CIVIL AVIATION RULE

1984

PRELIMINARY

1. Short title and application

(1) These rules may be called the Civil Aviation Rules, 1984.

(2) These rules shall apply, unless a contrary intention appears, to all aircraft for the time being in or over Bangladesh:

Provided that, in the case of aircraft registered elsewhere than in Bangladesh, the provisions of Parts I, VII, VIII and IX of these rules relating to Personnel Licensing, Registration and Marking of Aircraft, Airworthiness of Aircraft and Facilitation shall not apply but the laws applicable to them in their respective countries shall apply;

Provided further that these Rules shall apply to aircrafts registered elsewhere than in Bangladesh where responsibilities have been transferred under a written agreement between the State of Registry and Bangladesh made under article 83*bis* of the Convention.

(3) These rules shall not apply to, or in relation to, military aircraft and military aerodromes of Bangladesh.

(4) Notwithstanding the provisions of sub-rule (3), the provisions of these rules relating to manoeuvre of aircraft and air traffic control shall apply to, and in relation to, a flight by the military aircraft and State aircraft when they operate at military aerodromes exclusively used for military used for military purposes.

2. Definitions

In these rules, unless there is anything repugnant in the subject or context, -

"acrobatic flight" means manoeuvres intentionally performed by an aircraft involving as abrupt change in its attitude, an abnormal attitude of an abnormal variation in speed;

"advisory area" means a designated area within a flight information region where air traffic advisory service is available;

"advisory route" means a route within a flight information region along which air traffic advisory service is available;

"aerial work aircraft" means an aircraft, not being a public transport aircraft, which is being flown for payment to be made to the operator of the aircraft, being payment for the flight or in respect of the purpose for which the flight is carried out, and any reference to an aerial work aircraft by any class shall be construed accordingly;

"aerodrome control service" means air traffic control service for aerodrome traffic;

"aerodrome meteorological minima" means limiting meteorological conditions laid down for the purpose of determining the usability of an aerodrome either for take-off or landing;

"aerodrome traffic" means all traffic on the manoeuvring area of an aerodrome and all aircraft flying in the vicinity of an aerodrome;

"Aeronautical Information Publication" or "AIP" means the publications issued by or with the authority of, a State containing aeronautical information of a lasting character essential to air navigation;

"aeronautical mobile radio service" means a radio communication service between aircraft radio stations and land stations and between two or more aircraft radio stations;

"aeroplane" means a power-driven heavier-than-air aircraft, deriving its lift in flight chiefly from aerodynamic reactions on surfaces remaining fixed under given conditions of flight;

"aeroplane flight manual" means manual, associated with the certificate of airworthiness, containing limitations within which the aeroplane is to be considered airworthy, and instructions and information necessary to the flight crew members for the safe operation of the aeroplane;

"aerodrome control tower" means a unit established to provide air traffic control service to aerodrome traffic;

"aerodrome elevation" means the elevation of the highest point of the landing area;

"aerodrome taxi circuit" means the specified path of the aircraft on the manoeuvring area during specific wind conditions;
"agricultural operations" means the broadcasting of chemicals, seeds, fertilizers and other substances from aircraft for agricultural purposes including purposes of pest disease control;

"Air Navigation Order" means the orders published by the Chairman under rule 4;

"air-report" means a report prepared by the pilot-in-command during the course of a flight in conformity with requirements for position and operational meteorological reporting;

"airtraffic control clearance" means authorization for an aircraft to proceed under conditions specified by an air traffic control unit;

"air traffic advisory service" means a service provided within the advisory area or advisory route to ensure separation, in sofar as possible, among aircraft which are

operating on an IFR flight plan;

"air traffic control service" means a service provided for the purposes of -

(a) preventing collisions_

(i) between aircraft and

(ii) on the manoeuvring area, between aircraft and obstructions; and

(b) expediting and maintaining an orderly flow of air traffic;

"air traffic control unit" means an area control centre, approach control office or as the case may be, aerodrome control tower;

"air traffic service" means flight information service, alerting service, air traffic advisory service, air traffic control service area control service, approach control service or aerodrome control service;

"air traffic service reporting office" means a unit established for the purpose of receiving reports concerning air traffic services and flight plans submitted before departure of an aircraft;

"airway" means a control area or a portion thereof established in the from of a corridor equipped with radio navigational aids;

"air route facilities" means any facilities provided to permit safe navigation of an aircraft within the airspace of an air route; and includes visual and non-visual aids to approach and landing at aerodromes, communication services, meteorological and air traffic services and facilities;

"airship" means a power driven lighter-than-air aircraft;

"air traffic" means all aircraft in flight or operating on the manoeuvring area of an aerodrome;

"air traffic control instructions" mean directions issued by an air traffic service unit for an aircraft to conduct its flight in the manner specified by that air traffic service;

"air traffic controller's licence" means a licence granted to a person in accordance with the provisions of these rules;

"alternate aerodrome" means an aerodrome specified in the flight plan to which a flight may proceed when it becomes inadvisable to land at the aerodrome of intended landing;

"altitude" means the vertical distance of a level or point, or an object considered as a point, measured from mean sea level;

"alerting service" means service provided to notify appropriate organisations regarding aircraft in need of search and rescue air, and assist such organisations as required;

"approach control office" means a unit established to provide air traffic control service to controlled flights arriving at or departing from, one or more aerodromes;

"approach control service" means air traffic control service for arriving or departing controlled flights;

"approach sequence" means the order in which two or more aircraft are cleared to approach to land at an aerodrome;

"approved" means approved by the Chairman of the Civil Aviation Authority;
"apron" means a defined area, on a land aerodrome, intended to accommodate aircraft for purposes of loading or unloading of passengers, mail, cargo, refuelling, parking, or maintenance of aircraft;

"area control centre" means a unit established to provide air traffic control service to controlled flights in control area;

"area control service" means an air traffic control service for controlled flights in control areas;

"air traffic services route" or "ATS route" means specified route designed for channeling the flow of air traffic as necessary for the provision of air traffic services;

"authorised" means authorised by the Chairman or by a person appointed by the Chairman to give the authority concerned;

"base turn" means a turn by the aircraft during the intermediate approach between the end of the outbound track and the beginning of the final approach track. These tracks are not reciprocal;

"cargo means any property carried on an aircraft other than mail, stores and personal accompanied baggage of passengers;

"ceiling" means the height above the ground or water of the base of the lowest layer of could below sic thousand metres (twenty thousand feet) covering more than half of the sky;

"Chairman" means the Chairman of the Civil Aviation Authority or any person performing the duties of the Chairman for the time being in force;

"charter aircraft" means an aircraft employed in charter operations;

"commercial operations" means an air operation for hire and reward;

"compulsory reporting point" means specified geographical location in relation to which

the position of an aircraft must be reported;

"control area" means controlled airspace extending upwards from a specified limit above the surface of the earth;

"controlled flight" means any flight which is provided with air traffic control service;

"controlled VFR flight" means controlled flight conducted in accordance with the visual flight rules;

"control tower" means a unit established to provide air traffic control service to aerodrome traffic;

"control zone" means controlled airspace extending upward from the surface of the earth to a specified upper limit;

"controlled aerodrome" means an aerodrome at which air traffic control service is provided to aerodrome traffic;

"controlled airspace" means and airspace of defined dimensions within which air traffic control service is provided to controlled flight;

"co-pilot" means a licensed pilot serving in any piloting capacity other than as pilot -in-command but excluding a pilot who is on board the aircraft for the sole purpose of receiving flight instruction;

"convention" means the convention on International Civil Aviation signed in Chicago on the seventh day of December, 1944, and any amendments of the Convention or Annex thereto made in accordance with the provisions of Article 94 of the Convention;

"crew member" means a person assigned by an operator to duty on an aircraft during flight time;

"cruising level" means a person assigned by an operator to duty on an aircraft during flight time;

"cruising level" means a level maintained during a significant portion of a flight;

"current flight plan" means the flight plan, including changes, if any, brought about by subsequent clearances;

"danger area" means an airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times;
"dangerous lights" mean any lights which may endanger the safety of aircraft, whether by reason of glare, or by causing confusion with or preventing clear visual reception of aeronautical lights or signals;

"elevation" means the vertical distance of a point or a level on or affixed to the surface of the earth, measured from mean sea level;

"expected approach time" means the time at which ATC expects that an arriving aircraft will be cleared to commence its approach for a landing;

"field flight plan' or "FPL" means the plan as field with an air traffic service unit by the pilot or his designated representative without any subsequent changes;

"final approach" means that part of an instrument approach procedure from the time the aircraft has-
(a) completed the last procedure turn or base turn where one is specified; or
(b) crossed a specified fix; or
(c) intercepted the last track specified for the procedure, until it has crossed a point in the vicinity of an aerodrome from which -
i) a landing can be made; or
ii) a missed approach procedure is initiated;

"flight crew member" means a licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period;

"flight time means the total time from the moment an aircraft first moves under its own power for the purpose of taking off until the moment at which it comes to rest at the end of the flight;

"flight visibility" means the visibility forward from the cockpit of an aircraft in flight;

"forecast" means a statement of expected meteorological conditions for a specified period and for a specified area or portion of airspace;

"flight information centre" means a unit established to provide flight information service and altering service;

"flight information region" means an airspace of defined dimensions within which flight information service and alerting service are provided;

"flight information service" means a service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flight;

*"flight level" means surface of constant atmospheric pressure which are related to a specific pressure datum, 1013.2mbs (29.92 inches) and are separated by specific pressure intervals.

Notes: 1. *a pressure type altimeter calibrated in accordance with the standard atmosphere-*

(a) when set to QNH altimeter setting, will indicate altitude;
(b) when set to QFE altimeter setting, will indicate height above the QFE reference datum;

(c) when set to a pressure of 1013.2 mvs (29.92 inches) any be used to indicate flight levels;

2. *The terms height and altitude used in Note 1 indicate altimetric rather than geometric heights and altitudes;*

"flight plan" means specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft;

"flight status" means an indication of whether a given aircraft requires special handing by air traffic services unit or not;

"glider" means a non-power-driven heavier-than-air aircraft deriving its lift in flight chiefly from aero-dynamic reactions on surfaces remaining fixed under given conditions of flight;

"ground visibility" means visibility at an aerodrome as reported by an authorised observer;

"heading" means the direction in which the longitudinal axis of an aircraft is pointed, usually expressed in degrees from North (true, magnetic, compass or grid);

"holding point" means a specified location, identified by visual or other means, in the vicinity of which the position of an aircraft in flight is maintained in accordance with air traffic control clearances;

"holding procedure" means a predetermined manoeuvre which keeps an aircraft within a specified airspace whilst awaiting further clearance;

"helicopter" means a heavier-than-air aircraft supported in flight by reaction of the air on one or more power-driven rotors on substantially vertical axis;

"horizontal plane" in relation to an aircraft, means the plane containing the longitudinal axis perpendicular to the plane of symmetry of the aircraft;

"instrument meteorological conditions" or "LMC" means meteorological conditions of such a nature that flight in compliance with the visual flight rules laid down in these rules in precluded;

"instrument approach procedure" means a series of predetermined manoeuvres for the orderly transfer of an aircraft from the beginning of the initial approach to a landing or to a point from which a landing may be made visually;

"international air service" means an air service which passes through the airspace over the territory of more than one state;

"instrument flight rules flight" or "IFR flight" means a flight conducted in accordance with the Instrument Flight Rules;

"licence" includes any certificate of competency required to be held in connection with the licence by the law of the country in which the licence is granted;

"missed approach procedure" means the procedure to be followed if, after an instrument approach, a landing is not effected and occurring normally:-
(a) when the aircraft has descended to the decision height and has not established visual contact; or
(b) when directed by the air traffic control to pull up or to go around again;

"meteorological minima" means the minimum values of meteorological elements as determined by the chairman in respect of specified type of flight operation;

"meteorological observation" means the qualitative evaluation by instrument or visual means of one or more meteorological elements at a place at a given time;

"meteorological report" means a statement of observed meteorological conditions relatd to a specified time and location;

"mile" means a nautical mile (6,080 feet);

"military aircraft means an aircraft of the Defence Force of Bangladesh (including any aircraft that is being constructed for the Defence Force) and any aircraft commanded by a member of that Force who is detailed for the purpose other than any aircraft that is registered under those rules as a Bangladesh aircraft;

"movement area" means the part of an aerodrome intended for the surface movement of aircraft;

"night" means the hours between the end of evening civil twilight and the beginning of morning civil twilight;

Note: *"civil twilight" ends in the evening when the centre of the sun's disc is 6 degrees below the horizon and begins in the morning when the centre of the sun's disc is 6 degrees below the horizon;*

"night flight" means flight during night when any unlighted aircraft or other unlighted prominent objects cannot be clearly seen at a distance of three miles;

"NOTAM" means notices containing information concerning the establishment,

condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations;

"operating crew" means any person having duties on board in connection with the flying or safety of the flight of an aircraft;

"operator" means a person, organisation or enterprise engaged in or offering to engage in, an aircraft operation;

"pilot-in-command" means the pilot designated by the operator, or in the case of general aviation by the owner, as being in command and charged with the safe conduct of a flight;

"procedure turn" means a manoeuvre in which a turn is made away from a designated track followed by turn in the opposite direction, both turns being executed so as to permit the aircraft to intercept and proceed along the reciprocal designated track;

"position report" means a message in a specified manner containing information on the position and progress of an aircraft;

"private aircraft" means an aircraft employed in private operations as specified in these rules;

"prohibited area" means as area of defined dimensions within the land areas of Bangladesh or territorial waters adjacent thereto within which the flight of aircraft is prohibited;

"public transport service" means a service for the carriage of persons or cargo for hire or reward;

"radio apparatus" means apparatus for the transmission or reception of sign signal, writing, facsimiles or sound of any kind by Hertzian waves;

"rating" means an authorisation entered on a licence and forming part there,f, stating special conditions, privileges or limitation pertaining to such licence;

"registered" means registered under these rules;

"reporting point" means specified geographical location in relation to which the position of an aircraft can be reported;

"reserve time" means a period during which a flight crew member is required by an operator to hold himself available for a tour of duty;

"rest period" means any period of time on the ground during which a flight crew member is relieved by an operator of all duties associated with his employment;

"restricted area" means a specified area within the land areas of Bangladesh or its territorial waters adjacent thereto, declared by the Chairman under these rules within which the flight of aircraft and all other movements are restricted;

"route segment" means a route, or portion of a route, usually flown without an intermediate stop;

"scheduled public transport aircraft" means an aircraft employed in scheduled public transport operations as specified in these rules;

"signal area" means an area on an aerodrome used for the display of ground signals so that they will be visible to aircraft in the air;
"state aircraft" means military aircraft and aircraft used in the military, customs or police services;

"State of Registry" means the State on whose register the aircraft is entered;
"threshold" means the beginning of that portion of the runway usable for landing;

"track" means the projection on the earth's surface of the path of an aircraft, the direction of which path at any point is usually expressed in degrees from North (true, magnetic or grid);

"transition altitude" means the altitude at or below which the vertical position of an aircraft is controlled by reference to altitudes:

"transition layer" means the airspace between the transition altitude and the transition level;

"transition level" means the lowest flight level available for use above the transition altitude;

"visual flight rules flight" or "VFR flight" means a flight conducted in accordance with the Visual Flight Rules;

"Visibility" means the ability, as determined by atmospheric condition and expressed in units of distance, to see and identify prominent unlighted objects by day and prominent lighted objects by night;

"visual approach" means an approach by an IFR flight when either part of all of an instrument approach procedure is not completed and the approach is executed in visual reference to the terrain.

"aerodrome" means a defined area on land or water (including any buildings, installations and equipment) intended to be used, either wholly or in part, for the arrival, departure and surface movement of aircraft;

"aircraft" means any machine which can derive support in the atmosphere from reactions of the air other than reactions of the air against the earth's surface and includes balloons whether fixed or free, airships, kites, gliders and flying machines;

"cargo aircraft" means any aircraft, other than a passenger aircraft, which is carrying goods or property;

"dangerous goods" means articles or substances which are capable of posing a risk to health, safety, property or the environment and which are listed as such in the Technical Instructions or which are classified according to the Technical Instructions;

"dangerous goods accident" means an occurrence associated with and related to the transport of dangerous goods by air which results in fatal or serious injury to a person or major property damage;

"dangerous goods incident" means an occurrence, other than a dangerous goods accident, associated with and related to the transport of dangerous goods by air, not necessarily occurring on board an aircraft, which results in injury to a person, damage to property, fire, breakage, spillage, leakage of fluid or radiation or other evidence that the integrity of the packaging has not been maintained and also includes any occurrence relating to the transport of dangerous goods which seriously jeopardizes the aircraft or its occupants;

"overpack" means an enclosure used by a single shipper to contain one or more packages and to form one handling unit for convenience of handling and stowage;

"package" means the complete product of the packing operation consisting of the packaging and its contents prepared for transport;

"packaging" means receptacles and any other components or materials necessary for the receptacle to perform its conainment function;

"passenger aircraft" means an aircraft that carries any person other than a crew member, an operator's employee in an official capacity, an authorized representative of an appropriate national authority or a person accompanying a consignment or other cargo;

"serious injury" means an injury which is sustained by a person in an accident and which:

(i) Requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; or

(ii) Results in a fracture of any bone (except simple fractures of fingures, toes or nose); or

(iii) Involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage; or

(iv) Involves injury to any internal organ; or

(v) Involves second or third degree burns, or any burns affecting more than five per cent of the body surface; or

(vi) Involves verified exposure to infectious substances or injurious radiation;

“state of origin” means the State in the territory of which the dangerous goods were first loaded on an aircraft;

"state of the operator" means the State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent place of residence;

"technical Instructions" means the Technical Instructions for the Safe Transport of Dangerous Goods by Air issued by the International Civil Aviation Organisation as amended from time to time;

"UN number" means the four-digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods to identify a substance or a particular group of substances;

"unit load device" means any type of freight container, aircraft container or aircraft pallet with a net, but excluding an over pack, designed for loading on an aircraft.";

3. Responsibility of the Chairman.-

(1) The Chairman shall be responsible with the administration of these rules, and shall exercise such powers and perform such functions conferred on him by these rules.

(2) The Chairman may by order in writing delegate and direct that any power and/or functions conferred or imposed by these rules on him, as the case may be, be exercised or performed on behalf of the Chairman by:

(a) any officer or authority subordinate to him, or

(b) any other person.

(3) The Chairman shall make arrangements to identify the differences of contents of these rules from those of ICAO SARP's and to notify the differences, if any, to ICAO.

(4) The Chairman shall maintain close liaison with Bangladesh Meteorological Department and Bangladesh Air Force in the matters of common interest.

4. Air Navigation Orders.-

For the purpose of giving effect to these rules and any requirements which are not inconsistent with these rules, the Chairman may publish orders to be known as Air Navigation Orders.

5. Prohibited areas.-

(1) No person shall fly, or assist in flying, an aircraft over any of the areas specified by the Chairman in Air Navigation Orders as prohibited.

(2) Every pilot who, when flying an aircraft, finds himself above a prohibited area in contravention of sub-rule (1), shall, as soon as is aware of the fact, report the fact to the air traffic control units and if instructions so required shall land his aircraft as soon as possible at one of the nearer aerodromes.

(3) The Chairman shall, from time to time, publish in the Air Navigation Orders, dimensions of airspace as restricted or danger areas within which the flight or aircraft is restricted with specified conditions.

6. Photographs from aircraft in flight

No person shall take, or cause or permit to be taken from an aircraft in flight, any photograph except in accordance with and subject to the terms and conditions of a permission granted by the Chairman.

7. Prohibition of carriage of persons without valid travel documents

(1) No person-in-charge of any aircraft shall allow such aircraft to enter into Bangladesh from a place outside Bangladesh unless all persons on board the aircraft are in

possession of valid travel documents as required by the immigration and other authorities.

(2) Where an aircraft is brought into Bangladesh in contravention of sub-rule (1), any authority empowered by the Government generally or specially in this behalf may direct the owner or the person-in-charge of the aircraft to take on board and remove from Bangladesh or otherwise arrange for the immediate removal from Bangladesh of the person or persons without valid travel documents and the owner or, as the case may be, the person-in-charge of the aircraft shall comply with such directions.

8. Carriage of arms

No aircraft, whether national or foreign, shall carry munitions of war or implements of war in or across the territory of Bangladesh, except by permission of the Government.

9. Radio equipment

(1) No person shall operate radio-equipment in any aircraft registered in Bangladesh unless he holds a license of the type in accordance with the radio-communication rules.

(2) All public transport aircraft registered in Bangladesh and all other aircraft registered in Bangladesh when carrying out a flight under Visual Flight Rules over routes on which navigation is possible by visual reference to land marks shall carry such radio-equipment as is necessary to accomplish the following:-

(a) maintain two-way communications with the appropriate air traffic service unit for the purpose of aerodrome control service, using the frequencies and the type of emission notified for this purpose;

(b) maintain two-way communication on designated frequencies and using the approved type of emission, with at least one air traffic control unit from any point on the route for the purpose of exchanging of air traffic control service, meteorological and other information required by procedures in force.

10. Cancellation, suspension or endorsement of licensees

(1) Where any person is convicted of a contravention of or failure to comply with these rules in respect of any aircraft, the Chairman may cancel or suspend the registration of that aircraft under these rules.

(2) The Chairman may, for reason recorded in writing, cancel, suspend or endorse any licences granted under these rules if he is satisfied that there is sufficient grounds for so doing and may suspend any such license temporarily during the investigation of any matter forming a ground for action under this sub-rule.

(3) The Chairman may cancel or vary any particulars entered in any license granted, or in any journey log book issued under these rules.

(4) The Chairman may require the holder of any license or other document granted or issued under these rules or any person having possession of or custody of such license or document to surrender the same to him for cancellation, suspension, endorsement or variation and any person failing to comply with any such requirement within a reasonable time shall be deemed to have acted in contravention of this rules.

(5) The Chairman may cancel or suspend any certificate relating to the airworthiness of an aircraft granted under these rules if he is satisfied that reasonable doubt exists as to the safety of the aircraft in question of the type to which the aircraft in question belongs and may vary the conditions attached to any such certificates if he is satisfied that those conditions could be relaxed of that reasonable doubt exists whether those conditions afford a sufficient margin of safety.

11. Construction of building, planting of trees, etc

No building or structure shall be constructed or erected or tree shall be planted in those areas which, in the opinion of the Chairman may affect aircraft operation or jeopardise the safety of aircraft operations.

12. Aeronautical fees and charges

(1) The Chairman may, by notification in the official Gazette, specify the fees in respect of the following:-

(a) aircraft registration;

(b) any other matter as may be required.

(2) The Chairman may, on such terms and conditions as he may deem fit to impose, authorise a company or agency to collect fees or to undertake any work on an aerodrome.

13. Inspection

(1) Any person authorised by the Chairman by special or general order in writing in this behalf may -

(a) at all reasonable times enter any place to which access is necessary for the purpose of exercising his powers or carrying out his duties under this rule;

(b) at all times during working hours enter that portion of any place in which aircraft or parts of aircraft or aero-engines or parts of aero-engines are overhauled, repaired or assembled and inspect any such place, aircraft, aero-engines or parts and any drawings relating to such aircraft, aero-engines or parts;

(c) at any time inspect any flying machine which is required under these rules to be

certified as airworthy or in respect of which a certificate of airworthiness is in force;

(d) examine all documents associated with the work; and

(e) conduct and direct in person such tests of the efficiency of the pilot or any other crew member of any aircraft registered in Bangladesh and recommend measures that may be considered necessary for the purpose of ensuring safety.

(2) No person shall voluntarily or otherwise obstruct any person acting in the exercise of his power or in the discharge of his duties under this rule.

14. False statement

A person shall not make, either orally or in writing, a statement that is false or misleading in a material particular or in connection with--

(a) an application for the grant, issue, renewal or endorsement of a licence, rating, certificate, permit, permission, authority or approval under these rules; or

(b) a return report, notice, form or other document furnished in accordance with these rules.

15. Foreign military aircraft

No person shall fly or land, or assist in flying or landing, any foreign military aircraft over or in Bangladesh except on or with the invitation or permission in writing of the Government and on such conditions as may be specified in the invitation or permission.

16. International airport

(1) The Government may, by notification in the official Gazette, declare any aerodrome in Bangladesh to be an international airport.

(2) No person-in-charge of an aircraft entering Bangladesh shall cause it to be landed in Bangladesh for the first time in any journey except at an international airport unless the aircraft is compelled to land before arriving at an international airport by accident, stress of weather or other unavoidable cause.

(3) No person-in-charge of an aircraft shall fly the aircraft or allow it to be flown to a place outside Bangladesh save from an international airport.

(4) No person in any aircraft entering or departing from Bangladesh shall carry, or allow, to be carried in the aircraft any cargo the import or export of which prohibited by or under any law for the time being in force.

(5) No person shall, except an officer of customs, break or alter any seal placed by an officer of customs at the aerodrome at which an aircraft departed for Bangladesh upon any

part of that aircraft or any cargo therein.

(6) The person in of an aircraft at an international airport from a place outside Bangladesh shall, on landing, forthwith, cause the aircraft to be taken to the examination station at such airport or, if, owing to circumstances over which he has no control, he is unable so to do shall deliver the documents to the Collector of Customs as required by these rules and thereafter remove all cargo carried in the aircraft to the examination station in the presence of an officer of customs.

(7) The person-in-charge of an aircraft shall, if required so to do, after the landing at an international airport, coming from a place outside Bangladesh--

(a) disembark at such aerodrome for examination of all passengers and their baggage carried in such aircraft and produce, and, if required to do so unload, all cargo in such aircraft for examination;

(b) deliver to the Collector of Customs his journey log book and declaration of cargo and stores on board the aircraft signed by an officer of customs of the aerodrome from which he departed for Bangladesh.

(8) The person-in-charge of an aircraft proceeding to any place outside Bangladesh shall deliver to the Collector of Customs at the airport of departure his journey log book, and, if the aircraft carries any cargo, a manifest and declaration on duplicate in such form as may be approved by the Collector of Customs declaring the cargo and stores on such aircraft.

(9) No Customs duty shall be levied on an aircraft not registered in Bangladesh which is brought into Bangladesh for the purpose of a flight to or across Bangladesh and which it is not intended to register in Bangladesh and which it is intended to remove from Bangladesh within six months from the date of entry, provided that the person-in-charge makes a written declaration to that effect to the Collector of Customs on arrival.

(10) In the case of an aircraft in respect of which a declaration under sub-rule (9) has been made and which is not removed from Bangladesh within six months, the duty leviable in respect of it shall be paid to the Collector of Customs before the aircraft is again flown.

17. Forced landing.- If any aircraft arriving from a place outside Bangladesh is forced to land at any place other than that of an international airport, or if any aircraft is so forced after departure from such airport for a foreign destination, the person-in-charge of the aircraft shall, if the place of landing is not an aerodrome, forthwith report to the nearest collector of Customs or a police officer and to the nearest Air Traffic Service unit and shall depart from such place only after being inspected by the appropriate authorities.

18. Customs examination.- (1) The person-in-charge of an aircraft shall permit any officer of Customs authorised in this behalf by the Collector of Customs to board and examine the aircraft at any time and any cargo loaded therein.

(2) The person-in-charge of such cargo shall produce such documents relating to such cargo to an officer of Customs at the airport departure or arrival, and permit him to examine such cargo.

19. Designation of air-routes and airways. The Chairman may designate air route and airways and may determine the conditions of use thereof and shall publish the same in the Aeronautical Information Publication or by NOTAM.

20. Noise and vibration caused by aircraft at Aerodromes.- The Chairman may specify the limit of noise and vibration that may be caused by an aircraft (including a military aircraft) at a Government aerodrome, licensed aerodrome or at aerodromes at which the manufacture, repair or maintenance of aircraft is carried out.

PART I
PERSONNEL LICENSING.

21. General rules concerning licences: (1) Every aircraft shall carry, and be operated by, the personnel specified in this Part and such personnel shall be licensed in the manner as specified in this Part.

(2) A person shall not act as a flight crew member of an aircraft unless a valid licence is held showing compliance with the rules contained in this Part and appropriate to the duties to be performed by that person. The licence shall have been issued by the State of Registry of that aircraft or by any other Contracting State and rendered valid by the State of Registry of that aircraft.

(3) When a licence issued by another Contracting State is rendered valid as an alternative to the issuance of the licence, a suitable authorization shall be issued and to be carried with the former licence. When this authorization is limited to specific privileges it shall specify the privileges of the licence, which are to be accepted as its equivalent. The validity of the authorization shall not extend beyond the period of validity of the former licence. This authorization shall cease to be valid if the licence upon which it was issued is revoked or suspended.

(4) This authorization when used in commercial air transport operation, the Chairman shall confirm the validity of the other Contracting State's licence before issuing the authorization.

(5) A pilot licence issued by a Contracting State should be rendered valid by the Chairman for use in private flights.

(6) The holder of a licence shall not exercise the privileges other than those granted by that licence.

(7) No member of the flight crew of an aircraft registered outside Bangladesh shall fly, or attempt to fly, such aircraft within Bangladesh unless he is the holder of a valid licence granted under the law of the country in which the aircraft is registered.

(8) No person in-charge of an aircraft shall allow such aircraft to be flown unless every member of the flight crew thereof is the holder of a valid licence, which is required to hold under these rules.

(9) A person shall not be deemed to be a member of the flight crew of an aircraft if he is flying for the purpose of becoming qualified for grant or renewal of a licence.

(10) The holder of a pilot's licence of any class may fly as pilot-in-command of an aircraft other than a type to which the provisions of, and the conditions set out in, these rules for the purpose of qualifying fro, and included in, the licence to cover an additional type of aircraft.

(11) A person may fly in accordance with the provisions of sub-rule (7) of this rule as pilot-in-command of an aircraft if the licence which he holds entitles him to fly as pilot-in-command of a commercial transport aircraft and every passenger carried in the aircraft is being carried in accordance with the conditions set out in these rules for the purpose of being trained to perform duties as a member of the flight crew of an aircraft.

(12) For the purpose of entitling persons to act as a member of the flight crew of an aircraft registered in Bangladesh, the Chairman may, subject to such conditions and limitations a he may specify in the Air Navigation Orders, grant licence and ratings of any of the classes specified in this Part and the provisions of this Part shall have effect with respect to all such licences and ratings.

(13) No person shall act as an air traffic controller in any air traffic control unit unless he holds a valid licence and rating appropriate to the unit.

(14) For the purpose of issuance of licence and ratings under these rules the Chairman may grant exemption to any requirements specified in these rules provided the Chairman is satisfied that such exemptions are granted only to those having adequate knowledge and experience. Provided that such exemption may be granted in exceptional circumstances and in the public interest.

(15) An applicant shall, before be issued with any pilot licence or rating, meet such requirements in respect of age, knowledge, experience, flight instruction, skill and medical fitness, as are specified for that licence or rating.

(16) An applicant for any pilot licence or rating shall demonstrate such requirements for knowledge and skill as specified in this Part for that licence or rating, within a period specified by the Chairman.

(17) Until 10 March 2011, Chairman may endorse a type rating for aircraft of the powered-lift category on an aeroplane or helicopter pilot licence. The endorsement of the rating on the licence shall indicate that the aircraft is part of the powered-lift category. The training for the type rating in the powered-lift category shall be completed during a course of approved training, shall take into account the previous experience of the applicant in aeroplane or helicopter as appropriate and incorporate all relevant aspects of operating an aircraft of the powered-lift category.

21A. Category of aircraft, Class, Type of Ratings and Validity of Licence.- (1) The category of aircraft, class and type of ratings as appropriate shall be endorsed on the licence.

(2) A person shall not act either as pilot-in-command or as co-pilot of an aircraft in any of the following categories unless that person is the holder of a pilot licence issued in accordance with the provisions of this Part:

(a) aeroplane ;

(b) airship of a volume of more than 4600 cubic metres
(c) helicopter;
(d) Glider;
(e) free ballon ;
(f) powered-lift.

Category ratings shall be for categories of aircraft listed above. Category ratings shall not' be endorsed on a licence when the category is included in the title of the licence itself.

(3) When the holder of a pilot licence seeks a licence for an additional category of aircraft, that new category rating shall also be endorsed in the original licence. This additional category rating endorsed on a pilot licence shall indicate the level of licensing privileges at which the category rating is granted.

(4) The holder of a pilot licence seeking additional category ratings shall meet the requirements of this Part appropriate to the privileges for which the category rating is sought.

(5) Class ratings for aeroplanes certificated for single-pilot operation shall comprise as:
(a) single-engine, land ;
(b) single-engine, sea ;
(c) multi-engine, land;
(d) multi-engine, sea.

(6) Helicopters certified for single-pilot operations and which have comparable handling, performance and other characteristics shall also comprise a class.

(7) Type ratings shall established for;

(a) aircraft certificated for operation with a minimum crew of at least two pilots;

(b) helicopters and powered-lift aircraft certificated for single-pilot operation except where a class rating has been issued under sub-rule (6) of this rule; and

(c) any aircraft whenever considered necessary by the Chairman.

(d) Where a common type rating is established, it shall only be for aircraft with similar characteristics in terms of operating procedures, systems and handling.

(8) When an applicant demonstrates skill and knowledge for the initial issue of a pilot licence, the category and the ratings appropriate to the class or type of aircraft used in the demonstration shall be entered on the licence.

(9) No pilot licence holder shall be permitted to act either as pilot-in-command or as co-pilot of an aeroplane or helicopter unless the holder has received appropriate class rating specified in sub-rule (5) & (6) of this rule or type rating when required in accordance with the provision of sub-rule (7) of this rule.

(10) Type rating issued limiting the privileges to act as co-pilot, or limiting the privileges to act as pilot only during the cruise phase of the flight shall be endorsed on the rating.

(11) For the purpose of training, testing, or specific special purpose non-revenue, non-passenger carrying flight, special authorization may be provided in writing to the licence holder by the Chairman in place of issuing the class or type rating in accordance with sub-rule (9) of this rule. Such authorization shall be limited in validity to the time needed to complete the specific flight.

(12) For class rating, the applicant shall have demonstrated a degree of skill appropriate to the licence in an aircraft of the class for which the rating is sought.

(13) For type rating as required by sub-rule 7(a) of this rule, the applicant shall have:

(a) gained, under appropriate supervision, experience in the applicable type of aircraft and/or flight simulator in the following:

(i) normal flight procedures and manoeuvres during all phases of flight;

(ii) abnormal and emergency procedures and manoeuvres in the event of failures and malfunctions of equipments, such as power plant, systems and airframe ;

(iii) where applicable, instrument procedures, including instrument approach, missed approach and landing procedures under normal, abnormal and emergency conditions, including simulated engine failure;

(iv) procedures for crew incapacitation and new coordination including allocation of pilot tasks; crew cooperation and use of checklists;

(b) demonstrated the skill and knowledge required for the safe operation of the applicable type of aircraft, relevant to the duties of a pilot-in-command or a co-pilot as applicable; and

(c) demonstrated, at the airline transport pilot licence level, an extent of knowledge determined by the Chairman of the basis of the requirements specified in Rule 26(1)(b).

(14) For type rating as required by sub-rule 7 (b) and (c) of this rule, the applicant shall have demonstrated the skill and knowledge required for the safe operation of the applicable type of aircraft, relevant to the licensing requirements and piloting functions of the applicant.

(15) Flight simulation training device appropriate to the task for acquiring the experience or performing any manoeuvre required during the demonstration of skill for the issue of a licence or rating shall be approved the Chairman.

(16) No pilot licence holder shall be permitted to act either as pilot-in-command or as co-pilot of an aircraft under instrument flight rules (IFR) unless such holder has received proper authorization from Chairman. Proper authorization shall comprise an instrument rating appropriate to the aircraft category.

(17) No pilot licence holder shall be permitted to carry out flight instruction required for the issue of a pilot licence or rating, unless such holder has received proper authorization from Chairman. Proper authorization shall comprise :

(a) a flight instructor rating on the holder's licence ; or

(b) the authority to act as an agent of an approved organization authorized by the Chairman to carry out flight instruction; or

(c) a specific authorization granted by the Contracting State which issued the licence.

(18) No person shall be permitted to carry out instruction on a flight simulation training device required for the issue of a pilot licence or rating unless such person holds or has held an appropriate licence or has appropriate flight training and flight experience and has received proper authorization from Chairman.

(19) Except as provided in sub-rule (20), (21), (23), (24), and (25) of this Rule a Medical Assessment issued in accordance with sub-rule (4) (f) & (4)(g) of Rule-51 shall be valid from the date of the medical examination for a period not greater than:

(a) 60 months for the private pilot licence – aeroplane, airship, helicopter and powered-lift;

(b) 12 months for the commercial pilot licence – aeroplane, airship, helicopter and powered-lift;

(c) 12 months for the multi-crew pilot licence-aeroplane;

(d) 12 months for the airline transport pilot licence-aeroplane, helicopter and powered-lift;

(e) 60 months for the glider pilot licence;

(f) 60 months for the free balloon pilot licence;

(g) 12 months for the flight navigator licence;

(h) 12 months for the flight engineer licence;

(i) 48 months for the air traffic controller licence.

(20) the period of validity of a Medical Assessment may be reduced by the Chairman when clinically indicated.

(21) When the holders of airline transport pilot licences and commercial pilot licence, for aeroplane and helicopter, who are engaged in single-crew commercial air transport operations carrying passengers, have passed their 40th birthday, the period of validity specified in sub-rule (19) of this rule shall be reduced to six months.

(22) When a holders of private pilot licences for aeroplane and helicopter, glider pilot licence, free balloon pilot licence, and air traffic controller licence have passed their 40th birth day, the period of validity specified in sub-rule (19) of this rule should be further reduced to 24 moths.

(23) When the holders of private pilot licence for aeroplane and helicopter, glider pilot licences, free balloon pilot licences, and air traffic controller licences have passed their 50th birthday, the period of validity specified in sub-rule (19) of this rule should be further reduced to 12 months.

(24) When the holders of airline transport pilot licences, commercial pilot licences multi-crew pilot licences, who are engaged in commercial air transport operations, have passed their 60th birthday, the period of validity specified in 21A (21) shall be reduced to six months.

Note: The periods of validity listed above are based on the age of the applicant at the time of undergoing the medical examination.

(25) Privileges granted by a licence or by related ratings shall not be exercised unless the holder maintains competency and meets the requirements for recent experience as specified by the Chairman and periodical medical assessments in accordance with Rule 51(3) and sub-rule (19) of this rule.

(26) Chairman should establish maintenance of competency and recent experience requirements for pilot licences and ratings based on a systematic approach to accident prevention and should include a risk assessment process and analysis of current operations, including accident and incident data. The maintenance of competency of flight crewmembers, engaged in commercial air transport operations, may be satisfactorily established by demonstration of skill during proficiency flight chicks completed in accordance with Part 6 of these Rules.

(27) Chairman, having issued a licence, shall ensure that the other Contracting States are enables to be satisfied as to the validity of the licnece.

(28) The holder of a licence granted under this Part shall comply with all the conditions attached to the licence and shall conduct his operations accordingly.

(29) Applicants should undergo closely supervised, systematic and continuous courses of

training, conforming to a planned syllabus or curriculum approved by the Chairman and this approved training shall be designed to provide a level of competency at least equal to that provided by the minimum experience requirements for personnel not receiving such approved training

(30) The approval of an organization providing training for flight crew shall be dependent up on the applicant demonstrating compliance with the requirement specified in these rules.

(31) Aeroplane, airship, helicopter and powered-lift pilots and those flight navigators who are required to use the radio telephone aboard an aircraft shall demonstrate the ability to speak and understand the English language used for radiotelephony communications.

(32) Air traffic controllers and aeronautical station operators shall demonstrate the ability to speak and understand the English language used for radiotelephony communications.

(33) Flight engineers, and glider and free balloon pilots should have the ability to speak and understand the English language used for radiotelephony communications.

(34) Aeroplane, airship, helicopter and powered-lift pilots, flight navigatiors required to use the radiotelephone aboard an aircraft, air traffic controllers and aeronautical station operators shall demonstrate the ability to speak and understand the language used for radiotelephony communications to the level specified in the language proficiency requirements to a level as specified in these rules.

(35) As of 5 March 2008, the English language proficiency of aeroplane, airship, helicopter and powered-lift pilots, air traffic controllers and aeronautical station operators who demonstrate proficiency below the Expert Level (Level (6) shall be formally evaluated at intervals in accordance with an individual's demonstrated proficiency level.

(36) The English language proficiency of aeroplane, airship, helicopter and powered-lift pilots, flight navigators required to use the radio telephone aboard an aircraft, air traffic controllers and aeronautical station operators who demonstrate proficiency below the Expert Level (Level 6) should be formally evaluated at intervals in accordance with an individual's demonstrated proficiency level, as follows:

(a) those demonstrating language proficiency at the Operational Level (Level 4) should be evaluated at least once every three years; and

(b) those demonstrating language proficiency at the Extended Level (Level 5) should be evaluated at least once every six years.

(37) The proficiency level and it's criterion as mentioned earlier shall be published with the authority of the Chairman as ANOs.

22. Student Pilot's Licence: **(1) Requirements for the issue of the Licence.-** An applicant for a Student Pilot's Licence shall satisfy the following requirements:

(a) Age: He shall be not less than 16 years of age on the date of application:

(b) Academic qualification and knowledge: He shall have passed at least Secondary School Certificate Examination in Science group or its equivalent and shall show required aptitude for a pilot;

(c) Medical fitness: The applicant shall hold medical fitness on the basis of compliance with the requirements as laid down in rules 51 and 53.

(2) **Validity of the Licence:** (a) The period of validity of the licence shall commence from the date of issue or renewal of the Licence.

(b) The licence shall be valid for a period not exceeding 12 months from the date of passing the medical examination and it shall lapse on the holder obtaining a pilot licence of a higher order for the same category of aircraft.

(3) **Renewal of the Licence**: The licence may be renewed for a period not exceeding 12 months from the date of a fresh medical examination.

(4) **Aircraft rating**: the licence shall indicate the class and type of aeroplane, helicopter, power-lift and airship the holder is entitled to fly.

(5) **Privileges**: Subject to the validity of endorsements and ratings in the licence, the holders of a licence is entitled to fly within the territory of Bangladesh only as Pilot-in-command of any aeroplane, helicopter, power-lift and airship entered in the aircraft rating of his licence:

Provided that the holder of a Student-Pilot's Licence:

(a) shall fly at all times under the authority and supervision of a flight instructor or an approved examiner;

(b) shall fly under visual flight rules only;

(c) shall not carry passenger, animals and cargo or fly for hire, reward or remuneration of any kind;

(d) shall not undertake cross-country flights unless he has a minimum of 10 hours of solo flight time; and

(e) shall not fly solo unless he meets the medical requirements under rules 51 and 53.

(f) shall not fly solo in an aircraft on an international flight unless by special or general arrangement between the Contracting States concerned.

Note: For this rule "cross-country flight" means a flight to a point beyond a radius of 28 Km (15 miles) from the aerodrome of departure.

23. Private Pilot Licence: (1) General requirements for the issue of the licence appropriate to the aeroplane, helicopter, powered-lift and airship categories.- An applicant for a Private Pilot Licence shall satisfy the following requirements:

(a) **Age :** The applicant shall be not less that 17 years of age on the date of application ;

(b) **Academic qualification and knowledge:** The applicant shall have passed at least Secondary School Certificate Examination or its equivalent and shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a private pilot licence and appropriate to the category of aircraft/intended to be included in the licence, in the following subjects:

Air Law

(i) rules and regulations relevant to the holder of a Private Pilot Licence ; rules of the air; altimeter setting procedures; appropriate air traffic services practices and procedures ;

Aircraft general knowledge for aeroplane, helicopter, powered-lift and airship

(ii) principles of operation and functioning of powerplants, systems and instruments;

(iii) operating limitations of the relevant category of aircraft and powerplants; relevant operational information from the flight manual or other appropriate document ;

(iv) for helicopter and power-lift, transmission (power-trains) where applicable;

(v) for airship, physical properties and practical application of gases;

Flight performance, planning and loading

(vi) effects of loading and mass distribution on flight characteristics; mass and balance calculations;

(vii) use and practical application of take-off, landing and other performance data;

(viii) pre-flight and en-route flight planning appropriate to private operations under VFR; preparation and filing of air traffic services flight plans;

appropriate or traffic services procedures; position reporting procedures; altimeter setting procedures; operations in areas of high-density traffic;

Human performance

(ix) human performance including principles of threat and error management;

Meteorology

(x) application of elementary aeronautical meteorology; use of, and procedures for obtaining, meteorological information; altimetry; hazardous weather conditions;

Navigation

(xi) practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts ;

Operational procedures

(xii) application of threat and effor management principles to operational performance;

(xiii) altimeter setting procedures;

(xiv) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;

(xv) appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards;

(xvi) in the case of the helicopter, and if applicable, powered-lift, settling with power; ground resonance; retreating blade stall; dynamic roll-over and other operation hazards; safety procedures, associated with flight in VMC;

Principles of flight

(xvii) principles of flight;

Radiotelephony

(xviii) communication procedures and phraseology as applied to VFR operations; action to be taken in case of communication failure;

Seamanship

(xix) if, the licence is to include a seaplane or amphibian type of flying machine.

(c) **Skill**: The applicant shall have demonstrated the ability to perform as Pilot-in-command of an aircraft within the appropriate category, the procedures and manoeuvres described in sub-rule 3(b) or 4(b) or 5(b) or 6(b) of this rule, with a degree of competency appropriate to the privileges granted to the holder of a private pilot Licence, and to:

(i) recognize and manage threats and errors;

(ii) operate the aircraft within its limitations;

(iii) complete all maneuvers with smoothness and accuracy;

(iv) exercise good judgment and airmanship;

(v) apply aeronautical knowledge; and

(vi) maintain control of the aircraft at all times in a manner that the successful outcome of a procedure or maneuvers is assured.

(d) **Medical Fitness**: The applicant shall hold medical fitness on the basis of compliance with the requirements as laid down in rules 51 and 53.

(2) **Privileges of the holder of the licence and the conditions to be observed in exercising such privileges**: (a) Subject to compliance with the requirements of the general rules concerning pilot licences and ratings, validity of endorsements and rating in the licence, maintenance of medical fitness and language proficiency, the privileges of the holder of a private pilot licence shall be to act, but not for remuneration, as pilot-in-command or co-pilot of aircraft within the appropriate aircraft category engaged in non-revenue flights.

(b) Before exercising the privileges at night, the licence holder shall have received dual instruction in aircraft within the appropriate category of aircraft in night flying including take-off, landing and navigation.

(3) Specific requirements for the issue of the aeroplane category rating:

(a) **Experience**:

(i) The applicant shall have completed not less than 40 hours of flight time, or 35 hours if completed during a course of approved training, as a pilot of aeroplanes appropriate to the class rating sought. Experience as a pilot under instruction in a flight simulation training device, approved by the Chairman, is acceptable as part of the total flight time of 40 hours or 35 hours, as the case may be and credit for such experience shall be limited to a maximum of 5 hours;

(ii) When the applicant has flight time as a pilot of aircraft in other categories, the Chairman shall determine whether such experience is acceptable and, if so, the extent to which the flight time requirements specified in sub-rule 3(a)(i) of this rule can be reduced accordingly.

(iii)The applicant shall have completed in aeroplanes not less thaa 10 hours of solo flight time appropriate to the class rating sought, under the supervision of an authorized flight instructor, including 5 hours of solo cross-country flight time with at least one cross-country flight totaling not less than 270 km (150 NM) in the course of which full stop landings at two different aerodromes shall be made.

(b) **Flight Instruction**: The applicant shall have received dual instruction in aeroplanes appropriate to the class rating sought from an authorized flight instructor. The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the private pilot:

(i) recognize and manage threats and errors;

(ii) pre-flight operations, including mass and balance determination, aeroplane inspection and servicing;

(iii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures ;

(iv) control of the aeroplane by external visual reference;

(v) flights at critically slow airspeeds; recognition of and recovery from, incipient and full stalls;

(vi) flight at critically high airspeeds; recognition of, and recovery from, spiral dives;

(vii) normal and cross-wind take-offs and landings;

(viii) maximum performance (short field and obstacle clearance) take-offs; short-field landings;

(ix) flight by reference solely to instruments, including the completion of a level 180° turn;

(x) cross-country flying using visual references, dead reckoning and, where available, radio navigation aids;

(xi) emergency operations, including simulated aeroplane equipment malfunctions;

(xii) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures; and

(xiii) communication procedures and phraseology.

Note: The instrument experience specified in sub-rule 3(b)(ix) of this rule and the night flying dual instruction in sub-rule 2(b) of this rule do not entitle the holder of a private licence to pilot aeroplanes under IFR.

(4) Specific requirements for the issue of the helicopter category rating:

(a) **Experience**:

(i) The applicant shall have completed not less than 40 hours of flight time or 35 hours if completed during a course of approved training, as a pilot of helicopters. The Chairman shall determine whether experience as a pilot under instruction in a flight simulation training device, is acceptable as part of the total flight time of 40 hours or 35 hours as the case me be and credit for such experience shall be limited to a maximum of 5 hours.

(ii) When the applicant has flight time as a pilot of aircraft in other categories, the Chairman shall determine whether such experience is acceptable and, if so, the extent to which the flight time requirements sub-rule 4(a)(i) of this rule can be reduced accordingly.

(iii) The applicant shall have completed in helicopters not less than 10 hours of solo flight time under the supervision of an authorized flight instructor, including 5 hours of solo cross-country flight time with at least one cross-country flight totaling not less than 180 km (100 NM) in the course of which landings at two different points shall be made.

(b) **Flight instruction**:

(i) The applicant shall have received not less than 20 hours of dual instruction time in helicopter from an authorized flight instructor. The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the private pilot:

(A) recognize and manage threats and errors;

(B) pre-flight operations, including mass and balance determination, helicopter inspection and servicing;

(C) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;

(D) control of the helicopter by external visual reference;

(E) recovery at the incipient stage from settling with power; recovery techniques from low-rotor rpm within the normal range of engine rpm;

(F) ground maneuvering an run-ups; hovering; take-offs and landings-normal, out of wind and slopping ground;

(G) take-offs and landing with minimum necessary power; maximum performance take-off and landing techniques; restricted site operations; quick stops;

(H) cross-country flying using visual references, dead reckoning and, where available, radio navigation aids; including a flight of at least one hour;

(I) emergency operations, including simulated helicopter equipment malfunctions; autorotative approach;

(J) operations to, from and transmitting controlled aerodromes, compliance with air traffic services procedures; and

(K) communications procedures and phraseology.

(ii) The applicant should have received dual instrument flight instruction form an authorized flight instructor. The instructor should ensure that the applicant has operational experience in flight solely be reference to instruments, including the completion of a level 180° turn, in a suitably instrumented helicopter.

Note: The instrument experience specified in sub-rule 4(b)(ii) and the night flying dual instruction in sub-rule 2(b) of this rule do not entitle the holder of a private pilot licence to pilot helicopter under IFR.

(5) Specific requirements for the issue of the powered-lift category rating:

(a) **Experience**:

(i) The applicant should have completed not less than 40 hours of flight time as pilot of a powered lift. The Chairman should determine whether experience as a pilot under instruction in a flight simulation training device is acceptable as part of the total flight time of 40 hours.

(ii) When the applicant has flight time as a pilot of aircraft in other categories, the Chairman should determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of sub-rule 5(a)(i) of this rule can be reduced accordingly.

(iii) The applicant should have completed in a powered-lift not less than 10 hours of solo flight time under the supervision of authorized flight instructor, including 5 hours of solo cross-country flight time with at least one cross country flight totaling not less than 270 km (150) NM) in the course of which full stop landings at two different aerodromes shall be made.

(b) **Flight instruction**:

(i) The applicant should have received not less than 20 hours of dual instruction time in a powered-lift from an authorized flight instructor. The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the private pilot:

(A) recognize and manage threats and errors ;

(B) pre-flight operations, including mass and balance determination, powered-lift inspection and servicing;

(C) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;

(D) control of the powered-lift by external visual reference ;

(E) ground manoeuvring and run-ups; however and rolling take-offs and climb-out; hover and rolling approach and landing-normal, out of wind and slopping ground;

(F) take-offs and landings with minimum necessary power; maximum performance take-off and landing techniques; restricted site operations; quick stops;

(G) flight by reference solely to instruments, including the completion of a level 180° turn;

(H) recovery at the incipient stage from settling with power; recovery techniques from low-rotor rpm within the normal range of engine rpm;

(I) cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids, including a flight of at least one hour;

(J) emergency operations, including simulated powered-lift equipment malfunctions; power of reconversion to autorotation and autorotative approach, where applicable, transmission and interconnect driveshaft failure, where applicable;

(K) operations to, from and transiting controlled aerodrome, compliance with air traffic services procedures; and

(L) communication procedures and phraseology.

Note: The instrument experience specified in sub-rule 5(b)(i) and the night flying dual instruction specified in sub rule 2(b) of this rule do not entitle the holder of a private pilot licence to pilot powered-lift under IFR.

(6) Specific requirements for the issue of the airship category rating:

(a) **Experience**: The applicant shall have completed not less than 25 hours of flight time as a pilot of airships, including at least :

(i) 3 hours of cross-country flight training in an airship with a cross-country flight totaling not less than 45 km (25 NM);

(ii) 5 take-offs and 5 landings to a full stop at an aerodromes with each landing involving a flight in the traffic pattern at an airport;

(iii) 3 hours of instrument time; and

(iv) 5 hours as pilot assuming the duties of the pilot-in-command under the supervision of the pilot-in-command.

(b) **Flight instruction**: (i) The applicant shall have received dual instruction in airships from an authorized flight instructor. The instructor shall ensure that the applicant has received instruction in at least the following areas:

(A) recognize an manage threats and errors;

(B) pre-flight operations, including mass and balance determination, airships inspection and servicing;

(C) ground reference maneuvers;

(D) aerodromes and traffic pattern operations, collision avoidance precautions and procedures;

(E) techniques and procedures for the take-off, including appropriate limitations, emergency procedures and signals used;

(F) control of the airships by external visual reference;

(G) take-offs and landings and go-around;

(H) maximum performance (obstacle clearance) take-offs;

(I) flight by reference solely to instruments, including the completion of a level 180° turn;

(J) navigation, cross-country flying using visual reference, dead reckoning and radio navigation aids;

(K) emergency operations (recognition of leaks), including simulated airship equipment malfunctions; and
(L) communication procedures and phraseology.

24. Commercial pilot Licence: (1) General requirements for the issue of the licence appropriate to the aeroplane, helicopter, powered-lift and airship categories.– An applicant for a Commercial Pilot Licence shall satisfy the following requirements:

(a) **Age**: The applicant shall be not less than 18 years of age on the date of application;

(b) **Academic qualification and knowledge**: The applicant shall have passed at least Higher Secondary Certificate (Science) Examination with Physics and Mathematics or its equivalent and shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a commercial pilot licence and appropriate to the category of aircraft intended to be included in the licence, in the following subjects:

Air law

(i) rules and regulations relevant to the holder of a Commercial Pilot Licence; rules of the air; appropriate air traffic services practices and procedures;

Aircraft general knowledge for aeroplane, helicopter, powered-lift and airship

(ii) principles of operation and functioning of powerplants, systems and instruments;

(iii) operating limitations of the relevant category of aircraft and powerplants; relevant operational information from the flight manual or other appropriate document ;

(iv) use and serviceability checks of equipment and systems of appropriate aircraft;

(v) maintenance procedures for airframes, system and powerplants of appropriate aircraft;

(vi) for helicopter and powered-lift, transmission (power-trains) where applicable;

(vii) for airship, physical properties and practical application of gases;

Flight performance, planning and loading

(viii) effects of loading and mass distribution on aircraft handling, flight characteristics and performance, mass and balance calculations, in the case of airships, helicopters and power-lifts, effects of external loading on handling;

(ix) use and practical application of take-off, landing and other performance data;

(x) pre-flight and en-route flight planning appropriate to commercial operations under VFR, preparation and filing of air traffic services flight plans, appropriate air traffic services procedures, altimeter setting procedures;

Human performance

(xi) human performance including principles of threat and error management;

Meteorology

(xii) interpretation and application of aeronautical meteorological reports, charts and forecasts, use of, and procedures for obtaining, meteorological information, pre-flight and in-flight, altimetry;

(xiii) aeronautical meteorology; climatologic of relevant areas in respect of the elements taving an effect upon aviation, the movement of pressure systems, the structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions;

(xiv) causes, recognition and effects of icing; frontal zone penetration procedures; hazardous weather avoidance;

Navigation

(xv) air navigation, including the use of aeronautical charts, instruments and navigation aids, and understanding of the principles and characteristics of appropriate navigation systems, operation of airborne equipment;

(xvi) In the case of airship;

(A) use, limitation and serviceability of avionics and instruments necessary for the control and navigation;

(B) use, accuracy and reliability of navigation systems used in departure, on-route, approach and landing phases of flight, identification of radio navigation

aids;

(C) principles and characteristics of self-contained and external referenced navigation systems operation of airborne equipment ;

Operational procedures

(xvii) application of threat and error management principles to operational performance;

(xviii) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;

(xix) altimeter setting procedures;

(xx) appropriate precautionary and emergency procedures;

(xxi) operational procedures for carriage of freight, potential hazards associated with dangerous goods;

(xxii) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from aircraft;

(xxiii) in the case of the helicopter, and if applicable, powered-lift, settling with power; ground resonance; retreating blade stall; dynamic roll-over an other operation hazards; safety procedures, associated with flight in VMC;

Principles of flight

(xxiv) principles of flight;

Radiotelephony

(xxv) communication procedures and phraseology as applied to VFR operations, action to be taken in case of communication failure.

Seamanship

(xxvi) if the licence is to include a seaplane or amphibian type of flying machine;

(c) **Skill**: The applicant shall have demonstrated the ability to perform as pilot-in-command of an aircraft within the appropriate category of aircraft, the procedures and manoeuvres described in sub-rule 3(b) or 4(b) or 5(b) or 6(b) of this rule, with a degree of competency appropriate to the privileges granted to the holder of a commercial pilot licence, and to:

(i) recognize and manage threats and errors;

(ii) operate the aircraft within its limitations ;

(iii) complete all manoeuvres with smoothness and accuracy;

(iv) exercise good judgment and airmanship;

(v) apply aeronautical knowledge; and

(vi) maintain control of the aircraft at all times in a manner such that the successful outcome of a procedure or manoeuvre is assured.

(d) **Medical Fitness**: The applicant shall hold medical fitness on the basis of compliance with the requirements as laid down in rules 51 and 52.

(2) **Privileges of the holder of the licence and the conditions to be observed in exercising such privileges**: (a) Subject to compliance with the requirements of the general rules concerning pilot licneces and ratings, validity of endorsements and rating in the licence, maintenance of medical fitness and language proficiency, the privileges of the holder of a commercial pilot licence shall be:

(i) to exercise all the privileges of the holder of a private pilot licence in an aircraft within the appropriate aircraft category;

(ii) to act as pilot-in-command in an aircraft within the appropriate aircraft category engaged in operations other than commercial air transportation;

(iii) to act as pilot-in-command in commercial air transportation in an aircraft within the appropriate aircraft category certificated for single-pilot operation;

(iv) to act as co-pilot in an aircraft within the appropriate aircraft category required to be operated with a co-pilot; and

(v) for the airship category, to pilot an airship under IFR.

Provided that for all flights under Instrument Flight Rules either as Pilot-in-Command or as co-pilot, the applicant shall be required to have a current instrument rating.

(b) If the privileges of the licence are to be exercised at night, the applicant shall have received dual instruction in aircraft within the appropriate category in night flying, including take-off, landing and navigation.

(3) Specific requirements for the issue of the aeroplane category rating:

(a) **Experience**: (i) The applicant shall have completed not less than 200 hours of flight time, or 150 hours if completed during a course of approved training, as a pilot

of aeroplanes; experience as a pilot under instruction in a flight simulation training device approved by the Chairman, is acceptable as part of the total flight time of 200 hours or 150 hours, as the case may be and credit for the experience shall be limited to a maximum of 10 hours.

(ii) The applicant shall have completed in aeroplanes not less than:

(A) 100 hours as pilot-in-command or, in the case of a course of approved training, 70 hours as Pilot-in-command;

(B) 20 hours of cross-country flight time as pilot-in-command including a cross-country flight totaling not less than 540 km (300 NM) in the course of which full-stop landings at two different aerodromes shall be made;

(C) 10 hours of instrument instruction time of which not more that 5 hours may be instrument ground time; and

(D) if the privileges of the licence are to be exercised at night, 5 hours of night flight time including 5 take-offs and 5 landings as pilot-in command.

(iii) When the applicant has flight time as a pilot of aircraft in other categories, the Chairman shall determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of sub-rule 3(a)(ii)(C) of this rule can be reduced accordingly.

(b) **Flight instruction:** The applicant shall have received dual instruction in aeroplanes appropriate to the class and/or type rating sought from an authorized flight instructor and the instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the commercial pilot:

(i) recognize and manage threats and errors;

(ii) pre-flight operations, including mass and balance determination, aeroplane inspection and servicing;

(iii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;

(iv) control of the aeroplane by external visual reference;

(v) flight at critically slow airspeeds; spin avoidance; recognition of, and recovery from,, incipient and full stalls;

(vi) flight with asymmetrical power for multi-engine class or type rating;

(vii) flight at critically high airspeeds; recognition of, and recovery from spiral

dives;

(viii) normal and cross-wind take-offs and landings;

(ix) maximum performance (short field and obstacle clearance) take-offs; short-field landings;

(x) basic flight maneuvers and recovery from unusual attitudes by reference solely to basic flight instruments;

(xi) cross-country flying using visual reference, dead reckoning and radio navigation aids; diversion procedures;

(xii) abnormal and emergency procedures and manoeuvres including simulated aeroplane equipment malfunction;

(xiii) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures; and

(xiv) communication procedures and phraseology.

(4) Specific requirements for the issue of the helicopter category rating:

(a) **Experience**:

(i) The applicant shall have completed not less than 150 hours of flight time, or 100 hours if completed during a course of approved training, as a pilot of helicopters. Chairman shall determine whether experience as a pilot under instruction in a flight simulation training device is acceptable as part of the total flight time of 150 hours or 100 hours, as the case may be and credit for such experience shall be limited to a maximum of 10 hours.

(ii) The applicant shall have completed in helicopters not less than:

(A) 35 hours as pilot-in-command;

(B) 10 hours of cross-country flight time as pilot-in-command including a cross-country flight in the course of which landings at two different points shall be made;

(C) 10 hours of instrument instruction time of which not more than 5 hours may be instrument ground time; and

(D) if the privileges of the licence are to be exercised at night, 5 hours of night flight time including 5 take-offs and 5 landings pattern as pilot-in-command.

(iii) When the applicant has flight time as a pilot of aircraft in other categories, the Chairman shall determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of sub-rule 4(a)(i) of this rule can be reduced accordingly.

(b) Flight instruction: The applicant shall have received dual instruction in helicopters from an authorize flight instructor. The instructor shall ensure that the applicant has operational experience in the least the following areas to the level of performance required for the commercial pilot.

(i) recognize and manage threats and errors;

(ii) pre-flight operations, including mass and balance determination, helicopter inspection and servicing;

(iii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;

(iv) control of the helicopter by external visual reference;

(v) recovery at the incipient stage from settling with power, recovery techniques from low-rotor rpm within the normal range of engine rpm;

(vi) ground manoeuvring and run-ups; hovering; take-offs and landings-normal, out of wind and sloping ground; steep approaches;

(vii) take-offs and landings with minimum necessary power, maximum performance take-off and landing techniques; restricted site operations; quick stops;

(viii) hovering out of ground effect; operations with external load, if applicable; flight at high altitude;
(ix) basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;

(x) cross-country flying using visual reference, dead read reckoning and radio navigation aids; diversion procedures;

(xi) abnormal and emergency procedures, including simulated helicopter equipment malfunction, autorotavie approach and landing;

(xii) operations to, from and transiting controlled aerodromes, compliance with air traffic services procedures; and

(xiii) communication procedures and phraseology.

Note: The instrument experience specified in sub-rule 4(a)(ii)(C) and sub-rule 4(b)(ix) and the night flying experience and dual instruction specified in sub-rule 4(a)(ii)(D) and sub-rule 2(b) of this rule do not entitle the holder of a commercial pilot licence to pilot helicopters under IFR.

(5) Specific requirements for the issue of the powered-lift category rating:

(a) **Experience**:

(i) The applicant should have completed not less than 200 hours of flight time in a powered-lift, or 150 hours if completed during a course of approved training, as a pilot of aircraft.

(ii) The applicant should have completed in a powered-lift not less than:

(A) 50 hours as pilot-in-command;

(B) 10 hours in cross-country flying as pilot-in-command including a cross-country flight totaling not less than 540 km (300 NM) in the course of which full stop landing at two different aerodromes shall be made;

(C) 10 hours of instrument instruction of which not more than 5 hours may be instrument ground time; and

(D) if the privileges of the licence are to be exercised at night, 5 hours of night flight time including 5 take-offs and landings as pilot-in-command.

(iii) When the applicant has flight time as a pilot of aircraft in other categories, the Chairman should determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of sub-rule 5(a)(i) could be reduced accordingly.

(b) **Flight instrument**: The applicant should have received dual instruction time in a powered-lift from and authorized flight instructor. The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the commercial pilot:

(i) recognize and manage threats and errors;

(ii) pre-flight operations, including mass and balance determination, powered-lift inspection and servicing;

(iii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;

(iv) control of the powered-lift by external visual reference ;

(v) recovery at the incipient stage from settling with power; recovery techniques from low-rotor rpm within the normal range of engine rpm;

(vi) ground manoeuvring and run-ups; over and rolling take-offs and climb-out; hover and rolling approach and landings-normal, out of wind and slopping ground; steep approaches;

(vii) take-offs and landings with minimum necessary power; maximum performance take-off and landing techniques; restricted site operations; quick stop;

(viii) hovering out of ground effect; operations with external load, if applicable; flight at high altitude;

(ix) basic flight manoeuvres and recovery from unusual attitudes by reference solely to basic flight instruments;

(x) cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids, including a flight at least one hour;

(xi) emergency operations, including simulated powered-lift equipment malfunctions, where applicable; power of reconversion to autorotation; autorotative approach; transmission and interconnect driveshaft failure;

(xii) operations to, from and transmitting controlled aerodromes, compliance with air traffic services procedures; and

(xiii) communication procedures and phraseology.

Note: The instrument experience specified in sub-rule 5(a)(ii)(C) and sub-rule 5(b)(ix) and the night flying experience and dual instruction specified in sub-rule 5(a)(ii)(D) and sub-rule 2(b) of this rule do not entitle the holder of a commercial pilot licence to pilot powered-lift under IFR.

(6) Specific requirements for the issue of the airship category rating:

(a) **Experience**: (i) The applicant shall have completed not less than 200 hours of flight time as a pilot.

(ii) The applicant shall have completed not less than:

(A) 50 hours as a pilot in airships;

(B) 30 hours as pilot-in-command or pilot-in-command under supervision in airships, to include not less than:

- 10 hours of cross-country flight; and

- 10 hours of night flight.

(C) 40 hours of instrument time, of which 20 hours shall be in flight and 10 hours in flight in airship; and

(D) 20 hours of flight training in airships on the areas of operation listed in sub-rule 6(b) of this rule.

(b) **Flight instruction:** The applicant shall have received dual instruction in airships from an authorized flight instructor. The instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the commercial pilot:

(i) recognize and manage threats and errors;

(ii) pre-flight operations, including mass and balance determination, airships inspection and servicing;

(iii) aerodrome and traffic pattern operations, collision avoidance precautions and procedures;

(iv) techniques and procedures for the take-off, including appropriate limitations, emergency procedures and signals used;

(v) control of the airships by external visual reference;

(vi) recognition of leak;

(vii) normal take-offs and landings;

(viii) maximum performance (short field and obstacle clearance) take-offs; short-field landings;

(ix) flight under IFR;

(x) cross-country flying using visual reference, dead reckoning and, where available, radio navigation aids;

(xi) emergency operations, including simulated airship equipment malfunctions;

(xii) operations to, from and transmitting controlled aerodromes, compliance with air traffic services procedures; and

(xiii) communication procedures and phraseology.

25. Multi-crew pilot licence appropriate to the aeroplane category: (1) General requirements for the issue of the licence.- The applicant for a multi-crew licence shall satisfy the following requirements:

(a) Age: The applicant shall be not less than 18 years of age on the date of application;

(b) Academic qualification and knowledge: The applicant shall have passed at least Higher Secondary Certificate (Science) Examination with Physics and Mathematics or its equivalent and shall have met the requirement specified in sub-rule 1(b) or Rule 26 for the airline transport pilot licence appropriate to the aeroplane category in an approved training course.

(c) Skill: (i) The applicant shall have demonstrated the skills required for fulfilling all the competency units specified at Appendix 3 as pilot flying and pilot not flying, to the level required to perform as a co-pilot of turbine-powered aeroplanes certificated for operation with a minimum crew of at least two pilots under VFR and IFR, and to:

(A) recognize and manage threats and errors;

(B) smoothly and accurately manually control the aeroplane within its limitations at all times, such that the successful outcome of a procedure or manoeuvre is assured;

(C) operate the aeroplane in the mode of automation appropriate to the phase of flight and to maintain awareness of the active mode of automation ;

(D) perform, in an accurate manner, normal, abnormal and emergency procedures in al phases of flight; and

(E) communicate effectively with other flight crew members and demonstrate the ability to effectively perform procedures for crew incapacitation, crew coordination, including allocation of pilot tasks, crew cooperation, adherence to standard operating procedures (SOPs) and use of checklist.

(F) progress in acquiring the skills specified in subrule(1)(c) of Rule25 shall be continuously assessed.

(d) Medical fitness: The applicant shall hold medical fitness on the basis of compliance with the requirements as laid down in rules 51 and 52.

(2) Privileges of the holder of the licence and the conditions to be observed in exercising such privileges:

(a) Subject to compliance with the requirements of the general rules concerning pilot licneces and ratings, validity of endorsements and rating in the licence, maintenance of

medical fitness and language proficiency, the privileges of the holder of a multi-crew pilot licence shall be:

(i) to exercise all the privileges of the holder of a private licence in the appropriate aeroplane category provided the requirements of paragraph sub-rule(3) of Rule 23 have been met;

(ii) to exercise the privileges of the instrument rating in a multi-crew operation; and

(iii) to act as co-pilot in an aeroplane required to be operated with a co-pilot.

(b) Before exercising the privileges of the instrument rating in a single pilot operation in aeroplanes, the licence holder shall have demonstrated an ability to act as pilot-in-command in a single pilot operation exercised solely by reference to instruments and met the skill requirements specified in sub-rule 1(b) of Rule 32 appropriate to the aeroplane category.

(c) Before exercising the privileges of a commercial pilot licence in a single pilot operation in aeroplanes, the licence holder shall have:

(i) completed 70 hours, either as pilot-in-command, or made up by not less than 10 hours a pilot-in-command and the necessary additional flight time a pilot-in-command under supervision in aeroplanes;

(ii) completed 20 hours of cross-country flight time as pilot-in-command, or made up[of not less than 10 hours as pilot-in-command and 10 hours as pilot-in-command under supervision, including a cross-country flight totaling not less than 540 km (300 NM) in the course of which full-stop landings as two different aerodromes shall be made; and

(iii) met the requirements for the commercial pilot licence specified in sub-rule 1(b), 1(c), 3(a)(i) & (ii) (B), to (D) and 3(b) of Rule 24 appropriate to the aeroplane category.

Note: When granting single pilot operation privileges to the holder of a MPL, privileges may be documented through an endorsement of the MPL or through the issuance of a CPL in the aeroplane category.

(d) **Experience:** (i) The applicant shall have completed in an approved training course not less than 240 hours as pilot flying and pilot not flying of actual and simulated flight.

(ii) Flight experience in actual flight shall include at least the experience requirements at sub-rule 3(a) of Rule 23, upset recovery training, night flying and flight solely by reference to instruments.

(iii) In addition to meeting sub-rule 2(d)(ii) of this rule, the applicant shall have

gained, in a turbine-powered aeroplane certificated for operation with a minimum crew of at least two pilots, or in a flight simulation training device approved for that purpose by the Chairman in the experience necessary to achieve the advanced level of competency specified by the Chairman.

(e) **Flight instruction:** (i) The applicant shall have completed a course of approved training covering the experience requirements specified in sub-rule 2(d) of Rule 25.

(ii) The applicant shall have received dual flight instruction in all the competency units stated at Appendix 3, to the level required for the issue of the multi-crew pilot licence, to include the competency units required to pilot under instrument flight rules.

26. Airline Transport Pilot Licence: (1) General requirements for the issued of the licence appropriate to the aeroplane, helicopter and powered-lift categories.-The applicant for a Airline Transport Pilot Licence shall satisfy the following requirements:

(a) **Age:** The applicant shall be not less than 21 years of age on the date of application;

(b) **Academic qualification and knowledge:** The applicant shall have passed at least Higher Secondary Certificate (Science) Examination with Physics and Mathematics or its equivalent and shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of an airline transport pilot licence and appropriate to the category of aircraft intended to be included in the licence, in the following subjects.

Air law

(i) rules and regulations relevant to the holder of an Airline Transport Pilot Licence; rules of the air; appropriate air traffic services practices and procedures;

Aircraft general knowledge for aeroplane, helicopter and powered-lift

(ii) general characteristics and limitations of electrical, hydraulic, pressurization and other aircraft systems; flight control systems, including autopilot and stability augmentation;

(iii) principles of operation, handling procedures and operating limitations of aircraft powerplant; effects of atmospheric conditions on engine performance; relevant operational information from the flight manual or other appropriate document;

(iv) operating procedures and limitations of the relevant category of aircraft; effects of atmospheric conditions on aircraft performance in accordance to the relevant operational information from the flight manual;

(v) use and serviceability checks of equipment and systems of appropriate aircraft;

(vi) flight instruments; compasses, turning and acceleration errors; gyroscopic instruments, operational limits and precession effects; practices and procedures in the event of malfunctions of various flight instruments and electronic display units;

(vii) maintenance procedures for airframes, systems and powerplants of appropriate aircraft;

(viii) for helicopter and powered-lift, transmission (power-trains) where applicable;

Flight performance and planning

(ix) effects of loading and mass distribution on aircraft handling, flight characteristics and performance; mass and balance calculations;

(x) use and practical application of take-off, landing and other performance data, including procedures for cruise control;

(xi) pre-flight and en-route operational flight planning; preparation and filing of air traffic services flight plans; appropriate air traffic services procedures; altimeter setting procedures;

(xii) in the case of helicopter or powered-lift, effects of external loading on handling;

Human performance

(xiii) human performance including principles of threats and error management;

Meteorology

(xiv) interpretation and application of aeronautical meteorological reports, charts and forecasts; codes and abbreviations; use of, and procedures for obtaining; meteorological information; pre-flight and in-flight; altimetry;

(xv) aeronautical meteorology; climatology of relevant areas in respect of the elements having an effect upon aviation; the movement of pressure systems; the structure of fronts, and the origin and characteristics of significant weather phenomena which effect take-off, en-route and landing conditions;

(xvi) causes, recognition and effects of icing; frontal zone penetration procedures; hazardous weather avoidance;

(xvii) in the case of aeroplane and powered-lift, practical high altitude meteorology, including interpretation and use of weather reports, charts and forecasts; jet streams;

Navigation

(xviii) air navigation, including the use of aeronautical charts, radio navigation aids and area navigation systems; specific navigation requirements for long-range flights;
(xix) use, limitation and serviceability of avionics and instruments necessary for the control and navigation of aircraft;

(xx) use, accuracy and reliability of navigation systems and landing phases of flight; identification of radio navigation aids;

(xxi) principles and characteristics of self-contained and external-referenced navigation systems; operation of airborne equipment;

Operational procedures

(xxii) applicant of threat and error management to operational performance;

(xxiii) interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;

(xxiv) precautionary and emergency procedures; safety practices;

(xxv) operational procedures for carriage of freight and dangerous goods;

(xxvi) requirements and practices for safety briefing to passengers, including precautions to be observed when embarking and disembarking from aircraft;

(xxvii) in the case of the helicopter, and if applicable, powered-lift, settling with power; ground resonance; retreating blade stall; dynamic roll-over and other operation hazards; safety procedures, associated with flight in VMC;

Principles of flight

(xxviii) principles of flight;

Radiotelephony

(xxix) communication procedures and phraseology, action to be taken in case of communication failure.

(2) In addition to the above subjects, the applicant for an airline transport pilot licence applicable to the aeroplane or powered-lift category, shall have met the knowledge requirements for the instrument rating at 1(a) of Rule 32.

(c) **Skill:** (i) The applicant shall have demonstrated the ability to perform as pilot-in-command of an aircraft of the appropriate category required to be operated with a co-pilot, the following procedures and manoeuvres:

(A) pre-flight procedures, including the preparation of the operational flight plan and filing of the air traffic services flight plan;
(B) normal flight procedures and manoeuvres during all phases of flight;

(C) abnormal and emergency procedures and manoeuvres related to failures and malfunctions of equipment, such as powerplant, systems and airframe;
(D) procedures for crew incapacitation and crew co-ordination, including allocation of pilot tasks, crew co-operation and use of checklists; and

(E) in the case of aeroplane and powered-lift, procedures and manoeuvres for instrument flight described in 1(b)(i)(A) to (D) of Rule 32, including simulated engine failure.

(ii) In the case of aeroplane, the applicant shall have demonstrated the ability to perform the procedures and manoeuvres described in 1(C) of Rule 26 as pilot-in-command of a multi-engined aeroplane.

(iii) The applicant shall have demonstrated the ability to perform the procedures and manoeuvres described in 2.6.1.3 with a degree of competency appropriate to the privileges granted to the holder of an airline transport pilot licence, and to:

(A) recognize and manage threats and errors;

(B) smoothly and accurately control the aircraft within its limitations at all times, such that the successful outcome of a procedure or manoeuvre is assured;

(C) operate of aircraft in the mode of automation appropriate to the phase of flight and to maintain awareness of the active mode of automation;

(D) perform, in an accurate manner, normal, abnormal and emergency procedures in all phases of flight;

(E) exercise good judgment and airmanship, to include structured decision making and the maintenance of situational awareness; and

(F) communicate effectively with the other flight crew members and demonstrate the ability to effectively perform procedures for crew

incapacitation, crew coordination, including allocation of pilot tasks, crew cooperation, adherence to standard operation procedures (SOPs) and use of checklists.

(d) **Medical Fitness**: The applicant shall hold medical fitness on the basis of compliance with the requirements as laid down in rules 51 and 52.

(2) **Privileges of the holder of the licence and the conditions to be observed in exercising such privileges**:

(a) Subject to compliance with the requirements of the general rules concerning pilot licences and ratings, validity of endorsements and ratings in the licence, maintenance of medical fitness and language proficiency, the privileges of the holder of an airline transport pilot licence shall be:

(i) to exercise all the privileges of the holder of a private and commercial pilot licence of an aircraft within the appropriate aircraft category and , in the case of a licence for the aeroplane and powered-lift categories, of the instruments rating; and

(ii) to act as pilot-in-command in commercial air transport in an aircraft of the appropriate category and certificated for operation with more than one pilot.

(b) When the holder of an airline transport pilot licence in the aeroplane category has only previously held a MPL, the privileges of the licence shall be limited to multi-crew operations unless the holder has met the requirements established in 2(a)(i), 2(b) and 2(c) of Rule 256 as appropriate. Any limitation of privileges shall be endorsed on the licence.

(3) **Specific requirements for the issue of the aeroplane category rating:**

(a) **Experience**: (i) The applicant shall have completed not less than 1500 hours of flight time as a pilot of aeroplanes. Experience as a pilot under instruction in a flight simulation training device approved by the Chairman, is acceptable as part of the total flight time of 1500 hours and credit for the experience shall be limited to a maximum of 100 hours of which not more than 25 hours shall have been acquired in a flight procedure trainer or a basic instrument flight trainer.

(ii) The applicant shall have completed in aeroplanes not less than:

(A) 500 hours as pilot-in-command under supervision or 250 hours, either as pilot-in-command, or made up by not less than 70 hours as pilot-in-command and necessary additional flight time as pilot-in-command under supervision;

(B) 200 hours of cross-country flight time, of which not less than 100 hours shall be as pilot-in-command or as pilot-in-command under supervision;

(C) 75 hours of instrument time, of which not more than 30 hours may be instrument ground time; and

(D) 100 hours of night flight as pilot-in-command or as co-pilot.

(iii) When the applicant has flight time as a pilot of aircraft in other categories, the Chairman shall determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of 3(a) of this rule can be reduced accordingly.

(b) **Flight instruction:** The applicant shall have received the dual flight instruction required at 3(b) of rule 24 for the issue of the commercial pilot licence and t 2(c) of rule 32 for the issue of the instrument rating-or at 2(e) of rule 25 for the issue of the multi-crew pilot licence.

(4) Specific requirements for the issue of the helicopter category rating:

(a) **Experience:** (i) The applicant shall have completed not less than 1000 hours of flight time as a pilot of helicopters. Chairman shall determine whether experience as a pilot under instruction in a flight simulation training device is acceptable as part of the total flight time of 1000 hours. Credit for such experience shall be limited to a maximum of 100 hours, of which not less than 25 hours shall have been acquired in a flight procedure trainer or a basic instrument flight trainer.

(ii) The applicant shall have completed in helicopters not less than:

(A) 250 hours, either as pilot-in-command, or made up by not less than 70 hours as pilot-in-command and necessary additional flight time as pilot-in-command under supervision;

(B) 200 hours cross-country flight time, of which not less than 100 hours shall be as pilot-in-command or as pilot-in-command under supervision;

(C) 30 hours of instrument time, of which not more than 10 ours may be instrument ground time; and

(D) 50 hours of night flight, as pilot-in-command or as co-pilot.

(iii) When the applicant has flight time as a pilot of aircraft in other categories, the Chairman shall determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of 4(a)(i) of this rule, can be reduced accordingly.

(b) **Flight instruction:** The applicant shall have received the flight time instruction required for the issue of the commercial pilot licence 4(b) of rule 24.

Note: The instrument time specified in 4(a)(ii)(C) and the night flying time specified in 4(a)(ii)(D) do not entitle the holder of the airline transport pilot licence-helicopter to pilot helicopters under IFR

(5) Specific requirements for the issue of the powered-lift category rating:

(a) Experience: (i) The applicant should have completed not less than 1500 hours of flight time as a pilot in a powered-lift. Chairman should determine whether experience as a pilot under instrument in a flight simulation training device is acceptable a part of the total flight time of 1500 hours.

(ii) The applicant should have completed in a powered-lift not less than:

(A) 250 hours, either as pilot-in-command, or made up by not less than 70 hours as pilot-in-command and the necessary additional flight time as pilot-in-command under supervision;

(B) 100 hours of cross-country flight time, of which not less than 50 hours shall be as pilot-in-command or as pilot-in-command under supervision;

(C) 75 hours of instrument time, of which not more than 30 hours may instrument ground time; and

(D) 25 hours of night flight as pilot-in-command or as co-pilot.

(iii) When the applicant has flight time as a pilot of aircraft in other categories, the Chairman should determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of 2(a)(i) of this rule could be reduced accordingly.

(b) **Flight instruction:** The applicant should have received the dual flight instruction required at 5(b) of rule 24 for the issue of the commercial pilot licence and at 2(C) of rule 32 for the issue of the instrument rating.

27. Glider pilot licence: (1) Requirements for the issue of the licence.- The applicant for a glider pilot licence shall satisfy the following requirements:

(a) **Age**: The applicant shall be not less than 16 years of age on the date of application.

(b) **Knowledge**: The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a glider pilot licence, in at least the following subjects:

Air law

(i) rules and regulations relevant to the holder of a glider pilot licence; rules of the air; appropriate air traffic services practices and procedures;

Aircraft general knowledge

(ii) principles of operation of glider systems and instruments;

(iii) operating limitations of gliders; relevant operational information from the flight manual or other appropriate document;

Flight performance and planning

(iv) effects of loading and mass distribution on flight characteristics; mass and balance considerations;

(v) use and practical application of launching, landing and other performance data;

(vi) pre-flight and en-route flight planning appropriate to operations under VFR; appropriate air traffic services procedures, altimeter setting procedures; operations in areas of high-density traffic;

Human performance

(vii) Human performance relevant to the glider pilot including principles of threat and error management;

Meteorology

(viii) application of elementary aeronautical meteorology; use of, and procedures for obtaining, meteorological information; altimetry;

Navigation

(ix) practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts;

Operational procedures

(x) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;

(xi) different launch methods and associated procedures;

Principles of flight

(xiii) principles of flight relating to gliders.

(c) The applicant should have demonstrated a level of knowledge appropriate to the privileges to be granted to the holder of a glider pilot licence, in communication procedures and phraseology as appropriate to VFR operations and on action to be taken in case of communication failure.

(d) **Experience**: (i) The applicant shall have completed not less than six hours of flight time as a pilot of gliders including two hours solo flight time during which not less than 20 launches and landings have been performed.

(ii) When the applicant has flight time as a pilot of aeroplanes, the Chairman shall determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of sub-rule 1(d)(i) of this rule can be reduced accordingly.

(iii) The applicant shall have gained, under appropriate supervision, operational experience in gliders in at least the following areas:

(A) pre-flight operations including glider assembly and inspection;

(B) techniques and procedures for the launching method used, including appropriate airspeed limitations, emergency procedures and signals used;

(C) traffic pattern operations, collision avoidance precautions and procedures;

(D) control of the glider by external visual reference;

(E) flight throughout the flight envelope ;

(F) recognition of, and recovery from, incipient and full stalls and spiral dives;

(G) normal and cross-wind launches, approaches and landings;

(H) cross-country flying using visual reference and dead-reckoning;
(I) emergency procedures.

(e) **Skill**: The applicant shall have demonstrated the ability to perform as pilot-in-command of a glider, the procedures and manoeuvres described in sub-rule 1(d)(iii) of this rule with a degree of competency appropriate to the privileges granted to the holder of a glider pilot licence, and to;

(i) recognize and manage threats and errors;

(ii) operate the glider within its limitations;

(iii) complete all manoeuvres with smoothness and accuracy;

(iv) exercise good judgment and airmanship;

(v) apply aeronautical knowledge; and

(vi) maintain control of the glider at all times in a manner such that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

(f) **Medical Fitness**: The applicant shall hold medical fitness on the basis of compliance with the requirements as laid down in rules 51 and 53.

(2) **Privileges**: Subject to validity of endorsements and ratings in the licence, the privileges of the holder of a glider pilot licence shall be to act as Pilot-in-command of any glider provided the licence holder has operational experience in the launching method used. If passengers are to be carried, the licence holder should have completed not less than 10 hours of flight time as pilot glider.

27A. Free balloon pilot licence: (1) The provisions of the free balloon pilot licence apply to free balloons using hot air or gas.

(2) **Requirements for the issue of the licence**: The applicant for a free balloon pilot's licence shall satisfy the following requirements:

(a) **Age**: The applicant shall be not less than 16 years of age on the date of application.

(b) **Knowledge**: The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a free balloon pilot licence, in at least the following subjects:

Air law

(i) rules and regulations relevant to the holder of a free balloon pilot licence; rules of the air; appropriate air traffic services practices and procedures;

Aircraft general knowledge

(ii) principles of operations of free balloon systems and instruments,

(iii) operating limitation of free balloons; relevant operational information from the flight manual or other appropriate documents;

(iv) physical properties and practical application of gasses used in free balloons;

Flight performance and planning

(v) effects of loading on flight characteristics; mass calculations;

(vi) use and practical application of launching, landing and other performance data, including the effect of temperature;

(vii) pre-flight and en-route flight planning appropriate to operations under VFR; appropriate air traffic services procedures; altimeter setting procedures; operations in areas of high-density traffic;

Human performance

(viii) human performance relevant to the free balloon pilot including principles of threat and error managements;

Meteorology

(ix) application of elementary aeronautical meteorology; use of, and procedures for obtaining, meteorological information; altimetry;

Navigation

(x) practical aspects of air navigation and dead-reckoning techniques; use of aeronautical charts;

Operational procedures

(xi) use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations;

(xii) appropriate precautionary and emergency procedures, including action to be taken to avoid hazardous weather, wake turbulence and other operating hazards;

Principles of flight

(xiii) principles of flight relating to free balloons;

(c) The applicant should have demonstrate a level of knowledge appropriate to the privileges to be granted to the holder of a free balloon pilot licence, in radiotelephony procedures and phraseology as appropriate to VFR operations and on action to be taken in case of communication failure.

(d) **Experience**: (i) The applicant shall have completed not less than 16 hours time as a pilot of free balloons including at least eight launches and ascents of which one must be solo.

(ii) the applicant shall have gained, under appropriate supervision, operational experience in free balloons in at least the following areas :

(A) pre-flight operation, including balloon assembly, rigging, inflation, mooring and inspection;

(B) techniques and procedures for the launching and ascent, including appropriate limitations, emergency procedures and signals used;

(C) collision avoidance precautions;

(D) control of a free balloon by external visual reference;

(E) recognition of, and recovery from, rapid descents;

(F) cross-country flying using visual reference and dead-reckoning;

(G) approaches and landings, including ground handling;

(H) emergency procedures.

(iii) If the privileges of the licence are to be exercised at night, the applicant shall have gained, under appropriate supervision, operational experience in free balloons in night flying.

(iv) If passengers are to be carried for remuneration or hire, the licence holder shall have completed not less than 35 hours of flight time including 20 hours as a pilot of free balloon.

(e) **Skill**: The applicant shall have demonstrated the ability to perform as pilot-in-command of a free balloon, the procedures and maneuvers described in sub-rule 2(d)(ii) of this rule with a degree of competence appropriate to the privileges granted to the holder of a free balloon pilot's licence, and to:

(i) recognize and manage threats and errors;

(ii) operate the free balloon within its limitations;

(iii) complete all manoeuvres with smoothness and accuracy;
(iv) exercise good judgment and airmanship;

(v) apply aeronautical knowledge; and

(vi) maintain control of the free balloon at all times in a manner such that the successful outcome of a procedure or manoeuvre is never seriously in doubt.

(f) **Medical fitness**: The applicant shall have his fitness on the basis compliance with the requirements as laid down in rules 51 and 53.

(2) Privileges of the holder of the licence and the conditions to be observed in exercising such privileges: (1) Subject to compliance with the requirements of the general rules concerning pilot licences and ratings, validity of endorsements and rating in the licence, the privileges of the holder of a free balloon pilot licence shall be to act as pilot-in-command of any free balloon provided that the licence holder has operational experience in hot air or gas balloons as appropriate. In addition, if passengers are to be carried for remuneration or hire, the licence holder shall have completed not less than 35 hours of flight time including 20 hours as a pilot of free balloon.

(ii) Before exercising the privileges at night, the licence holder shall have complied with the requirements specified in sub-rule 2(d)(iii) of this rule.

28. Deleted.

29. Deleted.

30. Deleted.

31. Deleted.

32. Instrument Rating: (1) Requirements for the issue of the rating for aeroplane, helicopter, powered-lift and airship categories.-The applicant for an instrument rating shall satisfy the following requirements:

(a) **Knowledge**: The applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of an instrument rating, in at least the following subjects:

Air law

(i) rules and regulation relevant to flight under IFR; related air traffic services practices and procedures;

Aircraft general knowledge for the aircraft category being sought

(ii) use, limitation and serviceability of avionics, electronic devices and instruments necessary for the control and navigation of aircraft under IFR and in instrument meteorological conditions; use and limitations of autopilot;

(iii) compasses, turning and acceleration errors; gyroscopic instruments, operational limits and precession effects; practices and procedures in the event of malfunctions of various flight instruments;

Flight performance and planning for the aircraft category being sought

(iv) pre-flight preparations and checks appropriate to flight under IFR;

(v) operational flight planning; preparation and filling of air traffic services flight plans under IFR; altimeter setting procedures;

Human performance for the aircraft category being sought

(vi) human performance relevant to instrument flight in aircraft including principles of threat and error management;

Meteorology for the aircraft category being sought

(vii) application of aeronautical meteorology; interpretation and use of reports; charts and forecasts; codes and abbreviations; use of, and procedures for obtaining, meteorological information; altimetry;

(viii) causes, recognition and effects of engine and airframe icing; frontal zone penetration procedures; hazardous weather avoidance;

(ix) in the case of helicopter and powered-lift, effects of rotor icing;

Navigation for the aircraft category being sought

(x) practical air navigation using radio navigation aids;

(xi) use, accuracy and reliability of navigation systems used in departure, en-route, approach and landing phases of flight; identification of radio navigation aids;

Operational procedures for the aircraft category being sought

(xii) applicant of threat and error management to operational procedures;

(xiii) interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes and abbreviations, and instrument procedure charts for departure, en-route, descent and approach;

(xiv) precautionary and emergency procedures; safety practices associated with flight under IFR; obstacle clearance criteria;

Radiotelephony

(xv) communication procedures and phraseology as applied to aircraft operations under IFR; action to be taken in case of communication failure.

(b) **Skill**: (i) The applicant shall have demonstrated in an aircraft of the category for which the instrument rating is being sought the ability to perform the procedures and manoeuvres described in sub-rule 2(c) of this rule with a degree of competency appropriate to the privileges granted to the holder of an instrument rating, and to:

(A) recognize and manage threats and errors;

(B) operate the aircraft for the category being sought within its limitations;

(C) complete all manoeuvres with smoothness and accuracy;
(D) exercise good judgment and airmanship;

(E) apply aeronautical knowledge;

(F) maintain control of the aircraft at all times in a manner such that the successful outcome of a procedure or manoeuvre is assured.

(ii) The applicant shall have demonstrated the ability to operate mulit-engined aircraft of the appropriate category solely by reference to instruments with one engine inoperative, or simulated inoperative, if the privileges of the instrument fating on such aircraft;

(c) **Medical fitness**: (1) Applicant who hold a private pilot licence shall have established their hearing acuity on the basis of compliance with the hearing requirements for the issue of a Class 1 Medical Assessment.

(2) Privileges of the holder of the rating and the conditions to be observed in exercising such privileges: (a) (i) Subject to compliance with the requirements of the general rules concerning pilot licences and ratings, validity of endorsements and rating in the licence, the privileges of the holder of an instrument rating with a specific aircraft category of aircraft under IFR.

(ii) Before exercising the privileges on multi-engined aircraft, the holder of the rating shall have complied with the requirements of sub-rule 1(b)(ii) of this rule.

Note: Pilot may exercise joint category privileges of the instrument rating on more than one category of aircraft if they have completed the requirements in each category.

(b) **Experience**: (i) The applicant shall hold a pilot licence for the aircraft category being sought.

(ii) The applicant shall have completed not less than:

(A) 50 hours of cross-country flight time as pilot-in-command of aircraft in categories acceptable to the Chairman, of which not less than 10 hours shall

be in the aircraft category being sought; and

(B) 40 hours of instrument time in aircraft of which not more than 20 hours, or 30 hours where a flight simulator is used, may be instrument ground time; and the ground time shall be under the supervision of an authorized instructor.

(c) **Flight Instruction**: The applicant shall have gained not less than 10 hours of the instrument flight time required in sub-rule 2(b)(ii) while receiving dual instrument flight instruction in the aircraft category being sought from an authorized flight instructor; and the instructor shall ensure that the applicant has operational experience in at least the following areas to the level of performance required for the holder of an instrument rating:

(i) pre-flight procedures including the use of the flight manual or equivalent document, and appropriate air traffic services documents in the preparation of an IFR flight plan;
(ii) pre-flight inspection, use of checklists, taxiing and pre-take-off-checks;

(iii) procedures and manoeuvres for IFR operation under normal, abnormal and emergency conditions covering at least :

(A) transition to instrument flight on take-off;

(B) standard instrument departures and arrivals;

(C) en-route IFR procedures;

(D) holding procedures;

(E) instrument approaches to specified minima;

(F) missed approach procedures; and

(G) landings from instrument approaches;

(iv) in-flight manoeuvres and particular flight characteristics.

(v) If the privileges of the instrument rating are to be exercised on multi-engined aeroplanes, the applicant shall have received dual instrument flight instruction in such an aeroplane from an authorized flight instructor, and the instructor shall ensure that the applicant has operational experience in the operation of the aeroplane solely be reference to instruments with one engine inoperative or simulated inoperative.

32A. Deleted.

33. Deleted.

34. Flight instructor rating appropriate to aeroplanes, airships, helicopters and powered-lift: (1) Requirements for the issue of the rating.- The applicant for the flight instructor's rating shall satisfy the following requirements:

(a) **Knowledge**: The applicant shall have met the knowledge requirements for the issue of a commercial pilot licence as appropriate to the category of aircraft included in the licence. In addition, the applicant shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a flight instructor rating, in at least the following areas:

(i) techniques of applied instruction;
(ii) assessment of student performance in those subjects in which ground instruction is given ;

(iii) the learning process ;

(iv) elements of effective teaching;

(v) student evaluation and testing, training philosophies;

(vi) training programme development;

(vii) lesson planning;

(viii) classroom instructional techniques;

(ix) use of training aids, including flight simulation training devices as appropriate;

(x) analysis and correction of student errors;

(xi) human performance relevant to flight instruction including principles of threat and error management;

(xii) hazards involved in simulating system failures and malfunctions in the aircraft.

(b) **Skill**: The applicant shall have demonstrated, in the category and class of aircraft for which flight instructor privileges are sought, the ability to instruct in those areas in which flight instruction is to be given, including pre-flight, post-flight and ground instruction as appropriate.

(c) **Experience**: The applicant shall have met the experience requirements for the issue of a commercial pilot licence as specified in sub-rule 3(a), sub-rule 4(a), sub-rule 5(a) and sub-rule 6(a) of Rule 24 for each aircraft category, as appropriate.

(d) **Flight Instruction**: The applicant shall, under the supervision of a flight instructor accepted by the Chairman for that purpose:

(i) have received instruction techniques in those flight manoeuvres and procedures in which it is intended to provide flight instruction.

(ii) have practiced instructional techniques in those flight manoeuvres and procedures in which it is intended to provide flight instruction.

(2) Privileges of the holder of the rating and the conditions to be observed in exercising such privileges: (a) Subject to compliance with the requirements of the general rules concerning pilot licences and ratings, validity of endorsements and rating in the licence, the privileges of the holder of a flight instructor rating shall be:

(i) to supervise solo flights by student pilots ; and
(ii) to carry out flight instruction for the issue of a private pilot licence, a commercial pilot licence, an instrument rating, and a flight instructor rating.

Provided that the flight instructor:

(A) holds at least the licence and rating for which instruction is being given, in the appropriate aircraft category;
(B) holds the licence and rating necessary to act as the pilot-in-command of the aircraft on which the instruction is given ; and

(C) has the flight instructor privileges granted entered on the licence.

(b) The applicant, in order to carry out instruction for the multi-crew pilot licence, shall have also met all the instructor qualifications requirements.

35. Flight navigator licence: (1) Requirement for the issue of the licence: The applicant for the flight navigator licence shall meet the following requirements:

(a) **Age**: The applicant shall be not of less than 18 years of age on the date of application;

(b) **Academic Qualification and Knowledge:** The applicant shall have passed the Higher Secondary Certificate (Science) Examination or its equivalent and shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a flight navigator licence, in at least the following subjects:

Air law

(i) rules and regulations relevant to the holder of a Flight Navigator Licence; appropriate air traffic services practices and procedures;

Flight performance and planning

(ii) effects of loading and mass distribution on aircraft performance ;

(iii) use of take-off, landing and other performance data including procedures for cruise control;

(iv) pre-flight and en-route operational flight planning; preparation and filing of air traffic services flight plans, appropriate air traffic services procedures; altimeter setting procedures;

Human performance

(v) human performance relevant to the flight navigator including principles of threats and error management;

Meteorology

(vi) interpretation and practical application of aeronautical meteorological reports, charts and forecasts; cods and abbreviations; use of, and procedures for obtaining, meteorological information, pre-flight and in-flight; altimetry;

(vii) aeronautical meteorology; climatology of relevant areas in respect of the elements having an effect upon aviation; the movement of pressure systems; the structure of fronts and the origin and characteristics of significant weather phenomena which effect take-off, en-route and landing conditions;

Navigation

(viii) dead-reckoning, pressure=pattern and celestial navigation procedures; the use of aeronautical charts, radio navigation aids and area navigation systems; specific navigation requirement for long-rang flights;

(ix) use, limitation and serviceability of avionics and instruments necessary for the navigation of the aircraft;

(x) use, accuracy and reliability of navigation systems used in departure, en-route and approach phases of flight; identification of radio navigation aids;

(xi) principles, characteristics and use of self-contained and external-referenced navigation systems; operation of airborne equipment;

(xii) the celestial sphere including the movement of heavenly bodies and their selection and identification for the purpose of observation and reduction of sights; calibration of sextants; the completion of navigation documentation;

(xiii) definitions, units and formulae used in air navigation;

Operational procedures

(xiv) interpretation and use of aeronautical documentation such as AIP, NOTAM, aeronautical codes, abbreviations, and instrument procedure charts for departure, en-route, descent and approach;

Principles of flight

(xv) principles of flight;

Radiotelephony

(xvi) communication procedures and phraseology;

(c) Experience: (i) The applicant shall have completed in the performance of the duties of a flight navigator not less than 200 hours of flight time acceptable to the Chairman, in aircraft engaged in cross-country flights, including not less than 30 hours by night;

(ii) when the applicant has flight time as a pilot, the Chairman may reduce the flight time requirements of sub-rule (i) of this Rule;

(iii) the applicant shall produce evidence of having satisfactorily determined the aircraft's position in flight, and used that information to navigate the aircraft, as follows:

(A) by night-not less than 25 times by celestial observations; and

(B) by day – not less than 25 times by celestial observations in conjunction with self-contained or external referenced navigation systems.

(d) **Skill**: The applicant shall have demonstrated the ability to perform as flight navigator of an aircraft with a degree of competency appropriate to the privileges granted to the holder of a flight navigator licence, and to:

(i) recognize and manage threats and errors;

(ii) exercise good judgment and airmanship;

(iii) apply aeronautical knowledge;

(iv) perform all duties as part of an integrated crew; and

(v) communicate effectively with the other flight crew members.

(e) **Medical fitness**: The applicant shall have established medical fitness on the basis of compliance with the requirements as laid down in rules 51 and 53.

(2) **Privileges**: The privileges of the holder of a flight navigator licence shall be to act as a flight navigator of any aircraft where a flight navigator is required to be carried. If privileges include radiotelephony communication, the licence holder shall comply with the requirements specified in sub-rule(31) of Rule 21A.

36. Deleted.

37. Flight engineer licence: (1) Requirements for the issue of the licence.- The applicant for the flight engineer licence shall satisfy the following requirements:

(a) **Age**: The applicant shall be not less than 18 years of age on the date of application;

(b) **Academic Qualification and Knowledge**: The applicant shall have passed at least Higher Secondary Certificate (Science) Examination or its equivalent and shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder o a flight engineer licence, in at least the following subjects:

Air law

(i) rules and regulations relevant to the holder of a Flight Engineer Licence; rules and regulations governing the operation of civil aircraft pertinent to the duties of a flight engineer;

Aircraft general knowledge

(ii) basic principles of powerplants, gas turbines and/or piston engines; characteristic of fuels, fuel systems including fuel control; lubricants and lubrication systems; afterburners and injection systems, function and operation of engine ignition and starter systems;

(iii) principles of operation, handling procedures and operating limitations of aircraft powerplants; effects of atmospheric conditions on engine performance;

(iv) airframes, flight controls, structures, wheel assemblies, brakes and anti-skid units, corrosion and fatigue life;

(v) ice and rain protection systems;

(vi) pressurization and air-conditioning systems, oxygen systems;

(vii) hydraulic and pneumatic systems;

(viii) basic electrical theory, electric systems (AC and DC), aircraft wiring systems, bonding and screening;

(ix) principles of operation of instruments, compasses, autopilots, radio communication equipment, radio and radar navigation aids, flight management systems, displays and avionics;

(x) limitations of appropriate aircraft;

(xi) fire protection, detection, suppression and extinguishing systems;

(xii) use and serviceability checks of equipment and systems of appropriate aircraft;

Flight performance and planning

(xiii) effects of loading and mass distribution on aircraft handling, flight characteristics and performance; mass and balance calculations;

(xiv) use and practical application of performance data including procedures for cruise control;

Human performance

(xv) human performance relevant to the flight engineer, including principles of threat and error management.

Operational procedures

(xvi) principles of maintenance, procedures for the maintenance of airworthiness, defect reporting, pre-flight inspections, precautionary procedures for fuelling and use of external power; installed equipment and cabin systems;

(xvii) normal, abnormal and emergency procedures;

(xviii) operational procedures for carriage of freight and dangerous goods;

Principles of flight

(xix) fundamentals of aerodynamics;

Radiotelephony

(xx) communication procedures and phraseology.

(c) The applicant should have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a flight engineer licence in at least the following subjects:

(i) fundamentals of navigation; principles and operation of self-contained systems; and

(ii) operational aspects of meteorology.

(d) **Experience**: (i) The applicant shall have completed, under the supervision of a person accepted by the Chairman for that purpose, not less than 100 hours of flight time in the performance of the duties of a flight engineer. Chairman shall determine whether experience as a flight engineer in a flight simulator, which it has approved, is acceptable as part of the total flight time of 100 hours, and credit for such experience shall be limited to a maximum of 50 hours.

(ii) When the applicant has flight time as a pilot, the Chairman determine whether such experience is acceptable and, if so, the extent to which the flight time requirements of sub-rule 1(d)(i) of this rule can be reduced accordingly.

(iii) The applicant shall have operational experience in the performance of the duties of a flight engineer, under the supervision of a flight engineer accepted by the Chairman for that purpose, at least in the following areas:

(A) Normal procedures

- pre-flight inspections
- fuelling procedures, fuel management
- inspection of maintenance documents
- normal flight deck procedures during all phases of flight
- crew co-ordination and procedures in case of crew in capacitation and
- defect reporting

(B) Abnormal and alternate (Standby) procedures
- recognition of abnormal functioning of aircraft systems
- use of abnormal and alternate (standby) procedures

(C) Emergency procedures

- recognition of emergency conditions
- use of appropriate emergency procedures

(e) **Skill**: (i) The applicant shall have demonstrated the ability to perform as flight engineer of an aircraft, the duties and procedures described in sub-rule 1(d)(iii) with a degree of competency appropriate to the privileges granted to the holder of a flight engineer licence, and to:

(A) recognize and management threats and errors;

(B) use aircraft systems within the aircraft's capabilities and limitations;

(C) exercise good judgment and airmanship;

(D) apply aeronautical knowledge;

(E) perform all the duties as part of an integrated crew with the successful outcome assured; and

(F) communicate effectively with the other flight crew members.

(ii) The use of a flight simulation-training device for performing any of the procedures required during the demonstration of skill described in 1(c) of this rule shall be approved by the Chairman, which shall ensure that the flight simulation-training device is appropriate to the task.

(f) **Medical fitness**: The applicant shall have established medical fitness on the basis of compliance with the requirements as laid down in Rules 51 and 53 of these rules.

(2) **Privileges**: (i) Subject to the endorsements and rating in the licence, the privileges of the holder of a flight engineer licence shall be to act as flight engineer of any type of aircraft on which the holder has demonstrated a level of knowledge and skill, as determined by the Chairman of the basis of those requirements specified in sub-rule (1) (b) and (1) (d) which are applicable to the safe operation of that type of aircraft."

(ii) The types of aircraft on which the holder of a flight engineer licence is authorized to exercise the privileges of tat licence, shall be either entered on the licence or recorded also where in a manner acceptable to the Chairman..

38. (1) An applicant shall, before being issued with any licence or rating for personnel other than flight crew members, meet such requirements in respect of age, knowledge, experience and where appropriate, medical fitness and skill, as are specified for that licence or rating.

(2) An applicant, for any licence or rating for personnel other than flight crew members, shall demonstrate, in a manner determined by the Licensing Authority, such requirements in respect of knowledge and skill as are specified for that licence or rating.

38A. Aeronautical Station Operator Licence.- (1) Requirements for the issue of the Licence : An applicant for an Aeronautical Station Operator Licence shall meet the following requirements:

(a) **Age**: The applicant shall be not less than 18 years of age on the date of application.

(b) **Academic Qualification and Knowledge**: The applicant shall have passed Higher Secondary (Science) Examination or its equivalent and shall have demonstrated a level of knowledge appropriate to the holder of an Aeronautical Station Operator Licence, in at least the following subjects:

General knowledge

(i) Air traffic services provided within Bangladesh;

Operational procedures

(ii) Radiotelephony procedures; phraseology; telecommunications network;

Rules and regulations

(iii) Rules and regulations applicable to the aeronautical station operator, and

Telecommunication equipment

(iv) Principles, use and limitations of telecommunication equipment in aeronautical stations.

(c) **Experience:** The applicant shall have:

(i) satisfactorily completed an approved training course within the 12 month period immediately proceeding application, and have served satisfactorily under a qualified aeronautical station operator for not less than two months; or

(ii) satisfactorily served under a qualified aeronautical station operator for not less than six months during the 12-month period immediately preceding application.

(d) **Skill**: The applicant shall have demonstrated, or have demonstrated, competency in:

(i) operating the telecommunication equipment in use; and

(ii) transmitting and receiving radiotelephony messages with efficiency and accuracy.

(2) **Privileges:** (a) the privileges of the holder of an Aeronautical Station Operator Licence shall be to act as an operator in an aeronautical station.

(b) before exercising the privileges of the licence, the holder shall be familiar with all pertinent and current information regarding the types of equipment and operating procedures use at that aeronautical station.

39. Aircraft Maintenance Engineer: (1) **Requirement for the issue of the Licence:** An applicant for the Aircraft Maintenance Engineer Licence shall meet the following requirements:

(a) **Age**: the applicant shall be not less than 18 years of age on the date of application;

(b) **Academic qualification and knowledge**: The applicant shall have passed at least Higher Secondary (Science) Examination or its equivalent or has obtained a Diploma in relevant branch of Aircraft Maintenance Technology or Mechanical, Electrical, Power or Electronics Engineering and shall have demonstrated a level of knowledge relevant to the privileges to be granted and appropriate to the responsibilities of an aircraft maintenance engineer licence holder, in at least the following subjects:

Air law and airworthiness requirements

(i) rules and regulations relevant to an aircraft maintenance engineer licence holder including applicable airwo5rthiness requirements governing certification and continuing airworthiness of aircraft and approval aircraft maintenance organization and procedures,

Natural science and aircraft general knowledge

(ii) basic mathematics: nits of measurements, fundamental principles and theory of physics and chemistry applicable to aircraft maintenance,

Aircraft engineering

(iii) characteristics and applications of the materials of aircraft construction including principles of construction and functioning of aircraft structures fastening techniques, powerplants and their associated systems, mechanical fluid, electrical and electronic power sources, aircraft instrument and display system, aircraft control systems, and airborne navigations and communications systems,

Aircraft maintenance

(iv) tasks required to ensure the continuing airworthiness of an aircraft including

methods and procedures for the overhaul, repair, inspection, replacement, modification or defect rectification of aircraft structures, components and system in accordance with the methods prescribed in the relevant Maintenance Manuals and the applicable Standards of airworthiness, and

Human performance

(v) human performance relevant to aircraft maintenance;

(c) **Experience**: the applicant shall have had the following experience in the inspection, servicing and maintenance of aircraft or its components:

(i) for the issue of a licence with privileges for the aircraft in its entirety, at least:

(A) four years ; or

(B) two years if the applicant has satisfactorily completed an approved training course; and

(ii) for the issue of a licence with privileges restricted in accordance with sub-rule (2)(b)(i) B. or (2)(b)(i) C a period of time that will enable a level of competency equivalent to that required in sub-rule (2)(b)(i) to be attained, provided that this is not less than:

(A) two years ; or

(B) such a period as the Chairman considers necessary to provide an equivalent level of practical experience to applicants who have satisfactorily completed an approved training course;

(d) **Training**: The applicant should have completed a course of training appropriate to the privileges to be granted.

(e) **Skill**: The applicant shall have demonstrated the ability to perform those functions applicable to the privileges to be granted;

(f) **Medical Fitness:** For the initial licence only the applicant shall have established medical fitness on the basis of compliance with the requirements as laid down in Rule 51(2).

(2) **Privileges:** (a) Subject to compliance with the requirements specified in sub-rule (2)(b) and (2)(c), the privileges of the holder of an Aircraft Maintenance Engineer Licence shall be to certify the aircraft or parts of the aircraft as airworthy after an authorized repair, modification or installation of a power plant, accessories, instrument, and/or item of equipment, and to sign a maintenance release following inspection, maintenance operations and/or routine servicing.

(b) The privileges of the holder of an Aircraft Maintenance Engineer Licence specified in sub-rule (2)(a) shall exercised only:

(i) in respect of:

(A) such aircraft as are entered on the licence in their entirety either specifically or under broad categories; or

(B) such airframes and powerplants and aircraft systems or components as are entered on the licence wither specifically or under broad categories; and/or

(C) such aircraft avionic systems or components as are entered on the licence either specifically or under broad categories;

(ii) provided that the licence holder is familiar wit all the relevant information relating to the maintenance and airworthiness of the particular aircraft for which the licence holder is signing a Maintenance Release, or such airframe, powerplant, aircraft system or component and aircraft avionic system or component which the licence holder is certifying as being airworthy; and

(iii) on condition that, within the preceding 24 months, the licence holder has either had experience in the inspection, servicing or maintenance of an aircraft or components in accordance with the privileges granted by the licence held for not less than six months, or has met the provision for the issue of a licence with the appropriate privileges, to the satisfaction of the Chairman.

(c) the Chairman through Air Navigation Order shall prescribe the scope of privileges of the licence holder in terms of the complexity of the task to which the certification relates.

(d) in case of authorizing and approved maintenance organization to appoint non licensed personnel to exercise the privileges of sub-rule (2) the person appointed shall meet the requirement specified in sub-rule (1).

40. Air Traffic Controller Licence.–(1) Requirements for the issue of the Air Traffic Controller Licence: The Chairman shall require an applicant for Air Traffic Controller Licence to meet the following requirements including at least one of the ratings set out in rule 41:

(a) **Age:** The applicant shall be not than 21 years of age on the date of application.

(b) **Academic Qualification and Knowledge**: The applicant shall have passed at least Higher Secondary Certificate (Science) Examination or its equivalent and shall have demonstrated a level of knowledge appropriate to the holder of an air traffic controller licence, in at least the following subjects:

Air law

(i) rules and regulations relevant to the air traffic controller :

Air traffic control equipment

(ii) Principles, use and limitations of equipment used in air traffic control ;

General knowledge

(iii) principles of flight; principles of operation and functioning of aircraft, powerpalnts and systems; aircraft performances relevant to air traffic control operations;

Human performance

(iv) human performance relevant to air traffic control.

Meteorology

(vi) aeronautical meteorology; use and appreciation of meteorological documentation and information; origin and characteristics of weather phenomena affecting flight operations and safety; altimetry;

Navigation

(vii) principles of air navigation; principle, limitation and accuracy of navigation systems and visual aids; and

Operational procedures

(viii) air traffic control, communication, radiotelephony and phraseology procedures (routine, non-routine and emergency); use of the relevant aeronautical documentation; safety practices associated with flight.

(c) **Experience**: The applicant shall have completed an approved training course and not less than three months satisfactory service engaged in the actual control of air traffic under the supervision of an appropriately rated air traffic controller. The experience requirements specified for air traffic controller ratings in sub rule (1) of rule 40 may be credited as part of the experience specified in this paragraph.

(d) **Medical fitness**: The applicant shall hold medical fitness on the basis of compliance with the requirements as laid down in rules 51 and 54.

41. Air Traffic Controller Ratings.- (1) **Categories of Air Traffic Controller Ratings-** Air traffic controller ratings shall comprise the following categories-

(a) aerodrome control rating;

(b) approach control rating;

(c) approach radar control rating;

(d) approach precision radar control rating;

(e) area control rating; and

(f) area radar control rating;

(2) **Requirement for air traffic controller ratings.-** (a) **Knowledge:** the Chairman shall require the applicant to demonstrate a level of Knowledge appropriate to the privileges granted, in at least the following subjects in so far as they affect the area of responsibility;

(i) aerodrome control rating-

(A) aerodrome layout, physical characteristics and visual aids,

(B) airspace structure,

(C) applicable rules, procedures and source of information,

(D) air navigation facilities,

(E) air traffic control equipment and its use,

(F) terrain and prominent landmarks,

(G) characteristics of air traffic,

(H) weather phenomena, and

(I) emergency and search and rescue plans,

(ii) approach control and area control ratings

(A) airspace structure,

(B) applicable rules, procedures and source of information,

(C) air navigation facilities,

(D) air traffic control equipment and its use,

(E) terrain and prominent landmarks,

(F) characteristics of air traffic and traffic flow,

(G) weather phenomena, and

(H) emergency and search and rescue plans,

(iii) approach radar, approach precision radar and area radar control ratings- the applicant shall meet the requirements specified in sub-rule (2) (a) (ii) in so far as they affect the area of responsibility, and shall have demonstrated a level of knowledge appropriate to the privileges granted in at least the following additional subjects-

(A) principles, use and limitations of radar, other surveillance systems and associated equipment, and

(B) procedures for the provision of approach, precision approach or area radar control services, as appropriate including procedures to ensure appropriate terrain clearance;

(b) Experience: (i) the applicant shall have-

(A) satisfactorily completed an approved training course under the supervision of an appropriately rated air traffic controller-,
(B) aerodrome control rating : an aerodrome control service, for a period of not less than 90 hours or one month', whichever is greater, at the unit for which the fating is sought,

(C) approach, approach radar, area or area radar control rating, the control service for which the rating is. sought, for a period of not less than 180 hours or three, months, whichever is greater, at the unit for which the rating is sought, and

(D) approach precision radar control rating-not less than 200 precision approaches of which not more than 100 shall have been carried out on a radar simulator approved for that purpose by the Chairman. Not less than 50 of those precision approaches shall have been carried out at the unit and on the equipment for which the rating is sought,

(ii) if the privileges of the approach radar control rating include surveillance radar approach duties, the experience shall include not less than 25 plan position indicator (PPI) approaches on the surveillance equipment of the type in use at the unit for which the rating is sought and under the supervision of an appropriately rated approach radar controller,

(iii) The experience specified in sub-rule (2)(b)(ii) shall have been completed within the 6-month period immediately preceding application.

(iv) when the applicant already holds an air traffic controller rating in another category, or the same rating for another unit, the Chairman may reduce the experience requirement specified in this sub-rule;

(c) **Skill:** the applicant shall have demonstrated at a level appropriate to the privileges being granted, the skill, judgement and performance required to provide a safe, orderly and expeditious control service;

(3) **Concurrent issuance of two air traffic controller ratings:** when two air traffic controller ratings are sought concurrently, the Chairman shall determine the applicable requirements on the basis of the requirements for each rating, and these requirements shall not be less than those of the more demanding rating.

(4) **Privileges:** (a) the privileges of the holder of Air Traffic Controller Licence endorsed with one or more for the under mentioned ratings shall be:-

(i) aerodrome control rating: to provide or to supervise the provision of aerodrome control service for the aerodrome for which the licence holder is rated,

(ii) approach control rating: to provide or to supervise the provision of aerodrome control service for the aerodrome or aerodromes for which the licence holder is rated, 'within the airspace or portion thereof, under the jurisdiction of the unit providing approach control service,

(iii) approach radar control rating: to provide and/or supervise the provision the aerodrome or aerodromes for which the licence holder is rated, within the airspace or portion thereof, under the jurisdiction of the, unit providing approach control service, and subject to compliance with the provision of sub-rule (2)(b)(iii) the privileges shall include the provision of surveillance radar approaches;

(iv) approach precision radar control rating: to provide and/or supervise the provision of precision approach radar service at the aerodrome for which the licence holder is rated,

(v) area control rating: to provide and/or supervise the provision of area control service within the control area or portion thereof, for which the licence holder is rated; and

(vi) area radar control rating: to provide and/or supervise the provision of area control service with the use of radar, within the control area or portion thereof, for which the licence holder is rated;

(b) before exercising the privileges indicated in sub-rule (4)(a) the licence holder shall

be familiar with all pertinent and current information.

(5) **Validity of ratings:** A rating shall become invalid when an air traffic controller has ceased to exercise the privileges of the rating for a period exceeding six months, and a rating shall remain invalid until the controller's ability to exercise the privileges of the rating has been re-established.

(6) A Contracting State having issued an air traffic controller licence shall not permit the holder thereof to carry out instruction in an operational environment unless such holder has received proper authorization from such Contracting State.";

42. Flight Operations Officer Licence.- (1) Requirements for the issue of the Licence: A person engaged in, or intended to be engaged in any phase of airline flight operations may apply to the Chairman for the grant of a Flight Operations Officer Licence, and the Chairman shall require the applicant for the licence to meet the following requirements:

(a) **Age**: The applicant shall be not les than 21 years of age on the date of application.

(b) **Academic qualification and Knowledge**: The applicant shall have passed at least Higher Secondary Certificate (Science) Examination or its equivalent and shall have demonstrated a level of knowledge appropriate to the privileges granted to the holder of a Flight Operations Officer Licence, in at least the following subjects:

Air law

(i) rules and regulations relevant to the holder of a flight operations officer licence; appropriate air traffic services practices and procedures;

Aircraft general knowledge

(ii) principles of operation of aeroplane power plants, systems and instruments;

(iii) operating limitations of aeroplanes and power plants,

(iv) minimum equipment list,

Flight performance calculation and planning procedures

(v) effects of loading and mass distribution on aircraft performance and flight characteristics; mass and balance calculations;

(vi) operational flight planning; fuel consumption and endurance calculations; alternate airport selection procedures; en-rout cruise control; extended range operations;

(vii) preparation and filing of air traffic services flight plans;

(viii) basic principles of computer-assisted planning systems;

Human Performance

(ix) human performance relevant to dispatch duties;

Meteorology

(x) aeronautical meteorology; the movement of pressure systems; the structure of fronts, and the origin and characteristics of significant weather phenomena which affect take-off, en-route and landing conditions;

(xi) interpretation and application of aeronautical meteorological reports, charts and forecasts; codes and abbreviations; use of, and procedures for obtaining , meteorological information;

Navigation

(xi) principles of air navigation with particular reference to instrument flight;

Operational procedures

(xii) use of aeronautical documentation;

(xiii) operational procedures for the carriage of freight and dangerous goods;

(xiv) procedures relating to aircraft accidents and incidents; emergency flight procedures;

(xv) procedures relating to unlawful interference and sabotage of aircraft;

Principles of flight

(xvi) principles of flight relating to the appropriate category of aircraft; and

Radio communication

(xvii) procedures for communicating with aircraft and relevant ground stations.

(c) **Experience**: The applicant shall have gained the following experience:

(i) a total of two years service in any one or in any combination of the capacities specified in (A) to (C) inclusive, provided that in any combination of experience the period serviced in any capacity shall be at least one year:

(A) a flight crew member in air transportation : or

(B) a meteorologist in an organization dispatching aircraft in air transportation; or

(C) an air traffic controller; or a technical supervisor of flight operations officers or air transportation flight operations systems; or

(ii) at least one year as an assistant in the dispatching of air transport; or

(iii) have satisfactorily completed a course of approved training.

(iv) The applicant shall have served under the supervision of a flight operations officer for at least 90 working days within the six months immediately preceding the application.

(d) **Skill**: The applicant shall have demonstrated the ability to:

(i) make an accurate and operationally acceptable weather analysis from a series of daily weather maps and weather reports : provide an operationally valid briefing on weather conditions prevailing in the general neighbourhood of a specific air route; forecast weather trends pertinent to air transportation with particular reference to destination and alternates;

(ii) determine the optimum flight path for a given segment and create accurate manual and/or computer generated flight plant; and

(iii) provide operating supervision and all other assistance to a flight in actual or simulated adverse weather conditions, as appropriate to the duties of the duties of the holder of a Flight Operations Officer Licence.

(2) Privileges: The privileges of the holder of a Flight Operations Officer Licence shall be to serve in that capacity with responsibility for each area for which the applicant meets the requirements specified in Part VI of these rules.

43. Licence or Certificate issued by authorities outside Bangladesh.- (1) When any person who is holder of a valid licence or certificate issued by the competent authority of any other State in conformity with at least the minimum conditions required under Annex 1 of the Convention, the Chairman may grant a licence or certificate appropriate to the qualifications and experience of the person subject to such conditions and limitations as he thinks fit, or confer validation on the person's licence or certificate for the purpose of operating as a flight crew member or the maintenance engineer of Bangladesh registered aircraft or operating aircraft radio apparatus in Bangladesh.

44. Curtailment of Privileges of pilots.- The Chairman, having issued pilot licences, shall not permit the holders thereof to act as pilot-in-command of an aircraft engaged in

international commercial air transport operations if the licence holders have attained their 60th birthday or, in the case of operations with more than one pilot where the other pilot is younger than 60 years of age, their 65th birthday.

The Chairman, having issued pilot licences, should not permit the holders thereof to act as co-pilot of an aircraft engaged in international commercial air transport operations if the licence holders have attained their 65th birthday.

45. Deleted.

46. Flight Instruction: (1) Every aircraft which is being used for the purpose of giving instructions in piloting shall have a dual control.

(2) No person other than a person having a Flight Instructor's rating shall impart instructions in piloting an aircraft.

47. Flight Navigator. -Every public transport aircraft engaged on a flight without landing over a distance of 1,610 km (1,000 miles) over water and 2,415 km (1,500 miles) over land unless equipped with one INS and Doppler or two INS shall carry on board a Flight Navigator licensed in accordance with these rules:

Provided that the Chairman may require a Flight Navigator to be carried on board an aircraft on any flight.

48. Flight Engineer.- When a separate flight Engineer's station is incorporated in the design of an aircraft, the flight crew shall include at least one licensed flight engineer.

49. Deleted.

50. Deleted.

51. Medical Standards and Assessment.- (1) General : The Medical Standards specified in these Rules cannot, on their own, be sufficiently detailed to cover all possible individual situations. Of necessity, many decisions relating to the evaluation of medical fitness are left to the judgment of the individual medical examiner. The evaluation shall, therefore, be based on a medical examination conducted throughout in accordance with the highest standards of medical practice. Predisposing factors for disease, such as obesity and smoking, may be important for determining whether further evaluation or investigation in necessary in an individual case. In cases where the applicant does not fully meet the medical requirements and in complicated and unusual cases, the evaluation may have to be deferred and the case submitted to the medical assessor as specified by the Chairman for final evaluation. In such cases due regard shall be given to the privileges granted by the licence applied for or held by the applicant for the Medical Assessment, and the conditions under which the licence holder is going to exercise those privileges in carrying out assigned duties.

(2) Requirements of Medical Assessment:

(a) An applicant for a licence or rating, when applicable, shall undergo a Medical Assessment with approved medical examiners and satisfy the Medical Standards specified in these Rules. The applicant for a Medical Assessment shall undergo a Medical Assessment based on the following requirements:

(i) physical and mental;

(ii) visual and colour perception ; and

(iii) hearing.

(b) **Physical and mental requirements:** An applicant for any class of Medical Assessment shall be required to be free from-

(i) any abnormality, congenital or acquired; or

(ii) any active, latent, acute or chronic disability; or

(iii) any wound, injury or sequelae from operation; or

(iv) any effect or side-effect of any prescribed or non-prescribed therapeutic, diagnostic or preventive medication taken; such as would entail a degree of functional incapacity which is likely to interfere with the safe operation of an aircraft or with the safe performance of duties; use of herbal medication and alternative treatment modalities requires particular attention to possible side-effects.

(c) **Visual acuity test and Colour perception requirements:** (i) The methods in use for the measurement of visual acuity are likely to lead to differing evaluation. To achieve uniformity, therefore, Contracting States shall ensure that equivalence in the methods of evaluation be obtained.

(ii) The following should be adopted for tests of visual acuity:

(A) Visual acuity tests should be conducted in an environment with a level of illumination that corresponds to ordinary office illumination (30-60 cd/m^2)

(B) Visual acuity should be measure by means of a series of Landolt rings or similar optotypes, placed at a distance from the applicant appropriate to the method of testing adopted.

(iii) Methods of examination shall be such as to guarantee reliable testing of colour perception.

(iv) The applicant shall be required to demonstrate the ability to perceive readily those colours the perception of which is necessary for the safe performance of

duties.

(v) The applicant shall be tested for the ability to correctly identify a series of pseudoisochromatic plates in daylight or in artificial light of the same colour temperature such as that provided by CIE standard illuminants C or D_{65} as specified by the International Commission on Illumination (CIE).

(vi) An applicant obtaining a satisfactory result as prescribed by the Licensing Authority shall be assessed as fit. An applicant failing to obtain a satisfactory result in such a test shall be assessed as unfit unless able to readily distinguish the colours used in air navigation and correctly identify aviation coloured lights. Applicants who fail to meet these criteria shall be assessed as unfit except for Class 2 assessment with the following restriction: valid daytime only.

(vii) Sunglasses worn during the exercise of the privileges of the licence or rating held should be non-polarizing and of a neutral grey tint.

(d) **Hearing test requirements**: (i) Methods of examination shall be such as to guarantee reliable testing of hearing;

(ii) Applicants shall be required to demonstrate a hearing performance sufficient for the safe exercise of their licence and rating privileges;

(iii) Applicants for Class 1 Medical Assessments shall be tested by pure-tone audiometry at first issue of the Assessment, not less than once every five years up to the age of 40 years, and thereafter not less than once every two years. Alternatively, other methods providing equivalent results may be used;

(iv) Applicants for Class 3 Medical Assessments shall be tested by pure-tone audiometry at first issue of the Assessment, not less than once every five years up to the age of 40 years, and thereafter not less than once every two years. Alternatively, other methods providing equivalent results may be used;

(v) Applicants for Class 2 Medical Assessment should be tested by pure-tone audiometry at first issue of the Assessment and, after the age of 50 years, not less than once every two years;

(vi) At medical examinations, other than those mentioned in sub-rule 2(b) (iii), 2(b)(iv) and 2(b)(v) where audiometry is not performed, applicants shall be tested in a quiet room by whispered and spoken voice testes;

Note 1: The reference zero for calibration of pure-tone audiometers is that of the pertinent Standards of the current edition of the Audiometric Test Methods, published by the International Organization for Standardization (ISO);

Note 2: For the purpose of testing hearing in accordance with the requirements, a quiet room is a room in which the intensity of the background noise is less than 35 dB(A);

Note 3: For the purpose of testing hearing in accordance with the requirements, the sound level of an average conversation voice at 1 m from the point of output (lower lip of the speaker) is c.60 dB(A) and that of a whispered voice c.45dB(A). At 2 m from the speaker, the sound level is 6 dB(A) lower.

(3) **Classes of Medical Assessment:** Medical assessments shall be of the following classes:

(a) **Class 1 Medical Assessment**: Class 1 Medical Assessment shall be applicable to applicants for, and holders of:

(i) commercial pilot licences for aeroplane. airship, helicopter and powered-lift,
(ii) multi-crew pilot licences for aeroplane,

(iii) airline transport pilot licence for aeroplane, helicopter, and powered-lift,

(b) **Class 2 Medical Assessment:** Class 2 Medical Assessment shall be applicable to applicants for, and holders of:
(i) flight navigator licences,

(ii) flight engineer licences;

(iii) private pilot licences for aeroplane, airship, helicopter, and powered-lift,

(iv) glider pilot licences,

(v) free balloon pilot licences.

(c) **Class 3 Medical Assessment**: Class 3 Medical Assessment shall be applicable to applicants for, and holders of Air Traffic Controller Licences.

(4) **Duration of the Medical Assessment**: The duration of the period of validity shall be in accordance with the provisions of 21A(19).

(5) **Other Provisions**: (a) An applicant for a licence shall, when applicable, hold a Medical Assessment issued in accordance with the provisions of this Part.

(b) The period of validity of a Medical Assessment shall begin on the day the medical examination is performed.

(c) The period of validity of a Medical Assessment may be extended, at the discretion of the Chairman, up to 45 days.

(d) Chairman shall designate medical examiners, qualified and licensed in the practice of medicine, to conduct medical examinations of fitness of applicants for the issue or renewal

of the appropriate licence specified in this Part.

(e) Except as provided in sub rule (22) of rule 21A flight crew members or air traffic controllers shall not exercise the privileges of their licence unless they hold a current Medical Assessment appropriate to the licence.

(f) Medical examiners shall have received training in aviation medicine and shall receive refresher training at regular intervals. Before designation, medical examiners shall demonstrate adequate competency in aviation medicine.

(g) Medical examiners shall have practical knowledge and experience of the conditions in which the holders of licences and ratings carry out their duties.

(h) Except as provided in Rule 21A (24), flight crew members or air traffic controllers shall not exercise the privileges of their licence unless they hold a current Medical Assessment appropriate to the licence.

(i) The applicant for a Medical Assessment shall provide the medical examiner with a personally certified statement of medical facts concerning personal, familial and hereditary history. The applicant shall be made aware of the necessity for giving a statement that is as complete and accurate as the applicant's knowledge permits, and any false statement shall be dealt with in accordance with the sub-rule (5)(1) of this rule.

(j) The medical examiner shall report to the Licensing Authority any individual case where, the examiner's judgement, an applicant's failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the licence being applied for, or held, is not likely to jeopardize flight safety.

(k) Applicant for licence or ratings for which medical fitness is prescribed shall sign and furnish to the medical examiner a declaration stating whether he has previously undergone such an examination and, if so, the date, place and result of the last examination. He shall indicate to the examiner whether a Medical Assessment has previously been refused, revoked or suspended and, if so, the reason for such refusal, revocation or suspension.

(l) Any false declaration to a medical examiner made by an applicant for a licence or rating shall be reported to the Chairman for such action as may be considered appropriate.

(m) Having completed the medical examination of the applicant in accordance with the requirements this Part, the medical examiner shall coordinate the results of the examination and submit a signed report, or equivalent, to the Chairman, in accordance with its requirements, detailing the results of the examination and evaluating the findings with regard to medical fitness.

(n) If the medical report is submitted to the Chairman in electronic format, adequate identification of the examiner shall be established.

(o) If the medical examination is carried out by two or more medical examiners,

Chairman shall appoint one of these to be responsible for coordinating the results of the examination, evaluating the findings with regard to medical fitness, and signing the report.

(p) Chairman shall use the services of medical assessors to evaluate reports submitted to the Chairman by medical examiners.

(q) The medical examiner shall be required to submit sufficient medical information to the Chairman to enable him to audit Medical Assessments.

(r) If the medical Standards prescribed in this Part for a particular licence are not met, the appropriate Medical Assessment shall not be issued or renewed unless the following conditions are fulfilled:

(i) accredited medical conclusion indicates that in special circumstances the applicant's failure to meet any requirement, whether numerical or otherwise, is such that exercise of the privileges of the licence applied for is not likely to jeopardize flight safety;

(ii) relevant ability, skill and experience of the applicant and operational conditions have been given due consideration ; and

(iii) the licence is endorsed with any special limitation or limitations when the safe performance of the licence holder's duties is dependent on compliance with such limitation or limitations.

(s) Medical confidentiality shall be respected at all times.

(t) All medical reports and records shall be securely held with accessibility restricted to authorized personnel.

(u) When justified by operational considerations, the medical assessor shall determine to what extent pertinent medical information is presented to relevant officials of the Chairman.

(v) the medical requirements for renewal of a licence or rating shall be the same as those for initial issue of that licence or rating, except where otherwise specifically stated;

(w) Holders of licences under Part 1 of these Rules shall not exercise privileges of their licences and related ratings or authorizations at any time when they are aware of any decrease in their medical fitness, which might render them unable to safely and properly exercise those privileges.

(x) Licence holders should inform the Chairman of confirmed pregnancy or any decrease in medical fitness of duration of more than 20 days or which requires continued treatment with prescribed medication or which has required hospital treatment.

(y) Methods should be established to ensure that licence holders do not exercise the

privileges of their licences and related ratings during any period, which their medical fitness has, from any cause, decreased to an extent that would have prevented the issue or renewal of their Medical Assessment.

(z) Holders of licences provided for in this Part shall not engage in any problematic use of substances. Methods should be established to ensure that all licence holders who engage in any kind of problematic use of substances are identified and removed from their safety-critical functions. Return to the safety-critical functions may be considered after successful treatment or, in cases where no treatment is necessary, after cessation of the problematic use of substances and upon determination that the person's continued performance of the function is unlikely to jeopardize safety.

(aa) The prescribed re-examination of a licence holder operating in an area distant from designated medical examination facilities may be deferred at the discretion of the Chairman, provided that such deferment shall only be made as an exception and shall not exceed.

(i) a single period of six months in the case of a flight crew member of an aircraft engaged in non-commercial operations;

(ii) two consecutive periods each of three months in the case of a flight crew member of an aircraft engaged in commercial operations provided that in each case a favourable medical report is obtained after examination by a designated medical examiner of the area concerned, or, in cases where such a designated medical examiner is not available, by a physician legally qualified to practise medicine in that area. A report of the medical examination shall be sent to the Chairman where the licence was issued;

(iii) in the case of a private pilot, a single period not exceeding 24 months where the medical examination is carried out by an examiner designated by the Contracting State in which the applicant is temporarily located. A report of the medical examination shall be sent to the Chairman where the licence was issued.

(ab) Use of psychoactive substances: Holders of licences provided for in this Part shall not exercise the privileges of their licences and related ratings while under the influence of any psychoactive substance which might render them unable to safely and properly exercise these privileges.

52. Class 1 Medical Assessment.- (1) Assessment, issue and renewal: (a) An applicant for a Commercial Pilot Licence for aeroplane or helicopter, an Airline Transport Pilot Licences for aeroplane or helicopter Licence shall undergo an initial medical examination for the issue of a Class 1 Medical Assessment.

(b) Except where otherwise stated in these rules, holders of Commercial Pilot Licences for aeroplane or helicopter, Airline Transport Pilot Licences for aeroplane or helicopter, Flight Engineer Licences or Flight Navigator Licences shall have their Class 1

Medical Assessments renewed at intervals specified in rule 51(3).

(c) When the Chairman is satisfied that the requirements under these Rules have been met, a Class 1 Medical Assessment shall be issued to the applicant.

(2) **Physical and mental requirements:** (a) The applicant shall not suffer from any disease or disability which could render that applicant likely to become suddenly unable either to operate an aircraft safety or to perform assigned duties safely.

(b) The applicant shall have no established medical history or clinical diagnosis of:

(i) an organic mental disorder;

(ii) a mental or behavioural disorder due to use of psychoactive substances; this includes dependence syndrome induced by alcohol or other psychoactive substances;
(iii) schizophrenia or a schizotypal or delusional disorder;

(iv) a mood (affective) disorder;

(v) a neurotic, stress-releated or somatoform disorder;

(vi) a disorder of adult personality or behaviour, particularly if manifested by repeated overt acts;

(vii) a disorder of adult personality or behaviour, particularly if manifested by repeated overt acts;

(viii) mental retardation;

(ix) a disorder of psychological development;

(x) a behavioural or emotional disorder, with onset in childhood or adolescence; or

(xi) a mental disorder not otherwise specified;

such as might render the applicant unable to safely exercise the privileges of the licence applied for or held.

(c) The applicant shall have no established medical history or clinical diagnosis of any of the following:

(i) a progressive or non-progressive disease of the nervous system, the effects of which, are likely to interfere with the safe exercise of the applicant's licence and rating privileges;

(ii) epilepsy; or

(iii) any disturbance of consciousness without satisfactory medical explanation of cause.

(d) The applicant shall not have suffered any head injury, the effects of which, are likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(e) The applicant shall not possess any abnormality of the heart, congenital or acquired which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(f) An applicant who has undergone coronary by-pass regrafting or angioplasty (with or without stenting) or other cardiac intervention or who has a history of myocardial infarction or who suffers from any other potentially incapacitating cardiac condition shall be assessed as unfit unless the applicant's cardiac condition has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

(g) An applicant with an abnormal cardiac rhythm shall be assessed as unfit unless the cardiac arrhythmia has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

(h) Electrocardiography shall form part of the heart examination for the first issue of a Medical Assessment. Electrocardiography shall be in re-examinations of applicants over the age of 50 no less frequently than annually.

(i) Electrocardiography should be included in re-examinations of applicants between the ages of 30 and 50 no less frequently than every two years.

Note: The purpose of routine electrocardiography is case findings. It does not provide sufficient evidence to justify disqualification without further thorough cardiovascular investigation.

(j) The systolic and diastolic blood pressures shall be within normal limits.

(k) The use of drugs for control of high blood pressure shall be disqualifying except for those drugs, the use of which, is compatible with the safe exercise of the applicant's licence and rating privileges.

(l) There shall be no significant functional nor structural abnormality of the circulatory system.

(m) There shall be no acute disability of the lungs nor any active disease of the structures of the lungs, mediastinum or pleurae likely to result in incapacitating symptoms during normal or emergency operations.

(n) Chest radiography should form a part of the initial examination.

Note: Periodic chest radiography is usually not necessary but may be a necessity in situations where asymptomatic pulmonary disease can be expected.

(o) Applicants with chronic obstructive pulmonary disease shall be assessed as unfit unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

(p) Applicants with asthma causing significant symptoms or likely to cause incapacitating symptoms during normal or emergency operations shall be assessed as unfit.

(q) The use of drugs for control of asthma shall be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

(r) Applicants with active pulmonary tuberculosis shall be assessed as unfit.
(s) Applicants with quiescent or healed lesions which are known to be tuberculoses, or are presumably tuberculoses in origin, may be assessed as fit.

(t) Applicants with significant impairment of function of the gastrointestinal tract or its adnexa shall be assessed as unfit.

(u) Applicants shall be completely free from those hernias that might give rise to incapacitating symptoms.

(v) Applicants with sequelae of disease of, or surgical intervention on, any part of the digestive tract or its adnexae, likely to cause incapacitation in flight, in particular any obstructions due to stricture or compression shall be assessed as unfit.
(w) An applicant who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexae with a total or partial excision or a diversion of any of these organs should be assessed as unfit until such time as the medical assessor, having access to the details of the operation concerned, considers that the effects of the operation are not likely to cause incapacitation in flight.

(x) Applicants with metabolic, nutritional or endocrine disorders that are likely to interfere with the safe exercise of their licence and rating privileges shall be assessed as unfit.

(y) Applicants with insulin treated diabetes mellitus shall be assessed as unfit.

(aa) Applicants with non-insulin treated diabetes mellitus shall be assessed as unfit unless the condition is shown to be satisfactorily controlled by diet alone or by diet combined with oral anti-diabetic medication, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

(ab) Applicants with diseases of the blood and/or the lymphatic system shall be assessed s unfit unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges. Sickle cell trait or other haemoglobinopathic traits are usually compatible with a fit assessment.

(ac) Applicants with renal or genito-urinary disease shall be assessed as unfit, unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges.

(ad) Urine examination shall form part of the medical examination and abnormalities shall be adequately investigated.

(ae) Applicants with sequelae of disease of or surgical procedures on the kidneys or the genito-urinary tact, in particular obstructions due to stricture or compression, shall be assessed as unfit unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

(af) Applicants who have undergone nephrectomy shall be assessed as unfit unless the condition is well compensated.
(ag) Applicants with acquired immunodeficiency syndrome (AIDS) shall be assessed as unfit.

(ah) Applicants who are seropositive for human immunodeficiency virus (HIV) shall be assessed as unfit unless full investigation provides no evidence of clinical disease.

Note: Evaluation of applicants who are seropositive for human immunodeficiency virus (HIV) requires particular attention to their mental state, including the psychological effects of the diagnosis.

(ai) Applicants with gynaecological disorders that are likely to interfere with the safe exercise of their licence and rating privileges shall be assessed as unfit.

(aj) Applicants who are pregnant shall be assessed as unfit unless obstetrical evaluation and continued medical supervision indicate a low-risk uncomplicated pregnancy.

(ak) For applicants with a low-risk uncomplicated pregnancy, evaluated and supervised in accordance with 2(jj), the fit assessment should be limited to the period

from the end of the 12th week until the end of the 26th week of gestation.

(al) Following confinement or termination of pregnancy, the applicant shall not be permitted to exercise the privileges of her licence until she has undergone re-evaluation in accordance with best medical practice and it has been determined that she is able to safely exercise the privileges of her licence and ratings.

(am) The applicant shall not possess any abnormality of the bones, joints, muscles, tendons or related structures, which is likely to interfere with the safe exercise of the applicant's licence and rating privileges. Any sequelae after lesions affecting the bones, joints, muscles or tendons, and certain anatomical defects will normally require functional assessment to determine fitness.

(an) The applicant shall not possess any abnormality or disease of the ear or related structures, which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(ao) There shall be :

(i) no disturbance of vestibular function;

(ii) no significant dysfunction of the Eustachian tubes; and

(iii) no unheales perforation of the tympanic membranes.

(ap) A single dry perforation of the tympanic membrane need not render the applicant unfit.

(aq) There shall be :

(i) no nasal obstructions; and
(ii) no malformation nor any disease of the buccal cavity or upper respiratory tract which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(ar) Applicants with stuttering or other speech defects sufficiently severe to cause impairment of speech communication shall be assessed as unfit.

(3) **Visual requirements:** (a) The function of the eyes and their adnexae shall be normal; there shall be no active pathological condition, acute or chronic, of either eye of adnexae which is likely to interfere with its proper function to an extent that would interfere with the safe exercise of the applicant's licence and rating privileges.

(b) Distant visual acuity with or without correction shall be 6/9 or better in each eye separately, and binocular visual acuity shall be 6/6 or better; no limits apply only to uncorrected visual acuity, and where this standard of visual acuity can be obtained only with

correcting lenses, the applicant may be assessed as fit provided that:

(i) Such the correcting lenses are worn during the privileges of the licence or rating applied for or held; and

(ii) In addition, a pair of a suitable correcting spectacles is kept readily available during the exercise of the privileges of the applicant's licence.

Note: An applicant accepted as meeting these provisions is deemed to continue to do so unless there is reason to suspect otherwise, in which case an ophthalmic report is required at the discretion of the Chairman, Both uncorrected and corrected visual acuity are normally measured and recorded at each re-examination. Conditions which indicate a need to obtain an ophthalmic report include: a substantial decrease in the uncorrected visual acuity, any decrease in best corrected visual acuity, and the occurrence of eye disease, eye injury or eye surgery.

(c) Applicants may use contact lenses to meet this requirement provided that:

(i) The lenses are monofocal and non-tinted;

(ii) The lenses are well tolerated; and

(iii) A pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges.

Note: Applicants who use contact lenses may not need to have their uncorrected visual acuity measured at each re-examination provided the history of their contact lens prescription is known.

(d) Applicants with a large refractive error shall use contact lenses or high-index spectacle lenses; if spectacles are used, high-index lenses are needed to minimize peripheral field distortion.

(e) Applicants whose uncorrected distant visual acuity in either eye is worse than 6/60 shall be required to provide a full ophthalmic report prior to initial Medical Assessment and every five years thereafter.

Note: The purpose of the required ophthalmic examination is to ascertain normal visual performance, and to identity ay significant pathology.

(f) Applicants who have undergone surgery affecting the refractive status of the eye shall be assessed as unfit unless they are free from those sequelae which are likely to interfere with the safe exercise of their licence and rating privileges.

(g) (i) the applicant shall have the ability to read, while wearing the correcting lenses, if any, required by rule 52(3)(b), the N5 chart or its equivalent at a distance selected

by that applicant in the range of 30 to 50 cm and the ability to read the N14 chart or its equivalent at a distance of 100 cm; if this requirements is met only by the use of near correction, the applicant may be assessed as fit provided that this near correction is added to the spectacle correction already prescribed in accordance with rule 52(3)(b); if no such correction is prescribed, a pair of spectacles for near use shall be kept readily available during the exercise of the privileges of the licenses;

Note: N5 and N14 refer to the size of typeface used. For further details, see the Manual of Civil Aviation Medicine (Doc 8984).

(ii) when near correction is required, the applicant shall demonstrate that one pair of spectacles is sufficient to meet both distant and near visual requirements;

(h) When near correction is required in accordance with this paragraph, a second pair of near- correction spectacles shall be kept available for immediate use.

(i) The applicant shall be required to have normal fields of vision.

(j) The applicant shall be required to have normal binocular function.

(k) Reduced stereopsis, abnormal convergence not interfering with-near vision, and ocular misalignment where the fusional reserves are sufficient to prevent asthenopia and diplopia need not be disqualifying.

(4) **Hearing requirements**: (a) The applicant, when tested on a pure-tone audiometer, shall not have a hearing loss, in either ear separately, of more than 35 dB at any of the frequencies 500, 1000 or 2000 Hz, or more than 50 dB at 3000 Hz.

(b) An applicant with a hearing loss greater than the above may be declared fit provided that the applicant has normal hearing performance against a background noise that reproduces or simulates the masking properties of flight deck noise upon speech and beacon signals.

Note 1.- It is important that the background noise is representative of the noise in the cockpit of the type of aircraft for which the applicant's licence and ratings are valid.

Note 2.- In the speech material for discrimination testing, both aviation relevant phrases and phonetically balanced words are normally used.

(c) Alternatively, a practical hearing test conducted in flight in the cockpit of an aircraft of the type for which the applicant's licence and ratings are valid may be used.

53. Class 2 Medical Assessment: (1) Assessment, issue and renewal.- (a) An applicant for a Private Pilot Licence for aeroplane or helicopter, Flight Engineer Licences or Flight Navigator Licences a Glider Pilot Licence or a Free Balloon Pilot Licence shall undergo an

initial medical examination for the issue of a Class 2 Medical Assessment;

(b) Except where otherwise stated in these Rules, holders of Private Pilot Licences for Aeroplane, airship, helicopter or powered-lift, glider pilot licenses, free balloon pilot licenses, flight engineer licenses or flight navigator licenses shall have their class 2 medical assessments renewed at intervals not exceeding those specified in rule-51(4).

(c) When the Chairman is satisfied that the requirements of these rules have been met, a Class 2 Medical Assessment shall be issued to the applicant.

(2) **Physical and mental requirements**: (a) The applicant shall not suffer from any disease or disability which could render that applicant likely to become suddenly unable either to operate an aircraft safely or to perform assigned duties safely;

(b) The applicant shall have no established medical history or clinical diagnosis of:

(i) an organic mental disorder;

(ii) a mental or behavioural disorder due to psychoactive substances; this includes dependence syndrome induced by alcohol or other psychoactive substances;

(iii) schizophrenia or a schizotypal or delusional disorder;

(iv) a mood (affective) disorder;

(v) a neurotic, stress-related or somatoform disorder;

(vi) a behavioural syndrome associated with physiological disturbances or physical factors;

(vii) a disorder of adult personality or behaviour, particularly if manifested by repeated overt acts;

(viii) mental retardation;

(ix) a disorder of psychological development;

(x) a behavioural or emotional disorder, with onset in childhood or adolescence; or

(xi) a mental disorder not otherwise specified; such as might render the applicant unable to safely exercise the privileges of the licence applied for or held.

(c) The applicant shall have no established medical history or clinical diagnosis of any of the following:

(i) a progressive or non-progressive disease of the nervous system, the effects of

which; are likely to interfere with the safe exercise of the applicant's licence and rating privileges;

(ii) epilepsy;

(iii) any disturbance of consciousness without satisfactory medical explanation of cause.

(d) The applicant shall not have suffered any head injury, the effects of which, are likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(e) The applicant shall not posses any abnormality of the heart, congenital or acquired, which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(f) An applicant who has undergone coronary by-pass grafting or angioplasty (with or without stenting) or other cardiac intervention or who has a history of myocardial infarction or who suffers from many other potentially incapacitating cardiac conditions shall be assessed as unfit unless the applicant's cardiac condition has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicants licence or rating privileges.

(g) An applicant with an abnormal cardiac rhythm shall be assessed as unfit unless the cardiac arrhythmia has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicants licence or rating privileges.

(h) Electrocardiography shall form part of the heart examination for the heart examination for the first issue of Medical Assessment after the age of 40.

(i) Electrocardiography shall form part of the heart examinations of applicants after the age of 50 no les than every two years.

(j) Electrocardiography should form part of the heart examination for the first issue of a Medical Assessment.

Note: The purpose of routine electrocardiography is case finding. It does not provide sufficient evidence to justify disqualification without further thorough cardiovascular investigation.

(k) The systolic and diastolic blood pressures shall be within normal limits.

(l) The use of drugs for control of high blood pressure shall be disqualifying except for those drugs, the use of which, is compatible with the safe exercise of the

applicant's licence and rating privileges.

(m) There shall no significant functional nor structural abnormality of the circulatory system.

(n) There shall be no disability of the lungs nor any active disease of the structures of the lungs, mediastnum or pleura likely to result in incapacitating symptoms during normal or emergency operations.

(o) Chest radiography should form part of the initial and periodic examinations in cases where asymptomatic pulmonary disease can be expected.

(p) Applicants with chronic obstructive pulmonary disease shall be assessed as unfit unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

(q) Applicants with asthma causing significant symptoms or likely to cause incapacitating symptoms during normal or emergency operations shall be assessed as unfit

(r) The use of drugs for control of asthma shall be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

(s) Applicants with active pulmonary tuberculosis shall be assessed as unfit.

(t) Applicants with quiescent or healed lesions, known to be tuberculous or presumably tuberculous in origin, may be assessed as fit.

(u) applicants shall be completely free from those hernias that might give rise to incapacitating symptoms.

(v) Applicants with significant impairment of the function of the gastrointestinal tract or its adnexa shall be assessed as unfit.

(w) Applicants with sequelae of disease of or surgical intervention on any part of the digestive tract or its adnexa, likely to cause incapacitation in flight, in particular any obstructions due to stricture or compression, shall be assessed as unfit.

(x) An applicant who has undergone a major surgical operation on the biliary passages or the digestive tract or its with a total or partial excision or a diversion of any of these organs should be assessed as unfit until such time as the medical assessor, having access to the details of the operation concerned, considers that the effects of the operation are not likely to cause incapacitation in flight.

(y) Applicants with metabolic, nutritional or endocrine disorders that are likely to interfere with the safe exercise of their licence and rating privileges shall be assessed as unfit.

(z) Applicants with insulin treated diabetes mellitus shall be assessed as unfit.

(aa) Applicants with non-insulin treated diabetes mellitus shall be assessed as unfit unless the condition is shown to be satisfactorily controlled by diet alone or by diet combined with oral anti-diabetic medication, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

(ab) Applicants with diseases of the blood and/or the lymphatic system shall be assessed as unfit, unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges. Sickle cell trait and other haemoglobinopathic traits are usually compatible with fit assessment.

(ac) Applicants with renal or genito-urinary disease shall be assessed as unfit unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges.

(ad) Urine examination shall form part of the medical examination and abnormalities shall be adequately investigated.

(ae) Applicants with sequelae of disease of, or surgical procedures on, the kidneys or the genito-urinary tract, in particular obstructions due to stricture or compression, shall be assessed as unfit unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant's licence or rating privileges.

(af) Applicants who have undergone nephrectomy shall be assessed as unfit unless the condition is well compensated.

(ag) Applicants with acquired immunodeficiency syndrome (AIDS) shall be assessed as unfit.

(ah) Applicants who are seropositive for human immunodeficiency (HIV) shall be assessed as unfit unless full investigation provides no evidence of clinical disease.

Note: Evaluation of applicants who are seropositive for human immunodeficiency virus (HIV) requires particular attention to their mental state, including the psychological effects of the diagnosis.

(ai) Applicants with gynaecological disorders that are likely to interfere with the safe exercise of their licence and rating privileges shall be assessed as unfit.

(aj) Applicants who are pregnant shall be assessed as unfit unless obstetrical

evaluation and continued medical supervision indicate a low-risk uncomplicated pregnancy.

(ak) For applicants with a low-risk uncomplicated pregnancy, evaluated and supervised in accordance with 2(jj), the fit assessment should be limited to the period from the end of the 12th week until the end of the 26th week of gestation.

(al) Following confinement or termination of pregnancy, the applicant shall not be permitted to exercise the privileges of her licence until she has undergone re-evaluation in accordance with best medical practice and it has been determined that she is able to safely exercise the privileges of her licence and ratings.

(am) The applicant shall not possess any abnormality of the bones, joints, muscles, tendons or related structures which is likely to interfere with the safe exercise of the applicant's licence and rating privileges. Any sequelae after lesions affecting the bones, joints, muscles or tendons, and certain anatomical defects will normally require functional assessment to determine fitness.

(an) The applicant shall not possess any abnormality or disease of the ear or related structures which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(ao) There shall be:

(i) no disturbance of the vestibular function;

(ii) no significant dysfunction of the Eustachian tubes; and

(iii) no unhealed perforation of the tympanic membranes.

(ap) A single dry perforation of the tympanic membrane need not render the applicant unfit.

(aq) There shall be:

(i) no nasal obstruction; and

(ii) no malformation nor any disease of the buccal cavity or upper respiratory tract; which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(ar) Applicants with stuttering and other speech defects sufficiently severe to cause impairment of speech communication shall be assessed as unfit.

(3) **Visual requirements**: (a) The function of the eyes and their adnexae shall be normal; there shall be no active pathological condition, acute or chronic, nor an sequelae of

surgery or trauma of the eyes or their adnexae likely to reduce proper visual function to an extent that would interfere with the safe exercise of the applicant's licence and rating privileges;

(b) Distant visual acuity with or without correction shall be 6/12 or better in each eye separately, and binocular visual acuity shall be 6/9 or better; no limits apply to uncorrected visual acuity; when this standard of visual acuity can be obtained only with correcting lenses, the applicant may be assessed as fit provided that:

(i) Such correcting lenses are worn during the exercise of the privileges of the licence or rating applied for or held, and

(ii) in addition, a pair of a suitable correcting spectacles is kept readily available during the exercise of the privileges of the applicant's licence;

(c) an applicant may use contact lenses to meet this requirement provided that:

(i) the lenses are monofocal and non-tinted;

(ii) the lenses are well tolerated; and

(iii) a pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges;

(d) Applicants with a large refractive error shall use contact lenses or high-index spectacle lenses; if spectacles are used, high-index lenxes are needed to minimize peripheral field distortion;

(e) applicants whose uncorrected distant visual acuity in wither eye is worse than 6/60 shall be required to provide a full ophthalmic report prior to initial Medical Assessment and every five years thereafter;

(f) Applicants who have undergone surgery affecting the refractive status of the eye shall be assessed as unfit unless they are free from those sequelae which are likely to interfere with the safe exercise of their licence and rating privileges;

(g) The applicant shall have the ability to read while wearing the correcting lenses, if any, required by rule 53(3)(b), the N5 chart or its equivalent at a distance selected by that applicant in the range of 30 to 50 cm. and if this requirement is met only by the use of near correction, the applicant may be assessed as fit provided that this near correction is dded to the spectacle correction already prescribed in accordance with rule 53(3)(b); if no such correction is prescribed, a pair of spectacles for near use shall be kept readily available during the exercise of the privileges of the licenses; when near correction is required, the applicant shall demonstrate that one pair of spectacles is sufficient to meet both distant and near visual requirements;

(h) When near correction is required a second pair of near-correction spectacles shall be kept available for immediate use;

(i) The applicant shall be required to have normal fields of vision;

(j) The applicant shall be required to have normal binocular function;

(k) Reduced stereopsis, abnormal convergence not interfering with near vision, and ocular misalignment where the fusional reserves are sufficient to prevent asthenopia and diplopia need not be disqualifying.

(4) **Hearing requirements**: (a) Applicants who are unable to hear an average conversational voice in a quiet room, using both ears, at a distance of 2 m from the examiner and with the back turned to the examined, shall be assessed as unfit.

(b) When tested by pure-tone audiometry, an applicant with a hearing loss, in either ear separately, of more than 35 dB at any of the frequencies 500, 1000 or 2000 Hz, or more than 50 dB at 3000 Hz shall be assessed as unfit

(c) An applicant who does not meet the requirements in 4(a) or 4(b) should undergo further testing in accordance with Rule 52(4)(c).

54. Class 3 Medical Assessment: (1) Assessment, issue and renewal.- (a) An applicant for an air traffic Controller Licence shall undergo an initial medical examination for the issue of a Class 3 Medical Assessment;

(b) Except where otherwise stated in this rule, holders of an Air Traffic Controller Licence shall have their Class 3 Medical Assessments renewed at intervals not exceeding those specified in rule 51(3) of these Rules.
(c) When the Chairman is satisfied that the requirements of these Rules have been met, a Class 3 Medical Assessment shall be issued to the applicant.

(2) **Physical and mental requirements:** (a) The applicant shall not suffer from any disease or disability which could render that applicant likely to become suddenly unable to perform duties safely;

(b) The applicant shall have no established medical history or clinical diagnosis of:

(i) an organic mental disorder;

(ii) a mental or behavioural disorder due psychoactive substances use; this includes dependence syndrome induced by alcohol or other psychoactive substances;

(iii) schizophrenia or a shcizotypal or delusional disorder;

(iv) a mood (affective) disorder;

(iv) a neurotic, stress-related or somatoform disorder;

(vi) a behavioural syndrome associated with physiological disturbances or physical factors;

(vii) a disorder of adult personality or hehaviour, particularly if manifested by repeated overt acts;

(viii) mental retardation;

(ix) a disorder of psychological development;

(x) a behavioural or emotional disorder, with onset in childhood or adolescence; or

(xi) a mental disorder not otherwise specified; such as might render the applicant unable to safely exercise the privileges of the licence applied for or held.

Note: Mental and behavioural disorders are defined in accordance with the clinical descriptions and diagnostic guidelines of the World Health Organization as given in the International Statistical Classification of Diseases and Related Health Problems, 10th Edition – Classification of Mental and Behavioural Disorders, Who 1992. This document contains detains detailed descriptions of the diagnostic requirements which may be useful for their applicant to medical assessment.

(c) The applicant shall have no established medical history or clinical diagnosis of any of the following:

(i) a progressive or non-progressive disease of the nervous system, the effects of which, are likely to interfere with the safe exercise of the applicant's licence and rating privileges;

(ii) epilepsy; or

(iii) any disturbance of consciousness without satisfactory medical explanation of cause.

(d) The applicant shall not have suffered any head injury, the effects of which, are likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(e) The applicant shall not possess any abnormality of the heart, congenital or acquired, which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(f) An applicant who has undergone coronary by-pass grafting or angioplasty (with or without stenting) or other cardiac intervention or who has a history of myocardial infarction or who suffers from ay other potentially incapacitating cardiac condition shall be assessed as unfit unless the applicant's cardiac condition has been investigated and evaluated in accordance with best medical practice and is assessed not likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(g) An applicant with an abnormal cardiac rhythm shall be assessed as unfit unless the cardiac arrhythmia has been investigated and evaluated in accordance with best medical practice and is assessed no likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(h) Electrocardiography shall form part of the heart examination for the first issue of a Medical Assessment.

(i) Electrocardiography shall be included in re-examinations of applicants after the age of 50 no less frequently than every two years.

Note: The purpose of routine electrocardiography is case finding. It does not provide sufficient evidence to justify disqualification without further through cardiovascular investigation.

(j) The systolic and diastolic blood pressures shall be within normal limits.

(k) The use of drugs for control of high blood pressure is disqualifying except for those drugs, the use of which, is compatible with the safe exercise of the applicant's licence privileges.

(l) There shall be no significant functional nor structural abnormality of the circulatory system.

(m) There shall be no disability of the lungs nor nay active disease of the structures of the lungs, mediastium or pleurae likely to result in incapacitating symptoms.

Note.- Chest radiography is usually not necessary but may be indicated in cases where asymptomatic pulmonary disease can be expected.

(n) Applicants with chronic obstructive pulmonary disease shall be assessed as unfit unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed no likely to interfere with the safe exercise of the applicant's licence or rating privileges.

(o) Applicant with asthma causing significant symptoms or likely to cause incapacitating symptoms shall be assessed as unfit.

(p) The use of drugs for control of asthma shall be disqualifying except for those drugs, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

(q) Applicants with active pulmonary tuberculosis shall be assessed as unfit

(r) Applicant with quiescent or healed lesions, known to be tuberculous or presumably tuberculous in origin, may be assessed as fit.

(s) Applicants with significant impairment of the function of the gastrointestinal tract or its adnexae, shall be assessed as unfit.

(t) Applicants with sequelae of disease of or surgical intervention on any part of the digestive tract or its adnexa, likely to cause incapacitation, in particular any obstructions due to stricture or compression, shall be assessed as unfit.

(u) An applicant who has undergone a major surgical operation on the biliary passages or the digestive tract or its adnexa, with a total or partial excision or a diversion of any of these organs should be assessed as unfit until such time as the medical assessor, having access to the details of the operation concerned, considers of the operation are not likely to cause incapacitation.

(v) Applicants with metabolic, nutritional or endocrine disorders that are likely to interfere with the safe exercise of their licence and rating privileges shall be assessed as unfit.

(w) Applicants with insulin treated diabetes mellitus shall be assessed as unfit.
(x) Applicants with non-insulin treated diabetes shall be assesed as unfit unless the condition is shown to be satisfactorily controlled by diet alone or by diet combined with oral anti-diabetic medication, the use of which is compatible with the safe exercise of the applicant's licence and rating privileges.

(y) Applicants with diseases of the blood and/or the lymphatic system shall be assessed as unfit, unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges.

(z) Applicants with renal or genito-urinary disease shall be assessed as unfit unless adequately investigated and their condition found unlikely to interfere with the safe exercise of their licence and rating privileges.

(aa) Urine examination shall form part of the medical examination and abnormalities shall be adequately investigated.
(ab) Applicants with sequelae of disease of, or surgical procedures on the kidneys or the genito-urinary tract, in particular obstructions due to stricture or compression, shall be assessed as unfit unless the applicant's condition has been investigated and evaluated in accordance with best medical practice and is assessed not likely to

interfere with the safe exercise of the applicant's licence or rating privileges.

(ac) Applicants who have undergone nephrectomy shall be assessed as unfit unless the condition is well compensated.

(ad) Applicants with acquired immunodeficiency syndrome (AIDS) shall be assessed as unfit.

(ae) Applicants who are seropositive for human immunodeficiency virus (HIV) shall be assessed as unfit unless full investigation provides no evidence of clinical disease.

Note: Evaluation of applicants who are seropositive for human immunodeficiency virus (HIV) requires particular attention ton their mental state, including the psychological effects of the diagnosis.

(af) Applicants with gynaecological disorders that are likely to interfere with the safe exercise of their licence and rating privileges shall be assessed as unfit.

(ag) Applicants who are pregnant shall be assessed as unfit unless obstetrical evaluation and continued medical supervision indicate a low-risk complicated pregnancy.

(ah) During the gestational period, precautions should be taken for the timely relief of an air traffic controller in the event of early onset of labour or other complications.

(ai) For applicants with a low-risk uncomplicated pregnancy, evaluated and supervised in accordance with 3(gg), the fit assessment should be limited to the period until the end of the 34th week of gestation.

(aj) Following confinement or termination of pregnancy the applicant shall not be permitted to exercise the privileges of her licence until she has undergone re-evaluation in accordance with best medical practice and it has been determined that she is able to safely exercise the privileges of her licence and ratings.

(ak) The applicant shall no possess any abnormality of the bones, joints, muscles or, tendons or related structures which is likely to interfere with the safe exercise of the applicant's licence and rating privileges. Any sequelae after lesions affecting the bones, joints, muscles or tendons, and certain anatomical defects will normally require functional assessment to determine fitness.

(al) The applicant shall not possess any abnormality or disease of the ear or related structures which is likely to interfere with the safe exercise of the applicant's licence and rating privileges.

(am) There shall be no malformation nor any disease of the nose, buccal cavity or upper respiratory tract which is likely to interfere with the safe exercise of the

applicant's licence and rating privileges.

(an) Applicants with stuttering or other speech defects sufficiently severe to cause impairment of speech communications shall be assessed as unfit.

(3) **Visual requirements**: (a) The function of the eyes and their adnexae shall be normal; there shall be no active pathological condition,, acute or chronic, nor nay sequelae of surgery or trauma of the eyes or their adnexae likely to reduce proper visual function to an extent that would interfere with the safe exercise of the applicant's licence and rating privileges;

(b) Distant visual acuity with or without correction shall be 6/9 or better in each eye separately, and binocular visual acuity shall be 6/6 or better; no limits apply to uncorrected visual acuity, and where this standard of visual acuity can be obtained only with correcting lenses, the applicant may be assessed as fit provided that:

(i) such correcting lenses are worn during the exercise of the privileges of the licence or rating applied for or held; and

(ii) in addition, a pair of a suitable correcting spectacles is kept readily available during the exercise of the privileges of the applicant's licence.

(c) Applicants may use contact lenses to meet this requirement provided that:

(i) the lenses are monofocal and non-tinted;

(ii) the lenses are well tolerated; and

(iii) a pair of suitable correcting spectacles is kept readily available during the exercise of the licence privileges.

(d) Applicants with a large refractive error shall use contact lenses or high-index spectacle lenses; if spectacles are used, high-index lenses are needed to minimize peripheral field distortion.

(e) Applicants whose uncorrected distant visual acuity in either eye is worse than 6/60, shall be required to provide a full ophthalmic report prior to initial Medical Assessment and every five years thereafter.

(f) Applicants who have undergone surgery affecting the refractive status of the eye shall be assessed as unfit unless they are free from those sequelae, which are likely to interfere with the safe exercise of their licence and rating privileges.

(g) The applicant shall have the ability to read while wearing the correcting lenses, if any, required by rule 54(3)(b), the N5 chart or its equivalent at a distance selected by that applicant in the range of 30 to 50 cm and the ability to read the N14 chart or its equivalent at a distance of 100 cm; if this requirement is met only by the use of near

correction, the applicant may be assessed as fit provided that this near correction is added to the spectacle correction already prescribed in accordance with rule 54(3)(b), and if no such correction is prescribed, a pair of spectacles for near use shall be kept readily available during the exercise of the privileges of the privileges of the licences; when near correction is required, the applicant shall demonstrate that one pair of spectacles is sufficient to meet both distant and near visual requirements.

(h) When near correction is required in accordance with this paragraph, a second pair of near-correction spectacles shall be kept available for immediate use.

(i) The applicant shall be required to have normal fields of vision.

(j) The applicant shall be required to have normal binocular function.

(k) Reduce stereopsis, abnormal convergence not interfering with near vision, and acular misalignment where fusional reserves are sufficient to prevent asthenopia and diplopia need not be disqualifying.

(4) Hearing requirements: (a) The applicant, when tested on a pure-tone audiometer shall not have a hearing loss, in either ear separately, of more than 35 dB at any of the frequencies 500, 1000 or 2000 Hz, or more than 50 dB at 3000 Hz.

(b) An applicant with a hearing loss greater than the above may be declared fit provided that the applicant has normal hearing performance against a background noise that re-procedures or simulates that experienced in a typical air traffic control working environment.

Note 1: The frequency composition of the background noise is defined only to the extent that the frequency range 600 to 4800 Hz (speed frequency range) is adequately represented.

Note 2: In the speech material for discrimination testing, both aviation relevant phrases and phonetically balanced words are normally used.

(c) Alternatively, a practical hearing test conducted in an air traffic control environment representative of the one for which the applicant's licence and rating are valid may used.

55. Checks, Tests and Examinations- For the purpose of these Rules, Chairman may-

(a) conduct examinations specified in these Rules, appoint invigilators and lay down the procedure for conducting the examinations;

(b) appoint examiner for carrying out flying tests and technical examinations; and

(c) determine the manner in which the proficiency cheeks shall be carried out and may approve check pilots and examiners for this purpose.

56. Fees and other charges relating to licences.- The fees for the issue, renewal, validation or revalidation of Licences and Rating or technical examination and official medical examination in connection therewith or the issue of duplicate licence and rating shall be as specified by the Chairman through Air Navigation Orders.

57. Logbooks, logging procedure and crediting of flight time: (1) Every crew member under these rules shall maintain a personal logbook in which all flight times shall be logged in the form and manner specified by the Chairman.

(2) All entries in logbooks shall be made in ink.

(3) Unless otherwise specified, logbooks shall be preserved.

(4) Every flight crewmember shall certify the accuracy of the entries in his logbook with respect of flight time at least at the end of each calendar month. The pilot-in-command, during dual instruction shall certify entries with respect to flight time. At the end of each quarter in a year, that is, at the end of March, June, September and December; logbooks shall be certified for correctness of entries therein, as:

(a) in the case of commercial pilots and other crew members by the competent authorities of the operator concerned as approved by the Chairman;

(b) in the case of members of the flying schools, by the Chief Flying Instructor; and

(c) in the case of all other persons, by such officers of the Civil Aviation Authority as may be designated by the Chairman.

(5) A student pilot or the holder of a pilot licence shall be entitled to credited in full with all solo, dual instruction and pilot-in-command flight time towards the total flight time required for the initial issue of a pilot licence or the issue of a higher grade of pilot licence.

(6) The holder of a pilot licence, when acting as co-pilot at a pilot station of an aircraft certificated for operation by a single pilot but required by the Chairman to be operated with a co-pilot, shall be entitled to be credited with 50 per cent of the co-pilot flight time towards the total flight time required for a higher grade of pilot licence. The Chairman may authorize that flight time be credited in full towards the total flight time required if the aircraft is equipped to be operated by a co-pilot and the aircraft is operated in a multi-crew operation.

(7) **Acting as a Co-pilot**. (a) The holder of a pilot licence, when acting as co-pilot at a pilot station of an aircraft certificated to be operated with a co-pilot, shall be entitled to be credited in full with this flight time towards the total flight time required for a higher grade of pilot licence.

(b) The holder of a pilot licence, when acting as pilot-in-command under supervision, shall be entitled to be credited in full with this flight time towards the total flight time

required for a higher grade of pilot licence.

(8) A pilot who acts as Examiner or Check Pilot may log the flight time as pilot-in-command during which he so acts, provided he is entitled and authorised to fly as a pilot-in-command of that type of aircraft by virtue of his ratings and privileges.

(9) A Flight Navigator shall log the flight time during which he is engaged in actual navigational duties. Actual navigational duties under supervision of a licensed flight navigator shall be logged as a flight navigator with the indication "under supervision" in the remarks column.

(10) A Flight Engineer shall log the flight time during which he is engaged in actual flight engineer's duties. Actual flight engineer's duties under supervision of a licensed flight engineer shall be logged as a flight engineer with indication "under supervision" in the remarks column.

57A. Specifications for Personnel Licences. Personnel licences issued by a Contracting State in accordance with the relevant provisions of this Annex shall conform to the following specifications:

(a) The authority having issued a licence shall ensure that other States are able to easily determine the licence privileges and validity of ratings. The following details shall appear on the licence:

(i) Name of State (in bold type);

(ii) Title of licence (in very bold type);

(iii) Serial number of the licence, in Arabic numerals, given by the authority issuing the licence;

(iv) Name of holder in full (in Roman alphabet also if script of national language is other than Roman);

(v) Date of birth;

(vi) Address of holder if desired by the State;

(vii) Nationality of holder;

(viii) Signature of holder;

(ix) Authority and, where necessary, conditions under which the licence is issued;

(x) Certification concerning validity and authorization for holder to

exercise privileges appropriate to licence;

(xi) Signature of officer issuing the licence and the date of such issue;

(xii)Seal or stamp of authority issuing the licence;

(xiii) Ratings, e.g. category, class, type of aircraft, airframe, aerodrome control, etc.;

(xiv)Remarks, i.e. special endorsements relating to limitations and endorsements for privileges, including an endorsement of language proficiency, and other information required as applicable.

(xv) Any other details desired by the Chairman.

(b) First quality paper or other suitable material, including plastic cards, shall be used and the items mentioned in sub-rule (a) of rule 57A shown clearly thereon.

(c) Item headings on the licence shall be uniformly numbered in roman numerals as indicated in sub-rule (a) of this rule, so that on any licence the number will, under any arrangement, refer to the same item heading.

PART-X
AERONAUTICAL TELECOMMUNICATIONS

225. Aeronautical Telecommunications – General provisions.- To give effect to the convention, the Chairman shall make provisions for facilities and services for aeronautical telecommunications including radio navigation aids in order to ensure safety, regularity and efficiency of aircraft operation by securing the highest practicable degree of uniformity in the provision of aeronautical telecommunication facilities, methods of operation, procedures, codes and protocols.

PART XI
AIR TRAFFIC SERVICES

226. (1) **Establishment of authority for Air Traffic Services**.- (a) CAA, Bangladesh is the statutory authority responsible for providing Air Traffic Services in Bangladesh. No other agency shall provide an air traffic service unless approved by the Chairman.

(b) The Chairman may delegate to another State the responsibility for establishing and providing air traffic services in flight information regions, control areas or control zones extending over the territories.

Note: The delegation of such a responsibility of providing air traffic services would be without derogation of the national sovereignty. The providing State's responsibility would be limited to technical and operational considerations only and would not extend beyond those pertaining to the safety and expedition of aircraft using the concerned airspace. Such an agreement may be terminated at any time by the both the delegating and the providing States.

(c) Chairman shall establish, maintain and operate a service, which shall be known as "Air Traffic Services" and will give effect to the Convention in this regard.

(d) Details of each ATS that is provided in particular airspace or for a particular aerodrome, including the hours during which the service is available shall be published in AIP Bangladesh.

(e) Air Traffic Services shall be provided:

(i) Over entire airspace over Bangladesh Territory including territorial water except the special use airspace,

(ii) The airspace over high seas for which ICAO as per Regional Air Navigation Agreement has delegated the responsibility. Such Air Traffic Services shall be established and provided in accordance with the provisions of this part.

(2) **Language proficiency:** An air traffic services provider shall ensure that air traffic controllers speak and understand the English Language(s) used for radiotelephony communications as acceptable to the Chairman.

(3) **Interception of civil aircraft:**

(a) (i) Interception of civil aircraft shall be governed by appropriate regulations and administrative directives issued by the Chairman in compliance with the Convention on International Civil Aviation.

(ii) The pilot-in-command of a civil aircraft, when intercepted, shall comply with the instructions as published by the Chairman.
(iii) If a Bangladesh registered aircraft or an aircraft operated by a Bangladeshi

operator, while over flying the territory of another contracting state, is intercepted by the authority of that State shall follow the applicable rules of that authority.

(b) As soon as an air traffic services unit learns that an aircraft is being intercepted in its area of responsibility, it shall take such steps as are appropriate in the circumstances.

(4) **Safety management**: (a) Chairman shall establish a State Safety Programme, in order to achieve an acceptable level of safety in the provision of ATS.

(b) The acceptable level of safety to be achieved shall be established by the Chairman.

(c) As part of State Safety Programme, the air traffic services provider implements a safety management system acceptable to the Chairman, as a minimum:

(i) identifies safety hazards;

(ii) ensures that remedial action necessary to maintain an acceptable level of safety is implemented;

(iii) provides for continuous monitoring and regular assessment of the safety level achieved; and

(iv) aims to make continuous improvement to the overall level of safety.

(d) A safety management system shall clearly define lines of safety accountability throughout the air traffic services provider, including a direct accountability for safety on the part of senior management.

(5) Safety Oversight Functions: The Chairman or any other officer especially empowered by the Chairman shall perform the Safety Oversight Functions in respect of matters specified by the Chairman.

227. Objective of Air Traffic Services.-The objectives of air traffic services shall be -

(a) to prevent collisions between aircraft and on the manoeuvring area, between aircraft and obstructions;

(b) to expedite and maintain an orderly flow of air traffic;

(c) to provide such advice and information as may be useful for the safe and efficient conduct of fights; and

(d) to notify and alert appropriate organisations regarding aircraft known to be, or believed to be, in need of search and rescue aid and assisting those organisations as

required.

228. Designation of airspace.- (1) The Chairman may designate:-

(a) an aerodrome as a controlled aerodrome at which aerodrome control service is provided;

(b) any portion of the airspace within the defined horizontal and vertical limits as control area, control zone, aerodrome traffic zone, flight information region or air traffic advisory route.

(2) Where the Chairman designates an aerodrome or an airspace under sub-rule (1), he shall cause a notification of the boundaries of the airspace to be published in the Aeronautical Information Publication, or where the designation is of a temporary nature, in NOTAM.

229. Compliance with air traffic control clearance

(1) An aircraft shall comply with air traffic control instructions.

(2) Subject to the provision of sub-rule (3) and unless otherwise authorised by the appropriate air traffic control unit or by a notification in the Aeronautical Information Publication or in NOTAM, an aircraft shall not-

(a) enter, operate in, or leave controlled airspace;

(b) operate outside controlled airspace as a result of diversion; or

(c) operate at a controlled aerodrome.

(3) If an emergency arises that necessitates a deviation from requirements of an air traffic control clearance in the interests of safety, the pilot-in-command may make such deviation as is necessary but shall forthwith inform the appropriate air traffic control unit of the deviation.

(4) The pilot-in-command of an aircraft is responsible for compliance with the air traffic control clearances and air traffic control instructions.

230. Exemption from the provisions of rule 229(2)(c) under certain condition.- An aircraft operating in a control zone or at a controlled aerodrome shall not be required to comply with the provisions of clause (c) of sub-rule (2) of rule 229 during any period in which air traffic control is not in operation in respect of that control zone or controlled aerodrome.

231. Prohibition to act in air traffic control unit: - A person shall not act in any capacity for controlling air traffic unless he is authorised in writing by the Chairman**.**

PART XII
SEARCH AND RESCUE

232. Search and Rescue Services. - (1) The Chairman shall ensure through CAAB's own resources, or with assistance of other Organizations of Bangladesh or in cooperation with other States for the establishment, maintenance and operation of search and rescue services within territory of Bangladesh to ensure that timely assistance is rendered to aircraft, passengers and persons in distress. Such services shall be in accordance with the requirements of the Convention.

(2) The Search and Rescue Procedures shall be prepared taking into consideration available resources within the country of various organizations for example, Defense Forces, Maritime Authority, Fire Brigade, Hospitals, Police and other Organizations as may be applicable. All the Organizations shall render appropriate assistance and services as per the detailed role & procedures agreed and required by the Chairman.

(3) Provision of search and rescue services will be established for the portions of the high seas or areas of undetermined sovereignty shall be determined on the basis of regional air navigation agreements. The Chairman, having accepted the responsibility to provide search and rescue services in such areas shall thereafter, individually or in cooperation with other States, arrange for the services to be established and provided in accordance with the provisions of this rule.

(4) Basic elements of search and rescue services shall include a legal framework, a responsible authority, organized available resources, communication facilities and a workforce skilled in coordination and operational functions.

(5) Search and rescue services shall establish processes to improve service provision, including the aspects of planning, domestic and international cooperative arrangements and training.

(6) The Chairman shall provide assistance to aircraft in distress and to survivors of aircraft accidents, regardless of the nationality or status of persons or the circumstances in which such persons are found.

(7) The Chairman shall use search and rescue units and other available facilities to assist any aircraft or its occupants that are or appear to be in a State of emergency.

(8) Aeronautical and maritime rescue coordination centers serving the same area shall ensure the closest practicable coordination between the centers.

(9) Aeronautical and maritime search and rescue services should be facilitated for consistency and co-operation amongst them.

(10) The Chairman should establish joint rescue coordination centers to coordinate

aeronautical and maritime search and rescue operations, where practical.

(11) Subject to such conditions as may be prescribed by Bangladesh Government, the Chairman may permit immediate entry into Dhaka SRR by search and rescue unit of neighbouring States or allow search and rescue units of Bangladesh to enter into SRR of other neighbouring States for the purpose of searching for the site of aircraft accidents and rescuing survivors of such accidents.

(12) The Chairman should enter into agreements with neighboring States to strengthen search and rescue co-operation and coordination, setting forth the conditions for entry of each other's search and rescue units into their respective territories. These agreements should also provide for expediting entry of such units with the least possible formalities

(13) In order to promote search and rescue efficiency, the Chairman may arrange joint training exercises involving search and rescue units of neighboring countries.

(14) The Chairman shall arrange for all aircraft, vessels and local services and facilities, which do not form part of the search and rescue organization, to cooperate fully with the later in search and rescue and to extend any possible assistance to the survivors of aircraft accidents.

(15) The Chairman should ensure that wreckage resulting from aircraft accidents within Bangladesh or, in the case of accidents on the high seas or in areas of undetermined sovereignty, within the search and rescue regions for which it is responsible, is removed, obliterated or charted following completion of the accident investigation, if its presence might constitute a hazard or confuse subsequent search and rescue operations.

(16) Expenditures incurred in Search and Rescue operation including the cost incurred in removing the wreckage of the aircraft may be charged to the Owner(s) and Operator of the aircraft.

233. Information concerning emergencies.- Any authority, organization or any element of the search and rescue organization having reason to believe that an aircraft is in an emergency shall give immediately all available information to the rescue coordination centre of the Civil Aviation Authority.

PART XIII
AIRCRAFT ACCIDENT ENQUIRY

234. Definitions.- (1) In this PART, unless there is anything repugnant in the subject or context,-

(a) **accident** means an occurrence associated with operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, in which:

(i) a person is fatally or seriously injured as a result of being in the aircraft or direct contact with any part of the aircraft, including parts which have become detached from the aircraft or direct exposure to jet blast, except when the injures are from natural causes, self- inflicted or inflicted by other persons or the injuries are to stowaways hiding outside the areas normally available to the passengers & crews.

(ii) the aircraft sustains damage or structural failure which adversely affects the structural strength, performance or flight characteristics of the aircraft and would normally require major repair or replacement of the affected components except for engine failure or damage, when the damage is limited to the engine, it's cowling or accessories; or for damage limited to propellers, wing tips, antennas, tires, brakes, fairings, small dents or puncture holes in the aircraft skin.

(iii) the aircraft is missing or is completely inaccessible.

(b) **accredited representative** means a person designated by a state, on the basis of his or her qualifications for the purpose of participating in an investigation conducted by another state.

(c) **adviser** means a person appointed by a state, on the basis of his or her qualifications, for the purpose of assisting its accredited representative in an investigation.

(d) **causes means** actions, omissions, events, conditions or combinations thereof, which led to the accident or incident.

(e) **flight recorder** means any type of recorder installed in the aircraft for the purpose of complementing accident/incident investigation.

(f) **incident** means an occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect the safety of operation of aircraft, or in relation to an aircraft, means an occurrence taking place either on ground or in flight in which-

(i) the aircraft suffers damage or a person suffers injury in circumstances other

than those specified in the definition of accident;

(ii) the aircraft has a forced landing;

(iii) the aircraft is compelled to land at the aerodrome of departure without completing the intended flight;

(iv) the aircraft lands in an unairworthy condition;

(v) the aircraft lands owing to conditions which make continuance of flight inadvisable;

(vi) the position of the aircraft become unknown for any period; or

(vii) the safety of the aircraft or its occupants or of any other person or property is jeopardized;

(g) **investigation** means a process conducted for the purpose of accident prevention which includes the gathering and analysis of information, the drawing of conclusions, including the determination of causes and, when appropriate, the making of safety recommendation.

(h) **investigator-in-charge** means a person charged, on the basis of his/her qualifications, with the responsibilities for the organization, conduct and control of an investigation.

(i) **maximum mass** means maximum certificated take-off mass.

(j) **operator** means a person, organization or enterprises engaged in or offering to engage in an aircraft operation.

(k) **preliminary report** means the communication used for the prompt dissemination of data obtained during the early states of the investigation.

(l) **safety recommendations** means a proposal of the accident investigation authority of the State conducting the investigation, based on information derived from the investigation, made with the intention of preventing accidents or incidents.

(m) **serious incident** means an incident involving circumstances indicating that an accident nearly occurred.

(n) **serious injury** means an injury which is sustained by a person in an accident and which:

(i) requires hospitalization for more than 48 hours, commencing within seven days from the date the injury was received; or

(ii) results in a fracture of any bone (except simple fractures of fingers, toes or nose); or

(iii) involves lacerations which cause severe haemorrhage, nerve, muscle or tendon damage; or

(iv) involves injury to any internal organ; or
(v) involves second or third degree burns, or any burns affecting more than 5 per cent of the body surface; or involves verified exposure to infectious substances or injurious radiation.

(o) **State of occurrence** means the State in the territory of which an accident or incident occurs.

(p)**State of the operator** means the State in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

(q)**Substantial Damage** means damage or structural failure which adversely affects the structural strength, performance or flight characteristics of the aircraft which would normally require major repair or replacement of the affected component.

(2) **Objective of the investigation:** the sole objective of the investigation of an accident or serious incident or incident shall be the prevention of accidents, serious incidents and incidents. It is not the purpose of this activity to apportion blame or liability.

(3) **Applicability:** unless otherwise stated, the specifications in this rule apply to activities following accidents, serious incidents and incidents wherever they occur and specifications shall apply only when an aircraft is leased, chartered or interchanged and if CAAB discharges, in part, or in whole the functions and obligation of the State of registry."

235. Notification.- Accident or serious incident in the territory of a contracting State to aircraft of other contracting State responsibilities of the State of occurrence.

(1) When an accident, serious incident or incident occurs to:

(a) a Bangladesh registered aircraft, or

(b) any aircraft in Bangladesh territory, the owner, the operator or hirer (if any) shall each be responsible for ensuring that a notification is furnished by the most suitable and quickest means immediately after the accident, serious incidents or incident followed by a written report to the Chairman.

(2) Any pilot observing any aircraft accident, serious incidents or incident in Bangladesh shall report the same in details to the Chairman.

(3) The Chairman shall forward a notification of an accident, serious incident or incident with minimum of delay by the most suitable and quickest means available to the:

(i) State of registry in case of foreign aircraft

(ii) State of operator in case of foreign operator

(iii) State of design
(iv) State of manufacture

(v) International Civil Aviation Organization, when the aircraft involved is of a maximum mass of over 2250 kg.

(4) When Bangladesh is not the State of occurrence of an accident or serious incident but is the State of registry or the State of operator of the aircraft, the Chairman shall forward notification of the accident or serious incident occurring outside the territory of Bangladesh and/or in a non-contracting State or outside the territory of any contracting State or where the State of occurrence is not aware of the accident or serious incident, to;

(a) all the States involved

(b) ICAO.

(5) The Chairman shall establish a voluntary occurrence reporting system on potential safety deficiencies and ensure that the voluntary occurrence reporting system is non-punitive and protects the sources of information."

236. Format and contents of notification.- (1) The notification shall be in plain language and contain as much of the following information as it is readily available, but it's dispatch shall not be delayed due to the lack of complete information:

(a) for accidents the identifying abbreviation ACCID, for serious incident, "INCID"

(b) manufacturer, model and nationality and registration marks and serial number of the aircraft;

(c) name of owner, operator and hirer (if any) of the aircraft

(d) name of the pilot-in-command and nationality

(e) date and time (local time or UTC) of the accident or serious incident

(f) last point of departure and point or intending landing of the aircraft;

(g) position of the aircraft with reference to some easily defined geographical point and latitude and longitude;

(h) number of passengers and crews, aboard, killed and seriously injured; others, killed and seriously injured;

(i) description of the accident or serious incident and the extent of damage to the aircraft so far as is known;

(j) physical characteristics of the accident or serious incident area, as well as an indication of accesses difficulties or special requirements to reach the site;

(A) presence and description of dangerous goods on board the aircraft (if any) and

(B) If all the particulars specified in sub-rule (1) are not immediately available, the report shall so state and supplementary reports containing particulars not included in the first report shall be furnished at the earliest possible time.

(C) As soon as it is possible to do so, the State of occurrence/the Chairman shall dispatch the details omitted from the notification as well as other known relevant information."

237. **Responsibility in case of accident or serious incident of foreign registered aircraft in Bangladesh.-**(1) If a foreign registered aircraft meets an accident, incident or serious incident in the territory of Bangladesh, the Chairman, shall forward a notification of the accident or serious incident indicating the nature of the investigation or inquiry being conducted with respect to the accident or incident with a minimum of delay and by the most suitable and quickest means available to the:

(a) State of registry

(b) State of operator (if Bangladesh registered aircraft is operated by another State on wet lease)

(c) State of design

(d) State of manufacture, and

(e) International Civil Aviation Organization, when the aircraft involved is of a maximum mass of over 2250 kg.

238. Responsibilities for Protection of evidence, custody and removal of aircraft.

(1) When an accident or serious incident or incident in the territory of Bangladesh to any aircraft either registered in Bangladesh or any other State, the Chairman being the authority of State of occurrence shall take all responsible measures to protect the evidence and to maintain safe custody of the aircraft and its contents for such a period as may be necessary for the purpose of an investigation.

(2) Safe custody shall include protection against further damage, access by unauthorized persons, pilfering and deterioration and shall be deemed to be in the custody of the Chairman. The aircraft shall not be removed or other wise interfered with out the permission of the Chairman.

(3) if a request is received from the State of registry, the State of operator, the State of design or the State of manufacture that the aircraft, its contents and any other evidence remain undisturbed pending inspection by an accredited representative of the requesting State, the Chairman being the authority of State of occurrence shall take all necessary steps to comply with such request, so far this is reasonably practicable and compatible with the proper conduct of investigation, provided that the aircraft may be moved to the extent necessary to extricate persons, animal, mails and valuables, to prevent destruction by fire or other causes, or to eliminate other dangers or obstruction to air navigation, to other transport, work to the public, and provided that it does not result in undue delay in returning the aircraft to service where this is practicable.

(4) The removal of aircraft and its contents to a place of safety when the aircraft is wrecked in water.

(5) The removal of goods or baggage under the supervision of a police officer, but in the care of an aircraft, which has come from outside Bangladesh, the goods or baggage shall not be removed from the vicinity of an aircraft except on a clearance by or with the consent of a custom officer or under the supervision of an officer of Civil Aviation Authority nominated by the Chairman

(6) The removal of mails under the supervision of an officer of the police department or an officer of the postal department or an official of the Civil Aviation Authority, nominated by the Chairman.

(7) The Chairman may authorize any person, so far as is necessary for the purpose or any investigation or inquiry:

(a) to take measures for the preservation of the aircraft.

(b) to secure and safe keeping of all air traffic services communication recordings and documents associated with the flight.

(c) to have access to, examine, remove or otherwise deal with the aircraft; and

(d) to make records of photographic or other adequate means of any material evidence which are of transitory nature or can be removed or effaced or lost or destroyed.

239. Aircraft of foreign State to remain undisturbed on request.- (1) Upon receipt of the notification from a state to which rule 237 applies of its intention to send an accredited representative together with a request by that State that the aircraft, its contents and any other evidence shall remain undisturbed pending inspection by the accredited representative, the Chairman shall, subject to the provisions of sub rule (2), take such steps as are reasonably necessary and practicable to comply with the request, including the facilitation of access to the aircraft, contents or evidence.

(2) If any aircraft, its contents or evidence lies in a restricted or prohibited area including a temporary restricted or prohibited area, the Chairman may refuse access to that area, but shall effect removal of the aircraft, its contents or evidence, as the case may be, to a point outside that area for the purpose of access.

240. Release of aircraft etc., from custody.- When the retention of an aircraft, any parts or the contents thereof is no longer necessary for the purpose of an investigation or an inquiry, the Chairman shall in writing, release from his custody the aircraft, parts or contents, as the case may be, to the owner of the aircraft, or in the case of aircraft other than a Bangladesh aircraft, to the persons duly authorized by the State of registration.

241. Investigation-Appointment of investigator.- Responsibility for instituting and conducting investigation to an accident or incident in the territory of Bangladesh:

(1) If an accident or serious incident occurs to an aircraft in Bangladesh either foreign registered or Bangladesh and in case to an aircraft stated later, the Chairman, being the authority of State of occurrence, shall institute an investigation into the circumstances of the accident and be responsible for the conduct of the investigation. However, in case of foreign registered aircraft, the Chairman may delegate the whole or part of conducting such investigation to another State by mutual agreement and consent. In any event, the Chairman shall use every means to facilitate the investigation.

(2) When the accident or serious incident has occurred of Bangladesh registered aircraft in the territory of a non-contracting State which does not intend to conduct an investigation in accordance with Annex-13, the Chairman shall institute an investigation in co-operation with the State of occurrence, but failing such co-operation, shall conduct an investigation with such information as it is available.

(3) Where the location of the accident or serious incident cannot definitely be established, as being the territory of State, the Chairman shall institute and conduct necessary investigation of the accident or serious incident. However, in this case, it may delegate the whole or any part of the investigation to another State by mutual arrangement and consent.

(4) If an accident occurs in international waters near to Bangladesh, the Chairman shall

provide such assistance as possible in respond to requests of the concerned contracting State.

(5) If accident or serious incident of an aircraft registered in non-contracting State occurs in Bangladesh territory and no State intend to conduct an investigation in accordance with ICAO Annex-13, the Chairman may conduct the investigation in whole or part with the mutual consent and arrangement with the State.

(6) The Chairman may appoint an investigator to conduct an investigation into any of the following matters occurring in Bangladesh and where more than one investigator has been appointed, one of the investigator shall be designated as the chief investigator and shall initiate the investigation immediately:

(a) accident

(b) serious incident

(c) incident

(d) unlawful interference against aviation.

242. (1) **Powers of the investigators.-** For the purpose of an investigation, authorized under rule 241, an investigator has the following powers:

(a) the investigators shall have unhampered access to the wreckage and all relevant materials, including flight records and ATS record and shall have unrestricted control over it to ensure that a detailed examination can be made without delay by authorized personnel participating in the investigation.

(b) summon any person or witness

(c) take evidence on oath or affirmation

(d) require the production of documents or any part, or component or an aircraft relevant to the investigations

(e) require all or any flight crew members of the aircraft involved in the accident or incident to undergo medical examination promptly after the occurrence; by a physician, preferably experienced in accident investigation. These examinations should be expeditious.

(f) where an investigator has required the production of a document or a part or component of an aircraft relevant to the investigation, he may retain the document, part or component of the aircraft, as the case may be, for such period as it is necessary for the purpose of the investigation and may take copies of, or take extracts from, the documents so produced or retained.

(g) a summon under these rules shall be in writing under the hand of the investigator and shall specify the time and place for taking of evidence and the documents and the part or components of an aircraft (if any) required to be produced.

(h) a summon under these rules may be served either personally on the person to be served or by prepaid registered letter addressed to the person at his last known place of abode or business.

(2) **Tasks of the investigators:** The investigators appointed by the Chairman shall have independence in the conduct of the investigation and unrestricted authority over its conduct, consistent with the provisions of the Convention. Tasks of the investigators shall include:

(a) the gathering, recording and analysis of all available information on that accident or incident

(b) if appropriate, the issuance of safety recommendations,

(c) if possible, determination of cause,

(d) the completion of final report,

(e) the scene of the accident shall be visited, the wreckage examined and statements taken from witness

(f) any judicial or administrative proceeding to apportion blame or liabilities shall be separated from any investigation conducted under the provisions of annex-13.

(g) effectiveness shall be made of Flight Recorder in the investigation of an accident or incident. Operator of the aircraft on which accident or incident has occurred shall arrange for read out of the Flight Recorder without delay. In the event that the operator does not have adequate facilities to read out the Flight Recorder, the operator may use the facilities made available to it by other state, giving consideration to the capabilities of the read-out facilities, the timelines of read-out and the location of read-out facilities.

(h) the investigators appointed by the Chairman and conducting the investigation into a fatal accident shall arrange for complete autopsy examination of fatally injured flight crews and, subject to the particular circumstances, of fatally injured passengers and cabin attendants, by a pathologist, preferably experienced in an accident investigation. These examinations shall be expeditions and complete.

(i) the investigators conducting the investigation shall recognize the need of coordination between the investigator-in-charge/ chief investigator and the judicial authorities. Particular attention shall be given to evidence which requires prompt

recording and analyzing for the investigation to be successful, such as the examination and identification of victims and read-out of Flight Recorder recordings.

(j) if in the course of investigation it becomes known or it is suspected that an act of unlawful interference was involved, the investigator in-charge/chief investigator shall have to initiate action to ensure that the aviation security authorities of CAAB concerned are so informed.

(k) if it appears to the investigator that the investigation may result in framing charge against any person for an offence under these rules or in the cancellation of any license or certificate issued under the rules or of a rating or other endorsement endorsed in a license or certificate issued under these rules the investigators shall give that person or holder of that license or certificate an opportunity of making any statement or given any evidence and calling witness on his behalf.

243. (1) **Non-Disclosure of Records.-** The investigators conducting the investigation of an accident or incident shall not make the following records available for purposes other than accident or incident investigation, unless the appropriate authority for the administration of justice in the State determines that their disclosure outweighs the adverse domestic and international impact such action may have on that or any future investigation:

(a) all statement taken from persons by the investigation authorities in the course of their investigation.

(b) all communication between persons having been involved in the operation of the aircraft.

(c) medical or private information regarding persons involved in the accident or incident.

(d) cockpit voice recordings and transcripts from such recordings.

(e) recordings and transcriptions of recordings from air traffic control units and

(f) opinion expressed in the analysis of information including flight recorder information.

(2) The records stated in sub-rule (1) of this rule shall be included in the final report or its appendices only when pertinent to the analysis of the accident or incident. Parts of the records not relevant to the analysis shall not be disclosed.

(3) Reopening of the investigation: If after the investigation has been closed, new and significant evidence become available, the Chairman shall re-open the investigation.

(4) Information-accidents and incidents: Any State shall, on request from the State

conducting the investigation of an accident or incident, provide that State with all the relevant information available to it.

(5) Any state, the facilities or services of which have been, or would normally have been, used by an aircraft prior to an accident or incident, and which has information pertinent to the investigation shall provide such information to the State conducting the investigation.

(6) Responsibilities of the State of register and the State of operator; Flight Recorders**:** When an aircraft involved in an accident or incident or a serious incident lands in a State other than the State of occurrence, the State of registry or the State of operator shall, on request from the State conducting the investigation, furnish the latter State with the flight recorders records and, if necessary, the associated flight recorders.

(7) Organization information: The State of registry and the State of operator, on request from the State conducting the investigation shall provide pertinent information on any organization whose activities may have directly or indirectly influenced the operation of aircraft.

(8) Rights of person who may charged: If it appears to the investigator that the investigation may result in framing a charge against any person for an offence under these or in the cancellation of any license or certificate issued under these rules or of a rating or other endorsed in a license or certificate issued under these rules or of rating or other endorsed in a license or certificate issued under these rules, the investigator shall give that person or the holder of that license or certificate, an opportunity of making any statement or giving any evidence and calling witness on his behalf.

244. Witness.- (1) A person summoned as a witness at an investigation shall be guilty of an offence, if he/she

(a) disobeys the summon;

(b) refuses to be sworn or to make an affirmation as a witness;

(c) fails to answer any question which is lawfully required by the investigator to answer or

(d) refuses or fails to produce any document or part or component of an aircraft which he/she is lawfully required to provide.

(2) If a person objects to answering a question asked to him/her as a witness at an investigation on the ground that the answer might tend to incriminate him/her or make him/her liable to any penalty and the investigator informs that person of his/her obligation to answer that question, the person shall not refuse to answer the question but the answer given shall not be admissible in evidence in any proceedings against him/her other than proceedings in respect of the falsity of the answer or in respect of the refusal or

failure to answer the question.

(3) A person summoned as a witness shall be paid such fees and traveling expenses as may be determined by the Chairman."

245. Report of the Investigator.- (1) Upon conclusion of an investigation, the investigator shall forward a report in writing to the Chairman including all signed statements and other documents which have come into his possession in course of the investigation.

(2) The investigation report shall be submitted according to the format outlined in the Convention and promulgated by the Chairman.

246. Publication of the report.- (1) Investigators conducting the investigation into an accident serious incident shall not circulate, publish or give access to a draft report or any part there of, or any documents obtained during an investigation of an accident or incident without permission of the Chairman, unless such reports or documents have already been published or released.

(2) In case of a foreign or Bangladesh registered aircraft, the Chairman shall send a copy of the investigation report to the following organisations as may be applicable:

(a) State of registry;

(b) State of the operator;

(c) State of design;

(d) State of manufacture;

(e) All States involved in the investigation;

(f) Any States having suffered fatalities or serious injuries to its citizens;

(g) Any States that provided relevant information, significant facilities or experts; and

(h) ICAO.

(3) In the interest of accident prevention, the investigators conducting the investigation of an accident or incident shall submit the final report as soon as possible and practicable.

(4) Upon receipt of a report of an investigation under rule-245 the Chairman will forward the report to the Government with his comment/recommendation and may make public whole or any part of the report.

(5) The Chairman shall ensure that incident data report for investigations into incidents

to aircraft of a maximum mass of over 5700 kgs is forwarded to ICAO.

(6) At any stage of the investigation of an accident or incident, the accident and investigation authority of the State conducting the investigation shall recommend to the appropriate authority, including other states, any preventive action that it considers necessary to be taken promptly to enhance aviation safety.

(7) Investigators appointed by the Chairman investigating an accident or incident may address when appropriate, any safety recommendation arising out of the investigations to the accident investigation authorities of other States concerned and, when ICAO documents are involved, to ICAO.

(8) The Chairman shall ensure that, in case of safety recommendations received from other contracting States, the concerned proposing States shall be informed of the prevention action taken or the recommendations under consideration, or reasons of why no action will be taken.

(9) ADREP Reporting: When aircraft involved in an accident (either Bangladesh registered of foreign registered) is of a mass (maximum) of over 2250 kg, in the territory of Bangladesh, the investigator appointed by the Chairman, shall sent preliminary report to the:

(a) State of registry;

(b) State of the operator;

(c) State of design;

(d) State of manufacture;

(e) All States involved in the investigation;

(f) Any States having suffered fatalities or serious injuries to its citizens;

(g) Any States that provided relevant information, significant facilities or experts; and

(h) ICAO.

(10) **Accident or aircraft of 2250 kg or less:** When an aircraft not covered rule-246 (9) is involved in an accident, in the territory of Bangladesh and when airworthiness or matters considered to be of interest to the other States are involved, Bangladesh conducting the investigation shall forward the preliminary report to the:

(a) State of registry;
(b) State of operator;

(c) State of design;

(d) State of manufacturer; and

(e) any State that provided relevant information, significant facilities or experts.

(11) The preliminary report shall be submitted to the appropriate States and to the ICAO in English language.

(12) The preliminary report shall be sent by facsimile, e-mail or airmail within thirty days of the date of the accident. When matters directly affecting safety are involved, it shall be sent as soon as the information is available and by the most suitable and quickest means available.

247. Accident of foreign registered aircraft in Bangladesh (1) When an accident occurs in Bangladesh to a foreign registered aircraft:

(a) the State of registration, the State of operator and the State of manufacture may each appoint a representative, who may be accompanied by technical or other advisers, to take part in all or any portion of the investigation conducted in Bangladesh.

(b) when neither the State of registry, nor the State of operator appoints an accredited representative, the Chairman may invite the operator to participate in the investigation conducted in Bangladesh.

(c) the State of design and the State of manufacture shall be entitled to appoint one or more advisers, proposed by the organization responsible for the type design and the final assembly of the aircraft.

(d) when neither the State of design nor the State of manufacture appoint an accredited representative, the Chairman being the authority of State of occurrence may invite the organization responsible for type design and the final assembly of the aircraft to participate in the investigation.

(e) when the Chairman conducting the investigation of an accident to a foreign registered aircraft of a maximum mass of over 2250kg specially requests participation by the State of registry, the State of operator, the State of design or the State of manufacture, the States concerned shall each appoint an accredited representative.

(f) any State which on request provides information, facilities or experts to Bangladesh conducting an investigation, shall be entitled to appoint an accredited representative to participate in the investigation.

(g) the representatives may examine witness and shall be given access by the

Chairman to all information and evidence.

(h) the Chairman may authorize any persons appointed by the State of registration to conduct the investigation and the person so authorized shall submit the report of investigation to the Chairman.

(i) the State of registration or any State taking part in investigation may request the Chairman to re-open the investigation if new and material evidence become available.

(2) A State which has a special interest in an accident by virtue of fatalities or serious injuries to its citizens shall upon making a request to do so, may be permitted by the Chairman to appoint an expert who shall be entitled to:

(a) visit the scene of accident;

(b) have access to the relevant factual information;

(c) participate in the identification of victims;

(d) assist in questioning surviving passengers who are citizens of expert's state; „mw

(e) receive a copy of the final report.

(3) The Chairman conducting an investigation into the accident of foreign registered aircraft shall send through the State of operator, a copy of draft final report to the operator to enable the operator to submit comments on the draft final report.

(4) The Chairman conducting the investigation should send through the State of design and the State of manufacture, a copy of the draft final report to the organization responsible for the type design and final assembly of the aircraft to enable them to submit comments on the draft final report.

(5) The Chairman shall ensure amendment of the draft final report for inclusion of substances of the comments received from the State of operator or the State of design or the State of manufacture. Alternately, the comments may be appended to the final report.

(6) The Chairman shall forward a copy of the final report of the investigation with a minimum delay to the:

(a) State of registry;

(b) State of the operator;

(c) State of design;

(d) State of manufacture;

(e) All States involved in the investigation;

(f) Any States having suffered fatalities or serious injuries to its citizens;

(g) Any States that provided relevant information, significant facilities or experts; and

(h) ICAO.

(7) The Chairman conducting the investigation should release the final report in the shortest possible time and, if possible, within twelve months of the date of the accident. If the report cannot be released within twelve months, the Chairman may release an interim report on each anniversary of the accident, detailing the progress of the investigation and any safety issues rose and forward to the:

(a) State of registry;

(b) State of the operator;

(c) State of design;

(d) State of manufacture;

(e) All States involved in the investigation;

(f) Any States having suffered fatalities or serious injuries to its citizens;

(g) Any States that provided relevant information, significant facilities or experts; and

(h) ICAO.

248. Accident/Incidents to Bangladesh registered aircraft in foreign states.- (1) Where an accident/incident occurs to a Bangladesh registered aircraft in a foreign State: Upon receipt of notification from the State of occurrence, the Chairman shall provide pertinent information on organization whose activities may have directly or indirectly influenced the operation of aircraft.

(2) Where an accident/incident occurs to a Bangladesh registered aircraft in a foreign state, the Chairman may appoint an accredited representative to participate in the investigation if conducted by the State of occurrence.

(3) The Chairman may, being the State authority, appoint one or more advisers, proposed by the operator to assist the accredited representative.

(4) The Chairman entitled to appoint an accredited representative shall also be entitled

to appoint one or more advisers to assist the accredited representative in the investigation.

(5) Advisers assisting accredited representatives shall be permitted, under the accredited representative's supervision, to participate in the investigation to the extent necessary to enable accredited representatives to make their participation effective.

(6) Participation in the investigation of accidental Bangladesh registered aircraft in a foreign State shall confer entitlement to participate in all aspects of the investigation, under the control of the investigator-in-charge/chief investigator or equivalent of the State of occurrence in particular to:

(a) visit the scene of the accident/incident;

(b) examine the wreckage;
(c) obtain written information and suggest areas of questioning;

(d) have full access to all relevant evidence as soon as possible;

(e) receive copies of all pertinent documents;

(f) participate in read-outs of recorded media;

(g) participate in off-scene investigative activities such as components examinations, technical briefings, tests and simulations;

(h) participate in investigation progress meeting including deliberations related to analysis, findings, causes and safety recommendations and

(i) make submissions in respect of the various elements of the investigation.

(7) Accredited representatives and advisers nominated by the Chairman:

(a) shall provide the State conducting the investigation with all relevant information available to them; and

(b) shall not divulge information on the process and the findings of the investigation without the express consent of the State conducting the investigation.

(8) The Chairman shall on request from the State of occurrence conducting the investigation furnish that authority with all relevant information.

(9) The State of registry for foreign registered aircraft, the State of operator, Bangladesh registered aircraft in foreign state, the State of design, and the State of manufacture shall acknowledge the receipt of notification of an accident or serious incident (Ref: sub-rule-1 of rule-237).

(10) In reference to this rule sub-rule (2), (3) & (4), Bangladesh being the State of registration shall provide the State of occurrence with any relevant information available regarding the aircraft and flight crews involved in the accident or serious incident, along with name (s) and contact detail of the accredited representative as well as their expected date of arrival to the State of occurrence.

(11) Upon receipt of notification, Bangladesh shall within minimum delay and by the most suitable and quickest means available, provide the State of occurrence with details of dangerous goods on board the aircraft (if any).

(12) When an accident or serious incident to a Bangladesh registered aircraft has occurred in the territory of a non-contracting State which does not intend to conduct an investigation and conduct an investigation in co-operation with the non-contracting State of occurrence but failing such co-operation, shall itself conduct an investigation with such information as is available.

249. Appointment of Board of Inquiry.- (1) Where an accident has been investigated under rule 247 or 248, the Government may, whenever it considers desirable to do so in the public interest, appoint a Board of Inquiry, hereinafter in this Part referred to as the Board, to inquire into the causes of the accident and such other maters relating to the accident as are referred to it by the Government.

(2) The Board shall have, for the purpose of the inquiry, all the powers of a Civil Court under the Code of Civil Procedure, 1908 (Act V of 1908), and without prejudice to those powers, the Board may-

(a) enter and inspect, or authorize any person to enter and inspect, any place or building, the entry or inspection whereof appears to the Board requisite for the purposes of the inquiry; and

(b) endorse the attendance of witness and compel the production of documents and material objects; and every person required by the Board to furnish any information shall be deemed to be legally bound to do so within the meaning of section176 of the Penal Code (Act XLV of 1860).

(3) Every such inquiry as aforesaid shall be judicial proceeding within the meaning of section 193 and section 228 of the Penal Code (Act XLV of 1860).

250. Constitution of Board of Inquiry.- (1) A Board appointed under rule 249 shall consist of a Chairman and such assessors as the Government considers necessary.

(2) The Chairman shall be a person who is, or has been, or is qualified to be, a Judge of the Supreme Court or possesses legal, aeronautical and engineering knowledge and experience including knowledge and experience of air navigation.
(3) The assessors shall be a person possessing legal, aeronautical or engineering knowledge and experience including knowledge and experience of air navigation.

(4) The Chairman of the Board and the assessors shall be paid such remuneration as the Government may determine.

251. Proceedings before a Board of Inquiry.- (1) A Board appointed under these rules shall conduct an inquiry into the causes of the accident and into other matters referred to it.

(2) The Chairman shall forward a report of the result of an investigation conducted under rule 247 or 248 to the Chairman of the Board.

(3) The time and place of conducting the inquiry shall be fixed by the Chairman of the Board after receipt by him of the report referred to in sub rule (2).

(4) The Chairman of the Board may grant leave to appear before the Board any person being-

(a) a person whom the Chairman considers may be affected or prejudice by the inquiry;

(b) the representative of an association which the Chairman considers may be affected or prejudice by the inquiry; and
(c) in the case of an accident to an aircraft of a foreign State, the representative of the concerned State.

(5) Any person granted leave to appear before the Board under sub rule (4) may be represented by the counsel, solicitor or agent who may examine witness and address the Board.

(6) Unless the Chairman of the Board otherwise directs, the sittings of the Board shall be open to the public.

(7) The Chairman of the Board may-

(a) direct that a witness be excluded from the sittings of the Board while another witness is giving evidence; and
(b) direct that the whole or specified part of the evidence not be published if, in his opinion, this course is in the public interest.

252. Powers of the Board.- (1)The Chairman of the Board may, by writing under his hand, summon a person to attend before the Board at a time and place specified in the summons to give evidence and to produce books, documents and writings or a part of component of an aircraft in the custody or control of the person which he is required by the summons to produce.
(2) The Board may inspect books, documents or writings or a part or component of an aircraft produced before it, and may retain them for such reasonable period as it thinks fit,

and may make copies of such portions of the books, documents or writings as are relevant to the inquiry.

253. Appearance of witness before a Board.- (1) The Board may examine on oath a person appearing as a witness before it, whether the witness has been summoned or appears without being summoned, and , for this purpose, may administer an oath to the witness.

(2) A person served with a summons to attend before a Board shall, without reasonable excuse-

(a) attend before the Board unless excused by the Chairman of the Board or until he is released from further attendance by the Chairman of the Board; or

(b) produce the books, documents or the part or component of an aircraft in his custody or control.

(3) A witness appearing before a Board shall not refuse to answer a question put to him which is relevant to the proceedings.

(4) A statement or disclosure made by a witness to the Board is not admissible in evidence against him in civil or criminal proceedings in a court except in a prosecution for giving false evidence before the Board.

(5) A witness summoned to attend before a Board shall be paid such fees and traveling expenses as may be determined by the Government.

254. Report of the Board.- (1) The Chairman of the Board shall, as soon as is convenient after conducting the inquiry, forward to the Government a written report stating the findings, together with any observations and recommendations which the Board thinks fit to make with a view to the preservation of life and property and the avoidance of similar accidents in future.

(2) The Chairman and each assessor constituting the Board shall sign the report.

(3) When the Chairman or assessor disagrees with a finding or recommendation of the Board, the Chairman or the assessor shall, state in writing his reasons for disagreement and those reasons shall be forwarded to the Government along with the report which shall be deemed to be part of the report.

255. Extension and reopening of inquiry.- (1) The Government may, at any stage of an inquiry, request the Board to inquire into such further matters relating to the accident as the Government thinks fit, and may, where an inquiry has been completed and a report has been forwarded, constitute a Board to inquire further into such matters relating to the accident as the Government thinks fir.
(2) The Government may make publish the whole or part of the report of the Board.

PART XIV
AERODROMES AND AIRPORTS

256. Responsibility.- All Government aerodromes and airports shall be under the control and management of the Chairman who may, subject to these rules, determine the conditions for the use thereof.

257. Admission fee for entry into aerodromes and airports.- (1) No person shall enter, or be in, the terminal building of any government aerodrome or airport or any other area in such aerodromes or airports as may be notified by the Chairman, unless he holds an admission ticket valid for entry therein:

Provided that it shall not apply to-

(a) any passenger embarking, disembarking or in transit bolding a valid air ticket; or

(b) any person who is engaged on duty at such aerodrome or airport and approved by the Chairman or is exempted by general of special order in writing of the Chairman.

(2) An admission ticket may be obtained on payment of a fee as specified in Schedule-III.

(3) The admission ticket shall be non-transferable and shall be produced for examination on demand by any person authorised by the Chairman in this behalf.

(4) Notwithstanding anything contained in this rule, the Chairman may, if he is satisfied that it is necessary so to do for the maintenance of proper order or decorum of the Government aerodrome or airport refuse admission to any person into the terminal building or any part of such building, or any other area, or require any person in such building, part or area to leave the same.

(5) The admission fees shall be collected by such person or agency or authority as may be specified by the Chairman.

258. Passenger services fees.- (1) Subject to the provision of sub-rule (4), every passenger before embarking on an aircraft of any scheduled or non scheduled flight at a Government aerodrome or airport shall pay a fee for the use of, and for the services provided at, the aerodrome or airport at following rates, namely:-

(a) where the destination is outside Bangladesh Taka 300.00

(b) where the destination is within Bangladesh Taka 25.00.

(2) No passenger shall board any aircraft unless such passenger has pai9d the passenger service fees under sub-rule (1).

(3) The passenger service fees shall be collected by such person or authority and in such manner as may be specified by the Chairman.

(4) Notwithstanding anything contained in sub-rule (1), the following persons shall be exempted from the payment of passenger service fees, namely:-

(a) Heads of States and Governments along with their entourage;

(b) Ministers and High dignitaries visiting Bangladesh as State guests;

(c) transit passenger leaving Bangladesh by a flight bearing the same number as the one with which they entered the country or by the next available flight by which they have to reach their destination: Provided the stay does not exceed twenty-four hours;

(d) children under two years of age; and

(e) such other person or category of persons as may be exempted from such payment by the Chairman by general or special order.

259. Use of aerodromes.- (1) An aircraft shall not land at, or take-off from, any places unless that place is a Government aerodrome or airport and has been licensed under this part or is a place authorised by the Government for use as an aerodrome or airport and all international airport's shall have to be certified by the Chairman in accordance with the provision of the Convention.

(2) The Chairman may, in relation to any aerodrome or airport, issue such directions as he considers necessary to ensure the safety of aircraft and compliance with the standards, recommended practices and procedures adopted from time to time pursuance of the Convention.

(3) In order to achieve an acceptable level of safety in aerodrome operation, Chairman shall establish a safety programme.

260. Licensing of aerodromes.- (1) Upon applicant by the owner of any place, the Chairman may issue to him an aerodrome licence authorizing the use of the place as an aerodrome.

(2) An aerodrome shall be licensed in one of the following categories, namely-

(a) for public use;

(b) for private use which means for use by the licensee and by individuals specifically authorized by he licensee

(3) An aerodrome licence shall be issued subject to such conditions as the Chairman considers necessary to ensure compliance with the Convention.

(4) A licence issued under these rules shall not be varied or altered in any manner without the written permission of the Chairman.

260A. Aerodrome Certification - (1) For the purpose of this Rules, -

(a) **"aerodrome certificate"** means a certificate issued by the Chairman under this rule for operation of an international aerodrome or airport ;
(b) "**aerodrome manual"** means a manual included in an application for aerodrome certificate pursuant to rule 260B and include any amendments to the manual accepted by the Chairman.

(c) **"aerodrome operator"** means in relation to certificated aerodrome, the aerodrome certificate holder ;

(d) "**certified aerodrome"** means an international aerodrome or airport whose operator has been granted an aerodrome certificate ;

(2) The operator of an international aerodrome or airport intended for air transport operations shall be in possession of an aerodrome certificate.

(3) An applicant may apply to be Chairman for an aerodrome certificate for authorising the applicant to operate an international aerodrome or airport at the place specified in the application. Such application must be in an approved form and include the aerodrome manual.

(4) Chairman may approve an application submitted under sub-rule (3) and grant an aerodrome certificate to the applicant. Chairman may establish a committee to assess the application and recommendation for certification of aerodromes being satisfied that.

(a) the aerodrome facilities, services and equipment are in accordance with the Standards as specified in Rule 267 ;

(b) the aerodrome's operating procedures make satisfactory provision for the safety of aircraft;

(c) an aerodrome manual, as specified in Rule 260B, has been prepared that contains all relevant information for the applicants international aerodrome or airport and submitted as per sub-rule(3) of this rule and an acceptable safety management system is in place at the aerodrome ; and

(d) the applicant will be able to operate and maintain the aerodrome properly.

(5) The Chairman may refuse to grant an aerodrome certificate giving the applicant a written notice of the refusal, and the reasons for it.

(6) The Chairman -

(a) may grant an aerodrome certificate subject to any conditions necessary in the interests of safety ;

(b) shall give written notice to the applicant of the reasons for any conditions applied to the certificate ;

(c) shall set out a condition in an endorsement on the certificate or otherwise notified in writing to the certificate holder.

(7) An aerodrome certificate shall remain in force for two years or until it is suspended or cancelled, which ever is earlier.

(8) An aerodrome certificate holder must give the Chairman not less than 60 days written notice of the date on which the certificate is to be surrendered so that suitable promulgation action can be taken.

(9) The Chairman may suspend or cancel an aerodrome certificate if there are reasonable grounds for believing that:

(a) condition to which the certificate was subject has been breached ;

(b) the aerodrome facilities, operations or maintenance are not of the standard required in the interests of the safety of air navigation.

(10) Before suspending or canceling an aerodrome certificate, the Chairman shall give to the holder a notice that sets out the facts and circumstances that appear to justify the suspension or cancellation and invites the holder to show cause, in writing and within a reasonable period, why the certificate should not suspended or cancelled.

(11) The Chairman shall take into account any reasons the holder provides within the time allowed prior to making a decision about suspension or cancellation. Notice of suspension or cancellation has effect on the day it is served on the aerodrome certificate holder.

(12) The Chairman may give its consent to, and issue an instrument of transfer of an aerodrome certificate to a transferee where -

(a) the current holder of the aerodrome certificate notifies the Chairman in writing at least 60 days before ceasing to operate the aerodrome that the current holder will cease to operate the aerodrome as of the date specified in the notice;

(b) the current holder of the aerodrome certificate notifies the Chairman in writing the name of the transferee ;

(c) the transferee applies in writing to the Chairman within 45 days before the current holder of the aerodrome certificate cease to operate the aerodrome, for the aerodrome certificate to be transferred to the transferee;

(d) the requirement of sub-rule 4 (b) of this rule is complied ; and

(e) the Chairman does not consent to the transfer of an aerodrome certificate, he shall give the applicant written notice of the refusal, and the reasons for it no later than 14 days after he refuses to transfer the certificate.

(13) The Chairman may, after satisfied that the requirement of sub-rule 4(b) of this rule and sub-rules (5) & 6(a) of rule 260B are fulfilled amend and aerodrome certificate where-

(a) there is a change in the operator of the aerodrome ;

(b) there is a change in the use or operation of the aerodrome ;
(c) there is a change in the boundaries of the aerodrome ; and

(d) the holder of the aerodrome certificate requests the amendment.

(14) The operator of a certified aerodrome shall implement a safety management system, acceptable to the Chairman as a minimum:

(a) identifies safety hazard;

(b) ensures that remedial action necessary to maintain an acceptable level of safety is implemented;

(c) provides for continuous monitoring and regular assessment of the safety level achieved; and

(d) aims to make continuous improvement to the overall level of safety."

260B. Aerodrome Manual - (1) The operator of a certified aerodrome must have a manual, to be known as the Aerodrome Manual, for the aerodrome.

(2) The Aerodrome Manual shall -

(a) be typewritten or printed and signed by the aerodrome operator ;

(b) be in a format that is easy to revise ;

(c) have a system for recording the currency of pages and amen laments, thereto, and should include a page for logging revisions ; and

(d) be organized in a manner that will facilitate the preparation and review processes.

(3) The aerodrome operator must provide the Chairman with a complete and current copy of the aerodrome manual, and must keep at least one complete and current copy of the aerodrome manual at the aerodrome in printed form. Other espies of the manual may be held in electronic form.

(4) The operator of a certificated aerodrome must include the particulars in an aerodrome manual. as specified by Chairman.

(5) If the Chairman exempts the aerodrome operator from complying with any requirement set out in rule 260D. the aerodrome manual must show the identifying number given to that exemption by the Chairman and the date the exemption came into effect. and any conditions or procedures subject to which the exemption was granted.

(6) If a particular information is included in the aerodrome manual because it is not applicable to the aerodrome the aerodrome operator must state in the manual -

(a) that the particular is not applicable ; and
(b) the reason for non-applicability.

(7) The operator of a certified aerodrome must alter or amend the aerodrome Manu I whenever necessary, in order to maintain the accuracy of the manual ;

(8) To maintain the accuracy of the aerodrome manual. the Chairman may issue written directives to the aerodrome operator to alter or amend the manual in accordance with the direction.

(9) An aerodrome operator must notify the Chairman, as soon as practicable. of any alterations that the operator wishes to make to the aerodrome manual.

(10) The Chairman shall approve the aerodrome manual and any amendments thereto provided these meet the requirements of the provisions of other rules.

(11) The operator of a certified aerodrome shall maintain a record for the holder of each copy of the aerodrome manual, in whole or in part, and shall provide updates of the manual appropriately to all the holders.

260C. Obligations of the Aerodrome Operator.- (1) The aerodrome operator shall comply with the standards specified in rule 267 and with any conditions endorsed in the certificate pursuant to sub-rule (6) of rule 260A and rule 260D.

(2) The operator of certified aerodrome shall ensure that the operations and maintenance of the aerodrome are carried out with a reasonable degree of care and diligence.

(3) The aerodrome operator shall employ adequate numbers of qualified and skilled personnel for performing all critical activities in the aerodrome operation and maintenance processes.

(4) Where the Chairman has prescribed competency certification requirement for personnel referred to in sub-rule (3), the aerodrome operator shall employ only those persons possessing such certificates.

(5) The aerodrome operator shall implement a programme to upgrade the competency of the personnel referred to in sub-rule (3).

(6) Subject to any directives that the Chairman may issue, the aerodrome operator shall operate and maintain the aerodrome in accordance with the procedures set out in the aerodrome manual.

(7) To ensure the safety of aircraft, the Chairman may give written directives to an aerodrome operator to alter the procedures set out in the aerodrome manual.

(8) The aerodrome operator shall establish a safety management system of the aerodrome describing the structure of the organization and the duties, powers and responsibilities of the officials in the organizational structure, with a view to ensuring that operations are carried out in demonstrably controlled way and are improved where necessary.

(9) The aerodrome operator shall oblige all the users of the aerodrome including organization which perform activities independently at the aerodrome in relation to flight or aircraft handling, to comply with requirements laid down by the aerodrome operator with regard to safety and order at the aerodrome, and shall monitor such compliance.

(10) The aerodrome operator shall oblige all the users of the aerodrome including all organizations referred to in sub-rule (9) to co-operate in the programme to promote safety, and the safe use of the aerodrome by immediately informing it of the accidents, incidents, defects and faults which have bearing on safety.

(11) The aerodrome operator shall arrange for an audit of the safety management system including an inspection of the aerodrome facilities and equipment. The audit shall cover the aerodrome operator's own functions. The aerodrome operator shall also arrange an external audit and inspection programme for evaluation of other users including all organizations working at the aerodrome referred to in sub-rule(9).

(12) The audits referred to in sub-rule (3) shall be carried out every 12 months or less, as specified by the Chairman.

(13) The aerodrome operator shall ensure that the audit reports including the report on the aerodrome facilities, services and equipment are prepared by suitably qualified safety experts.

(14) The aerodrome operator shall retain a copy of the reports referred to in sub-rule (13) for a period of at least three years.

(15) The reports referred to in sub-rule (13) shall be prepared and signed by the persons who carried out the audit and inspection.

(16) Personnel authorized by the Chairman nay inspect and carry out tests on the aerodrome facilities, services and equipment inspect aerodrome operators documents and records and verify the aerodrome operator's safety management system before the aerodrome certificate is granted or renewed and subsequently, at any other time, for the purpose of ensuring safety and order at the aerodrome.

(17) An aerodrome operator shall, allow access to the personnel, authorized by the Chairman as referred in sub-rule (16), to any part of the aerodrome or, any aerodrome facility, including equipment records, documents and operator's personnel for the purpose referred to in sub-rule(16).

(18) The aerodrome operator shall co-operate in conducting the activities referred to in sub-rule (16).

(19) An aerodrome operator shall adhere to the requirements of notifying and reporting within the specified time limits, to the Chairman air traffic control and pilots, as required in these Rules.

(20) An aerodrome operator shall review the issue of Aeronautical Information Publication (AIP), AIP Supplements, AIP Amendments, Notice to Airmen (NOTAMS) Pre-flight Information Bulletins and Aeronautical Information Circulars issued by the Chairman on receipt, thereof and immediately after such reviews, notify Chairman of any inaccurate information contained, therein, that pertains to the aerodrome.

(21) An aerodrome operator shall notify the Chairman in writing at least 60 days before any change to an aerodrome facility or equipment or the level of service at the aerodrome that has been planned in advance and that is likely to effect the accuracy of the information contained in any Aeronautical Information Service (AIS) publication referred to in sub-rule (20).

(22) Subject to the requirements of the sub-rule (23) and aerodrome of operator shall cause to be received at air traffic control and the flight operations units, immediate notice giving details of any of the following circumstances of which the operator has the information of -

(a) any projections by an object through an obstacle limitation surface relating to the aerodrome; and

(b) the existence of any obstruction or hazardous condition affecting aviation safety at

or near the aerodrome ;

(c) reduction in the level of service at the aerodrome set out in AIS publications referred to in sub-rule (20);

(d) closure of any part of the movement area of the aerodrome; and

(e) any other condition that could affect aviation safety at the aerodrome and against which precautions are warranted.

(23) When it is not feasible for an aerodrome operator to cause notice of a circumstance referred to in sub-rule (22) to be received at the air traffic control or a flight operations unit in these sub-rules, the operator shall give immediate notice directly to the pilot who may be affected by that circumstance.

(24) An aerodrome operator shall inspect or arrange for inspection of an aerodrome, as the circumstances require, to ensure aviation safety-

(a) as soon as practicable, after an aircraft accident or incident within the meaning of these terms defined in rule- 234 and the notification procedure for notifying incidents and accidents specified in Rules 233, 236 & 237;

(b) during any period of construction or/repair of the aerodrome facilities or equipment that is critical to the safety of aircraft operations ; and

(c) at any other time when there are conditions at the aerodrome that could affect aviation safety.

(25) An aerodrome operator shall remove, or arrange for the removal of other obstructions from the surface of the aerodrome or any vehicle that is likely to be hazardous.

(26) Where low flying aircraft, at or near an aerodrome, or taxing aircraft are likely to be hazardous to people or vehicular traffic, the aerodrome operator shall -

(a) post the warning notices of the hazard on any public way that is adjacent to the manoeuvring area ;

(b) inform the authority responsible for posting the warning notices on the public way that there is a hazard, if such a public way is not controlled by the aerodrome operator.

260D. Exemptions - (1) The Chairman may exempt, in writing, an aerodrome operator from compliance with specified provisions of these Rules.

(2) Before the Chairman decided to exempt the aerodrome operator; he shall take into

account all relevant considerations relating to the interest of safety.

(3) An exemption is subject to the aerodrome operator complying with the conditions/procedures specified by the Chairman in the aerodrome certificate as being necessary in the interests of safety.

(4) Where an aerodrome does not meet the requirement of a standard specified in rule-267, the Chairman may determine, after carrying out aeronautical studies, only if and where permitted by the standards such conditions and procedures relating to the Standards as are necessary to ensure a level of safety equivalent to the established by the Standard.

(5) The deviation from a Standard specified in Rule 267 and the conditions and procedures referred to in sub-rule (5) of rule 260A shall be set out in an endorsement on the aerodrome certificate or otherwise in writing. If an exemption is provided otherwise in writing it shall be incorporated in the aerodrome manual.

261. Public aerodrome.- Every aerodrome which is licensed for public use or which is open to public use by the aircraft registered in Bangladesh shall, upon payment of charges to the same extent and upon the same conditions be open to use by aircraft possessing the nationality of any other State.

262. Screening of dangerous lights.- (1) Whenever any light is exhibited at, or in the neighbourhood of, an aerodrome, air route or airway facility and the light is likely to endanger the safety of aircraft, whether by reason of glare or by causing confusion with, or preventing clear reception of, the lights or signals described in these rules or of air route or airway facilities operated in pursuance of these rules, the Chairman may cause a notice to be served upon the owner of the place where the light is exhibited or upon the person having charge of the light directing the owner or person, within a reasonable time to be specified in the notice, to extinguish or to screen effectually the light in the manner specified in such notice.

(2) If any owner or person on whom a notice under sub-rule (1) is served fails, within the time specified in the notice, to extinguish or screen effectually in the manner mentioned in the notice, the Chairman may authorize an officer with such assistance as he requires, to enter the palace where the light is and extinguish or screen the light, and may recover the expenses incurred in so doing form the owner or person on whom the notice has been served.

263. Isolation of aircraft.- An isolated parking position for aerodromes shall be designated by the Chairman or in the absence of such designation, the control tower shall advise the pilot-in-command to park the aeroplane in such area of the aerodrome as is considered to be suitable for the parking which is known or believed to be the subject of unlawful interference or which, for other reasons, needs isolation from normal aerodrome activities.

264. Apron lighting.- Apron floodlights shall be provided on all aprons intended to be used at night and also on a designated isolated aeroplane parking positing.

265. Protection by fences and barriers.- The Chairman, in the case of Government aerodromes and airports, and the owner, in the case of private aerodromes shall provide fences or other suitable barriers at aerodromes and airports established or licensed under these rules to prevent unauthorized persons to enter the restricted or protected area of the aerodrome or airport and also in the areas where ground installations and facilities essential for he safe of civil aviation are located outside an aerodrome boundary.

266. Prohibition of entry into aerodromes and airports.- No person shall, unless exempted by the Chairman or any authorized officer in writing in this behalf.

(a) enter or remain or cause any other person to enter or remain in the movement area;

(b) leave or throw or cause to be thrown any animal, bird or property or object of any nature whatsoever in the movement area;

(c) permit any animal under his possession or control or otherwise to stray in the movement area; and

(d) operate any vehicle in the movement area;

Provided that the provisions contained in clause (a) shall not apply to-

(i) persons authorized under rule 257;

(ii) bonafide passengers and crew members and their baggage, freight and mail during the process of embarkation and disembarkation in the movement area.

267. Aerodrome Standards.- Chairman shall specify the Standards that Prescribe the physical characteristics and obstacle limitation surfaces to be provided for at all aerodromes, and certain facilities and technical services normally provided at an aerodrome as per the provision of the Convention.

268. Obstruction clearance and marking.- (1) Whenever any object which is located on or within the defined limits of a Government aerodrome or airport or on routes used by aircraft engaged in international air navigation (within Bangladesh) and which projects above the surfaces, constitutes and obstruction or a potential hazard to aircraft moving in the navigable air space in the vicinity of an aerodrome or airport, the Chairman may cause a notice to be served upon the owner of the property in which the object is located directing the owner, within such reasonable time as is specified in the notice to-

(a) remove the object or such portion of it specified in the notice as is necessary; or

(b) install and operate lights on the object and mark it in accordance with the

requirements of the Convention.

(2) If a person upon whom a notice is served in pursuance of this rule fails to comply with a direction in the notice, he shall be guilty of an offence and the Chairman may authorize an officer, with such assistance as he requires, to enter the place where the obstruction is located and carry out he directions contained in the notice may recover the expenses in so doing from the owner or person on whom the notice has been served.

269. Tariff charges.- The charges for landing, parking and housing at Government aerodromes and airports and for providing security checking of embarking passengers and their hand-carried bags and route navigation facilities in the territory of Bangladesh shall be applicable to all aircraft whether registered in Bangladesh or in any other State and shall be leviable in accordance with the provisions contained in Schedule IV.

270. Qualification of licenses for private aerodromes.- A licence for an aerodrome shall not be granted to any person other than-

(a) a citizen of Bangladesh; or

(b) a company or body corporate registered, and having its principal place of business, in Bangladesh.

271. Period of validity of licence.- An aerodrome licence may be granted for any period not exceeding twelve months and may be renewed for any period not exceeding twelve months.

272. Fees for grant or renewal of a licence.- The fees chargeable for the renew of license or aerodrome certificate, mentioned in rule 260 and 260A for an aerodrome, shall be specified by the Chairman.

PART XV
AERONAUTICAL INFORMATION SERVICES

273. (1) Integrated Aeronautical Information Package.- The Chairman shall give effect to the Convention on International Civil Aviation in this regard and shall provide and publish an Aeronautical Information Publication; and may agree with other States for the provision of joint services, where necessary, provided the Standards and Recommended Practices adopted in pursuance of the Convention are adequately met.

274. Information for flight operations.- The aeronautical information service shall promptly make available to the aeronautical information services of other States, any information necessary for the regularity, safety, or efficiency of air navigation to ensure that information necessary for the safety, regularity or efficiency of air navigation is available in a form suitable for operational requirements of -

(a) flight operations personnel including the members of the flight crew and the services responsible for pre-flight information; and

(b) the air traffic services unit responsible for flight information service.

275. Authority for publication of AIP. -(1) Aeronautical information published by the Chairman which shall clearly indicate that it has been published under his authority.

(2) Aeronautical information obtained under clause (a) of sub-rule (3) of rule 273 shall be disseminated clearly identifying as having been obtained from the authority of the State of origin.

(3) Aeronautical information obtained under clause (b) of sub-rule (3) of rule 273 shall, if possible, be verified before dissemination and if not verified, shall, when disseminated, be clearly identified as such.

PART XVI
AIRCRAFT NOISE

276. Certificate requirement.- (1) An aircraft registered in Bangladesh shall not be engaged in international air navigation unless there is in force in respect of it a noise certificate issued or validated by the Chairman.

(2) This part shall apply to such categories of aircraft as are specified from time to time in Annex 16 to the Convention.

277. Noise Certificate.- (1) The owner or operator of an aircraft registered in Bangladesh may apply to the Chairman for the issue or renewal of a noise certificate in respect of the aircraft or for the validation of a noise certificate issued by a State in respect of the aircraft.

(2) The Chairman may issue, renew or validate a noise certificate in respect of an aircraft where the applicant furnishes to the Chairman such documents or other evidence relating to the noise characteristics of the aircraft as the Chairman requires and-

(a) satisfies the Chairman through demonstration that the aircraft complies with noise requirements which are at least equal in effect to the minimum noise standards adopted in pursuance of the Convention;

(b) satisfies the Chairman that a State has issued a noise certificate for the aircraft in compliance with the minimum noise standards adopted in pursuance of the Convention; or

(c) satisfies the Chairman that the aircraft has been modified in accordance with an applicable design that has been certified by a state as achieving compliance with the minimum noise standards adopted in pursuance of the Convention.

(3) A noise certificate shall contain at least the following information concerning the aircraft, namely:-

(a) State of Registry; nationality and registration marks;

(b) Manufacturer's serial number;

(c) Manufacturer's type and model designation; engine type/model; propeller type/model if applicable;

(d) Statement of any additional modifications incorporated for the purpose of compliance with the applicable Noise Certification Standard;

(e) The maximum mass at which compliance with the applicable Noise Certification Standards has been demonstrated;

(f) The average noise levels at the reference points for which compliance with the International Civil Aviation Organisation (ICAO) Standard has been demonstrated; and

(g) The chapter of ICAO Annex XVI, Volume 1, of International Civil Aviation Organisation (ICAO) according to which the aircraft was certificated.

278. Withdrawal of noise certificate.- (1) Where the Chairman is satisfied that reasonable doubt exists concerning the compliance of an aircraft registered in Bangladesh with the noise certification requirements, he may suspend the noise certificate of the aircraft or of each aircraft of the type for such period as he considers necessary to resolve the doubt.

(2) Where the Chairman becomes aware that an aircraft registered in Bangladesh has ceased to comply with noise standards that are at least equal in effect to the minimum noise standards adopted in pursuance of the Convention, he shall suspend or revoke the noise certificate of the aircraft or of each aircraft of the type and shall not remove the suspension or grant a new noise certificate unless the aircraft are found, on reassessment, to comply with the applicable noise certification requirements of this Part.

279. Application of this rule to foreign aircraft.- The rules contained in this Part shall, mutatis mutandis, apply to aircraft registered in a foreign State while flying in or over the territory of Bangladesh.

PART XVII
SAFEGUARD AGAINST ACTS OF UNLAWFUL INTERFERENCE

280. General Principles.-(1) **Applicability.-** (a) The provision of this Part shall be applied by the concerned authorities to the prevailing threats of acts of unlawful interference against civil aviation to which each aerodrome or airport within Bangladesh is exposed.

(b) The Chairman shall ensure that measures designed to safeguard against acts of unlawful interference are applied to domestic operations to the extent practicable, based upon a security risk assessment carried out by the relevant national authorities.

(2) **Objectives**.- (a) The primary objective shall be the safety of passengers, crew, ground personnel and the general public in all matters related to safeguarding against acts of unlawful interference with civil aviation.

(b) The Chairman shall develop and implement regulations, practices and procedures to safeguard civil aviation against acts of unlawful interference taking into account the safety, regularity and efficiency of flights.

(c) The Chairman shall ensure that such regulations, practices and procedures protect the safety of passengers, crew, ground personnel and the general public in all matters related to safeguarding against acts of unlawful interference with civil aviation; and are capable of responding rapidly to meet any increased security threat.

(d) The Chairman should whenever possible arrange for the security controls and procedures to cause a minimum of interference with, or delay to the activities of, civil aviation provided the effectiveness of these controls and procedures is not compromised.

(e) The Chairman should ensure appropriate protection of aviation security information.

281. Cooperation and co-ordination.- (1) The Chairman shall ensure that requests from other Contracting States for additional security measures in respect of a specific flight(s) by operators of such other States are met, as far as may be practicable. The requesting State shall give consideration to alternative measures of the other State that are equivalent to those requested.

(2) The Chairman shall cooperate with other States in the development and exchange of information concerning national civil aviation security programmes, training programmes and quality control programmes, as necessary.

(3) The Chairman shall establish and implement procedures to share with other Contracting States threat information that applies to the aviation security interests of those States, to the extent practicable.

(4) The Chairman shall establish and implement suitable protection and handling procedures for security information shared by other Contracting States, or security information that affects the security interests of other Contracting States, in order to ensure that inappropriate use or disclosure of such information is avoided.

(5) The Chairman should share, as appropriate, and consistent with the sovereignty of Bangladesh, the results of the audit carried out by ICAO and the corrective actions taken if requested by another State.

(6) The Chairman should include in each of its bilateral agreements on air transport a clause related to aviation security, taking into account the model clause developed by ICAO.

(7) The Chairman should make available to other Contracting States on request a written version of the appropriate parts of its national civil aviation security programme.

282. Organization.- (1) National organization and appropriate authority.- (a) The Chairman shall establish and implement a written national civil aviation security programme to safeguard civil aviation operations against acts of unlawful interference, through regulations, practices and procedures which take into account the safety, regularity and efficiency of flights.

(b) The Chairman shall be responsible for the development, implementation and maintenance of the national civil aviation security programme.

(c) The Chairman shall keep under constant review the level of threat to civil aviation within the territory of Bangladesh, and establish and implement policies and procedures to adjust relevant elements of national civil aviation security programme accordingly, based upon a security risk assessment carried out by the relevant national authorities.

(d) The Chairman shall define and allocate tasks and coordinate activities between the departments, agencies and other organizations of the Government, airport and aircraft operators and other entities concerned with or responsible for the implementation of various aspects of the national civil aviation security programme.

(e) The Chairman shall, on the direction of the Government, establish a national aviation security committee to be called the Civil Aviation Security Committee for the purpose of coordinating security activities between the departments, agencies and other organizations of the Government, airport and aircraft operators and other entities concerned with or responsible for the implementation of various aspects of the national civil aviation security programme.

(f) The Chairman shall ensure the development and implementation of a national training programme for personnel of all entities involved with or responsible for the implementation of various aspects of the national civil aviation security programme.

This training programme shall be designed to ensure the effectiveness of the national civil aviation security programme.

(g) The trainers and the training programmes should meet standards as defined by the Chairman

(h) The Chairman shall arrange for the supporting resources and facilities required by the aviation security services to be available at each airport serving civil aviation.
(i) The Chairman shall make available to the airport and aircraft operators operating in the territory of Bangladesh and other entities concerned, a written version of the appropriate parts of its national civil aviation security programme and/or relevant information or guidelines enabling them to meet the requirements of the national civil aviation security programme.

(2) Airport Operations.- (a) The Chairman shall require each airport serving civil aviation to establish, implement and maintain a written airport security programme appropriate to meet the requirements of the national civil aviation security programme.

(b) The Chairman shall ensure that an authority at each airport serving civil aviation is responsible for
coordinating the implementation of security controls.

(c) The Chairman shall ensure that an airport security committee at each airport serving civil aviation is established to assist the authority mentioned under sub-rule 2(b) of this rule in its role of coordinating the implementation of security controls and procedures as specified in the airport security programme.

(d) The Chairman shall ensure that airport design requirements, including architectural and infrastructure related requirements necessary for the implementation of the security measures in the national civil aviation security programme, are integrated into the design and construction of new facilities and alterations to existing facilities at airports.

(3) **Aircraft Operations.**- (a) The Chairman shall ensure that commercial air transport operators providing service from Bangladesh have established, implemented and maintained a written operator security programme that meets the requirements of the national civil aviation security programme of Bangladesh and shall be acceptable to or approved by the Chairman.

(b) The Chairman should ensure that each entity conducting general aviation operations, including corporate aviation operations, using aircraft with a maximum take-off mass greater than 5 700 kg, has established, implemented and maintained a written operator security programme that meets the requirements of the national civil aviation security programme of Bangladesh.

(c) The Chairman should ensure that each entity conducting aerial work operations

has established, implemented and maintained a written operator security programme that meets the requirements of the national civil aviation security programme of Bangladesh. The programme shall contain operations features specific to the type of operations conducted.

(d) The Chairman should take into account the ICAO model as a basis for operators' or entities' security programmes under sub-rule 3(a), (b) and (c) of this rule.

(e) The Chairman should require operators providing service from Bangladesh and participating in code-sharing or other collaborative arrangements with other operators to notify the appropriate authority of the nature of these arrangements, including the identity of the other operators.

(f) A Bangladesh operator shall establish and maintain for crew members and appropriate employees a security training programme approved by the Chairman and shall adopt a security programme and apply it in proportion to the threat to civil aircraft operation and its facilities as known to the appropriate authorities, and shall ensure that the programme is compatible with the national civil aviation security programme.

(g) The Chairman shall require the operators of aircraft registered in Bangladesh to conform to the civil aviation security requirements of those State into which they operate.

(h) An operator shall ensure that there is on board a checklist of the procedures to be followed in searching for a bomb incase of suspected sabotage.

(4) Quality control.- (a) The Chairman shall ensure that the persons implementing security controls are subject to background checks and selection procedures.

(b) The Chairman shall ensure that the persons implementing security controls possess all competencies required to perform their duties and are appropriately trained according to the requirements of the national civil aviation security programme and that appropriate records are maintained up to date. Relevant standards of performance shall be established and initial and periodic assessments shall be introduced to maintain those standards.

(c) The Chairman shall ensure that the persons carrying out screening operations are certified according to the requirements of the national civil aviation security programme to ensure that performance standards are consistently and reliably achieved.

(d) The Chairman shall develop, implement and maintain a national civil aviation security quality control programme to determine compliance with and validate the effectiveness of its national civil aviation security programme.

(e) The Chairman shall ensure that the implementation of security measures is

regularly subjected to
verification of compliance with the national civil aviation security programme. The priorities and frequency of monitoring shall be determined on the basis of risk assessment carried out by the relevant national authorities.

(f) The Chairman shall arrange for security audits, tests, surveys and inspections to be conducted on a regular basis, to verify compliance with the national civil aviation security programme and to provide for the rapid and effective rectification of any deficiencies.

(g) The Chairman shall ensure that the management, setting of priorities and organization of the national civil aviation security quality control programme shall be undertaken independently from the entities and persons responsible for the implementation of the measures taken under the national civil aviation security programme. The Chairman shall also:

(i) ensure that the personnel carrying out security audits, tests, surveys and inspections are trained to appropriate standards for these tasks in accordance with the national civil aviation security programme;

(ii) ensure that the personnel carrying out security audits, tests, surveys and inspections are afforded the necessary authority to obtain information to carry out these tasks and to enforce corrective actions;

(iii) supplement the national civil aviation security quality control programme by establishing a confidential
reporting system for analysing security information provided by sources such as passengers, crew and ground personnel; and

(iv) establish a process to record and analyse the results of the national civil aviation security quality control programme, to contribute to the effective development and implementation of the national civil aviation security programme, including identifying the causes and patterns of non-compliance and verifying that corrective actions have been implemented and sustained.

(h) When concerned with an act of unlawful interference the Chairman shall require to re-evaluate security controls and procedures and in a timely fashion take action necessary to remedy weaknesses so as to prevent recurrence.

283. Preventive security measures.- (1) **General.**- The Chairman shall establish measures to prevent weapons, explosives or any other dangerous devices, articles or substances, which may be used to commit an act of unlawful interference, the carriage or bearing of which is not authorized, from being introduced, by any means whatsoever, on board an aircraft engaged in civil aviation.

(2) **Measures relating to access control.**- (a) The Chairman shall ensure that the access

to airside areas at airports serving civil aviation is controlled in order to prevent unauthorized entry.

(b) The Chairman shall ensure that security restricted areas are established at each airport serving civil aviation based upon a security risk assessment carried out by the relevant national authorities.

(c) The Chairman shall ensure that identification systems are established in respect of persons and vehicles in order to prevent unauthorized access to airside areas and security restricted areas. Identity shall be verified at designated checkpoints before access is allowed to airside areas and security restricted areas.

(d) The Chairman shall ensure that background checks are conducted on persons other than passengers granted unescorted access to security restricted areas of the airport prior to granting access to security restricted areas.

(e) The Chairman shall ensure that the movement of persons and vehicles to and from the aircraft is supervised in security restricted areas in order to prevent unauthorized access to aircraft.

(f) The Chairman shall ensure that, at a minimum, a proportion of persons other than passengers being granted access to security restricted areas, together with items carried, are screened. The proportion shall be determined in accordance with risk assessment carried out by the relevant national authorities.

(g) The Chairman should ensure that identity documents issued to aircraft crew members provide a harmonized and reliable international basis for recognition and validation of documentation to permit authorized access to airside and security restricted areas.

(h) The Chairman should ensure that checks specified in sub-rule 2(d) of this rule be reapplied on a regular basis to all persons granted unescorted access to security restricted areas.

(3) **Measures relating to aircraft**.- (a) The Chairman shall ensure that aircraft security checks of originating aircraft engaged in commercial air transport movements are performed or an aircraft security search is carried out. The determination of whether it is an aircraft security check or a search that is appropriate shall be based upon a security risk assessment carried out by the relevant national authorities.

(b) The Chairman shall ensure that measures are taken to ensure that passengers of commercial flights
disembarking from the aircraft at any time do not leave items on board the aircraft.

(c) Commercial air transport operators shall take measures as appropriate to ensure that during flight unauthorized persons are prevented from entering the flight crew

compartment.

(d) The Chairman shall ensure that an aircraft subject to sub-rule 3(a) of this rule is protected from unauthorized interference from the time the aircraft search or check has commenced until the aircraft departs.

(e) The Chairman should ensure that security controls are established to prevent acts of unlawful interference with aircraft when they are not in security restricted areas.

(4) **Measures relating to passengers and their cabin baggage**.- (a) The Chairman shall establish measures to ensure that originating passengers of commercial air transport operations and their cabin baggage are screened prior to boarding an aircraft departing from a security restricted area.

(b) The Chairman shall ensure that transfer passengers of commercial air transport operations and their cabin baggage are screened prior to boarding an aircraft, unless it has established a validation process and continuously implements procedures, in collaboration with the other Contracting State where appropriate, to ensure that such passengers and their cabin baggage have been screened to an appropriate level at the point of origin and subsequently protected from unauthorized interference from the point of screening at the originating airport to the departing aircraft at the transfer airport.

(c) The Chairman shall ensure that passengers and their cabin baggage which have been screened are protected from unauthorized interference from the point of screening until they board their aircraft. If mixing or contact does take place, the passengers concerned and their cabin baggage shall be re-screened before boarding an aircraft.

(d) The Chairman shall establish at an airport measures for transit operations to protect transit passengers' cabin baggage from unauthorized interference and protect the integrity of the security of the airport of transit.

(5) **Measures relating to hold baggage**.- (a) The Chairman shall establish measures to ensure that originating hold baggage is screened prior to being loaded onto an aircraft engaged in commercial air transport operations departing from a security restricted area.

(b) The Chairman shall ensure that all hold baggage to be carried on a commercial aircraft is protected from unauthorized interference from the point it is screened or accepted into the care of the carrier, whichever is earlier, until departure of the aircraft on which it is to be carried. If the integrity of hold baggage is jeopardized, the hold baggage shall be re-screened before being placed on board an aircraft.

(c) The Chairman shall ensure that commercial air transport operators do not transport the baggage of passengers who are not on board the aircraft unless that baggage is identified as unaccompanied and subjected to additional screening.

(d) The Chairman shall ensure that transfer hold baggage is screened prior to being loaded onto an aircraft engaged in commercial air transport operations, unless it has established a validation process and continuously implements procedures, in collaboration with the other Contracting State where appropriate, to ensure that such hold baggage has been screened at the point of origin and subsequently protected from unauthorized interference from the originating airport to the departing aircraft at the transfer airport.

(e) The Chairman shall ensure that commercial air transport operators transport only items of hold baggage which have been individually identified as accompanied or unaccompanied, screened to the appropriate standard and accepted for carriage on that flight by the air carrier. All such baggage should be recorded as meeting these criteria and authorized for carriage on that flight.

(f) The Chairman should establish procedures to deal with unidentified baggage in accordance with a security risk assessment carried out by the relevant national authorities.

(6) **Measures relating to cargo, mail and other goods**.- (a) The Chairman shall ensure that security controls are applied to cargo and mail, prior to their being loaded onto an aircraft engaged in passenger commercial air transport operations.

(b) The Chairman shall ensure that cargo and mail to be carried on a passenger commercial aircraft are protected from unauthorized interference from the point security controls are applied until departure of the aircraft.

(c) The Chairman shall establish a process for approval of regulated agents, if such agents are involved in implementing security controls.

(d) The Chairman shall ensure that operators do not accept cargo or mail for carriage on an aircraft engaged in passenger commercial air transport operations unless the application of security controls is confirmed and accounted for by a regulated agent, or such consignments are subjected to appropriate security controls.

(e) The Chairman shall ensure that catering, stores and supplies intended for carriage on passenger commercial flights are subjected to appropriate security controls and thereafter protected until loaded onto the aircraft.

(f) The Chairman should ensure that security controls to be applied to cargo and mail for transportation on all-cargo aircraft are determined on the basis of a security risk assessment carried out by the relevant national authorities.

(7) **Measures relating to special categories of passengers**.- (a) The Chairman shall develop requirements for air carriers for the carriage of potentially disruptive passengers who are obliged to travel because they have been the subject of judicial or administrative

proceedings.

(b) The Chairman shall ensure that operators providing service from Bangladesh include in their security programmes, measures and procedures to ensure safety on board their aircraft when passengers are to be carried who are obliged to travel because they have been the subject of judicial or administrative proceedings.

(c) The Chairman shall ensure that the aircraft operator and the pilot-in-command are informed when passengers are obliged to travel because they have been the subject of judicial or administrative proceedings, in order that appropriate security controls can be applied.

(d) The Chairman shall ensure that the carriage of weapons on board aircraft, by law enforcement officers and other authorized persons, acting in the performance of their duties, requires special authorization in accordance with the laws of the States involved.

(e) The Chairman shall consider requests by any other State to allow the travel of armed personnel, including in-flight security officers, on board aircraft of operators of the requesting State. Only after agreement by all States involved shall such travel be allowed.

(f) The Chairman shall ensure that the carriage of weapons in other cases is allowed only when an authorized and duly qualified person has determined that they are not loaded, if applicable, and then only if stowed in a place inaccessible to any person during flight time.

(g) The Chairman, if decided by Bangladesh Operator to deploy in-flight security officers, shall ensure that they are government personnel who are specially selected and trained, taking into account the safety and security aspects on board an aircraft and deployed according to the threat assessment of the competent authority. The deployment of such officers shall be coordinated with concerned States and kept strictly confidential.

(h) The Chairman shall ensure that the pilot-in-command is notified as to the number of armed persons and their seat location.

284. Deleted.

285. Unlawful interference.- (1) **Prevention**.- (a) The Chairman shall establish measures, when reliable information exists that an aircraft may be subjected to an act of unlawful interference, to safeguard the aircraft if it is still on the ground and to provide as much prior notification as possible of the arrival of such aircraft to relevant airport authorities and air traffic services of the States concerned if the aircraft has already departed.

(b) The Chairman shall ensure, when reliable information exists that an aircraft may be subjected to an act of unlawful interference, that the aircraft is searched for concealed weapons, explosives or other dangerous devices, articles or substances. Prior notification of the search shall be provided to the operator concerned.

(c) The Chairman shall ensure that arrangements are made to investigate, render safe and/or dispose of, if necessary, suspected dangerous devices or other potential hazards at airports.

(d) The Chairman shall ensure that contingency plans are developed and resources made available to safeguard civil aviation against acts of unlawful interference. The contingency plans shall be tested on a regular basis.

(e) The Chairman shall ensure that authorized and suitably trained personnel are readily available for deployment at airports serving civil aviation to assist in dealing with suspected, or actual, cases of unlawful interference with civil aviation.

(f) Whenever an aircraft is being subjected to unlawful interference, the pilot-in-command shall endeavor to notify the appropriate ATS unit about the fact, any significant circumstances associated therewith and any deviation from the current flight plan necessitated by the circumstances, in order to enable the appropriate ATS unit to give priority to the aircraft and to minimize conflict with other aircraft.

(g) The pilot-in-command may, when s/he has reasonable ground to believe that a person has committed, or is about to commit, on board the aircraft, an offence or act which may jeopardize the safety of the aircraft or of person or property therein or jeopardize good order and discipline on board, impose restraint which are necessary-

(i) to protect the safety of the aircraft, or of persons or property therein; or

(ii) to maintain good order and discipline on board; or

(iii) to enable him to deliver such person to the competent authority or to disembark him.

(h) The pilot-in-command may require or authorise the assistance of other crew members and may request (or authorise, but not require), the assistance of passengers to restrain any person whom he is entitled to restrain; and any crew member or passenger may also take reasonable preventive measures without such requirement or authorisation when he has reasonable grounds, to believe that such action is immediately necessary to protect the safety of the aircraft or of persons or property therein.

(i) An aircraft known or believed to be in a state of emergency, including being subjected to unlawful interference shall be given priority over other aircraft.

(j) The Pilot-in-command of an aircraft registered in Bangladesh and equipped with a flight crew compartment door separate from the passenger compartment and engaged in carriage of passengers, shall ensure that the door is capable of being locked from within the flight crew compartment only and remains locked during the flight.

(2) **Response.-** (a) The Chairman shall take appropriate measures for the safety of passengers and crew of an aircraft, which is subjected to an act of unlawful interference, while on the ground, until their journey can be continued.

(b) When an aircraft is the subject of an act of unlawful interference, the Chairman, if responsible for providing air traffic services for that aircraft, shall collect all pertinent information on the flight of that aircraft and transmit that information to all other States responsible for the air traffic services units concerned, including those at the airport of known or presumed destination, so that timely and appropriate safeguarding action may be taken en route and at the aircraft's known, likely or possible destination.

(c) The Chairman shall provide assistance to an aircraft subjected to an act of unlawful seizure, including the provision of navigation aids, air traffic services and permission to land as may be necessitated by the circumstances.

(d) The Chairman shall take measures, as s/he may find practicable, to ensure that an aircraft subjected to an act of unlawful seizure which has landed in Bangladesh is detained on the ground unless its departure is necessitated by the overriding duty to protect human life. Recognizing the grave hazard attending further flight, the Chairman shall also consult, wherever practicable, the State of the Operator of the aircraft, and the States of assumed or stated destination before allowing such flight.

(e) The Chairman should ensure that information received as a consequence of action taken in accordance with sub-rule 2(b) of this rule is distributed locally to the air traffic services units concerned, the appropriate airport administrations, the operator and others concerned as soon as practicable.

(f) The Chairman should cooperate with other States for the purpose of providing a joint response in connection with an act of unlawful interference. When taking measures to free passengers and crew members of an aircraft subjected to an act of unlawful interference, the Chairman should use, as necessary, the experience and capability of the State of the Operator, the State of manufacture and the State of Registry of that aircraft.

286. Notification.- (1) When an aircraft subjected to an act of unlawful interference has landed Bangladesh, the Chairman shall notify by the most expeditious means the State of Registry of the aircraft and the State of the Operator of the landing and shall similarly transmit by the most expeditious means all other relevant information to:

(a) the two above-mentioned States;

(b) each State whose citizens suffered fatalities or injuries;

(c) each State whose citizens were detained as hostages;

(d) each State whose citizens are known to be on board the aircraft; and

(e) the International Civil Aviation Organization.

(2) The Chairman should notify ICAO where the information has been shared as per sub-rule (5) of rule-281.

287. Exchange of information and reporting.- (1) In the case of unlawful interference within Bangladesh, the Chairman shall provide the International Civil Aviation Organization with all pertinent information concerning the security aspects of the act of unlawful interference as soon as practicable after the act is resolved.

(2) The Chairman should exchange information with other Contracting States as considered appropriate on the management of response to an act of unlawful interference, at the same time supplying such information to ICAO.

(3) When actions taken under sub-rule 4(h) of rule 282, the Chairman shall share these actions with ICAO.

PART XVIII
AIR TRANSPORT SERVICES

288. Licensing of air transport services.- Except as provided in rule 217, no air transport service shall be established or shall operate within Bangladesh except under the authority of, and in accordance with, a licence issued by the Chairman:

Provided that the Chairman may permit the operation of air transport services to or across Bangladesh from and to places outside Bangladesh by persons not domiciled in Bangladesh or by companies registered outside Bangladesh with aircraft registered in Bangladesh or outside Bangladesh, on such terms and conditions as he may think fit.

289. Filling of Tariff.- (1) Every operator of an air transport service operating in accordance with rule 217 and 288 shall file with the Chairman, a tariff showing fares, rates and charges for air transportation of passengers and cargo to and from Bangladesh between the points served by it including the rates, terms and conditions of commission payable to the passengers or sales agents.

(2) If an operator is participating in a joint tariff with other air transport services, a separate declaration shall also be filed with the Chairman confirming the applicability of the joint tariff.

(3) A tariff (including a joint tariff) or any amendment thereof shall be filed at least thirty days in advance of its introduction.

(4) The Chairman may, for reasons to be recorded in writing, reject any tariff so filled under this rule and any tariff so rejected shall be ineffective.

290. Levy of fixed fares, rates and charges.- (1) No operator shall charge or demand or collect or received any greater or less or different compensation for air transportation or for any service connected therewith other than the approved fares, rates or charges.

(2) No operator shall in any manner or by any device directly or indirectly or through any agent or broker or otherwise, refund or remit any portion of the approved fares, rates and charges or extend to any person any privileges or facilities with respect to any matters required by the Chairman under rule 289.

291. Changes in tariff.- (1) No changes shall be made in fares, rates and charges or in classifications, rules regulations, practices or services affecting such fares, rates and charges or value of the services thereunder specified in any effective tariff including any change in the terms or conditions of the commission payable to the passenger or cargo sales agent except after previous approval by the Chairman.

(2) An application for such changes shall be made to the Chairman at least thirty days in advance.

(3) The Chairman may, for reasons to be recorded in writing, revise or disallow any change.

(4) The revised tariff shall, after approval by the Chairman be published in such form and manner as may be specified by the Chairman.

(5) All or any of the records relating to tariff required to be maintained under these rules shall, on demand, by the Chairman, by general or special order in writing, be produced for inspection.

292. Appeal.- Any operator of an air transport service aggrieved by the decision of the Chairman under sub rule (3) of rule 291 or under sub rule (4) of rule 289 may, within a period of thirty days from the date of such decision, prefer an appeal to the Government and the Government shall, after giving the appellant an opportunity of being heard, pass such orders as it deems fit.

293. Application for license.- (1) Applications for a licence to operate an air transport service shall be made to the Chairman not less than sixty days before the date on which it is desired to commence the service.

(2) The applicant shall be made in the form specified by the Chairman and shall be signed by the person applying for the licence and, if made by any body corporate, shall be signed by a person duly authorized in that behalf by such body.

294. Particulars and conditions of licence.- (1) A licence granted under this Part shall contain Operations Specifications consisting of the following sections:-

Section -1. General provisions:

(i) Name and address of Operator;

(ii) Number of the license;

(iii) Date of issue and period of validity;

(iv) Classes of operations (mentioned in rule 105) authorised;

(v) The types and the Registration Marks of the aircraft authorised for use;

Section-2. En-route authorisations and limitations;

Section -3, Aerodrome authorisations and limitations;

Section-4.Aircraft maintenance authorisations;

Section-5. Aircraft mass (weight) and balance authorisation;

Section-6. Minimum Equipment List authorisation, if applicable;

Section-7. Aircraft leasing authorisation, if applicable; and

any additional Sections as may be considered appropriate by the Chairman.

(2) A licence for the operation of air transport services, scheduled or non-scheduled, shall be subject to the conditions hereinafter specified and to such other rules as may from time to time be made by the Government.

(3) Any person desires to have a licence to operate air transport services in Bangladesh shall either be a body corporate created by Statute or be registered in accordance with the provisions of the Companies Act, 1994 and shall be subject to the provisions of the statute or the Companies Act and the rules made there under.

(4) A copy of the Memorandum and Articles of Association of the company, in duplicate, or, as the case may be, the statute creating the body corporate as mentioned in sub-rule (3) shall be forwarded to the Chairman along with the application for licence.

(5) The licensee shall conduct its business in accordance with the statute or, as the case may be, the Companies Act, 1994, and the air navigation orders, and shall supply such information as may be required by the Government and shall comply within the notified period with the instructions which may be issued.

(6) The licensee shall so conduct its air transport operations as not to involve in the breach of any obligations imposed upon the Government.

(7) Before the commencement of operation, the licensee shall submit to the Chairman for his approval-

(a) copies of the proposed Engineering, Operation and Route Manuals;

(b) detailed schedule of each route to be operated showing points of call;

(c) frequency to be operated on each route with the proposed time table;

(d) type of aircraft to be used;

(e) equipment available;

(f) management proposed with details of traffic maintenance and operational organisations.

(8) The licensee shall submit for previous approval of the Chairman all proposals for fares to be charged for the carriage of passengers and freight on each route to be operated

by it and no rules and regulations made by the licensee for the carriage of passengers and freight shall be published without the previous approval of the Chairman.

(9) No alternation in the route or the frequency or the time and fare table shall be effected without the approval in writing of the Chairman and any change proposed shall be submitted to the Chairman sufficiently in advance.

(10) Except by a special permission of the Government, no licence shall be given to a body corporate for the carriage of freight or passengers on a route on which any Bangladeshi operator is already operating under a licence.

(11) The Chairman or an authorised officer shall have the right of access, in the normal course of discharge of his duties, to the licensee's workshop, stores and offices.

295. Special Provisions for the Commercial Operators.- (1) The copy, in duplicate, of the annual accounts and auditor's report shall be sent to the Chairman at the time such accounts and reports are furnished to the Government.

(2) No appointment to any executive post requiring high technical or flying experience, shall be made without the previous approval of the Chairman.

(3) No purchase of an aircraft or an engine by the licensee and no sale thereof shall be effected without the approval of the Chairman.

(4) The licensee shall, at any time during its operations, take out an insurance policy approved by the Government to ensure against claims on the licensee as provided in the Warsaw Convention 1929, and the Hague Protocol of 1955. The licensee shall at all times, effect adequate insurance against "third party" risks to cover claims relating to damage to personnel or property resulting from the crash or improper operation of its aircraft.

(5) The licensee shall be liable for any expenses incurred by the Government in connection with air and sea rescue operation resulting from improper or negligent operation of a licensee's aircraft.

(6) The licensee shall pay all landing, housing and route navigational charges relating to aircraft operating in Bangladesh according to the rates specified by the Government.

(7) No aircraft, except with the previous permission in writing of the Chairman, shall be operated under a license issued under these rules unless the crew of the aircraft are in the regular employment of the license.

Explanation.- For the purposes of this rule crew employed on hourly, daily or part-time basis shall not be considered to be in regular employment.

296. Amendment of terms of licence.- (1) The Chairman may, at any time, if it appears

to be necessary for securing the more effective development of air transport or otherwise in the public interest, amend the terms of a licence after giving the holder thereof a reasonable opportunity of showing cause against the proposed amendment.

(2) The Chairman may, on the application of the holder of a licence, make such amendment in the licence as appears to be unobjectionable.

(3) When a licence is amended under sub-rule (1) or (2) the licence shall submit it to the Chairman who shall make an endorsement thereon showing reasons in brief for the amendment.

297. Revocation and suspension of licence.- (1) The Chairman may revoke, or suspend for such period as he thinks fit, a licence, if he is satisfied that any of the conditions thereof has not been complied with or tat the failure to comply is due to any willful act or omission on the part of the licensee or is due to such negligence on his part and committed so frequently that the licence should, in the public interest, be revoked or, as the case may be, suspended.
(2) Before any action is taken under sub-rule (1), the Chairman shall give to the licence in the case of revocation not less than thirty days' notice and in the case of suspension, fifteen days' notice in writing specifying the grounds upon which it is proposed to revoke or, as the case may be, suspend the licence, and shall give him an opportunity of showing cause against the proposed action.

(3) Where a licence is revoked under sub-rule (1), the Chairman shall record in writing the reason for its decision and the licensee shall be entitled to a copy thereof, showing the date on which revocation is to take effect.

(4) Where a licence is suspended under sub-rule (1), the licensee shall submit the licence to the Chairman who shall make an endorsement thereon showing the period of, and the reasons in brief, for the suspension.

298. Appeal.- Any person aggrieved by an order under rule 297 may, within sixty days from the date of making the order of revocation or, as the case may be suspension prefer an appeal to the Government and the Government shall, after giving as opportunity to the parties concerned of being heard in person or through legal representative, give its decision which shall be final.

299. Transfer of licence.- A licence granted under this Part shall not be transferable. But if an application is made by a licensee to the Chairman, fresh licence shall be issued to that licensee if it has amalgamated or has agreed to amalgamate its services with the services of another licensed transport company.

300. Continuance of rights.- Nothing in this Part shall be construed as conferring upon the licensee any right, after the expiry of the validity of the licence, to the issue of a new licence for the operation of a transport service on the same route or to the continuance of any other benefits arising from the provisions of this part or any licence granted

thereunder.

301. Custody, production and surrender of licences.- (1) A licence issued under this part shall be kept at the principal office of the holder thereof in Bangladesh and shall be produced for inspection, on demand, by any Magistrate, any police officer not below the rank of Superintendent of police, any Customs Officer, any authorized Officer of the Civil Aviation Authority or any person authorized by the Government by special or general order in writing in this behalf.

(2) On the expiration of the licence whether by efflux of time or in consequence or a decision of the Government under these rules, or when a license is suspended by the Chairman the holder shall surrender the licence to the Chairman for endorsement or cancellation as the case may require provided no appeal has been filed under rule 298.

302. Carriage of mails.- A licensee shall perform all such reasonable services in regard to the conveyance of mails as the Director of Post may, from time to time require. The remuneration for carriage of mails shall be such as may be determined from time to time by the Director General of Posts. The mails to be carried in conformity with any international agreement ratified by the Government. Any dispute arising out of the carriage of mails by a licensee shall be decided by the Government.

303. Fees. – The Chairman may notify through ANO fees for the application form for Air Transport Operating Licence (ATOL), issue of ATOL, renewal of ATOL and issue of a duplicate copy of the ATOL.

304. Periodical returns. – (1) Every person to whom a licence has been granted under this part shall submit to the Chairman in such form as may be specified-

(a) monthly returns regarding the operation of the licensed air transport services and other air transport operations of the licence holder which shall reach the Chairman not later than forty-five days after the expiry of the month to which the return relates; and

(b) annual returns regarding the financial results of the undertaking during each calendar year which shall reach the Chairman not later than three months after the expiry of the year to which the return relates.

(2) No information furnished in an annual return under clause (b) of sub-rule (1) shall be published or disclosed in respect of any individual air transport service or licensee without the consent of the licensee, and if any person publishes or discloses any such information without such consent he shall be guilty of an offence punishable under these rules.

Part-XVIIIA

SAFE TRANSPORTATION OF DANGEROUS GOODS BY AIR

304A. General principles, extent and application: (1) The provisions of this part shall be applied to the transport of the intended transport of dangerous goods in aircraft in or over the territory of Bangladesh, or to their transport in aircraft operated by the holder of an Air Operator License issued by Chairman, where they may be.

(2) The Chairman shall take the necessary measures to achieve compliance with the detailed provisions contained in the technical instructions , and shall also take the necessary measures to achieve compliance with any amendment to the Technical Instructions which may be published during the specified period of applicability of an edition of the Technical Instructions.

304B. Carriage of dangerous goods by air- (1) No operator shall engage in the carriage of dangerous goods unless it has been certified by the chairman to carry the dangerous goods.

(2) No operator shall carry and no person shall cause or permit to be carried in any aircraft to, from, within or over Bangladesh or deliver or cause to be delivered for loading on such aircraft any dangerous goods, except in accordance with and subject to the requirements specified in the Technical Instructions:

Provided that dangerous goods classified as explosives shall not be carried in any aircraft to, from, within or over Bangladesh except in accordance with and subject to the terms and conditions of a permission in writing granted by the Chairman.

Provided further that where dangerous goods classified as radioactive material are to be carried in any aircraft to, from or within Bangladesh, the operator shall ensure that the consignor or the consignee, as the case may be, has written consent of the Chairman to carry such goods.

Provided also that where there is extreme emergency such as national or international crisis or natural calamities or otherwise necessitating transportation by air of such goods and full compliance with the requirements specified in the Technical Instructions may adversely affect the public interest, the Chairman or any other officer authorised in this behalf by the Chairman may, by general or special order in writing, grant exemption from complying with these requirements provided that he is satisfied that every effort has been made to achieve an overall level of safety in the transportation of such goods which is equivalent to the level of safety specified in the Technical Instructions.

(3) Notwithstanding anything contained in sub-rule (2), the articles and substances that are specifically identified by name or by generic description in the Technical Instructions as being forbidden for transport by air under any circumstances, shall not be carried on any aircraft.

(4) The provisions of sub-rules (1) and (2) shall not apply to-

(a) The articles and substances classified as dangerous goods but otherwise required to be on board the aircraft in accordance with the pertinent airworthiness requirements and the operating regulations, or for such specialised purposes as are identified in the Technical Instructions.

(b) The articles and substances which are replacements for the articles or substances described under (a) and are transported in compliance with the applicable provisions of the Technical Instructions; or

(c) Specific articles and substances carried by passengers or crew members to the extent specified in the Technical Instructions.

(5) No operator shall carry the following goods under any circumstances:

(a) Any substances or articles specifically mentioned by name in the Technical Instructions as being forbidden for transport by aircraft under any circumstances;

(b) Infected live animals.

(6) Where dangerous goods are carried under sub-rule (2), it shall be the duty of the shipper, the operator and every person concerned with packing, marking, labelling, acceptance, handling, loading, unloading, storage, transportation or any other process connected directly or indirectly with carriage of such dangerous goods, to take all precautions to avoid danger to the aircraft or to the persons on board or to any other person or property.

304C. Classification of Dangerous goods – The dangerous goods shall be classified in accordance with the provisions of the Technical Instructions.

304D. Custody of unauthorised Dangerous Goods - Where any officer authorised in this behalf by the Chairman has reason to believe that the provisions of this rule are, or are about to be, contravened, he may cause the dangerous goods in question to be placed under his custody pending detailed examination of the nature of the goods or pending a decision regarding the action, if any, to be taken in the matter.

304E. Packing – (1) Dangerous goods shall be packed in accordance with the requirements specified in the Technical Instructions in addition to the provisions of this rule.

(2) It shall be ensured that no harmful quantity of a dangerous substance adheres to the outside of the packagings used for the transport of the dangerous goods.

(3) Packagings used for the transport of dangerous goods by air shall be of good quality

and shall be constructed and securely closed so as to prevent leakage which might be caused in normal conditions of transport by changes in temperature, humidity or pressure, or by vibration.

(4) The packagings shall be suitable for the contents and the packagings in direct contact with dangerous goods shall be resistant to any chemical or other action of such goods.

(a) Packagings shall meet the material and construction specifications contained in the Technical Instructions.

(b) Packagings shall be tested in accordance with the provisions of the Technical Instructions.

(c) Packagings for which retention of a liquid is a basic function, shall be capable of withstanding, without leaking, the pressure specified in the Technical Instructions.

(5) Inner packagings used for the transport of the dangerous goods shall be packed, secured or cushioned in such a manner that no breakage or leakage shall be caused and these shall also control the movement of the dangerous goods within the outer packaging(s) during normal conditions of air transport and also the cushioning and absorbent materials shall not react dangerously with the contents of the receptacles.

(6) No packaging used for the transport of the dangerous goods shall be re-used unless,-

(a) It has been inspected and found free from corrosion or other damage; and

(b) All necessary precautions have been taken to prevent contamination of subsequent contents:

Provided that where it is not possible to properly clean a packaging already used for the transport of dangerous goods, then such an un-cleaned empty packaging shall be transported by air following the same procedure as laid down for the transport of the dangerous goods for which such packagings has been used earlier.

304F. Labelling – (1) Unless otherwise provided in the Technical Instructions, each package of dangerous goods shall be labelled in accordance with the requirements specified in the Technical Instructions.

(2) Marking –

(a) Save as otherwise provided in the Technical Instructions, each package of dangerous goods shall be marked with the proper shipping name of its contents and, when assigned, the UN number and such other markings as may be specified in the Technical Instructions.

(b) Save as otherwise provided in the Technical Instructions, each packaging manufactured to the specifications of the Technical Instructions shall be marked in

accordance with the provisions of the Technical Instructions and no other packagings shall be so marked.

(c) In addition to the languages required by the State of origin, English shall also be used for the markings related to dangerous goods.

304G. Shipper's responsibilities – (1) No shipper or his agent shall offer any package or overpack of dangerous goods for transport by air unless he has ensured that such dangerous goods are not forbidden for transport by air and are properly classified, packed, marked and labelled in accordance with the requirements specified in the Technical Instructions.

(2) Unless otherwise provided in these rules, no shipper or his agent shall offer dangerous goods for transport by air unless he has completed, signed and provided to the operator a dangerous goods transport document, as specified in the Technical Instructions.

(3) The dangerous goods transport document shall bear a declaration signed by the shipper or his agent indicating that the dangerous goods are fully and accurately described by their proper shipping names and that they are classified, packed, marked, labelled and in proper condition for transport by air as per requirements of the Technical Instructions.

(4) In addition to the languages required by the State of origin, English shall also be used in the dangerous goods transport document.

304H. Operator's Responsibilities – (1) No operator shall accept dangerous goods for transport by air unless, --

(a) The dangerous goods are accompanied by a completed dangerous goods transport document, except where the Technical Instructions specify that such a document is not required; and

(b) The package, overpack or freight container containing the dangerous goods has been inspected in accordance with the acceptance procedures specified in the Technical Instructions.

(2) The operator shall ensure that an acceptance check-list as required by the Technical Instructions has been developed and is being used.

(3) Packages and overpacks containing dangerous goods and freight containers containing radioactive materials shall be inspected for evidence of leakage or damage before loading on an aircraft or into a unit load device and such packages, overpacks or freight containers shall be loaded and stowed on an aircraft in accordance with the requirements specified in the Technical Instructions.

(4) The operator shall ensure that no leaking or damaged packages, overpacks or freight

containers containing dangerous goods shall be loaded on an aircraft.

(5) A unit load device shall not be loaded aboard an aircraft unless the device has been inspected and found free from any evidence of leakage from, or damage to, any dangerous goods contained therein.

(6) Where any package of dangerous goods loaded on an aircraft appears to be damaged or leaking, the operator shall remove such package from the aircraft, or arrange for its removal by an appropriate authority or organisation, as the case may be, and thereafter shall ensure that the remainder of the consignment is in a proper condition for transport by air and that no other package has been contaminated.

(7) Packages or overpacks containing dangerous goods and freight containers containing radioactive materials shall be inspected for signs of damage or leakage upon unloading from the aircraft or unit load device and if evidence of damage or leakage is found, the area where the dangerous goods or unit load device were stowed on the aircraft shall be inspected for damage or contamination.

(8) No dangerous goods shall be carried in an aircraft cabin occupied by passengers or on the flight deck of an aircraft, except those specified in sub-rule (4) of rule 336.

(9) Any hazardous contamination found on an aircraft as a result of leakage or damage to dangerous goods shall be removed without delay.

(10) An aircraft which has been contaminated by radioactive materials shall immediately be taken out of service and not returned to service until the radiation level (at any accessible surface and the non-fixed contamination are) is not more than the values specified in the Technical Instructions.

(11) Packages containing dangerous goods which might react dangerously with one another shall not be stowed on an aircraft next to each other or in a position that would allow interaction between them in the event of leakage.

(12) Packages of toxic and infectious substances shall be stowed on an aircraft in accordance with the requirements specified in the Technical Instructions.

(13) Packages of radioactive materials shall be stowed on an aircraft so that they are separated from persons, live animals and undeveloped film, in accordance with the requirements specified in the Technical Instructions.

(14) Subject to the provisions of these rules, when dangerous goods are loaded in an aircraft, the operator shall protect the dangerous goods from being damaged, and shall secure such goods in the aircraft in such a manner that will prevent any movement in flight which would change the orientation of the packages. For packages containing radioactive materials, the securing shall be adequate to ensure that the separation requirements of sub-rule (13) are met at all times.

(15) Except as otherwise provided in the Technical Instructions, packages of dangerous goods bearing the "Cargo aircraft only" label shall be loaded in such a manner that a crew member or other authorised person can see, handle and, where size and weight permit, separate such packages from other cargo in flight.

304I. Provision of Information – (1) The operator of the aircraft in which dangerous goods are to be carried shall provide information in writing to the pilot in-command as early as practicable before departure of the aircraft as required by the Technical Instructions.

(2) The operator shall provide such information in the Operations Manual so as to enable the flight crew member to carry out their responsibilities with regard to the transport of dangerous goods and shall also provide instructions as to the action to be taken in the event of emergencies arising involving dangerous goods.

(3) Operators shall ensure that information is promulgated in such a manner that passengers are warned as to the types of goods which they are forbidden from transporting aboard an aircraft as provided in the Technical Instructions.

(4) Operators, shippers or other organisations involved in the transport of dangerous goods by air shall provide such information to their personnel so as to enable them to carry out their responsibilities with regard to the transport of dangerous goods and shall also provide instructions as to the action to be taken in the event of emergencies arising involving dangerous goods.

(5) If an in-flight emergency occurs, the pilot-in-command shall, as soon as the situation permits, inform the appropriate air traffic services unit, for the information of aerodrome authorities, of any dangerous goods on board the aircraft, as provided in the Technical Instructions.

(6) In the event of an aircraft accident or a serious incident where dangerous goods carried as cargo are involved, the operator of the aircraft shall provide information, without delay, to the emergency services responding to the accident or serious incident, and, as soon as possible, to the appropriate authorities of the State of the operator and the State in which the accident or serious incident occurred, about the dangerous goods on board, as shown on the written information to the pilot-in-command.

(7) In the event of an aircraft incident, the operator of an aircraft carrying dangerous goods as cargo shall, upon request, provide information, without delay, to the emergency services responding to the incident and also to the appropriate authority of the State in which the incident occurred, about the dangerous goods on board, as shown on the written information to the pilot-in command.

304J. Inspection. – (1) The Chairman or any other officer authorised in this behalf by the Chairman by general or special order in writing, may, at any reasonable time, enter

any place to which access is necessary and inspect any services, equipment, documents and records.

(2) The operator, shipper, training establishment and every other person concerned with carriage of dangerous goods shall allow the person so authorized, access to any part of the aircraft, building or any facility including equipment, records, documents and personnel, and shall co-operate in exercising his powers or carrying out his duties under these rules.

304K. Dangerous Goods Accidents and Incidents – (1) In the event of a dangerous goods accident or dangerous goods incident, as the case may be, the pilot-in-command of the aircraft and the operator of the aircraft or of the aerodrome, as the case may be, shall submit a report in writing to the Chairman on such accident or incident.
(2) The report under sub-rule (1) shall, in addition to any other relevant information, contain the following information, namely: -

(a) The type, nationality and registration marks of aircraft;

(b) The name of the owner, operator and hirer of the aircraft;

(c) The name of the pilot-in-command of the aircraft;

(d) The nature and purpose of the flight;

(e) The date and time of the dangerous goods accident or incident;

(f) The place where the accident occurred:

(g) The last point of departure and the next point of intended landing of the aircraft;

(h) Tthe details of the dangerous goods on board the aircraft viz. their proper shipping name, UN number, quantity etc.

(i) The known cause of the dangerous goods accident or incident;

(j) Details of other cargo on board the aircraft;

(k) The extent of known damage to the aircraft, other property and persons on board the aircraft;

(l) Any other information required to be included by the Chairman.

(3) On receipt of the report under sub-rule (1), the Chairman may, if considered necessary, order an investigation to determine the causes of such accident or incident and take preventive measures to avoid re-occurrence of such accident or incident.

304L. Establishment of Training Programmes – (1) No person shall engage himself in any manner in the transport of dangerous goods unless he has undergone proper training in accordance with the Technical Instructions.

(2) Initial and recurrent dangerous goods training programmes shall be established and maintained by or on behalf of –

(a) Shippers of dangerous goods including packers and persons or organizations undertaking the responsibilities of the shipper;

(b) Operators;

(c) Ground handling agencies which perform, on behalf of the operator, the act of accepting, handling, loading, unloading, transferring or other processing of cargo;

(d) Ground handling agencies located at an airport which perform, on behalf of the operator, the act of processing passengers;
(e) Agencies, not located at an airport, which perform, on behalf of the operator, the act of checking in passengers;

(f) Freight forwarders; and

(g) Agencies engaged in the security screening of passengers and their baggage, and cargo.

(3) Training shall be provided in the requirements commensurate with the responsibilities of the personnel being trained and such training shall include -

(a) General familiarization training aimed at providing familiarity with the general provisions;

(b) Function-specific training providing detailed training in the requirements applicable to the function for which that person is responsible; and

(c) Safety training covering the hazards presented by dangerous goods, safe handling and emergency response procedures.

(4) Training shall be provided or verified upon the employment of a person in a position involving the transport of dangerous goods by air and recurrent training shall take place within twenty-four months of previous training to ensure knowledge is current.

(5) The training programmes established and maintained by or on behalf of operators shall be subjected to review and approval by the Chairman.

(6) The training programmes established and maintained by or on behalf of agencies other than operators shall be subjected to review and approval by the Chairman.

304M. Directions by Chairman – The Chairman may issue special directions, relating to packing, marking, labelling, acceptance, handling, loading, unloading, storage, training and any other process or procedure connected directly or indirectly with the carriage of dangerous goods by air.

304N. General Power to exempt - The Chairman may, by general or special order in writing, exempt any aircraft or class of aircraft or any person or class of persons from the operation of these rules, either wholly or partially, subject to such conditions, if any, as may be specified in that order.

304O. Cancellation or suspension of licence, certificate and approval – Where the Chairman, after giving an opportunity of being heard, is satisfied that any person has contravened or failed to comply with the provisions of the rules relating to issuance of license, certificate or approval, he may, for reasons to be recorded in writing, cancel or suspend such licence, certificate or approval issued under these rules."

PART XIX
MISCELLANEOUS

305. Interference with flight crew or aircraft.-(1) A person shall not obstruct or impede any other person from exercising a power or performing a duty conferred on that other person by or under these rules.

(2) A person shall not, while in an aircraft, -

(a) interfere with a crew member;

(b) behave in a disorderly or offensive manner; or

(c) do any act which may threaten the safety of the aircraft or of any person on board the aircraft.

(3) A person shall not tamper with an aircraft or component or item of equipment of an aircraft.

306. Interference with air navigation facilities.- A person shall not tamper with any radio or navigational aids or any component or equipment which may endanger the safety of the flight.

307. Powers of the pilot-in-command.- A person shall not tamper with any radio or navigational aids or any component or equipment which may endanger the safety of the flight.

(a) take such action, including the removal of a person from the aircraft or the placing of a person under restraint or in custody, by force, as he considers reasonably necessary to ensure compliance with the ordinance or these rules in or in relation to the aircraft; and

(b) detain the passengers, crew member and cargo for such period as he considers reasonably necessary to ensure compliance with the Ordinance or these rules in or in relation to the aircraft.

(2) A person who, on an aircraft in flight, whether within or outside Bangladesh is found committing, or is reasonably suspected of having committed, or of having attempted to commit, or of being about to commit, an offence against the Ordinance or these rules may be arrested without warrant by a crew member in the some manner as a person who is found committing a crime may be arrested by a private person under section 59 of the Code of Criminal Procedure, 1898 (Act V of 1898) and shall be dealt with in the same manner provided in that section.

308. Liability for damage to aircraft during tests.- Chairman or any officer of the Civil Aviation Authority shall not be liable for any loss or damage to an aircraft which occurs while the aircraft is in the custody of the Chairman for the purpose of flying tests or other official tests, or during any inspection by an officer in pursuance of these rules.

309. Carriage of prisoners in aircraft.- No prisoner shall be taken aboard or carried on aircraft except under, and in accordance with, a permit in writing issued by the Chairman, and subject to such conditions, if any, as may be specified in the permit.

Explanation.- The term "prisoner" means a person who is confined in any prison and includes a person who is arrested under any law for the time being in force.

310. Carriage of animals, birds and reptiles in aircraft.- No animal, bird or reptile shall be taken aboard or carried on any aircraft to, from and within Bangladesh, except under, and in accordance with, a general or special permit in writing issued by the Chairman in this behalf, and subject to such conditions, if any, as may be specified therein.

311. Restricted area.- (1) No person shall enter any restricted area of an airport or aerodrome except with the permission of the Chairman or Airport Manager concerned, and on such terms as may be specified in the permission.

(2) No person shall enter the air traffic control centre, the control tower, communication and navigational aid sites, power houses, VVIP or VIP lounges, cargo and baggage storage and handing areas, immigration area, the loading platform, any customs area, runways taxi-ways and parking aprons, incoming and outgoing passenger lounges except -

(a) persons lawfully assigned to duty therein and approved by the Chairman;

(b) passengers embarking or disembarking; and

(c) persons authorised by the Chairman or the Airport Manager concerned.

312. Powers of Airport Manager to destroy birds or animals.- The Airport Manager of the airport concerned or any other person authorised by the Chairman in this behalf is authorised to shoot at any time kites, vultures, stray dogs or any other bird or animal constituting a hazard or danger to aerial navigation or for the safety of the aircraft.

313. Operation of vehicles in an aerodrome.- No person shall operate any vehicle authorised for use on the taxi-track or loading platform or the aircraft landing area, except -

(a) a person assigned to duty therein and approved by the Chairman, or

(b) a person authorised by the Airport Manager.

314. Parking.- No person shall park any motor vehicle at a lace in the airport or aerodrome other than an area designated in this behalf by the Airport Manager concerned.

315. Intoxication.- No person under the influence of liquor or drugs shall operae motor vehicle of any kind in the airport or aerodrome.

316. Disorderly conduct.- No person shall commit any nuisance or any disorderly act in the airport or aerodrome and engage in gambling in any form or operate gambling devices of any type in the airport or cause any vexation to any passenger or other person.

317. Sanitation.- No person shall dispose of garbage, waste papers, refuse or any other object in the Airport or aerodrome except in the receptacles provided for the purpose or in the specific area designated by the Airport Manager concerned for this purpose.

318. Preservation of property.- No person shall destroy, damage, deface or disturb in any way any building sign, equipment, mark or other structure, tree, flower, lawn or other property in the airport or aerodrome.

319. Radio operations.- No person shall operate any radio equipment contrary to any tele-communications laws, regulations or orders for the time being in force or in any aircraft when such aircraft is in the hanger.

320. Sign and bulletin boards.-The Chairman or the Airport Manager may direct a tenant or lessee of any premises in the airport or aerodrome to maintain boards for the display of signs and bulletins in a conspicuous place.

321. First-aid equipment.- All tenants or lessees of hanger or other premises in the airport or aerodrome shall provide in such hangers or premises in conveniently accessible place first-aid kits.

322. Provision for fire-fighting appliances and equipments.- Every tenant or occupier of any premises in any airport or aerodrome not being premises occupied by or on behalf of the Bangladesh Defence Services, shall provide on the said premises and maintain in good working order fire-fighting appliances and equipments to a standard approved by the Chairman or the Airport Manager.

323. Restriction on smoking use of naked flame, etc.-No person shall smoke, in any place of an airport or aerodrome or where smoking is prohibited by the Chairman or the Airport Manager nor shall any person light or use any fire or naked light flame except in such places and to such extent as may be approved by the Chairman or the Airport Manager, Every person using any oiled rags, cotton waste, waste oil, cleaning rags or articles liable to spontaneous combustion or otherwise inflammable shall take utmost care while using the said goods or articles on or near aircraft on the ground, fuelling unit, or at any hanger, workshop or other building or installation in which any combustible liquid is stored.

324. Restriction on combustible liquid.-(1)No combustible liquid exceeding 15 litres (4 gallons) shall be stored at any place in any airport or aerodrome except in such places and subject to such conditions as may be specified by the Chairman or the Airport Manager in writing.

(2) Any quantity of 15 litres (4 gallons) or less shall be kept in a closed metal container :

Provided that the provisions of these rules shall not apply to any petroleum which may

be contained in the tanks of any aircraft, motor vehicle or approved place of unit.

325. Restrictions on installation of engines and electrical apparatus within any airport or aerodrome.- (1) No person shall install or cause to be installed for use in any building, any engine or electrical apparatus of any kind or make or cause to be made any alteration or addition to existing electrical installation in any building without the consent of the Chairman or the Airport Manager in writing.

(2) All places where facilities for the charging of batteries are to be installed shall first be inspected and approved by the Chairman or the Airport Manager and no such installation shall be left unattended unless the power supply has first been switched off or the battery is disconnected.

326. Disposal of combustible waste and other matters.-The waste and other matters referred to in rules 317 and 323 shall not be permitted to accumulate and shall be disposed of daily in such place as may be approved by the Chairman or the Airport Manager for the purpose.

327. Fuelling of aircraft and vehicles.- (1) No aircraft shall be fuelled within 15 meters (50 feet) of any building.

(2) Fuelling operations shall be carried out under the supervision of a qualified engineer or member of the flight crew of an aircraft appointed by the owner or operators or by a fully trained supervisor appointed by the recognised fuelling organisation for the purpose. Such engineer or supervisor or member of the flight crew shall make certain before commencing fuelling operations that both aircraft and fuelling unit are completely bonded and adequately earthed in order to prevent static electrical discharges, and the fuelling hose and funnel are electrically bonded to the aircraft, and that no ground battery, gas starter or other external engine starting device or apparatus is in the vicinity of the aircraft.

(3) Efficient appliances and personnel for extinguishing fires during fuelling operations shall be provided by the recognised fuelling organisations to the satisfaction of the Chairman or the Airport Manager.

(4) Refuelling of an aircraft when passengers are embarking, on board or disembarkation, shall be carried out according to the procedures approved or issued by the Chairman.

(5) No fuelling units or other apparatus used for the fuelling of aircraft shall be used unless approved by the Chairman or the Airport Manager.328. Authorisation to certain persons to enter certain premises.- The Chairman or the Airport Manager, or any person specially authorised by either of them, shall have power to enter at all times by day or night into or upon any aircraft, hangar, workshop, building, store or fuel installation in the airport or aerodrome in order to inspect the same and to assure that the provisions of these rules have been and are being complied with.

329. Details of restrictions imposed on obstructions in vicinity of radio navigation aids and in the noise zone area of an aerodrome or airport. - (1) No person shall erect any obstruction in the vicinity of a Non-directional Beacon, Very High Frequency Omni Range, Instrument Landing System, Radar and any other facility or in the noise zone area of

an airport or aerodrome.

(2) Any person erecting any obstructions in contravention of sub-rule (1) shall, if so required by the Chairman, remove the obstruction at his own cost.

330. Removal from the airport or aerodrome.- (1) Any person who is guilty of a breach of any rule, or any order or instructions issued by the Chairman or Airport Manager or persons duly authorised by them for the purpose of the enforcement of these rules, may be removed or rejected from the Airport or the aerodrome and may, in addition to any other penalty to which he may be liable under these rules, be deprived of the further use of the airport or aerodrome and its facilities for such time as may be necessary in the public interest and for ensuring the safety of the air navigation.

(2) The Chairman or the Airport Manager may order the Owner(s) or Operator for removal of any aircraft from any airport, under any one or more of the following circumstances:

(a) The Owner(s) or the Operator has failed to meet the requirements of the Authority for issue Bangladesh Certificate of Registration or for issue or renewal of Bangladesh Certificate of Airworthiness for a period exceeding 1 (one) year.

(b) The Owner(s) or the Operator has failed to pay for Landing or Parking or housing or route navigation charges for a period exceeding 6 (six) months.

(3) The Owner(s) or Operator, who is served with a notice for removal of such aircraft, shall have to remove the aircraft within 30 (thirty) days of receiving notice from the Chairman or Airport Manager or a person authorized by them.

(4) In case of failure of the Owner(s) or the Operator to completely remove the aircraft within the stipulated period, the Chairman may confiscate the aircraft and auction or remove the aircraft.

331. Photographs at aerodrome and airports.- No person shall take, or cause or permit to be taken, at an airport or aerodrome any photograph except in accordance with, and subject to the terms and conditions of, a permission in writing issued by the Chairman.

332. Prevention of flights in contravention of the rules.- An authority authorised under section 8 of the Civil Aviation Ordinance, 1960 to detain aircraft may do so by the issue of a written direction to the pilot-in-command or some other person for the time being in-charge of the aircraft to be detained, or taking such other steps as may be necessary to make the detention effective. If an aircraft detained by a person so authorised is housed or kept at a Government aerodrome, the housing or picketing charges normally applicable shall be payable in respect of the whole period during which it is detained.

333. Penalty.- Any person contravening any of the provision of these rules shall be punishable with imprisonment for a term not exceeding one year or with fine not exceeding Taka Five thousand, or with both.

334. Summary trial.- Notwithstanding anything contained in the Code of Criminal Procedure, 1898 (Act V of 1898), or in any other law for the time being in force, any

Magistrate of the first class may try in a summary way in accordance with the provision of sections 262 to 265 of that Code of any breach of, or failure to comply with, any rule.

PART II
RULES OF THE AIR

58. Applicability, General provisions and Compliance:

(1) This part shall be known as Rules of the Air and shall apply to aircraft other than military aircraft, engaged in flight operations in Bangladesh and to Aircraft registered in Bangladesh wherever they may be except where they conflict with the Rules of the Air published by the State having jurisdiction over the territory over flown.

(2) Co-coordinated Universal Time (UTC);

(a) UTC shall be used and shall be expressed in hours and minutes and, when required, seconds of the 24-hour day beginning at mid night.

(b) A time check shall be obtained prior to operating a controlled flight and at such other times during the flight as may be necessary.

(c) In the application of data link communications time shall be accurate to within 1 second of UTC.

(3) Each person operating an aircraft either in flight or on the movement area of an aerodrome shall be in compliance with the general rules and, in addition, when in flight, either with:

(a) the visual flight rules; or

(b) the instrument flight rules.

Note.— A pilot may elect to fly in accordance with instrument flight rules in visual meteorological conditions or may be required to do so by as required by the Chairman.

59. Responsibility and authority of pilot-in-command: (1) The pilot-in-command of an aircraft shall have final authority as to the disposition of the aircraft while in command.

(2) The pilot-in-command of an aircraft shall, whether manipulating the controls or not, be responsible for the operation of the aircraft in accordance with the rules of the air, except that the pilot-in-command may depart from these rules in circumstances that render such departure absolutely necessary in the interests of safety.

(3) Each pilot-in-command who deviates from complying with the rules of this part under sub- rule(2) shall notify the appropriate air traffic services unit as soon as practicable and subsequently send a written report of that deviation to the Chairman.

(4) The Pilot-in –Command of an aircraft, which is being subjected to unlawful interference will endeavour to notify the appropriate ATS unit of this fact, any significant

circumstances associated therewith and any deviation from the current flight plan necessitated by the circumstance, in order to enable the ATS unit to give priority to the aircraft and to minimize conflict with other aircraft.

60. Pre-flight action.- Before beginning a flight, the pilot-in-command of an aircraft shall become familiar with all available information appropriate to the intended operation. Pre-flight action for flights away from the vicinity of an aerodrome, and for all IFR flights, shall include a careful study of available current weather reports and forecasts, taking into consideration fuel requirements and an alternative course of action if the flight cannot be completed as planned."

61. Use of psychoactive substance.- No person whose function is critical to the safety of aviation (safety-sensitive personnel) shall undertake that function while under the influence of any psychoactive substance, by reason of which human performance is impaired. No such person shall engage in any kind of problematic use of substances.

62. Airspace restrictions.- All civil aircraft operating within the territory of Bangladesh are restricted to operate within ATS routes, control zones and other controlled airspace except where otherwise approved by the appropriate ATS unit.

63. Flight restrictions.- (1) No person shall operate an aircraft over areas where there are flight restrictions, the particulars of which have been duly published, except in accordance with the conditions of the restriction or by permission of the appropriate authority imposing the restriction.

(2) No person shall operate an aircraft in a negligent or reckless manner so as to endanger life or property.

64. Minimum safe heights.- Except when necessary for take-off or landing, or except by permission from the Chairman, aircraft shall not be flown over the congested areas of cities, towns or settlements or over an open-air assembly of persons, unless at such a height as will permit, in the event of an emergency arising, a landing to be made without undue hazard to persons or property on the surface.

65. Cruising levels.- The cruising levels at which a flight or a portion of a flight is to be conducted shall be in terms of:

(a) flight levels, for flights at or above the lowest usable flight level or, where applicable, above the transition altitude;

(b) altitudes, for flights below the lowest usable flight level or, where applicable, at or below the transition altitude.

66. Avoidance of collision.- (1) Nothing in these rules shall prevent the pilot -in command to the reasonable use or keeping vigilance for detecting potential collisions of an aircraft either in flight or while operating on the manoeuvring area of an aerodrome.

(2) Right of way an operation:

(a) An aircraft that has the right of way shall maintain its heading and speed.

(b) Nothing in these rules shall relieve the pilot-in-command of an aircraft from the responsibility of taking such action, including collision avoidance man- oeuvres based on resolution advisories provided by ACAS or such other equipment as approved by ICAO, as will best avert collision.

(c) An aircraft that is obliged by the following rules to keep out of the way of another shall avoid passing over or under the other, or crossing ahead of it, unless passing well clear.

(d) Operate An aircraft in such proximity to other aircraft as to create a collision hazard.

(3) No person shall:

(a) Operate an aircraft in formation except by prearrangement among the pilots-in-command of the aircraft taking part in the flight and, for formation flight in controlled airspace, in accordance with the conditions prescribed by the Chairman. These conditions shall include the following:

(i) the formation operates as a single aircraft with regard to navigation and position reporting;

(ii) separation between aircraft in the flight shall be the responsibility of the flight leader and the pilots-in-command of the other aircraft in the flight and shall include periods of transition when aircraft are maneuvering to attain their own separation within the formation and during join-up and breakaway; and

(iii) a distance not exceeding 1 km (0.5 NM) laterally and longitudinally and 30 m (100 ft) vertically from the flight leader shall be maintained by each aircraft.

(4) When two aircraft are converging at approximately the same level, the aircraft that has the other on its right shall give way, except as follows:

(a) power-driven heavier-than-air aircraft shall give way to airships, gliders and balloons;

(b) airships shall give way to gliders and balloons;

(c) gliders shall give way to balloons;

(d) power-driven aircraft shall give way to aircraft which are seen to be towing other aircraft or objects.

(e) An aircraft in distress/emergency has the right of way over all other air traffic.

(5) An overtaking aircraft is an aircraft that approaches another from the rear on a line forming an angle of less than 70 degrees with the plane of symmetry of the latter, i.e. is in such a position with reference to the other aircraft that at night it should be unable to see either of the aircraft's left (port) or right (starboard) navigation lights.

(6) An aircraft that is being overtaken has the right-of-way and the overtaking aircraft, whether climbing, descending or in horizontal flight, shall keep out of the way of the other aircraft by altering its heading to the right, and no subsequent change in the relative positions of the two aircraft shall absolve the overtaking aircraft from this obligation until it is entirely past and clear.

(7) When two aircraft are approaching head-on or approximately so and there is danger of collision, each shall alter its heading to the right.

(8) **Landing priority:**

(a) An aircraft in flight, or operating on the ground or water, shall give way to aircraft landing or in the final stages of an approach to land.

(b) When two or more heavier-than-air aircraft are approaching an aerodrome for the purpose of landing, aircraft at the higher level shall give way to aircraft at the lower level, but the latter shall not take advantage of this rule to cut in front of another which is in the final stages of an approach to land, or to overtake that aircraft. Nevertheless, power-driven heavier-than-air aircraft shall give way to gliders.

(9) Emergency landing: An aircraft that is aware that another is compelled to land shall give way to that aircraft.

(10) Taking Off: An aircraft taxiing on the maneuvering area of an aerodrome shall give way to aircraft taking-off or about to take-off

(11) A pilot-in-command about to take -off shall not attempt to do so until there is no apparent risk of collision with other aircraft.

(12) An unmanned free balloon shall be operated in such a manner as to minimize hazards to persons, property or other aircraft and in accordance with the instructions as specified.

(13) An aircraft operated on a controlled aerodrome shall not taxi on the maneuvering area without clearance from the aerodrome control tower and shall comply with any instructions given by that unit.

(14) An aircraft taxiing on the maneuvering area shall stop and hold at all runway-

holding positions unless otherwise authorized by the aerodrome control tower

(15) An aircraft taxiing on the maneuvering area shall stop and hold at all lighted stop bars and may proceed further when the lights are switched off.

(16) **Surface movement:**

(a) In case of danger of collision between two aircraft taxiing on the movement area of an aerodrome the following shall apply.

(b) when two aircraft are approaching head on ,or approximately so ,each shall stop or where practicable alter its course to the right so as to keep well clear.

(c) when two aircraft are on a converging course, the one which has the other on its right shall give way.

Note: An aircraft which is being over taken by another aircraft shall have the right-of-way and the overtaking aircraft shall keep well clear of the other aircraft.

66A. Water operations: (1) General provisions: When two aircraft or an aircraft and a vessel are approaching one another and there is a risk of collision, the aircraft shall proceed with careful regard to existing circumstances and conditions including the limitations of the respective craft.

(2) Converging*:* An aircraft which has another aircraft or a vessel on its right shall give way so as to keep well clear.

(3) *Approaching head-on:* An aircraft approaching another aircraft or a vessel head-on or approximately so, shall alter its heading to the right to keep well clear.

(4) *Overtaking:* The aircraft or vessel which is being overtaken has the right of way, and the one overtaking shall alter its heading to keep well clear.

(5) *Landing and taking off:* Aircraft landing on or taking off from the water shall, in so far as practicable, keep well clear of all vessels and avoid impeding their navigation.

(6) *Lights to be displayed by aircraft on the water:* Between sunset and sunrise or such other period between sunset and sunrise as may be prescribed by the Chairman, all aircraft on the water shall display lights as required by the International Regulations for Preventing Collisions at Sea (revised 1972) unless it is impractical for them to do so, in which case they shall display lights as closely similar as possible in characteristics and position to those required by the International Regulations.

67. Acrobatic flight.- No aircraft shall be flown acrobatically except under conditions as may be prescribed by the Chairman and as indicated in relevant information, advice and/or clearance from the appropriate air traffic services unit.

68. Parachute descent and Dropping / spraying.- (1) Parachute descent, other than emergency descent, shall not be made except under the conditions prescribed by the Chairman and as indicated by relevant information, advice and/or clearance from the appropriate ATS unit.

(2) Nothing shall be dropped or sprayed from an aircraft in flight except under conditions prescribed by the Chairman and as indicated by relevant information, advice and/or clearance from the appropriate air traffic services unit.

69. Towing.- No aircraft or other object shall be towed by an aircraft, except in accordance with requirements prescribed by the Chairman and as indicated by relevant information, advice and/or clearance from the appropriate air traffic services unit.

70. Displaying of lights.- (1) Except as provided in sub-rule (4) from sunset to sunrise or during any other period which may be prescribed by the Chairman all aircraft in flight shall display:

(a) anti-collision lights intended to attract attention to the aircraft; and

(b) navigation lights intended to indicate the relative path of the aircraft to an observer and other lights shall not be displayed if they are likely to be mistaken for these lights.

(c) all aircraft moving on the movement area of an aerodrome shall display navigation lights intended to indicate the relative path of the aircraft to an observer and other lights shall not be displayed if they are likely to be mistaken for these lights;

(d) unless stationary and otherwise adequately illuminated, all aircraft on the movement area of an aerodrome shall display lights intended to indicate the extremities of their structure;

(e) all aircraft operating on the movement area of an aerodrome shall display lights intended to attract attention to the aircraft; and

(f) all aircraft on the movement area of an aerodrome whose engines are running shall display lights which indicate that fact.

(2) Except as provided in sub-rule(4),all aircraft in flight and fitted with anti-collision lights to meet the requirement of sub-rule(1) (a) shall display such lights also out side the period specified in sub-rule (1)

(3) Except as provided in sub-rule(4),all air craft : (a) Operating on the movement area of an aerodrome and fitted with anti-collision lights to meet the requirement of sub-rule (1)(e): or

(b) on the movement area of an aerodrome and fitted with lights to meet the requirement of sub-rule(1)(f) shall display such lights outside the period specified in sub-rule(1)

(4) A pilot is permitted to switch off or reduce the intensity of any flashing lights fitted to meet the requirements of sub-rule (1),(2),(3) if they do or likely to;

(a) adversely affect the satisfactory performance of duties; or

(b) subject an outside observer to harmful dazzle.

71. Signal for the control of aerodrome traffic

(1) The signals specified hereinafter shall be used only for the purposes respectively specified in this rule,and other signals likely to be confused with them shall not be used.

(2) The pilot-in-command while operating on or in the vicinity of an aerodrome shall comply with signals and instructions given in accordance with the rules.

(3) Where aerodromes are equipped with two-way radiotelephony apparatus, air traffic control shall give control instructions by this means to all aircraft equipped to receive radiotelephony messages.

(4) All such communications between aircraft and an air traffic control unit shall be in the English language.

(5) Where control by the means referred to in this rule is not available, the appropriate visual signals may be used.

(6) Nothing in this rule shall prevent any combination of radiotelephony and visual signals being used at any aerodrome, but a visual signal shall not be used in any case where it is possible to use radiotelephony.

(7) Where radio communication is being used, the pilot-in-command shall not be relived of the responsibility of keeping a look-out for any instructions which may be issued by visual means.

(8) No aircraft shall operate or eater in any controlled airspace without having any suitable two-way radio apparatus on board the aircraft, except with prior permission from appropriate ATS unit.

72. Signals: (1) A light signal directed at a particular aircraft from an air traffic control unit at an aerodrome has the meaning specified by ICAO in relation to the signal.

(2) Upon observing or receiving any of the signals given in schedule I (Signals), each pilot-in-command shall take such action as may be required by interpretation of the signal.

(3) The signals of Schedule I shall be used only for the purpose indicated there-in and no other signals likely to be confused with them shall be used.

(4) A signalman/ marshaller shall be responsible for providing standard marshalling signals to aircraft in a clear and precise manner using the signal as indicated in schedule I.

(5) No person shall guide an aircraft unless trained, qualified and approved by the Chairman to carry out the functions of a signalman.

(6) The signalman shall wear a distinctive fluorescent identification vest to allow the flight crew to identify that he or she is the person responsible for the marshalling operation

(7) Day light fluorescent wands, table tennis bats or gloves shall be used for all signalling during day light. Illuminated wands shall be used at night or in low visibility.

73. Simulated instrument flights: An aircraft shall not be flown under simulated instrument flight conditions unless:

(a) fully functioning dual controls are installed in the aircraft; and

(b) a qualified pilot occupies a control seat to act as safety pilot for the person who is flying under simulated instrument conditions. The safety pilot shall have adequate vision forward and to each side of the aircraft, or a competent observer in communication with the safety pilot shall occupy a position in the aircraft from which the observer's field of vision adequately supplements that of the safety pilot.

74. Operation on and in the vicinity of an aerodrome: An aircraft operated on or in the vicinity of an aerodrome shall, whether or not within an aerodrome traffic zone:

(a) observe other aerodrome traffic for the purpose of avoiding collision;

(b) conform with or avoid the pattern of traffic formed by other aircraft in operation;

(c) make all turns to the left, when approaching for a landing and after taking off, unless otherwise instructed;

(d) land and take off into the wind unless safety, the runway configuration, or air traffic considerations determine that a different direction is preferable.

75. Altimeter setting procedures.- (1) The procedures herein described the method intended for use in providing adequate vertical separation between aircraft and adequate terrain clearance during all phases of the flight.

(2) This method is based on the following principles:-

(a) during en- route flight an aircraft is flown along surface of a constant atmospheric pressure called " flight levels'' which are related to an altimeter setting of Hg.1013.2mb (29.92 inches) and,throughout this phase of a flight, the vertical position of an aircraft is expressed in terms of flight levels;

(b) during flight at or below the "transition altitude'', an aircraft is flown at "altimeter set to mean sea level pressure (QNH) and its vertical position is expressed in terms of altitudes;

(c) the change is reference from "flight levels'' used while en – route, to "altitudes'' and vice versa is made, when climbing, at the transition altitude and, when descending at transition level.

76. System of flight levels.- The flight level zero shall be located at the atmospheric pressure level of Hg. 101.2 m b (29.92) and consecutive flight levels shall be separated by a pressure interval corresponding to at least 152.4 meters (500 feet) in the standard atmosphere.

78. Transition level. - The transition level for all aerodromes in Bangladesh shall be notified by the Chairman**.**

79. Transition from flight levels to altitudes and *vice versa.-*

(1) The vertical position of aircraft when at or below the transition altitude shall be expressed in terms of altitude, whereas such position at or above the transition level shall be expressed in terms of flight levels. while passing through the transition layer, vertical position shall be expressed in terms of flight levels when ascending and in terms of altitude when descending.

(2) A QNH altimeter setting shall be made available to aircraft in taxi clearances prior to take-off.

(3) All aircraft operating en-route shall maintain a cruising level by clearances to an altimeter when operating –

(a) at and below 1,200 meters (4,000 feet) above the surface to the current QNH of the nearest available reporting along the route being flown;

(b) above 1,200 meters (4,000 feet) above the surface to Hg. 1013.2 m b (29.92 inches) unless otherwise specified.

(4) When complying with the rules of this part, all aircrafts shall be flown at flight levels in Schedule 2.

80. Terrain clearance

(1) QNH altimeter setting shall be provided from as many locations as practicable to

permit determination of terrain clearance.

(2) The air traffic service units shall at all times make available for flight planning purposes and for transmission to aircraft in flight, on request, the information required to determine the lowest flight level which will ensure adequate terrain clearance for routes on which such information is required.

(3) The lowest usable flight level is determined by the atmospheric pressure in the area of operation as shown in the following table:-

Altimeter setting (current reported) Hg 1013.2 mb (29.92") or higher	Lowest usable flight level Minimum en- route
1012.9 mb to 996.3 mb (29.91" to 29.42")	Add 150 meters (500 feet)
995.9 mb to b 979.3 mb (29.41" to 28.92")	Add 300 meters (1,000 feet)
979.0 mb to 962.4 mb (28.91" to 28.42")	Add 450 meters (1,500 feet)
962.1 mb to 945.5 mb (28.41" to 27.92")	Add 600 meters (2,000 feet)
945.1 mb to 982.5 mb (27.91" to 27.42")	Add 750 meters (2,500 feet)

(4) A QNH altimeter setting shall be made available in approach and landing clearances.

(5) A QFE altimeter setting shall be made available in approach and landing clearances on request.

(6) The vertical positioning of aircraft during approach shall be controlled by reference to flight levels until reaching the transition level below which vertical positioning shall be by reference to altitudes.

Note:- *This dose note preclude a pilot from using a QFE setting for terrain clearance purposes during the final approach to the runway.*

(7) After approach clearance has been issued and the descent to land is commenced,, the vertical positioning of an aircraft above the transition level may be by reference to altitudes (QNH) provide that level flight above the transition altitude is not anticipated.

Note:- *This applies primarily to turbine engine aircraft for which an uninterrupted descent from a high altitude is desirable.*

(8) The relevant provisions regarding take –of and climb, and approach and landing of this part shall also apply in the event of a missed approach.

81. Flight planning: (1) Information relative to an intended flight or portion of a flight, to be provided to ATS units, shall be in the form of a flight plan.

(2) Each pilot-in-command or his designated representative, while planning a flight, shall take into consideration the following factors when filling a flight plan and select levels:-

(a) In terms of flight levels, if the flight is to be conducted at or above the transition levels;

(b) In terms of altitudes, if the flight is to be conducted in the vicinity of an aerodrome or between adjacent aerodromes at or below the transition altitude or altitudes concerned.

(3) The level or levels selected for a flight: -

(a) Shall ensure adequate terrain clearance at all points along the route to be flown;

(b) Shall satisfy air traffic control requirements; and

(c) Shall be compatible with the application of the table of cruising levels.

(4) Contents of flight plan: Contents of flight plan should be as per Civil Aviation Form CA 200C. (Available at PFIU/ ATC unit.)

(5) Adherence to flight plan: Except as provided for in 89(8) and 88(6), an aircraft shall adhere to the current flight plan or the applicable portion of a current flight plan submitted for a controlled flight unless a request for a change has been made and clearance obtained from the appropriate air traffic control unit, or unless an emergency situation arises which necessitates immediate action by the aircraft, in which event as soon as circumstances permit, after such emergency authority is exercised, the appropriate air traffic services unit shall be notified of the action taken and that this action has been taken under emergency authority.

(6) Completion of flight plan;

(a) A flight plan shall contain information, as applicable, on relevant items up to and including "Alternate aerodrome(s)" regarding the whole route or the portion thereof for which the flight plan is submitted.

(b) A flight plan shall contain information on all other items as published through an ATSI or when otherwise deemed necessary by the person submitting the flight plan.

82. Radio communications.- While operating on ATS routes, control zones and other controlled air spaces, the pilot-in-command shall maintain continuous listening watch on the appropriate radio frequency of, and establish two-way communication with, the appropriate ATS unit.

83. Position reporting. - (1) On routes defined by designated reporting points, position reports shall be made when over or, as soon as possible, after passing each designated

compulsory reporting points. Additional reports may be requested by the appropriate air traffic services unit when so required for air traffic service purposes.

(2) On routes not defined by designated reporting points, position reports shall be made when over or, as soon as possible, after the first half-hour of flight and at hourly intervals thereafter. Additional reports may be requested by the appropriate air traffic services unit when so required for air traffic service purposes.

(3) Controlled flights providing position information to the appropriate ATS unit via CPDLC or such other means as approved by ICAO shall only provide voice position reports when requested.

(4) An IFR flight operating outside controlled airspace and required by the Chairman to:

- submit a flight plan,
- maintain an air-ground voice communication watch on the appropriate communication channel and establish two-way communication, as necessary, with the air traffic services unit providing flight information service, shall report position as specified in sub-rule (5) for controlled flights.

(5) The position reports shall contain the following elements of information:

(a) Aircraft identification;

(b) Position;

(c) time;

(d) Flight level or altitude;

(e) Next position and estimated time over;

Any significant weather conditions encountered; and any other information relating to the safety of flight.

84. Air traffic control clearance and Termination of control: (1) Air traffic control clearance: (a) An air traffic control clearance shall be obtained prior to operating a controlled flight, or a portion of a flight as a controlled flight. Such clearance shall be requested through the submission of a flight plan to an air traffic control unit.

(b) Whenever an aircraft has requested a clearance involving priority, a report explaining the necessity for such priority shall be submitted, if requested by the appropriate air traffic control unit.

(c) If prior to departure it is anticipated that depending on fuel endurance and subject to re-clearance in flight, a decision may be taken to proceed to a revised destination

aerodrome, the appropriate air traffic control units shall be so notified by the insertion in the flight plan of information concerning the revised route (where known) and the revised destination.

(d) Except in an emergency, no person shall, while under the jurisdiction of an air traffic control, operate an aircraft contrary to air traffic control clearance and instructions.

(e) Each pilot-in-command who deviates in an emergency form an air traffic control clearance or instructions shall notify the appropriate air traffic control unit of the deviation as soon as possible stating the reasons for such deviation.

(2) **Termination of control:** A controlled flight shall, except when landing at a controlled aerodrome, advise the appropriate ATC unit as soon as it ceases to be subject to air traffic control service.

85. Requirement to submit a flight plan: (1) A flight plan shall be submitted before departure to an air traffic services reporting office or, during flight, transmitted to the appropriate ATS unit or air-ground control radio station, unless arrangements have been made for submission of repetitive flight plans.

(2) A flight plan shall be submitted prior to operating;

(a) Any flight or portion thereof to be provided with Air Traffic Control Service.

(b) Any IFR flight within advisory air space.

(c) Any flight within or into designated areas, or along designated routes, when so required by the appropriate ATS authority to facilitate the provision of flight information, alerting and search and rescue services.

(d) Any flight within or into designated areas, or along designated routes, when so required by the appropriate ATS authority to facilitate co-ordination with appropriate military units or with ATS units in adjacent States in order to avoid the possible need for interception for the purpose of identification.

(e) Any flight across international borders.

(3) Written flight plan shall be filed with the appropriate ATS units for all flights prior to departure and in case of -

(a) Local flights at uncontrolled aerodrome in control zones and at all controlled aerodromes, the pilot-in -command or his representative shall file a flight plan prior to departure by any available means with the appropriate ATS Unit;

(b) Local flights at uncontrolled aerodromes outside control zone may be undertaken

without a flight plan provided they are operated during day and in visual meteorological conditions (VMC) below 300 meters (1000 feet).

(4) Unless otherwise required by the Chairman, a flight plan for a flight to be provided with air traffic control service or advisory service shall be submitted at least sixty minutes before departure, or, if submitted during flight, at a time which will ensure its receipt by the appropriate air traffic services unit at least ten minutes before the aircraft is estimated to reach-

(a) The intended point of entry into a controlled area or advisory area or FIR or

(b) The point of crossing an Airway or advisory route.

(5) The pilot-in- command intending to operate an aircraft into or over Bangladesh as an international flight shall submit a flight plan to the appropriate air traffic services unit in sufficient time to permit the air traffic services unit to receive the flight plan not less than twenty minutes prior to entering the Bangladesh territory.

(6) In the event of a delay of one hour in excess of the estimated departure time, for which a flight plan has been submitted, the flight plan shall be requested to be amended or a new flight plan shall be submitted.

86. Changes to flight plan.- (1) All changes to a flight plan submitted for an IFR flight or a controlled VFR flight, and significant changes to a flight plan submitted for an uncontrolled VFR flight shall be reported as soon as practicable to the appropriate air traffic services unit.

(2) **Intended changes:** Requests for flight plan changes shall include information as indicated hereunder:

(a) Change of cruising level: aircraft identification; requested new cruising level and cruising speed at this level, revised time estimates (when applicable) at subsequent flight information region boundaries.

(b) Change of route: (i) Destination unchanged: aircraft identification; flight rules; description of new route of flight including related flight plan data beginning with the position from which requested change of route is to commence; revised time estimates; any other pertinent information.

(ii) Destination changed: aircraft identification; flight rules; description of revised route of flight to revised destination aerodrome including related flight plan data, beginning with the position from which requested change of route is to commence; revised time estimates; alternate aerodrome(s); any other pertinent information.

87. Closing a flight plan.- (1) (a) Unless otherwise prescribed by the Chairman, a

report of arrival shall be made in person, by radiotelephony or via data link at the earliest possible moment after landing, to the appropriate air traffic services unit at the arrival aerodrome, by any flight for which a flight plan has been submitted covering the entire flight or the remaining portion of a flight to the destination aerodrome.

(b) When a flight plan has been submitted only in respect of a portion of a flight, other than the remaining portion of a flight to destination, it shall, when required, be closed by an appropriate report to the relevant ATS unit.

(2) When no air traffic services unit exists at the arrival aerodrome, the arrival report, when required, shall be made as soon as practicable after landing and by the quickest means available to the nearest air traffic services unit.

(3) Arrival reports made by aircraft shall contain the following elements of information:

(a) aircraft identification;

(b) departure aerodrome;

(c) destination aerodrome (only in the case of a diversionary landing);

(d) arrival aerodrome;

(e) time of arrival

(4) when communication facilities at the arrival aerodrome are known to be inadequate and alternate arrangements for the handling of arrival reports on the ground are not available, the following action shall be taken:

(a) Immediately prior to landing the aircraft shall, if practicable, transmit to the appropriate ATS unit, a message comparable to an arrival report.

(b) This transmission shall be made to the aeronautical station serving the ATS unit in charge of the flight information region in which the aircraft is operated.

88. Visual flight rules : (1) Weather minima - Except when otherwise authorized by appropriate ATS unit, a VFR flight shall be conducted so that the aircraft is flown in conditions of visibility and distance from cloud equal to or greater than the minima as specified by ICAO and issued by Chairman.

(2) **Operation within a control zone.-** Except when a clearance is obtained from the appropriate air traffic control unit, VFR flights shall not take-off or land at an aerodrome within a control zone or enter the aerodrome traffic zone-

(a) When the ceiling and ground visibility are less than the minima set by ICAO or

higher minima which ever is set by Chairman.

(3) **Operation in accordance with VFR:** A flight under VFR shall not be operated -

(a) Between sunset and sunrise;

(b) At transonic or supersonic speed.
(c) At/above a flight level as specified by Chairman by promulgating an ANO.

(4) **VFR flight shall not be flown:** (a) over the congested areas of cities, towns or settlements or over an open-air assembly of persons at a height less than 300 m (1 000 ft) above the highest obstacle within a radius of 600 m from the aircraft;

(b) elsewhere than as specified in (a), at a height less than 150 m (500 ft) above the ground or water.

(5) **VFR operation of helicopter:** A VFR flight by helicopters may be flown at less than the minimum height laid down in sub-rule (2) if the operation is conducted without hazard to persons or property.

(6) **Weather deterioration below the VMC:** When it becomes evident that flight in VMC in accordance with its current flight plan will not be practicable, a VFR flight operated as a controlled flight shall:

(a) request an amended clearance enabling the aircraft to continue in VMC to destination or to an alternative aerodrome, or to leave the airspace within which an ATC clearance is required; or

(b) if no clearance in accordance with (a) can be obtained, continue to operate in VMC and notify the appropriate ATC unit of the action being taken either to leave the airspace concerned or to land at the nearest suitable aerodrome; or

(c) if operated within a control zone, request authorization to operate as a special VFR flight; or

(d) request clearance to operate in accordance with the instrument flight rules.

(7) **Authorization of special VFR flight** - When the ground visibility or flight visibility is not less than 3 kilometers (2 miles) and ceiling not less than 300m (1,000 feet) appropriate ATC unit may authorize a special VFR flight to enter or leave control zone or operate locally within a control zone subject to the following conditions;-

(a) only one special VFR flight shall be allowed to operate in any given time within control zone;

(b) No conflict between a special VFR flight and a IFR flight; and

(c) the aircraft shall be equipped with functioning radio equipment on board capable of maintaining two-way communications with the appropriate ATS unit.

(8) **VFR flights in RVSM Airspace:** VFR Flights shall not be authorized to operate within RVSM Airspace

(9) Except where otherwise indicated in the air traffic control clearance or specified by the appropriate ATS authority, VFR flight in level cruising flight when operated above 900m (3000Ft) from the ground or water, shall be conducted at a flight level appropriate to the track.

(10) VFR flights shall comply with the provisions of Air Traffic Control:

(a) when operated within Classes B, C and D airspace;

(b) when forming part of aerodrome traffic at controlled aerodromes; or

(c) when operated as special VFR flights.

(11) A VFR flight operating within or into areas, or along routes, designated by the Chairman in accordance with sub-rule 85(e) and 85(f) shall maintain continuous air-ground voice communication watch on the appropriate communication channel of, and report its position as necessary to, the air traffic services unit providing flight information service.

89. Instrument flight rules. - (1) Instruments and equipments. - An aircraft shall not be flown under instrument flight rules unless it is equipped with -

(a) Suitable flight instruments;

(b) Suitable radio navigation equipment appropriate to the route to be flown;

(c) Suitable radio equipment capable of maintaining two -way radio communication with the appropriate air traffic services unit; and

(d) the pilot-in-command holds an instrument rating of the required class issued or rendered valid by the Chairman.

(2) **Minimum IFR levels. -** Except when necessary for take-off or landing or except when specifically authorized by the Chairman, an IFR flight shall be flown at a level which is not below the Minimum flight altitude established by the State whose territory is over flown or where no such minimum flight altitude has been established -

(a) Over high terrain or in mountainous areas, at a level which is at least 600 meters (2000 feet) above the highest obstacle located within 8 kilometers (5 miles) of the estimated position of the aircraft.

(b) Elsewhere than as specified in clause (a), at a level which is at least 300 meters (1000 feet) above the highest obstacle located within 8 kilometers (5 miles) of the estimated position of the aircraft.

Note: the estimated position of the aircraft will take account of the navigational accuracy, which can be achieved, on the relevant route segment, having regard to the navigational facilities available on the ground and in the aircraft.

(3) **Change from IFR to VFR flight and Vice versa –** (a) an aircraft elect to change the conduct of flight form compliance with the instrument flight rules to compliance with the visual flight rules shall notify the appropriate air traffic services unit with a message initiated by the pilot-in-command containing the specific expression "CANCELLING MY IFR FLIGHT" together with the changes, if any, to be made to his current flight plan.

(b) When an aircraft operation under the instrument flight rules is flown in or encounters visual meteorological conditions it shall not cancel its IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period of time in uninterrupted visual meteorological conditions.

(c) An aircraft elect to change the conduct of flights from compliance with the visual flight rules to compliance with the instrument flight rules shall communicate to the appropriate air traffic services unit the necessary changes to be effected to its current flight plan and obtain clearance prior to proceeding IFR when in control airspace.

(4) **IFR flight within controlled airspace**. IFR flights shall comply with the provisions of sub-rules (1) and (2) when operation within controlled airspace.

(5) **Cruising levels. -**the cruising levels to be used by IFR and VFR flights shall be selected from the table of cruising levels as mentioned in Schedule II.

(6) **Course to be flown.** Unless otherwise authorized by an air traffic control unit, no person shall operate an aircraft within any ATS route or controlled airspace under IFR, except as follows:-

(a) On an ATS route, along the centreline of that route;

(b) On any other route, along the direct course between the navigational aids or points defining that route.

Note: Any deviation from 6(a) and 6(b) shall be notified to the appropriate ATS unit.

(7) An aircraft operating along an ATS route segment defined by reference to VOR shall change over for its primary navigation guidance from the facility behind the aircraft to that ahead of it at, or as close as operationally feasible to, the change-over point, where established. Any deviation from this requirement shall be notified to the appropriate ATS unit.

(8) **Inadvertent changes:** In the event that a controlled flight inadvertently deviates from its current flight plan, the following action shall be taken;

(a) Deviation from track: if the aircraft is off track, action shall be taken forthwith to adjust the heading of the aircraft to regain track as soon as practicable.

(b) Variation in true airspeed: if the average true airspeed at cruising level between reporting points varies or is expected to vary by plus/minus 5% of the true airspeed, from that given in the flight plan, the appropriate ATS unit shall be so informed.

(c) Change in time estimate: if the time estimate for the next applicable reporting point is found to be in error in excess of three minutes from that notified to ATS unit, shall be notified to the appropriate ATS unit.

(d) When an ADS agreement is in place, the air traffic services unit (ATSU) shall be informed automatically via data link whenever changes occur beyond the threshold values stipulated by the ADS event contract.

(9) **IFR Flights outside controlled Airspace:** An IFR flight operating in level cruising flight out side of controlled airspace shall be flown at a cruising level appropriate to its track.

90. Communication failure: If a communication failure precludes compliance with Rule 82, the aircraft shall comply with the following procedures as are appropriate:

(1) he aircraft shall attempt to establish communications with the appropriate air traffic control unit using all other available means. In addition, the aircraft, when forming part of the aerodrome traffic at a controlled aerodrome, shall keep a watch for such instructions as may be issued by visual signals.

(2) If in visual meteorological conditions, the aircraft shall:

(a) continue to fly in visual meteorological conditions; land at the nearest suitable aerodrome; and report its arrival by the most expeditious means to the appropriate air traffic control unit;

(b) if considered advisable, complete an IFR flight in accordance with sub rule (3).

(3) If in instrument meteorological conditions or when the pilot of an IFR flight considers it inadvisable to complete the flight in accordance with sub rule(2)(a), the aircraft shall:

(a) unless otherwise prescribed on the basis of regional air navigation agreement, in airspace where radar is not used in the provision of air traffic control, maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 20

minutes following the aircraft's failure to report its position over a compulsory reporting point and thereafter adjust level and speed in accordance with the filed flight plan;

(b) in airspace where radar is used in the provision of air traffic control, maintain the last assigned speed and level, or minimum flight altitude if higher, for a period of 7 minutes following:

(i) the time the last assigned level or minimum flight altitude is reached; or

(ii) the time the transponder is set to Code 7600; or

(iii) the aircraft's failure to report its position over a compulsory reporting point; whichever is later, and thereafter adjust level and speed in accordance with the filed flight plan;

(c) when being radar vectored or having been directed by ATC to proceed offset using RNAV without a specified limit, rejoin the current flight plan route no later than the next significant point, taking into consideration the applicable minimum flight altitude;

(d) proceed according to the current flight plan route to the appropriate designated navigation aid or fix serving the destination aerodrome and, when required to ensure compliance with e) below, hold over this aid or fix until commencement of descent;

(e) commence descent from the navigation aid or fix specified in (d) at, or as close as possible to, the expected approach time last received and acknowledged; or, if no expected approach time has been received and acknowledged, at, or as close as possible to, the estimated time of arrival resulting from the current flight plan;

(f) complete a normal instrument approach procedure as specified for the designated navigation aid or fix; and

(g) land, if possible, within 30 minutes after the estimated time of arrival specified in e) or the last acknowledged expected approach time, whichever is later.

91. Signals

(1) The pilot-in-command shall transmit or display the signals specified in this rule according to the degree of emergency being experienced.

(2) The signals specified in relation to each successive degree of emergency may be sent either separately or together for anyone degree of emergency.

(3) Nothing in these rules shall prevent the use by an aircraft in distress of any means at its disposal to attract attention or make know its position for the purpose of obtaining help.

92. Distress signal

(1) The distress signal shall be transmitted only when the aircraft is threatened with grave and imminent danger and requires immediate assistance.

(2) In radiotelephony the distress signal takes from the word "MAYDAY'' pronounced three times followed by the words "THIS IS'', followed by the call sign of aircraft three times.

(3) by other means the distress signal shall take one or more of the following forms:-

(a) the signal of the SOS group (• • • – – – • • •) with visual apparatus or with sound apparatus;

(b) a succession of shells fired at short intervals each showing a red light;

(c) a parachute flare showing a red light.

93. Urgency signal

(1) The following signals, used either together or separately, shall be used by an aircraft for the purpose of giving notice of difficulties which compel it to land without requiring immediate assistance –

(a) the repeated switching on and off the navigation lights;
(b) the repeated switching on and off of the landing lights.

(2) The following signals, used either together or separately, shall be used by an aircraft for the purpose of giving notice that the aircraft has a very urgent message to transmit concerning the safety of a ship, aircraft or vehicle, or of some person on board or within sight –

(a) in radiotelephony, three repetitions of the word PAN sent before the transmission of the message;

(b) a signal made by radiotelegraphy or by any other signalling method consisting of the group XXX.

94. Air miss reporting

(1) An air miss report shall be filed by a pilot-in-command when he considers that his aircraft may have been endangered by the proximity of another aircraft, during a flight to the extent that a definite risk of collision existed.

(2) Whenever an air miss report is made by radio or telephone, a confirmatory report in

writing shall be submitted to the chairman within seven days of the date of incident in such form and manner as may be published in the AIP of Bangladesh.

(3) Whenever a pilot has genuine cause to complain about a certain deficiency in the provision of air control service, he shall file his complaint within 24 hours after the landing.

95. Diversions

(1) Diversions may be initiated by the pilot-in-command or as a result of advice or request from the operator or air traffic services unit.

(2) Diversions may be mad for the following reasons:-

(a) when the weather conditions at the planned aerodrome of destination is reported to be below the minima specified by an operating company for their aircraft;

(b) when obstructions on the landing area constitute a hazard to landing of aircraft and cannot be cleared within a reasonable period;

(c) the failure of aircraft equipment;

(d) the failure of essential ground aids to landing in circumstances which would require their use;

(e) unacceptable congestion of air traffic;

(f) the closure of the aerodrome of destination.

(3) On receipt of the diversion massage, the pilot-in-command shall acknowledge and comply with advice given, or give his reason for noncompliance and an alternative decision. should he decide not to divert but to attempt a landing at his planned destination permission to do so shall not be refused for reasons of adverse weather only, or in the case of emergency.

96. Fuel jettisoning

(1) The jettisoning of fuel by airborne aircraft is permitted provided the appropriate air traffic service unit is notified.

(2) The decision that emergency conditions require the jettisoning of fuel rests solely with the pilot-in-command.

(3) The procedure recommended is that the following conditions shall be observed:-

Height – Minimum 1,500 meters (5,000 feet) above terrain.

Vertical separation – Minimum 600 meters (2,000 feet) between aircraft.

(4) The jettisoning of fuel shall be carried out away from the populated areas or at such places as instructed by ATS Unit concerned.

PART III
AVIATION METEORLOGY

97. General provision and objective of Meteorological Services.- (1) The Meteorological Department shall supply meteorological information in accordance with the ICAO Annex 3 and as per the International Organization for Standardization (ISO) 9000 series of quality assurance standards, and certified by an approved organization and in such form and manner and at such places as may be required by the Chairman and promulgated through Air Navigation Order (ANO) to ensure:

(a) The safety, regularity and efficiency of Domestic and International air navigation.

(b) This objective shall be achieved by supplying the meteorological information to the following users, necessary for the performance of their respective functions:

(i) operators;

(ii) flight crew members;

(iii) air traffic services units;

(iv) search and rescue services units;

(v) airport managements; and

(vi) others concerned with the conduct or development of international air navigation.

(2) Chairman shall determine the meteorological service which will provide to meet the needs of international air navigation. This determination shall be made in accordance with the provisions of this rules and with due regard to regional air navigation agreements; it shall include the determination of the meteorological service to be provided for international air navigation over international waters and other areas which lie outside the territory of Bangladesh as may be applicable.

(3) The Bangladesh Meteorological Department (BMD) shall provide information to the Chairman on details of the designated Meteorological authority for inclusion and publication by CAAB in the Aeronautical Information Publication (AIP), Bangladesh.

(4) Bangladesh Meteorological Department shall comply with the requirements of the World Meteorological Organization in respect of qualifications and training of meteorological personnel providing service for international air navigation.

98. Aeronautical Climatological Information: (1) Aeronautical climatological information required for the planning of flight operations shall be prepared in the form of aerodrome climatological tables and aerodrome climatological summaries. Such information shall be supplied to aeronautical users as agreed between the meteorological authority and those users. The details requirements shall be promulgated by the Chairman through ANO.

(2) Department of Bangladesh shall initiate coordinating action with the meteorological authorities of other States with a view to obtaining from them the reports and/or forecasts required.

(3) The Bangladesh Meteorological Department, in coordination with the Civil Aviation Authority of Bangladesh, shall arrange for the supply of up-to-date meteorological information to relevant aeronautical information services units, as necessary, for the conduct of their functions.

(4) Weather reports of actual or forecasts made by any authority other than Bangladesh Meteorological Department shall not be used in planning, conduct and control of flights."99.The standards and recommended practices contained in Annex 3 to the Convention shall be used for aviation meteorology.

99. Obligations of States: (1) The Chairman shall ensure through promulgation of ANO, according to the provisions of this chapter, for observations to be made by Bangladesh registered aircraft operating on international air routes for the recording and reporting of the observations as may be required.

PART IV
AERONAUTICAL CHARTS

100. The chairman shall make arrangement for the availability of any chart or series of chart containing the territory of Bangladesh.

101. The chairman shall make arrangement for the availability of Aeronautical charts in such form and at such places as he considers necessary to ensure the safe economic and regular operation of aircraft and to give effect to the Convention.

102. Except as otherwise specified, the standards and recommended practices contained in Annex 4 to the convention shall be used in regard to the aeronautical charts.

PART V
UNITS OF MEASUREMENT

103. The chairman shall make arrangements with regard to the standardization of units of measurement in such manner and at such places as he consider necessary to ensure the safe, economic and regular operation of aircraft and to give effect to the Convention.

104. Units of Measurements: - (1) The units of measurement as applicable in air and ground operations in Bangladesh shall be promulgated by the Chairman through ANO.

PART VI
OPERATION OF AIRCRAFT

105. Classification of operations.- For the purposes of these rules, flight operations shall be divided into the following classes, namely:-

(1) **Commercial Air Transport Operation:** an aviation operation by an operator in which an aircraft/ helicopter is used for Scheduled Air Services or Non-scheduled Air Services involving –

(a) the carriage of passengers or cargo in the aircraft/ helicopter in return for payment or the promise of payment to the operator of the aircraft/ helicopter in respect of that flight; and

(b) the carriage of persons other than persons employed by the operator as aircraft/ helicopter crew members, where payment or promise of payment is made to the operator or the owner of the aircraft/ helicopter in respect of that flight, except that if the purpose of the flight is flight instruction and the payment or promise of payment is made in respect of that instruction, the flight shall be regarded as General Aviation Operation;

(2) **Aerial work operation:** a specialized aviation operation in which an aircraft is flown or operated by the operator or owner of that aircraft to provide a service for any of the following purposes:-

(a) agriculture operation;

(b) construction works;

(c) photography;

(d) surveying;

(e) observation and patrol by Government Departments;

(f) aerial ambulance and rescue;

(g) flight calibration navigation aids; or

(h) any other operation of a character substantially similar to any of the operations specified in clauses (a) to (g) or as decided by the Chairman.;

(3) **General Aviation Operation** : any type of aviation operation other than Commercial Air Transport Operations and Aerial Work Operations, such as:-

(a) transportation for personal or corporate use where payment or promise of payment to the operator or owner of the aircraft/ helicopter in respect of that flight is not involved;

(b) flight instructions or training where payment or promise of payment is made to the operator or owner of the aircraft/helicopter in respect of that flight;

(c) on-demand carriage of persons and/or goods on payment or promise of payment by a commercial operator not as a scheduled or non-scheduled air carrier;

(d) any other operation of a character substantially similar to any of the operations specified in clauses (a) to (c) or as decided by the Chairman.

106. Classification of aircrafts.- In accordance with the type of operations in which it is being employed at any time, operations of aircraft and helicopter shall be classified as follows:-

(1) Commercial Air Transport Aircraft: - when an aircraft is being employed in commercial air transport operations;

(2) Commercial Air Transport Helicopter: - when a helicopter is being employed in commercial air transport operations;

(3) Aerial Work Aircraft: - when an aircraft is being employed in aerial work operations;

(4) General Aviation Aircraft: - when an aircraft is being employed in general aviation operations.

(5) General Aviation Helicopter: - when an helicopter is being employed in general aviation operations.

107. Authorization of aircraft to be used

(1) An aircraft shall not be used in any class of operations unless the particular type of aircraft is authorized and approved for such use by the chairman.

(2) An aircraft shall not be used in any class of operations unless it is fitted with or carries such equipment, including emergency equipment, as the chairman approves or directs.

(3) Where the chairman directs that an instrument or item of equipment be fitted or carried on an aircraft, the instrument or item of equipment shall be fitted, carried or used in accordance with the directions issued by the chairman.

(4) Single-engine aeroplane shall not be operated for carriage of passengers in Commercial Air Transport Operations, other than as provided under rule 105(2) in Aerial

Work Operations and under rule 105(3) in General Aviation Operations.

(5) Only multi-engine aeroplanes of over 5700kg. maximum certificated take-off mass certified in accordance with Design Standards and Code of Performance issued or approved by the Chairman, shall be operated for carriage of passengers and/or cargo in Commercial Air Transport Operations.

(6) Helicopter certified only in accordance with the Design Standards and Code of Performance issued or approved by the Chairman, shall be operated for carriage of passengers and/or cargo in Commercial Air Transport Operations.

(7) An aircraft shall be operated in compliance with the Code of Performance issued or approved by the Chairman, the terms of its certificate of Airworthiness and operating limitations contained in its Flight Manual.

108. Deleted.

109. General Aviation–Aircraft.- An aircraft shall not be used in general aviation operations except under the authority of, and in accordance with a licence or certificate issued by the Chairman for general aviation operations and in compliance with the provisions of these rules and such conditions as the Chairman may impose from time to time.

(1) **General:**

(a) The pilot-in-command shall comply with the relevant laws, regulations and procedures of the States in which the aeroplane is operated.

(b) The Pilot-in-command shall be responsible for the safety of all crew members, passengers and cargo on board when the doors are closed. The pilot-in-command shall also be responsible for the operation and safety of the aeroplane form the moment the aeroplane is ready to move for the purpose of taking off until the moment is finally comes to rest at the end of the flight and the engine(s) used as primary propulsion units are shut down.

(c) If an emergency situation which endangers the safety of the aeroplane or persons necessitates the taking of action which involves a violation of local regulations or procedures, the pilot-in-command shall notify the appropriate local authority without delay. If required by the State in which the incident occurs, the pilot-in-command shall submit a report on any such violation to the appropriate authority of such State; in that event, the pilot-in-command shall also submit a copy of it to the Chairman. Such reports shall be submitted as soon as possible and normally within ten days.

(d) The pilot-in-command shall be responsible for notifying the nearest appropriate authority by the quickest available means of any accident involving the aeroplane resulting in serious injury or death of any person or substantial damage to the aeroplane or property.

(2) **Flight Preparation and in-flight procedures:-**

(a) Adequacy of operation facilities.- The pilot-in-command shall not commence a flight unless it has been ascertained by every reasonable means available that the ground and/or water areas and facilities available and directly required for such flight and for the safe operation of the aeroplane are adequate, including communication facilities and navigation aids.

(b) Aerodrome operation minima.- Except with the specific approval of the Chairman, Pilot-in-command shall not operate to or from an aerodrome using operation minima lower than those, established for that aerodrome.

(c) Briefing.- The pilot-in-command shall ensure that crew members and passengers are made familiar, by means of an oral briefing or by other means, with the location and the use of:

(i) Seat belts; and, as appropriate,
(ii) Emergency exits;
(iii) Life jackets;
(iv) Oxygen dispensing equipment; and
(v) Other emergency equipment provided for individual use, including passenger emergency briefing cards.

(d) The pilot-in-command shall ensure that all persons on board are aware of the location and general manner of use of the principal emergency equipment carried for collective use.

(e) Aeroplane airworthiness and safety precautions.- A flight shall not be commenced until the pilot-in-command is satisfied that:

(i) the aeroplane is airworthy, duly registered and that appropriate certificates with respect thereto are aboard the aero plane;

(ii) the instruments and equipment installed in the aeroplane are appropriate, taking into account the expected flight conditions;

(iii) any necessary maintenance has been performed in accordance with para-(6) of this rules;

(iv) the mass of the aeroplane and center of gravity location are such that the flight can be conducted safety, taking into account the flight condition expected;

(v) any load carried is properly distributed and safely secured; and

(vi) the aeroplane operation limitations, contained in the flight manual, or its equivalent, will not be exceeded.

(f) Weather reports and forecasts.- Before commencing a flight the pilot-in-command shall be familiar with all available meteorological information appropriate to the intended flight. Preparation for a flight away from the vicinity of the place of departure, and for every flight under the instrument flight rules, shall include:

(i) a study of available current weather reports and forecasts; and

(ii) the planning of an alternative course of action to provide for the eventuality that the flight cannot be completed as planned, because of weather conditions.

(g) Limitations imposed by weather conditions.-

(i) Flight in accordance with the visual flight rules.- A flight, except one of purely local character in visual meteorological conditions, to be conducted in accordance with the visual flight rules shall not be commenced unless available current meteorological reports, or a combination of current reports and forecasts, indicate that the meteorological conditions along the route, or that part of the route to be flown under the visual flight rules, will, at the appropriate time, be such as to render compliance with these rules possible.

(ii) Flight in accordance with the instrument flight rules.-

(A) When a destination alternate aerodrome is required.- A flight to be conducted in accordance with the instrument flight rules shall not be commenced unless the available information indicated that conditions, at the aerodrome of intended landing and at least one destination alternate would, at the estimated time of arrival, be at or above the aerodrome operating minima.

(B) When no destination alternate aerodrome is required.- A flight to be conducted in accordance with the instrument flight rules to an aerodrome when no alternate aerodrome is required shall not be commenced unless:

(1) a standard instrument approach procedure is prescribed for the aerodrome of intended landing; and

(2) available current meteorological information indicates that the following meteorological conditions will exist from two hours before to two hours after the estimated time of arrival:

(a) a cloud base of at least 300m (1000 ft) above the minimum associated with the instrument approach procedure; and

(b) visibility of at least 5.5 km or of 4 km more than the minimum associated with the procedure.

(h) Aerodrome operating minima.-

(i) A flight shall not be continued towards the aerodrome of intended landing unless the latest available meteorological information indicates that conditions at that aerodrome, or at least one destination alternate aerodrome, will, at the estimated time of arrival, be at or above that specified aerodrome operating minima.

(ii) An instrument approach shall not be continued beyond the outer marker fix in case of precision approach, or below 300 m (1000ft) above the aerodrome in case of non precision approach, unless the reported visibility or controlling RVR is above the specified minimum.

(iii) If, after passing the outer marker fix in case of precision approach, or after descending below 300 m (1000 ft) above the aerodrome in case of non-precision approach, the reported visibility or controlling RVR falls below the specified minimum, the approach may be continued to DA/H or MDA/H. In any case, an aeroplane shall not continue its approach-to-land beyond a point at which the limits or the aerodrome operating minima would be infringed.

(i) Flight in icing conditions.- A flight to be operated in known or expected icing conditions shall not be commenced unless the aeroplane is certificated and equipped to cope with such conditions.

(j) Destination alternate aerodromes.- For a flight to be conducted in accordance with the instrument flight rules, at least one destination alternate aerodrome shall be selected and specified in the flight plan, unless:

(i) the duration of the flight and the meteorological conditions prevailing are such that there is reasonable certainty that, at the estimated time of arrival at the aerodrome of intended landing, and for a reasonable period before and after such time, the approach and landing may be made under visual meteorological conditions; or

(ii) the aerodrome of intended landing is isolated and there is no suitable destination alternate aerodrome.

(k) Fuel and oil supply.- A flight shall not be commenced unless, taking into account both the meteorological conditions and any delays that are expected in flight, the aeroplane carries sufficient fuel and oil to ensure that it can safely complete the flight, and, as applicable, the following special provisions are complied with:

(i) Flight in accordance with the instrument flight rules. At least sufficient fuel and oil shall be carried to allow the aero plane:

(A) When, in accordance with the exception contained in clause (m) a destination alternate aerodrome is not required, to fly to the aerodrome to

which the flight is planned and thereafter for a period of 45 minutes; or

(B) When a destination alternate aerodrome is required, to fly to the aerodrome to which the flight is planned, thence to an alternate aerodrome, and thereafter for a period of 45 minutes.

(l) Oxygen supply.- The pilot-in-command shall ensure that breathing oxygen is available to crew members and passengers in sufficient quantities for all flights at such altitudes where a lack of oxygen might result in impairment of the faculties of crewmembers or harmfully affect passengers.

(m) Use of oxygen.- All flight crew members, when engaged in performing duties essential to the safe operation of an aeroplane in flight, shall use breathing oxygen continuously whenever the circumstances prevail for which its supply has been required in para (f).

(n) In-flight emergency instruction.- In an emergency during flight, the pilot-in-command shall ensure that all persons on board are instructed in such emergency action as may be appropriate to the circumstances.

(o) Fitness of flight crew members.- The pilot-in-command shall ensuring that a flight:

(i) will not be commenced if any flight crew member is incapacitated from performing duties by any cause such as injury, sickness, fatigue, the effects of alcohol or drugs; and

(ii) will not be continued beyond the nearest suitable aerodrome when flight crew members capacity to perform functions is significantly reduced by impairment of faculties from causes such as fatigue, sickness, lack of oxygen.

(p) Flight crew members at duty stations.-

(i) Take-off and landing.- All flight crew members required to be on flight deck duty shall be at their stations.

(ii) En route.- All flight crew members required to be on flight deck duty shall remain at their stations except when their absence is necessary for the performance of duties in connection with the operation of the aero plane, or for physiological needs.

(iii) Seat belts.- All flight crewmembers shall keep their seat belts fastened when at their stations

(q) Instrument flight procedures.-

(i) One or more instrument approach procedures designed in accordance with the classification of instrument approach and landing operations shall be approved by the Chairman and promulgated to serve each instrument runway or aerodrome utilized for instrument flight operations.

(ii) All aeroplanes operated in accordance with instrument flight rules shall comply with the instrument flight procedures approved by the Chairman.

(r) Instruction- general.- An aeroplane shall not be taxied on the movement area of an aerodrome unless the person at the controls-

(i) has been duly authorized by the owner or the lessee(in the case where it is leased), or a designated agent;

(ii) is fully competent to taxi the aero plane;

(iii) is qualified to use the radio telephone if radio communications are required; and

(iv) has received instruction from a competent person in respect of aerodrome layout, and where appropriate, information on routes, signs, marking, lights, ATC signals and instruction, phraseology and procedures, and is able to conform to the operational standards required for safe aeroplane movement at the aerodrome.

(3) **Aeroplane performance Operating Limitations.-**

(a) An aeroplane shall be operated-

(i) in compliance with the terms of its airworthiness certificate or equivalent approved document;

(ii) within the operation limitations prescribed by the Chairman; and

(iii) unless otherwise authorized by the Chairman within the mass limitations imposed by compliance with the applicable noise certification standards.

(b) Placards, listings, instrument markings, or combinations thereof, containing those operating limitations prescribed by the Chairman for visual presentation, shall be displayed in the aero plane.

(4) **Aeroplane Instruments and Equipment.-**

(a) All aero planes on all flights.-

(i) General.- In addition to the minimum equipment necessary for the issuance of a certificate of airworthiness, the instruments, equipment and flight documents prescribed in the following paragraphs shall be installed or carried, as appropriate, in aeroplane according to the aeroplane used and to the circumstances under which the flight is to be conducted. The prescribed instruments and equipment, including their installation, shall be approved or accepted by the Chairman.

(ii) Instruments.- An aeroplane shall be equipped with instruments which will enable the flight crew to control the flight path of the aero plane, carry out any required procedural manoeuvre, and observe the operating limitations of the aeroplane in the expected operating condition.

(iii) Equipment.- All aeroplanes on all flights shall be equipped with-

(A) an accessible first-aid kit;

(B) portable fire extinguishers of a type which, when discharged, will not cause dangerous contamination of the air within the aeroplane. At least one shall be located in:

(1) the pilot's compartment; and

(2) each passenger compartment that is separate from the pilot's compartment and not readily accessible to the pilot or co-pilot;

(C) (1) a seat or berth for each person over an age as determined by the Chairman.

(2) a seat belt for each seat and restraining belts for each berth;

(D) the following manuals, charts and information:

(1) the flight manual or other documents or information concerning any operating limitation prescribed for the aeroplane by the Chairman required for the application of rule109(1);

(2) current and suitable charts for the route of the proposed flight and all routes along which it is reasonable to expect that the flight may be diverted;

(3) procedures, as prescribed in part–XI of this Rules, for pilots-in-command of intercepted aircraft; and

(4) visual signals for use by intercepting and intercepted aircraft, as contained in part-XI of this Rules.

(E) spare electrical fuses of appropriate ratings for replacement of those accessible in flight.

(iv) Marking of break-in points.- In areas of the fuselage suitable for break-in by rescue crews in an emergency shall be marked on an aero plane. Such areas shall be marked as per ICAO SARP's.

(b) All aeroplanes operated as VFR flights.- All aero planes when operated as VFR flights shall be equipped with-

(i) a magnetic compass;

(ii) an accurate timepiece indicating the time in hours, minutes and seconds;

(iii) a sensitive pressure altimeter;

(iv) an airspeed indicator; and

(v) such additional instruments or equipment as may be prescribed by the appropriate authority.

(c) All aero planes on flights over water.- All seaplanes for all flights shall be equipped with-

(i) one life jacket, or equivalent individual floatation device, for each person on board, stowed in a position readily accessible from the seat or berth;

(ii) equipment for making the sound signals prescribed in the International Regulations for preventing Collisions at Sea, where applicable;

(iii) one anchor;

(iv) one sea anchor (drogue) when necessary to assist in maneuvering.

(d) Landplanes.- All single-engine landplanes when flying en route over water beyond gliding distance from the shore should carry one life jacket or equivalent individual floatation device for each person an board, stowed in a position easily accessible from the seat or berth of the person for whose use it is provided.

(e) All aero planes on extended flights over water.- All aero planes when operated on extended flights over water shall be equipped with-

(i) when the aeroplane may be over water at a distance of more than 93 Km (50 NM) away from land suitable for making an emergency landing: One life jacket or equivalent individual floatation device for each person on board, stowed in a position easily accessible from the seat or berth of the person for whose use it is provided;

(ii) when over water away from land suitable for making an emergency landing at a distance of more than 185 Km (100 NM), in the case of single-engine aero planes, and more than 370 km (200NM), in the case of multi-engine aeroplanes capable of continuing flight with one engine inoperative:

(A) life- saving rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in emergency, provided with such life saving equipment including means of sustaining life as is appropriate to the flight to be undertaken; and

(B) equipment for making the pyrotechnical distress signals described in part-II of these rules.

(f) All aero planes on flights over designated land areas.- Aero planes when operated across land areas which have been designated by the state concerned as areas in which search and rescue would be especially difficult shall be equipped with such signaling devices and life-saving equipment (including means of sustaining life) as may be appropriate to the area over flown.

(g) All aero planes on high altitude flights.- All aero planes intended to be operated at high altitudes shall be equipped with oxygen storage and dispensing apparatus capable of storing and dispensing the oxygen supplies required in sub-rule (2)(l).

(h) Aero planes for which the individual certificate of airworthiness is first issued on or after 1 January 1990.- Pressurized aero planes intended to be operated at flight

altitudes at which the atmospheric pressure is less than 376 hpa shall be equipped with a device to provide positive warning to the flight crew of any dangerous loss of pressurization.

(i) Aero planes for which the individual certificate of airworthiness is first issued before 1 January 1990.- Pressurized aero planes intended to be operated at flight altitudes at which the atmospheric pressure is less than 376 hpa should be equipped with a device to provide positive warning to the flight crew of any dangerous loss of pressurization.

(j) All aero planes operated in accordance with the instrument flight rules.- All aero planes when operated in accordance with the instrument flight rules or when the aeroplane cannot be maintained in a desired attitude without reference to one or more flight instruments, shall be equipped with-

(i) a magnetic compass;

(ii) an accurate timepiece indication the time in hours, minutes and seconds;

(iii) a sensitive pressure altimeter;

(iv) an airspeed indicating system with a means of preventing malfunctioning due to either condensation or icing;

(v) a turn and slip indicator;

(vi) an attitude indicator (artificial horizon);

(vii) a heading indicator (directional gyroscope);

(viii) means of indicating whether the supply of power to the gyroscopic instruments is adequate;

(ix) a means of indicating in the flight crew compartment the outside air temperature;

(x) a rate-or-climb and descent indicator; and

(xi) such additional instruments or equipment as may be prescribed by the appropriate authority.

(k) All aero planes when operated at night.- All aero planes, when operated at night, shall be equipped with-

(i) all the equipment specified in para-(j).

(ii) the lights required by part-II of this Rules for aircraft in flight or operating on the movement area of an aerodrome;

(iii) a landing light;

(iv) illumination for all flight instruments and equipment that are essential for the safe operation of the aero plane;

(v) lights in all passenger compartments; and

(vi) an electric torch for each crew member station.

(l) All aero planes complying with the noise certification Standards in Part-XVI of these rules: An aeroplane shall carry a document attesting noise certification.

(m) Aero planes required to be equipped with ground proximity warning systems (GPWS).-

(i) All turbine-engine aeroplanes of a maximum certificated take-off mass in excess of 5700 kg or authorized to carry more than nine passengers, for which the individual certificate of airworthiness is first issued on or after 1, January 2004, shall be equipped with a ground proximity warning system which has a forward looking terrain avoidance function.

(ii) All turbine- engine aeroplanes of a maximum certificated take–off mass in excess of 5700 kg or authorized to carry more than nine passengers, shall be equipped with a ground proximity warning system which has a forward looking terrain avoidance function.

(iii) All turbine – engine aeroplanes of a maximum certificated take-off mass of 5 700 kg or less and authorized to carry more than five but not more than nine passengers should be equipped with a ground proximity warning system which has a forward looking terrain avoidance function.

(iv) All piston–engine aeroplanes of a maximum certificated take-off mass in excess of 5700 kg or authorized to carry more than nine passengers should be equipped with a ground proximity warning system which has a forward looking terrain avoidance function.

(v) A ground proximity warning system shall provide automatically a timely and distinctive warning to the flight crew when the aeroplane is in potentially hazardous proximity to the earth s surface.

(vi) A ground proximity warning system shall provide, as a minimum, warnings of at least the following circumstances-

(A) excessive descent rate;
(B) excessive altitude loss after take – off or go-around; and (C) unsafe terrain clearance.

(n) Flight data recorders-types.-

(i) A type 1 flight data recorder shall record the parameters required to determine accurately the aeroplane flight path, speed, attitude, engine power and operation.

(ii) A type II flight data recorder shall record the parameters required to determine accurately the aeroplane flight path, speed, attitude, engine power and configuration of lift and drag devices.

(iii) The use of engraving metal foil flight data recorders, flight data recorders using frequency modulation (FM) and photographic film flight data recorders shall be discontinued.

(iv) All aeroplanes for which the individual certificate of airworthiness is first issued after 1 January 2005, which utilize data link communications and are required to carry a cockpit voice recorder (CVR), shall record on a flight recorder, all data link communications to and from the aero plane. The minimum recording duration shall be equal to the duration of the CVR, and shall be correlated to the recorded cockpit audio.

(v) All aeroplanes which utilize data link communications and are required to carry a CVR, shall record on a flight recorder, all data link communications to and from the aero plane. The minimum recording duration shall be equal to the duration of the CVR, and shall be correlated to the recorded cockpit audio.

(vi) Sufficient information to derive the content of the data link communications message, and whenever practical, the time the message was displayed to or generated by the crew shall be recorded.

(vii) A type 1A flight data recorder shall record the parameters required to determine accurately the aeroplane flight path, speed, attitude, engine power, configuration and operation. The parameters that satisfy the requirements for a Type 1A flight data recorder are listed in the paragraphs below. The parameters without an asterisk (*) are mandatory parameters which shall be recorded. In addition, the parameters designated by an asterisk (*) shall be recorded if an information data source for the parameter is used by aeroplane systems or the flight crew to operate the aeroplane.

(viii) The following parameters satisfy the requirements for flight path and speed:

(A) Pressure altitude;
(B) Indicated airspeed or calibrated airspeed;
(C) Air-ground status and each landing gear air-ground sensor when practicable;
(D) Total or outside air temperature;

(E) Heading (primary flight crew reference) ;
(F) Normal acceleration;
(G) Lateral acceleration;
(H) Longitudinal acceleration (body axis);
(I) time or relative time count;
(J) Navigation data* : drift angle, wind speed, wind direction, latitude/longitude;
(K) Groundspeed*;
(L) Radio altitude*.

(ix) The following parameters satisfy the requirements for attitude:

(A) Pitch attitude;
(B) Roll attitude;
(C) Yaw or sideslip angle*;
(D) Angle of attack*.

(x) The following parameters satisfy the requirements for engine power:

(A) Engine thrust/power: propulsive thrust /power on each engine, cockpit thrust/power level position;

(B) Thrust reverse status*;
(C) Engine thrust command*;
(D) Engine thrust target*;
(E) Engine bleed valve position*;
(F) Additional engine parameters*: EPR, N1, indicated vibration level, N2 , EGT, TLA, fuel flow, fuel cut-off lever position, N3.

(xi) The following parameters satisfy the requirements for configuration:

(A) Pitch trim surface position;
(B) Flaps trailing edge flap position, cockpit control selection;
(C) Slats8: leading edge flap (slat) position, cockpit control selection;
(D) Landing gear*: landing gear, gear selector position;
(E) Yaw trim surface position*;
(F) Roll trim surface position*;
(G) Cockpit trim control input position pitch*;
(H) Cockpit trim control input position roll*;
(I) Cockpit trim control input position yaw*;
(J) Ground spoiler and speed brake*: ground spoiler position, ground spoiler selection, speed brake position, speed brake selection;
(K) De-icing and /or anti-icing systems selection*;
(L) Hydraulic pressure (each system)*;
(M) Fuel quantity*;
(N) DC electrical bus status*;
(O) APU bleed valve position*;

(P) Computed center of gravity*.

(xii) The following parameters satisfy the requirements for operation:

(A) Warnings;
(B) Primary flight control surface and primary flight control pilot input: pitch axis, roll axis, yaw axis;
(C) Marker beacon passage;
(D) Each navigation receiver frequency selection;
(E) Manual radio transmission keying and CVR/FDR synchronization reference;
(F) Autopilot/auto throttle/AFCS mode and engagement status*;
(G) Selected barometric setting*: pilot, first officer;
(H) Selected altitude (all pilot selectable modes of operation)*;
(I) Selected mach (all pilot selectable modes of operation)*;
(J) Selected vertical speed (all pilot selectable modes of operation)*;
(K) Selected flight path (all pilot selectable modes of operation)*: course/DSTRK, path angle;
(L) Selected decision height*;
(M) EFIS display format* pilot, first officer;
(N) Multifunction; engine / alerts display format*;
(O) GPWS/ TAWS/ GCAS status*: Selection of terrain display mode including pop-up display status, terrain alerts, both cautions and warnings, and advisories, on/off switch position;
(P) Low pressure warning*: hydraulic pressure, pneumatic pressure;
(Q) Computer failure*;
(R) Loss of cabin pressure*;
(S) TCAS/ACAS (traffic alert and collision avoidance system/ airborne collision avoidance system)*;
(T) Icc detection;
(U) Engine warning each engine vibration*;
(V) Engine warning each engine over temperature*;
(W) Engine warning each engine oil pressure low*;
(X) Engine warning each engine over speed*;
(Y) Wind shear warning*;
(Z) Operational stall protection, stick shaker and pusher activation*;
(AA) All cockpit flight control input forces*: control wheel, control column, rudder pedal cockpit input forces;
(BB) Vertical deviation*: ILS glide path MLS elevation, GNSS approach path;
(CC) Horizontal deviation*: ILS localizer, MLS azimuth, GNSS approach path;
(DD) DME 1 and2 distances*;
(EE) Primary navigation system reference*: GNSS, INS, VOR/DME, MLS, Loran C, ILS;
(FF) Brakes*: left and right brake pressure, left and right brake pedal position;

(GG) Date*;
(HH) Even marker*;
(II) Head up display in use*;
(JJ) Para visual display on*.

(o) Flight data recorders – duration.- Types I and II flight data recorders shall be capable of retaining the information recorded during at least the last 25 hours of their operation.

(i) Flight data recorders– aeroplanes for which the individual certificate of airworthiness is first issued on or after 1 January 1989.- All aeroplanes of a maximum certificated take off mass of over 27000 kg shall be equipped with a Type I flight data recorder.

(q) Flight data recorders-aeroplanes for which the individual certificate of airworthiness is first issued after 1 January 2005.- All aero planes of maximum certificated take-off mass of over 5700 kg shall be equipped with a type IA flight data recorder.

(p) Cockpit voice recorders- aeroplanes for which the individual certificate of airworthiness is first issued on or after 1 January 1987.- All aeroplanes of a maximum certificated take-off mass of over 27000 kg shall be equipped with a cockpit voice recorder, the objective of which is the recording of the aural environment on the flight deck during flight time.

(q) Cockpit voice recorders- duration.-

(i) A cockpit voice recorder shall be capable of retaining the information recorded during at least the last 30 minutes of its operation.

(ii) A cockpit voice recorder, installed in aero planes of a maximum certificated take-off mass of over 5700 kg for which the individual certificate of airworthiness is first issued after 1 January 2003, shall be capable of retaining the information recorded during at least the last two hours of its operation.

(r) Flight recorders- construction and installation.- Flight recorders shall be constructed, located and installed so as to provide maximum practical protection for the recordings in order that the recorded information may be preserved, recovered and transcribed. Flighty recorders shall meet the prescribed crashworthiness and fire protection specifications.

(s) Flight recorders – operation.-

(i) Flight recorders shall not be switched off during flight time.

(ii) To preserve flight recorder records, flight recorders shall be de-activated

upon completion of flight time following an accident or incident. The flight recorders shall not be re-activated before their disposition as determined in accordance with part-XIII of this Rules.

(iii) Flight recorder records.- The pilot-in-command shall ensure, to the extent possible, in the event the aeroplane becomes involved in an accident or incident, the preservation of all related flight recorder records, and if necessary the associated flight recorders, and their retention in safe custody pending their disposition as determined in accordance with part-XIII of this Rules.

(t) Flight recorders- continued serviceability.- Operational checks and evaluations of recordings from the flight data and cockpit voice recorder systems shall be conducted to ensure the continued serviceability of the recorders.

(u) Mach number indicator.- All aero planes with speed limitations expressed in terms of Mach number shall be equipped with a Mach number indicator.

(v) Emergency locator transmitter (ELT).-

(i) All aero planes for which the individual certificate of airworthiness is first issued after 1 January 2002, operated on extended flights over water as described in para (e) shall be equipped with one automatic ELT.

(ii) All aero planes operated on extended flights over water as described in para-(e) and when operated on flights over designated land areas as described in para-(f) shall be equipped with one automatic ELT.

(w) Unless exempted by the Chairman, all aeroplanes shall be equipped with a pressure-altitude reporting transponder which operates in accordance with the relevant provisions of part-X of these Rules.

(x) All turbine-engine aero planes of a maximum certificated take-off mass in excess of 15000 kg, or authorized to carry more than 30 passengers, for which the individual airworthiness certificate is first issued after 1 January 2007, shall be equipped with an airborne collision avoidance system (ACAS II) or such other equipment as approved by ICAO .

(5) **Aeroplane Communication and Navigation Equipment.-**

(a) Communication equipment.-

(i) An aeroplane to be operated in accordance with the instrument flight rules or at night shall be provided with radio communication equipment. Such equipment shall be capable of conducting two-way communication with aeronautical stations.

(ii) When compliance with para-(a) requires that more than one communication equipment unit be provided, each shall be independent of the other or others to the extent that a failure in any one will not result in failure of any other.

(iii) Unless exempted by the Chairman, an aeroplane to be operated in accordance with the visual flight rules, but as a controlled flight, shall be provided with radio communication equipment capable of conducting two-way communication, at any time during flight, with aeronautical stations.

(iv) Unless exempted by the Chairman, an aeroplane to be operated as per the provisions of (4)(d) or (4)(e) shall be provided with radio communication equipment capable of conducting two-way communication at any time during flight with aeronautical stations.

(v) The radio communication equipment required in accordance with (5)(a)(i) to (iv) shall provide for communication on the aeronautical emergency frequency 121.5 MHZ.

(b) Navigation equipment.-

(i) An aeroplane shall be provided with navigation equipment which will enable it to proceed:

(A) in accordance with the flight plan; and
(B) In accordance with the requirements of air traffic services;

except when, if not so precluded by the appropriate authority navigation for flights under the visual flight rules is accomplished by visual reference to landmarks at least every 110 km (60 NM).

(ii) For flights in defined portions of airspace or on routes where an RNP type has been prescribed, an aeroplane shall, in addition to the requirements specified in para-(b):-

(A) be provided with navigation equipment which will enable it to operate in accordance with the prescribed RNP type (s); and

(B) be authorized by the Chairman for operations in such airspace.

(iii) For flights in defined portions of airspace where, based on Regional Air Navigation Agreement, minimum navigation performance specifications (MNPS) are prescribed, an aeroplane shall be provided with navigation equipment which:

(A) continuously provides indications to the flight crew of adherence to or departure from track to the required degree of accuracy at any point along that track; and

(B) has been authorized by the state of Registry for MNPS operations concerned.

(iv) For flights in defined portions of airspace where, based on Regional Air navigation Agreement, a reduced vertical separation minimum (RVSM) of 300 m (1000 ft) is applied between FL 290 and FL 410 inclusive, an aero plane:

(A) shall be provided with equipment which is capable of:

(1) indicating to the flight crew the flight level being flown;
(2) automatically maintaining a selected flight level;
(3) providing an alert to the flight crew when a deviation occurs from the selected flight level. The threshold for the alert shall not exceed +/- 90 m (300 ft); and
(4) automatically reporting pressure-altitude; and

(B) shall be authorized by the Chairman for operation in the airspace concerned.

(v) Prior to granting the RVSM approval required in accordance with para-(iv), the state shall be satisfied that:

(A) the vertical navigation performance capability of the aeroplane satisfies the requirements specified in ANO.

(B) the operator has instituted appropriate procedures in respect of continued airworthiness (maintenance and repair) practices and programmers; and

(C) the operator has instituted appropriate flight crew procedures for operations in RVSM airspace.

(vi) An operator shall not operate flights in RVSM airspace unless-

(A) the aircraft is RVSM approved and
(B) Crews are certified to operate in RVSM airspace.

(vii) The aeroplane shall be sufficiently provided with navigation equipment to ensure that, in the event of the failure of one item of equipment at any stage of the flight , the remaining equipment will enable the aeroplane to navigation accordance with para-(b) and where applicable para-(b)(ii), (b)(iii) & (b)(iv).

(viii) On flights in which it is intended to land in instrument meteorological conditions, an aeroplane shall be provided with radio equipment capable of receiving signals providing guidance to point from which a visual landing can be effected. This equipment shall be capable of providing such guidance for each

aerodrome at which it is intended to land in instrument meteorological conditions and for any designated alternate aerodromes.

(6) **Aeroplane Maintenance.-**

(a) Responsibilities.-

(i) The owner of an aero plane, or in the case where it is leased, the lessee, shall ensure that-

(A) the aeroplane is maintained in an airworthy condition;
(B) the operational and emergency equipment necessary for the intended flight is serviceable;
(C) the Certificate of Airworthiness of the aeroplane remains valid; and
(D) the maintenance of the aeroplane is performed in accordance with a maintenance programme acceptable to the Chairman.

(ii) The aeroplane shall not be operated unless it is maintained and released to service under a system acceptable to the Chairman.

(iii) When the maintenance release is not issued by an approved maintenance organization in accordance with part-VIII of these Rules, the person signing the maintenance release shall be licensed in accordance with Part-I of these Rules.

(b) Maintenance records.-

(i) The owner shall ensure that the following records are kept for the periods mentioned in (b)(ii):

(A) the total time in service (hours, calendar time and cycles, as appropriate) of the aeroplane and all life limited components;

(B) the current status of compliance with all mandatory continuing airworthiness information;

(C) appropriate details of modifications and repairs;

(D) the time in service (hours, calendar time and cycles, as appropriate) since last overhaul of the aeroplane or its components subject to a mandatory overhaul life;

(E) the current status of the aero planes compliance with the maintenance programme; and

(F) the detailed maintenance records to show that all requirements for signing a maintenance release have been met.

(ii) The records referred to in para-(i)(A) to (F) shall be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service, and the records in 6.4 (f) for a minimum period of one year after the signing of the maintenance release.

(iii) The lessee of an aeroplane shall comply with the requirements of para-(i) and (ii) as applicable, while the aeroplane is leased.

(c) Continuing airworthiness information.- The owner of an aeroplane over 5700 kg maximum, certificated take-off mass, or in the case where it is leased, the lessee, shall, as prescribed by the Chairman, ensure that the information resulting from maintenance and operational experience with respect to continuing airworthiness, is transmitted as required by part-VIII of this Rules.

(d) Modifications and repairs.- All modifications and repairs shall comply with airworthiness requirements acceptable to the state of Registry. Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained.

(e) Maintenance release.-

(i) A maintenance release shall be completed and signed, as prescribed by the Chairman to certify that the maintenance work performed has been completed satisfactorily.

(ii) A maintenance release shall contain a certification including:

(A) basic details of the maintenance carried out;
(B) date such maintenance was completed;
(C) when applicable, the identity of the approved maintenance organization; and
(D) the identity of the person or persons signing the release.

(7) **Aeroplane Flight crew.-**

(a) The pilot-in-command shall ensure that the licenses of each flight crew member have been issued or rendered valid by the Chairman and are properly rated and of current validity, and shall be satisfied that flight crew members have maintained competence.

(b) The Pilot-in-command of an aeroplane equipped with an airborne collision avoidance system (ACAS II) or such other equipment as approved by ICAO, shall ensure that each flight crew member has been appropriately trained to competency in the use of ACAS II or such other equipment as approved by ICAO, and the avoidance of collisions.

(c) Composition of the flight crew.- The number and composition of the flight crew shall not be less than that specified in the flight manual or other documents associated with the certificate of airworthiness.

110. Aerial Work Operations.- An aircraft shall not be used in aerial work operations except under the authority of, and in accordance with a licence or certificate issued by the Chairman for aerial work operations and in compliance with the provisions of these rules and such conditions as the Chairman may impose from time to time.

111. Non-scheduled Air Services Operations.- (1) An aircraft shall not be used in non-scheduled air services operations except under the authority of, and in accordance with a licence issued by the Chairman for air transport operations and in compliance with the provisions of these rules and such conditions as the Chairman may impose from time to time.

(2) Unless authorized by the Chairman, the holder of a non-scheduled air services operations licence shall not engage in air transport operations over a route or section of a route on which the holder of a scheduled air services licence is operating.

Explanation: Non-scheduled air services operations also include Charter Operations using a chartered aircraft including a foreign registered aircraft under a contractual arrangements between a duly certificated or licensed air carrier and an entity hiring or leasing its aircraft.

112. Operational Certification and Supervision.- (1) An operator shall not engage in commercial air transport operations unless in possession of a valid air operator certificate issued by Chairman.

(2) The air operator certificate shall authorize the operator to conduct commercial air transport operations in accordance with specified authorizations, conditions and limitations.

(3) Civil Aviation Authority, Bangladesh shall recognize as valid an air operator certificate issued by a Contracting State, provided that the requirements under which the certificate was issued are at least equal to the applicable Standards specified by Chairman.

(4) The issue of an air operator certificate by Chairman shall be dependent upon the operator demonstrating an adequate organization, method of control and supervision of flight operations, training programme as well as ground handling and maintenance arrangements consistent with the nature and extent of the operations specified.

(5) The continued validity of an air operator certificate shall depend upon the operator maintaining the requirements of sub rule (4) of rules under the supervision of the State of the Operator.

(6) The air operator certificate shall contain at least the following:

(a) operator's identification (name, location);

(b) date of issue and period of validity;

(c) description of the types of operations authorized;

(d) the type(s) of aircraft authorized for use; and

(e) authorized areas of operation or routes.

(7) Certification for operation of aircraft is to be obtained through the established system of Civil Aviation Authority, Bangladesh. All operators shall be subjected to continued surveillance by Chairman to ensure that the required standards of operations established in this rules are maintained.

113. Approval of contract regarding operations.- The holder of a Commercial Air Transport Operations, Aerial Work Operations or General Aviation Operations licence may, subject to the approval of the Chairman, enter into a contract or arrangement with other persons under whom the holder may operate the service for which the licence was issued.

114. General condition of flight.- Subject to the provisions of rule 115, a Bangladesh aircraft shall not commence a flight unless;

(a) it has a nationality mark and a registration mark pointed on, or affixed to it in accordance with part VII of these rules;

(b) there is in force in respect of it a certificate of airworthiness issued under rule 186;

(c) there is in force in respect of it a maintenance release issued by virtue of clause (a) of sub-rule (7) of rule 201 covering the period of the flight and the flight is not in contravention of any condition set out or referred to in the maintenance release or an approve alternative document;

(d) any maintenance, other than approved maintenance carried out by the pilot-in-command, required to be carried out before the commencement of the flight, or required to be carried out before the expiration of the flight,or required to be complied with any requirement or condition imposed under these rules with respect to the aircraft, has been certified in accordance with system of certification under rule 192 or in a manner acceptable to the chairman under sub-rule (3) of rule 199 have been completed; and

(e) it compiles with these rules in respect of the number and description of and holding of license and ratings by, the operating crew.

115. Permission for certain flights

(1) The chairman may, on the application of a person, give permission to fly an aircraft in Bangladesh on a particular flight for the purpose of –

(a) delivering the aircraft to a person under a contract of sale or with a view to sale;

(b) carrying out a demonstration, experiment or test in respect of the aircraft;

(c) bringing the aircraft to a place where a demonstration experiment or test with respect to the aircraft is to take place;

(d) bringing the aircraft to a place at which maintenance on the aircraft may be carried out;

(e) assisting in searching for, bringing aid to or rescuing persons in danger on a particular occasion; or

(f) assisting in dealing with a state of emergency.

(2) While giving permission for a flight a flight under sub-rule (1), the chairman may direct that the requirements of rules 114 and 120 do not apply in relation to such flight.

(3) While giving permission for a flight under sub-rule (1) the chairman may give such directions with respect to the flight as he thinks necessary for the purpose of ensuring the safety of air navigation.

116. Compliance with laws, regulations and procedures.- (1) An operator shall ensure that all employees when abroad know that they must comply with the laws, regulations and procedures of those States in which operations are conducted.

(2) An operator shall ensure that all pilots are familiar with the laws, regulations and procedures, pertinent to the performance of their duties, prescribed for the areas to be traversed, the aerodromes to be used and the air navigation facilities relating thereto. The operator shall ensure that other members of the flight crew are familiar with such of these laws, regulations and procedures as are pertinent to the performance of their respective duties in the operation of the aeroplane.

(3) An operator or a designated representative shall have responsibility for operational control.

(4) If an emergency situation, which endangers the safety of the aeroplane or persons, necessitates the taking of action, which involves a violation of local regulations or procedures, the pilot-in-command shall notify the appropriate local authority without delay. If required by the State in which the incident occurs, the pilot-in-command shall submit a report on any such violation to the appropriate authority of such State; in that event, the pilot-in-command shall also submit a copy of it to the Chairman. Such reports shall be submitted as soon as possible and normally within ten days.

(5) Operators shall ensure that pilot-in-command have available on board the aeroplane

all the essential information concerning the search and rescue services in the area over which the aeroplane will be flown.

(6) Operators shall ensure that flight crew members demonstrate the ability to speak and understand the language used for aeronautical radiotelephony communications as specified in the Part-I of these rule.

(7) An operator shall ensure that a flight will not be commenced unless it has been ascertained by every reasonable means available that the ground and/or water facilities available and directly required on such flight, for the safe operation of the aeroplane and the protection of the passengers, are adequate for the type of operation under which the flight is to be conducted and are adequately operated for this purpose.

(8) An operator shall ensure that any inadequacy of facilities observed in the course of operations is reported to the authority responsible for them, without undue delay.

(9) Subject to their published conditions of use, aerodromes and their facilities shall be kept continuously available for flight operations during their published hours of operations, irrespective of weather conditions.

(10) An aircraft, which possess the nationality of a Contracting State, shall not fly within, or depart from, Bangladesh unless it complies with the provisions of these rules, which are expressly applicable to such aircraft, and with the requirements of the Convention in respect of:

(a) its nationality and registration mark;

(b) its certificate of airworthiness;

(c) the number and description of, and the holding of licenses and ratings by the operating crew;

(d) the documents to be carried;

(e) the flight and manoeuver of aircraft; and

(f) the provision of radio systems.

(11) Responsibility for operational control shall be delegated only to the pilot-in-command and to a flight operations officer/flight dispatcher if an operator's approved method of control and supervision of flight operations requires the user of flight operations officer/flight dispatcher personnel.

(12) If an emergency situation which endangers the safety of the aeroplane or persons becomes known first to the flight operations officer/flight dispatcher, action by that person in accordance with sub-rule (4)(d) and (4)(e) of rule 127 shall include, where necessary, notification to the appropriate authorities of the nature of the situation without delay, and requests for assistance if required.

117. Operation of State aircrafts. A State aircraft, other than a Bangladesh military aircraft shall not fly over or land in Bangladesh except on the express invitation of the Government, but any aircraft so flying or landing on such invitation or with such permission shall be exempted from the provision of these rules to such extent as is specified in the invitation or permission.

118. Operation of pilot less aircraft.-An aircraft capable of being flown without a pilot shall not be flown without a pilot within Bangladesh except with the authorisation in writing of the of the chairman and in accordance with such conditions as he may specify in the instrument of authorization**.**

119. Flight Crew Operating Manuals.- Subject to the provisions of rule 211, the Chairman for the purpose of ensuring the safety of air navigation may direct the owner or operator of an aircraft registered in Bangladesh to make any alteration in the Flight Crew Operating Manual or equivalent document for that aircraft.

120. Documents carried in aircraft.- (1) Subject to this rule and rule 115, an aircraft registered in Bangladesh shall, when flying, carry:

(a) its certificate of registration;

(b) its certificate of airworthiness;

(c) the appropriate licenses for each member of the crew;

(d) its journey log book;

(e) if it is equipped with radio apparatus, the aircraft radio station license;

(f) if it carries passengers, a list of their names and places of embarkation and destination;

(g) if it carries cargo, a manifest and detailed declarations of the cargo; and

(h) such other documents as specified by the Chairman.

(2) An aircraft operating wholly within Bangladesh is not required, when flying to carry the documents specified in paragraphs (a), (f) and (g) of sub-rule (1).

121. Aerodrome operating minima.- (1) Chairman shall require that the operator establish aerodrome operating minima for each aerodrome to be used in operations, and shall approve the method of determination of such minima. Such minima shall not be lower than any that may be established for such aerodromes by the State in which the aerodrome is located, except when specifically approved by that State.

(2) Chairman shall require that in establishing the aerodrome operating minima, which will apply to any particular operation, full account shall be taken of:

(a) the type, performance and handling characteristics of the aeroplane;

(b) the composition of the flight crew, their competence and experience;

(c) the dimensions and characteristics of the runways which may be selected for use;

(d) the adequacy and performance of the available visual and non-visual ground aids;

(e) the equipment available on the aeroplane for the purpose of navigation and/or control of the flight path during the approach to landing and the missed approach;

(f) the obstacles in the approach and missed approach areas and the obstacle clearance altitude/height for the instrument approach procedures;

(g) the means used to determine and report meteorological conditions; and

(h) the obstacles in the climb-out areas and necessary clearance margins.

(3) Category II and Category III instrument approach and landing operations shall not be authorized unless RVR information is provided.

(4) For instrument approach and landing operations, aerodrome operating minima below 800 m visibility should not be authorized unless RVR information is provided.

(5) A flight shall not be continued towards the aerodrome of intended landing, unless the latest available information indicates that at the expected time of arrival, a landing can be effected at that aerodrome or at least one destination alternate aerodrome, in compliance with the operating minima established in accordance with sub-rule (1) of this rule.

(6) An instrument approach shall not be continued beyond the outer marker fix in case of precision approach, or below 300 m (1,000 ft) above the aerodrome in case of non-precision approach, unless the reported visibility or controlling RVR is above the specified minimum.

(7) If, after passing the outer marker fix in case of precision approach, or after descending below 300m (1,000 ft) above the aerodrome in case of non-precision approach, the reported visibility or controlling RVR falls below the specified minimum, the approach may be continued to DA/H or MDA/H. In case, an aeroplane shall not continue its approach-to-land at any aerodrome beyond a point at which the limits of the operating minima specified for that aerodrome would be infringed.

Note: Where RVR is used, the controlling RVR is the touchdown RVR.

122. Carriage of firearms.- No person including a flight crew member, shall, except with the permission of the Chairman, carry in aircraft any firearm in personal possession. This shall not include the firearm deposited to the pilot-in-command for safe custody for the duration of the flight.

123. Operating Instructions.- (1) An operator shall ensure that all operations personnel are properly instructed in their particular duties and responsibilities and the relationship of such duties to the operation as a whole.

(2) Chairman shall establish a safety programme in order to achieve an acceptable level of safety in the operation of aircraft and will ascertain the acceptable level of safety to be achieved by an operator.

(3) An operator shall implement a safety management system acceptable to the Chairman that, as a minimum:

(a) identifies safety hazards;

(b) ensures that remedial action necessary to maintain an acceptable level of safety is implemented;

(c) provides for continuous monitoring and regular assessment of the safety level achieved; and

(d) aims to make continuous improvement to the overall level of safety.

(4) A safety management system shall clearly define lines of safety accountability throughout the operator's organization, including a direct accountability for safety on the part of senior management.

(5) An operator of an aeroplane of a certificated take-off mass in excess of 20000 kg should establish and maintain a flight data analysis programme as part of its accident prevention and flight safety programme.

(6) An operator of an aeroplane of a maximum certificated take-off mass in excess of 27000 kg shall establish and maintain a flight data analysis programme as part of its accident prevention and flight safety programme. An operator may contract the operation of a flight data analysis programme to another party while retaining overall responsibility for the maintenance of such a programme.

(7) A flight data analysis programme shall be non-punitive and contain adequate safeguards to protect the source(s) of the data.

(8) An operator shall establish a flight safety documents system, for the use and guidance of operational personnel.

(9) An operator shall establish minimum flight altitude for those routes flown but they shall not be less than those established by the State responsible for those rules, as part of its safety management systems.

(10) An operator shall specify the method by which it is intended to determine minimum flight altitudes for operations conducted over routes for which minimum flight altitudes have not been established by the State flown over or the responsible State, and shall include this method in the operations manual. The minimum flight altitudes determined in accordance with the above method shall not be lower than specified in Part II.

(11) The method for establishing the minimum flight altitudes should be approved by the Chairman. The Chairman should approve such method only after careful consideration of the probable effects of the following factors on the safety of the operation in question:

(a) the accuracy and reliability with which the position of the aeroplane can be determined;

(b) the inaccuracies in the indications of the altimeters used;

(c) the characteristics of the terrain (e.g. sudden changes in the elevation);

(d) the probability of encountering unfavorable meteorological conditions (e.g. severe turbulence and descending air currents);

(e) possible inaccuracies in aeronautical charts; and

(f) airspace restrictions.

(12) One or more instrument approach procedures designed in accordance with the classification of instrument approach and landing operations shall be approved and promulgated by the chairman in which the aerodrome is located to serve each instrument runway or aerodrome utilized for instrument flight operations.

(13) All aeroplanes operated in accordance with instrument flight rules shall comply with the instrument flight procedures approved by the State in which the aerodrome is located.

(14) An operator shall establish operational procedures designed to ensure that an aeroplane being used to conduct precision approaches crosses the threshold by a safe margin, with the aeroplane in the landing configuration and attitude.

(15) The operator should issue operating instructions and provide information on aeroplane climb performance with all engines operating to enable the pilot-in-command to determine the climb gradient that can be achieved during the departure phase for the existing

take-off conditions and intended take-off technique. This information should be included in the operations manual.

(16) (a) Aeroplane operating procedures for noise abatement should comply with the provisions of rules mentioned in part XVI.

(b) Noise abatement procedures specified by an operator for any one aeroplane type should be the same for all aerodromes.

(17) Operational instructions involving a change in the ATS flight plan shall, when practicable, be coordinated with the appropriate ATS unit before transmission to the aeroplane. When this is not possible pilot shall obtain and appropriate clearance from a ATS unit, if applicable, before making a change in flight plan.

(18) An aeroplane shall not be operated under the IFR or at night by a single pilot unless approved by the Chairman.

(19) An aeroplane shall not be operated under the IFR or at night by a single pilot unless:

(a) the flight manual does not require a flight crew of more than one;

(b) the aeroplane is propeller-driven;

(c) the maximum approved passenger seating configuration is not more than nine;

(d) the maximum certificated take-off mass does not exceed 5,700 kg;

(e) the aeroplane is equipped as described in sub-rule (23) of rule 130; and

(f) the pilot-in-command has satisfied requirements of experience, training, checking and recency described in sub-rule 3(k), 3(l) & 3(m) or rule 126.

(20) Unless the operation has been specifically approved by the Chairman, an aeroplane with two turbine power-units shall not, except as provided in sub-rule (21) of this rule, be operated on a route where the flight time at single engine cruise speed to an adequate en-route alternate aerodrome exceeds a threshold time established for such operations by the Chairman.

(21) In approving the operation, the Chairman shall ensure that-

(a) the airworthiness certification of the aeroplane type;

(b) the reliability of the propulsion system; and

(c) the operator's maintenance procedures, operating practices, flight dispatch procedures and crew training programme:

provide the overall level of safety intended by the provisions of Part-VI and Part-VIII of these rules. In making this assessment, account shall be taken of the route to be flown, the anticipated operating conditions and the location of adequate en-route alternate aerodromes.

(22) A flight to be conducted in accordance with sub-rule (18) of this rule shall not be commenced unless, during the possible period of arrival, the required en-route alternate aerodrome(s) will be available and the available information indicates that conditions at those aerodromes will be at or above the aerodrome operating minima approved for the operation.

(23) An aeroplane type with two turbine power-units which was authorized by the Chairman prior to 25 March 1986, and operating on a route where the flight time at single-engine cruise speed to an adequate en-route alternate aerodrome exceeded the threshold time established for such operations in accordance with sub-rule (18) of this rule should give consideration to permitting such an operation to continue on that route after that date.

(24) Take of landing: All flight crew members required to be on flight deck duty shall be at their stations.

(25) En route: All flight crew members required to be on flight deck duty shall remain at their stations except when their absence is necessary for the performance of duties in connection with the operation of the aeroplane or for physiological needs.

(26) For each flight of an aeroplane above 15000m (49000 ft), the operator shall maintain records so that the total cosmic radiation dose received by each crew member over a period of 12 consecutive months can be determined.

(27) Hazardous flight conditions encountered, other than those associated with meteorological conditions, shall be reported to the appropriate aeronautical station as soon as possible. The reports so rendered shall give such details as may be pertinent to the safety of other aircraft.

(28) The operator shall ensure that all baggage carried onto an aeroplane and taken into the passenger cabin is adequately and securely stowed.

(29) (a) Operators shall ensure that, in accordance with procedures acceptable to the Chairman:

(i) each aeroplane they operate is maintained in an airworthy condition;

(ii) the operational and emergency equipment necessary for an intended flight is serviceable;

(iii) the Certificate of Airworthiness of each aeroplane they operate remains valid.

(b) An operator shall not operate an aeroplane unless it is maintained and released to service by an organization approved in accordance with the Rule-190 or under an equivalent system. In case an equivalent system, the person signing the maintenance release shall be licensed in accordance with Part-I of these rules.

(c) An operator shall employ a person or group of persons to ensure that all maintenance is carried out in accordance with the maintenance control manual.

(d) The operator shall ensure that the maintenance of its aeroplane is performed in accordance with the maintenance programme.

(30) (a) The operator shall provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance programme, approved by the State of Registry, containing the information required by the sub-rule (31) of this rule. The design and application of the operator's maintenance programme shall observe Human Factors principles.

(b) The operator shall ensure that the maintenance control manual is amended as necessary to keep the information contained therein up to date.

(c) Copies of all amendments to the operator's maintenance control manual shall be furnished promptly to all organizations or persons to whom the manual has been issued.

(d) The operator shall provide the State of the Operator and the State of Registry with a copy of the operator's maintenance control manual, together with all amendments and/or revisions to it and shall incorporate in it such mandatory material as the State of the Operator or the State of Registry may require.

(e) Maintenance programme: The operator shall provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance programme, approved by the State of Registry, containing the information required by sub-rule (31) of this rule. The design and application of the operator's maintenance programme shall observe Human Factors principles.

(f) Copies of all amendments to the maintenance programme shall be furnished promptly to all organizations or persons to whom the maintenance programme has been issued.

(31) (a) A maintenance programme for each aeroplane as required by the sub-rule (30) of this rule shall contain the following information-

(i) maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilization of the aeroplane;

(ii) when applicable, a continuing structural integrity programme;

(iii) procedures for changing or deviating from (i) and (ii) above; and

(iv) when applicable, condition monitoring and reliability programme descriptions for aircraft systems, components and power plants.

(b) Maintenance tasks and intervals that have been specified as mandatory in approval of the type design shall be identified as such.

(c) The maintenance programme should be based on maintenance programme information made available by the State of design or by the organization responsible for the type design, and any additional applicable experience.

(32) Maintenance records.- (a) An operator shall ensure that the following records are kept for the periods mentioned in sub-rule (b) of this rule-

(i) the total time in service (hours, calendar time and cycles, as appropriate) of the aeroplane and all life limited components;

(ii) the current status of compliance with all mandatory continuing airworthiness information;

(iii) appropriate details of modifications and repairs;

(iv) the time in service (hours, calendar time and cycles, as appropriate) since the last overhaul of the aeroplane or its components subject to a mandatory overhaul life;

(v) the current status of the aeroplane's compliance with the maintenance programme; and

(vi) the detailed maintenance records to show that all requirements for the signing of a maintenance release have been met.

(b) The records in sub-rule (a)(i) to (v) of this rule shall be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service, and the records in sub-rule (a)(vi) of this rule for a minimum period of one year after the signing of the maintenance release.

(c) In the event of a temporary change of operator, the records shall be made available to the new operator. In the event of any permanent change of operator, the records shall be transferred to the new operator.

(33) Continuing airworthiness information.- (a) The operator of an aeroplane over 5 700 kg maximum certificated take-off mass shall monitor and assess maintenance and operational experience with respect to continuing airworthiness and provide the information as

prescribed by Chairman and/or by the State of Registry and report through the system specified in Part VIII of these rules.

(b)The operator of an aeroplane over 5 700 kg maximum certificated take-off mass shall obtain and assess continuing airworthiness information and recommendations available from the organization responsible for the type design and shall implement resulting actions considered necessary in accordance with a procedure acceptable to Civil Aviation Authority, Bangladesh and/or by the State of Registry.

(34) Modifications and repairs.- All modifications and repairs shall comply with airworthiness requirements acceptable to Civil Aviation Authority, Bangladesh and/or by the State of Registry. Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained.

(35) Approved maintenance organization.- (a) The issue of a maintenance organization approval by any contracting State shall be dependent upon the applicant demonstrating compliance with the requirements of sub-rule (35) to (41)(b) of this rule for such organizations.

(b) The approval document shall contain at least the following-

(i) organization's name and location;

(ii) date of issue and period of validity;

(iii) terms of approval.

(c) The continued validity of the approval shall depend upon the organization remaining in compliance with the requirements of sub-rule (35) to (41)(b) of this rule for an approved maintenance organization.

(36) Maintenance organization's procedures manual.- (a) The maintenance organization shall provide for the use and guidance of maintenance personnel concerned a procedures manual which may be issued in separate parts containing the following information-

(i) a general description of the scope of work authorized under the organization's terms of approval;

(ii) a description of the organization's procedures and quality or inspection system in accordance with sub-rule (37)(a),(b),(c) & (d) of this rule;

(iii) a general description of the organization's facilities;

(iv) names and duties of the person or persons required by sub-rule (39) (a) of this rule;

(v) a description of the procedures used to establish the competence of maintenance personnel as required by sub-rule (39)(c) of this rule;
(vi) a description of the method used for the completion and retention of the maintenance records required by sub-rule (40)(a), (b), (c) & (d) of this rule;

(vii) a description of the procedures for preparing the maintenance release and the circumstances under which the release is to be signed;

(viii) the personnel authorized to sign the maintenance release and the scope of their authorization;

(ix) a description, when applicable, of the additional procedures or complying with an operator's maintenance procedures and requirements;

(x) a description of the procedures for complying with the service information reporting requirements of Part VIII; and

(xi) a description of the procedure for receiving, assessing, amending and distributing within the maintenance organization all necessary airworthiness data from the type certificate holder or type design organization.

(b) The maintenance organization shall ensure that the procedures manual is amended as necessary to keep the information contained therein up to date.

(c) Copies of all amendments to the procedures manual shall be furnished promptly to all organizations or persons to whom the manual has been issued.

(37) Safety management.- (a) An operator shall establish a safety programme in order to achieve an acceptable level of safety in the maintenance of aircraft.

(b) Chairman will ascertain the acceptable level of safety to be achieved by an operator.

(c) As part of their safety programme, operators shall ensure, that a maintenance organization implement a safety management system acceptable to the Chairman , as a minimum:

(i) identifies safety hazards;

(ii) ensures that remedial action necessary to maintain an acceptable level of safety is implemented;

(iii) provides for continuous monitoring and regular assessment of the safety level achieved; and

(iv) aims to make continuous improvement to the overall level of safety.

(d) A safety management system shall clearly define lines of safety accountability throughout a maintenance organization, including a direct accountability for safety on the part of senior management.

(38) Maintenance procedures and quality assurance system.- (a) Operators shall ensure that the maintenance organization shall establish procedures, acceptable to Chairman for granting the approval, which ensure good maintenance practices and compliance with all relevant requirements of this chapter.

(b) The maintenance organization shall ensure compliance with sub-rule (a) by either establishing an independent quality assurance system to monitor compliance with and adequacy of the procedures, or by providing a system of inspection to ensure that all maintenance is properly performed.

(39) Facilities.- (a) The facilities and working environment shall be appropriate for the task to be performed.

(b) The maintenance organization shall have the necessary technical data, equipment, tools and material to perform the work for which it is approved.

(c) Storage facilities shall be provided for parts, equipment, tools and material. Storage conditions shall be such as to provide security and prevent deterioration of and damage to stored items.

(40) Personnel.- (a) The maintenance organization shall nominate a person or group of persons whose responsibilities include ensuring that the maintenance organization is in compliance with the requirements of sub-rule (35) to (41) (b) of this rule for an approved maintenance organization.

(b) The maintenance organization shall employ the necessary personnel to plan, perform, supervise, inspect and release the work to be performed.

(c) The competence of maintenance personnel shall be established in accordance with a procedure and to a level acceptable to the State granting the approval. The person signing a maintenance release shall be qualified in accordance with Part-I.

(d) The maintenance organization shall ensure that all maintenance personnel receive initial and continuation training appropriate to their assigned tasks and responsibilities. The training programme established by the maintenance organization shall include training in knowledge and skills related to human performance, including coordination with other maintenance personnel and flight crew.

(41) Records.- (a) The maintenance organization shall retain detailed maintenance records to show that all requirements for the signing of a maintenance release have been met.

(b) The records required by sub-rule (35) to (41)(a) of this rule shall be kept for a

minimum period of one year after the signing of the maintenance release.

(42) Maintenance release.- (a) A maintenance release shall be completed and signed to certify that the maintenance work performed has been completed satisfactorily and in accordance with approved data and the procedures described in the maintenance organization's procedures manual.

(b) A maintenance release shall contain a certification including:

(i) basic details of the maintenance carried out including detailed reference of the approved data used;

(ii) the date such maintenance was completed;

(iii) when applicable, the identity of the approved maintenance organization; and

(iv) the identity of the person or persons signing the release.

(43) Operator's maintenance control manual.- The operator's maintenance control manual provided in accordance with sub-rule (30)(a) to (d) of this rule, which may be issued in separate parts, shall contain the following information:-

(a) a description of the procedures required by sub-rule (29)(a) including, when applicable-

(i) a description of the administrative arrangements between the operator and the approved maintenance organization;

(ii) a description of the maintenance procedures and the procedures for completing and signing a maintenance release when maintenance is based on a system other than that of an approved maintenance organization;

(b) names and duties of the person or persons required by sub-rule (29)(c) of this rule;

(c) a reference to the maintenance programme required by sub-rule (30)(e) of this rule;

(d) a description of the methods used for the completion and retention of the operator's maintenance records required by sub-rule(32) of this rule;

(e) a description of the procedures for monitoring, assessing and reporting maintenance and operational experience required by sub-rule (33)(a) of this rule;

(f) a description of the procedures for complying with the service information reporting requirements of Part-VIII;

(g) a description of procedures for assessing continuing airworthiness information and implementing any resulting actions, as required by sub-rule(33)(b) of this rule;

(h) a description of the procedures for implementing action resulting from mandatory continuing airworthiness information;

(i) a description of establishing and maintaining a system of analysis and continued monitoring of the performance and efficiency of the maintenance programme, in order to correct any deficiency in that programme;

(j) a description of aircraft types and models to which the manual applies;

(k) a description of procedures for ensuring that unserviceabilities affecting airworthiness are recorded and rectified; and

(l) a description of the procedures for advising Civil Aviation Authority, Bangladesh and/or the State of Registry of significant in-service occurrences.

(44) Flight manual.- The flight manual shall be updated by implementing changes made mandatory by Chairman and/or the State of Registry.

124. Operations manual.- (1) An operator shall provide for the use and guidance of operations personnel concerned, an operations manual. The lay out and the contents of the operations manual shall be as specified by the Chairman. The operations manual shall be amended or revised as is necessary to ensure that the information contained therein is kept up to date and do not contravene the conditions contained in the Air Transport Operating License or equivalent document and applicable regulations. All such amendments or revisions shall be issued to all personnel that are required to use this manual.

(2) The operator shall provide a copy of the operations manual together with all amendments and/or revisions to the Chairman, for review and acceptance and, where required, approval. The operator shall incorporate in the operations manual such mandatory material as the Chairman may require.

(3) Unless otherwise approved by the Chairman, an operator must prepare the operations manual in the English language.

(4) An operator may issue an operations manual in separate volumes.

(5) An operator shall provide the Chairman at least two copies of approved operations manual.

(6) An operator shall ensure that all operations personnel have easy access to a copy of each volume of the operations manual relevant to their duties.

(7) The operator shall supply crew members with a personal copy, volumes or chapters of

the operations manual relevant to their duties.

(8) An operator shall submit the intended amendments and revisions in advance of the effective date for approval of the Chairman.

(9) The approval shall be obtained before the amendment becomes effective and where immediate amendments are required in the interest of safety, they may be published and applied immediately only after any approval required has been applied for.

(10) An operator shall incorporate all amendments and revisions required by the Chairman.

(11) An operator must ensure that information taken from approved document, and any amendment of such contains no information contrary to any approved documentation, except in case of using more conservative data and procedures.

(12) An operator must ensure that the contents of the operations manual are presented in a form in which they can be used without difficulty.

(13) The operations manual must describe the content and use of the operational flight plan.

125. Flight time, flight duty periods and rest periods.- (1) The Chairman shall establish regulations specifying the limitations applicable to the flight time and flight duty periods for flight crew and cabin crew members. These regulations shall also make provision for adequate rest periods and shall be such as to ensure that fatigue occurring either in a flight or successive flights or accumulated over a period of time due to these and other tasks, does not endanger the safety of a flight.

(2) An operator shall formulate policies to limit flight time and flight duty periods and for the provision of adequate periods for all its flight crew and cabin crew members. These policies shall be in accordance with the regulations established by the Chairman and included in operations manual.

(3) An operator, other than the operator engaged in personal transportation, shall maintain current records of the individual flight time, flight duty periods and rest periods of the flight crews and cabin crews employed by him in accordance with the directives issued by the Chairman.

126. Flight Crew - training, qualification and other requirements.-

(1) General.-

(a) The number and composition of the flight crew shall not be less than that specified in the operations manual. The flight crews shall include flight crew members in addition to the minimum numbers specified in the flight manual or other documents associated with the certificate of airworthiness, when necessitated by

considerations related to the type of aeroplane used, the type of operation involved and the duration of flight between points where flight crews are changed.

(b) The flight crew shall include at least one member who holds a valid licence, issued or rendered valid authorizing operation of the type of radio transmitting equipment to be used.

(c) When a separate flight engineer's station is incorporated in the design of an aeroplane, the flight crew shall include at least one flight engineer especially assigned to that station, unless the duties associated with that station can be satisfactorily performed by another flight crew member, holding a flight engineer licence, without interference with regular duties.

(d) The flight crew shall include at least one member who holds a flight navigator licence in all operations where in the opinion of the Chairman, navigation necessary for the safe conduct of the flight cannot be adequately accomplished by the pilots from the pilot station.

(e) An operator shall, for each type of aeroplane, assign to all flight crew members the necessary functions they are to perform in an emergency or in a situation requiring emergency evacuation. Annual training in accomplishing these functions shall be contained in the operator's training programme and shall include instruction in the use of all emergency and life saving equipment required to be carried, and drills in the emergency evacuation of the aeroplane.

(2) Flight crew member training programmes.-

(a) An operator shall establish and maintain a ground and flight training programme, approved by Chairman, which ensures that all flight crew members are adequately trained to perform their assigned duties. The training programme shall:

(i) include ground and flight training facilities and properly qualified instructors as determined by Chairman;

(ii) consist of ground and flight training in the type(s) of aeroplane on which the flight crew member serves;

(iii) include proper flight crew coordination and training in all types of emergency and abnormal situations or procedures caused by power plant, airframe or systems malfunctions, fire or other abnormalities;

(iv) include training in knowledge and skills related to visual and instrument flight procedures for the intended area of operation, human performance including threat and error management and in the transport of dangerous goods;

(v) ensure that all flight crew members know the functions for which they are

responsible and the relation of these functions to the functions of other crew members, particularly in regard to abnormal or emergency procedures; and

(vi) be given on a recurrent basis, as determined by Chairman and shall include an assessment of competence.

(b) An operator shall ensure that when passengers or cargo are being carried, no emergency or abnormal situations shall be simulated.

(c) Flight training may, to the extent deem appropriate, be given in aeroplane synthetic flight trainers approved by the Chairman for that purpose.

(d) The scope of the recurrent training required in sub-rule 1(e) and sub-rule 2(a) of this rule may be varied and need not be as extensive as the initial training given in a particular type of aeroplane.

(e) The requirements for recurrent flight training in a particular type of aeroplane shall be considered fulfilled by:

(i) the use, to the extent deemed feasible, of aeroplane synthetic flight trainers approved by the Chairman for that purpose; or

(ii) the completion within the appropriate period of the proficiency check required by sub-rule 3(i) of this rule in that type of aeroplane.

(f) The checklists provided in accordance with sub rule (2) of rule 129 shall be used by flight crews prior to, during and after all phases of operations, and in emergency, to ensure compliance with the operating procedures contained in the aircraft operating manual and the aeroplane flight manual or other documents associated with the certificate of airworthiness and otherwise in the operations manual, are followed. The design and utilization of checklists shall observe Human Factors principles.

(3) Qualifications and recency.-

(a) An operator shall not assign a pilot-in-command or a co-pilot to operate at the flight controls of an aeroplane during take-off and landing unless that pilot has operated the flight controls during at least three take-offs and landings within the preceding 90 days on the same type of areoplane or in a flight simulator approved for the purpose.

(b) When a pilot-in-command or a co-pilot is flying several variants of the same type of aeroplane with similar characteristics in terms of operating procedures, systems and handling, the State shall decide under which conditions the requirements of sub-rule (3)(a) of this rule for each variant can be combined.

(c) An operator shall not assign a pilot to act in the capacity of cruise relief pilot

unless, within the preceding 90 days, that pilot has either:

(i) operated as a pilot-in-command, co-pilot or cruise relief pilot on the same type of aeroplane; or

(ii) carried out flying skill refresher training including normal, abnormal and emergency procedures specific to cruise flight on the same type of aeroplane or in a flight simulator approved for the purpose, and has practiced approach and landing procedures, where the approach and landing procedure practice may be performed as the pilot who is not flying the aeroplane.

(iii) when a cruise relief pilot is flying several variants of the same type of aeroplane with similar characteristics in terms of operating procedures, systems and handling, the State shall decide under which conditions the requirements of para (i) & (ii) of this sub-rule for each variant can be combined.

(d) An operator shall not utilize a pilot as pilot-in-command of an aeroplane on a route or route segment for which that pilot is not currently qualified until such pilot has complied with sub-rule 3(e) and 3(f) of this rule.

(e) Each such pilot shall demonstrate to the operator an adequate knowledge of:

(i) the route to be flown, and the aerodromes which are to be used. This shall include knowledge of:

(A) the terrain and minimum safe altitudes;

(B) the seasonal meteorological conditions;

(C) the meteorological, communication and air traffic facilities, services and procedures;

(D) the search and rescue procedures; and

(E) the navigational facilities and procedures, including any long-range navigation procedures, associated with the route along which the flight is to take place; and

(ii) procedures applicable to flight paths over heavily populated areas and areas of high air traffic density, obstructions, physical layout, lighting, approach aids and arrival, departure, holding and instrument approach procedures, and applicable operating minima.

(f) A pilot-in-command shall have made an actual approach into each aerodrome of landing on the route, accompanied by a pilot who is qualified for the aerodrome, as a member of the flight crew or as an observer on the flight deck, unless:

(i) the approach to the aerodrome is not over difficult terrain and the instrument approach procedures and aids available are similar to those with which the pilot is familiar, and a margin approved by the Chairman is added to the normal operating minima, or there is reasonable certainty that approach and landing can be made in visual meteorological conditions; or

(ii) the descent from the initial approach altitude can be made by day in visual meteorological conditions; or

(iii) the operator qualifies the pilot-in-command to land at the aerodrome concerned by means of an adequate pictorial presentation; or

(iv) the aerodrome concerned is adjacent to another aerodrome at which the pilot-in-command is currently qualified to land.

(g) The operator shall maintain a record, sufficient to satisfy the Chairman, the qualification of the pilot and of the manner in which such qualification has been achieved.

(h) An operator shall not continue to utilize a pilot as a pilot-in-command on a route or within an area specified by the operator and approved by the Chairman unless, within the preceding 12 months, that pilot has made at least one trip as a pilot member of the flight crew, or as a check pilot, or as an observer in the flight crew compartment:

(i) within that specified area; and

(ii) if appropriate, on any route where procedures associated with that route or with any aerodromes intended to be used for take-off or landing require the application of special skills or knowledge.

(i) In the event that more than 12 months elapse in which a pilot-in-command has not made such a trip on a route in close proximity and over similar terrain, within such a specified area, route or aerodrome, and has not practiced such procedures in a training device which is adequate for this purpose, prior to again serving as a pilot-in-command within that area or on that route, that pilot must re-qualify in accordance with sub-rule 3(e) and 3(f) of this rule.

(j) An operator shall ensure that piloting technique and the ability to execute emergency procedures is checked in such a way as to demonstrate the pilot's competence. Where the operation may be conducted under instrument flight rules, an operator shall ensure that the pilot's competence to comply with such rules is demonstrated to either a check pilot of the operator or to a representative of the Chairman. Such checks shall be performed twice within any period of one year. Any two such checks which are similar and which occur within a period of four

consecutive months shall not alone satisfy this requirement.

Note.- Flight simulators approved by the Chairman may be used for those parts of the checks for which they are specifically approved.

(k) When an operator schedules flight crew on several variants of the same type of aeroplane with similar characteristics in terms of operating procedures, systems and handling, Chairman shall decide under which conditions the requirements of (3)(h)(i) of this rule for each variant can be combined.

(l) The Chairman shall prescribe requirements of experience, recency and training applicable to single pilot operations intended to be carried out under the IFR or at night.

(m) The pilot-in-command should-

(i) for operations under the IFR or at night, have accumulated at least 50 hours flight time on the class of aeroplane, of which at least 10 hours shall be as pilot-in-command;

(ii) for operations under the IFR, have accumulated at least 25 hours flight time under the IFR on the class of aeroplane, which may form part of the 50 hours flight time as in para (i) of this rule;

(iii) for operations at night, have accumulated at least 15 hours flight time at night, which may form part of the 50 hours flight time as in para (i) of this rule;

(iv) for operations under the IFR, have acquired recent experience as a pilot engaged in single pilot operation under the IFR of:

(1) at least five IFR flight, including three instrument approaches carried out during the preceding 90 days on the class of aeroplane in the single pilot role; or

(2) an IFR instrument approach check carried out on such an aeroplane during the preceding 90 days;

(v) for operation at night, have made at least three take-offs and landings at night on the class of aeroplane in the single pilot role in the preceding 90 days;

(vi) have successfully completed training programmes that include, in addition to the requirements mentioned in sub-rule (2) of this rule, passenger briefing with respect to emergency evacuation, autopilot management, and the use of simplified in-flight documentation.

(n) The initial and recurrent flight training and proficiency checks indicated in sub-

rule (2)(a) and sub-rule (3)(i) of this rule shall be performed by the pilot-in-command in the single pilot role on the class of aeroplane in an environment representative of the operation.

(4) A flight crew member assessed as fit to exercise the privileges of a licence subject to the use of suitable correcting lenses, shall have a spare set of the correcting lenses readily available when exercising those privileges.

127. Flight Operations Officer.- (1) A flight operations officer, when employed in conjunction with an approved method of flight supervision requiring the services of licensed flight operations officers, shall be licensed in accordance with the provisions of rule 42 of this rule.

(2) A flight operations officer should not be assigned to duty unless that officer has-

(a) made within the preceding 12 months, at least a one way qualification flight on the flight deck of an aeroplane over any area in which that individual is authorized to exercise flight supervision. The flight should include landings at as many aerodromes as practicable;

(b) demonstrated to the operator a knowledge of :

(i) the contents of the operations manual;

(ii) the radio equipment in the aeroplanes used; and

(iii) the navigation equipment in the aeroplanes used;

(c) demonstrated to the operator a knowledge of the following details concerning operations for which the officer is responsible and areas in which that individual is authorized to exercise flight supervision:

(i) the seasonal meteorological conditions and the sources of meteorological information;
(ii) the effects of metrological conditions on radio reception in the aeroplanes used;

(iii) the peculiarities and limitations of each navigation system which is used by the operation; and

(iv) the aeroplane loading instructions;

(d) demonstrated to the operator knowledge and skills related to human performance relevant to dispatch duties; and

(e) demonstrated to the operator the ability to perform the duties specified in sub-

rule (4) of this rule.

(3) A flight operations officer assigned to duty should maintain complete familiarization with all features of the operation which are pertinent to such duties, including knowledge and skills related to human performance.

(4) A flight operations officer/dispatchers when employed in conjunction with a method of flight supervision in accordance with rule 294 shall:

(a) assist the pilot-in-command in flight preparation and provide the relevant information required;

(b) assist the pilot-in-command in preparing the operational and ATS flight plans, sign when applicable and file the ATS flight plan with the appropriate ATS unit;

(c) furnish the pilot-in-command while in flight, by appropriate means, with information which may be necessary for the safe conduct of the flight; and

(d) in the event of an emergency, initiate such procedures as may be outlined in the operations manual while avoiding taking any action that would conflict with ATC procedures; and

(e) convey safety-related information to the pilot-in-command that may be necessary for the safe conduct of the flight including information related to any amendments to the flight plan that become necessary in the course of the flight.

(5) A flight operations officer/flight dispatcher should not be assigned to duty after 12 consecutive months of absence from such duty, unless the provision of sub-rule (2) of this rule are met**.**

128. Deleted.

129. Requirements of Instrument, Equipment and Flight Documents under all conditions.-

(1) (a) In addition to the minimum equipment necessary for the issuance of a certificate of airworthiness, the instruments, equipment and flight documents prescribed in the following paragraphs shall be installed or carried, as appropriate, in aeroplanes according to the aeroplane used and to the circumstances under which the flight is to be conducted. The prescribed instruments and equipment, including their installation, shall be approved or accepted by the Chairman.

(b) An aeroplane shall carry a certified true copy of the air operator certificate specified in rule 288 and a copy of the authorization(s), conditions and limitations relevant to the aeroplane type, issued in conjunction with the certificate. When the certificate and the associated authorizations, conditions and limitations are issued by the State of the Operator in a language other than English, an English translation shall be included.

(2) The operator shall include in the operations manual a minimum equipment list (MEL), approved by the Chairman which will enable the pilot-in-command to determine whether a flight may be commenced or continued from any intermediates stop should any instrument, equipment or systems become inoperative. In case the aeroplane is registered elsewhere the Chairman shall ensure that the MEL does not affect the aeroplane's compliance with the airworthiness requirements applicable in the State of Registry.

(3) The operator shall provide operations staff and flight crew with an aircraft-operating manual, for each aircraft type operated, containing the normal, abnormal and emergency procedures relating to the operation of the aircraft. The manual shall include details of the aircraft systems and of the checklists to be used. The design of the manual shall observe Human Factors principles.

(4) An aeroplane shall be equipped with instruments which will enable the flight crew to control the flight path of the aeroplane, carry out any required procedural manoeuvres and observe the operating limitations of the aeroplane in the expected operating conditions.

(5) An aeroplane shall be equipped with-
(a) accessible and adequate medical supplies appropriate to the number of passengers the aeroplane is authorized to carry;

(b) medical supplies should comprise:

(i) one or more first-aid kits; and

(ii) a medical kit, for the use of medical doctors or other qualified persons in treating in-flight medical emergencies for aeroplanes authorized to carry more than 250 passengers.

(c) portable fire extinguishers of a type which, when discharged, will not cause dangerous contamination of the air within the aeroplane. At least one shall be located in:

(i) the pilot's compartment; and

(ii) each passenger compartment that is separate from the pilot's compartment and that is not readily accessible to the flight crew;

(d) spare electrical fuses of appropriate ratings for replacement of those accessible in flight.

(6) An aeroplane shall carry: (a) the operations manual prescribed in rule 124, or those parts of it that pertain to flight operations;

(b) the flight manual for the areoplane, or other documents containing performance data required for the application of rule 161 and any other information necessary for

the operation of the aeroplane within the terms of its certificate of airworthiness, unless these data are available in the operations manual; and

(c) current and suitable charts to cover the route of the proposed flight and any route along which it is reasonable to expect that the flight may be diverted.

(7) An aeroplane shall be equipped with flight recorders as specified or acceptable to the Chairman. Flight recorders comprise two systems, a flight data recorder (FDR) and a cockpit voice recorder (CVR). Combination recorders (FDR/CVR) can only be used to meet the flight recorder equipage requirements as specified below:

(a) A Type I FDR shall record the parameters required to determine accurately the aeroplane flight path, speed, attitude, engine power, configuration and operation.

(b) Type II and IIA FDRs shall record the parameters required to determine accurately the aeroplane flight path, speed, attitude, engine power and configuration of lift and drag devices.

(c) The use of engraving metal foil FDRs shall be discontinued.

(d) The use of photographic film FDRs shall be discontinued.

(e) All aeroplanes for which the individual certificate of airworthiness is first issued after 1 January 2005, which utilize data link communications and are required to carry a CVR, shall record on a flight recorder, all data link communications to and from the aeroplane. The minimum recording duration shall be equal to the duration of the CVR, and shall be correlated to the recorded cockpit audio.

(f) All aeroplanes which utilize data link communications and are required to carry a CVR shall record on a flight recorder, all data link communications to and from the aeroplane. The minimum recording duration shall be equal to the duration of the CVR, and shall be correlated to the recorded cockpit audio.

(g) Sufficient information to derive the content of the data link communications message and, whenever practical, the time the message was displayed to or generated by the crew shall be recorded.

(h) A Type IA FDR shall record the parameters required to determine accurately the aeroplane flight path, speed, attitude, engine power, configuration and operation. The parameters that satisfy the requirements for a Type IA FDR are listed in the paragraphs below. The parameters without an asterisk (*) are mandatory parameters which shall be recorded. In addition, the parameters designated by an asterisk (*) shall be recorded if an information data source for the parameter is used by aeroplane systems or the flight crew to operate the aeroplane.

(i) The following parameters satisfy the requirements for flight path and speed:

(i) Pressure altitude;
(ii) Indicated airspeed or calibrated airspeed;
(iii) Air-ground status and each landing gear air-ground sensor when practicable;
(iv) Total or outside air temperature;
(v) Heading (primary flight crew reference);
(vi) Normal acceleration;
(vii) Lateral acceleration;
(viii) Longitudinal acceleration (body axis);
(ix) Time or relative time count;
(x) Navigation data*: drift angle, wind speed, wind direction, latitude/longitude;
(xi) Groundspeed*;
(xii) Radio altitude*;

(j) The following parameters satisfy the requirements for attitude:

(i) Pitch attitude;
(ii) Roll attitude;
(iii) Yaw or sideshlip angle*;
(iv) Angle of attack*;

(k) The following parameters satisfy the requirements for engine power:

(i) Engine thrust/power: propulsive thrust/power on each engine, cockpit thrust/power lever position;
(ii) Thrust reverse status*;
(iii) Engine thrust command*;
(iv) Engine thrust target*;
(v) Engine bleed valve position*;
(vi) Additional engine parameters*: EPR, N1, indicated vibration level, N2, EGT, TLA, fuel flow, fuel cut-off lever position, N3;

(l) The following parameters satisfy the requirements for configuration:

(i) Pitch trim surface position;
(ii) Flaps*: trailing edge flap position, cockpit control selection;
(iii) Slats*: leading edge flap (slat) position, cockpit control selection;
(iv) Landing gear*: landing gear, gear selector position;
(v) Yaw trim surface position*;
(vi) Roll trim surface position*;
(vii) Cockpit trim control input position pitch*;
(viii) Cockpit trim control input position roll*;
(ix) Cockpit trim control input position yaw*;
(x) Ground spoiler and speed brake*: Ground spoiler position, ground spoiler selection, speed brake position, speed brake selection;
(xi) De-icing and/or anti-icing systems selection*;
(xii) Hydraulic pressure (each system)*;

(xiii) Fuel quantity*;
(xiv) AC electrical bus status*;
(xv) DC electrical bus status*;
(xvi) APU bleed valve position*;
(xvii) Computed centre of gravity* ;

(m) The following parameters satisfy the requirements for operation:

(i) Warnings.
(ii) Primary flight control surface and primary flight control pilot input: pitch axis, roll axis, yaw axis
(iii) Marker beacon passage
(iv) Each navigation receiver frequency selection.
(v) Manual radio transmission keying and CVR/FDR synchronization reference.
(vi) Autopilot/autothrottle/AFCS mode and engagement status*
(vii) Selected barometric setting*: pilot, first officer.
(viii) Selected altitude (all pilot selectable modes of operations)*
(ix) Selected speed (all pilot selectable modes of operation)*
(x) Selected Mach (all pilot selectable modes of operation)*
(xi) Selected vertical speed (all pilot selectable modes of operation)*
(xii) Selected flight path (all pilot selectable modes of operation)*: course/DSTRK, path angle
(xiii) Selected decision height*
(xiv) EFIS display format*: pilot, first officer
(xv) Multi-function/engine/alerts display format*
(xvi) GPWS/TAWS/GCAS status*: selection of terrain display mode including pop-up display status, terrain alerts, both cautions and warnings, and advisories, on/off switch position
(xvii) Low pressure warning*: hydraulic pressure, pneumatic pressure
(xviii) Computer failure*
(xix) Loss of cabin pressure*
(xx) TCAS/ACAS (traffic alert and collision avoidance system/airborne collision avoidance system)*
(xxi) Ice detection*
(xxii) Engine warning each engine vibration*
(xxiii) Engine warning each engine over temperature*
(xxiv) Engine warning each engine oil over temperature*
(xxv) Engine warning each engine oil pressure low*
(xxvi) Engine warning each engine over speed*
(xxvii) Wind shear warning*
(xxviii) Operational stall protection, stick shaker and pusher activation*
(xxix) All cockpit flight control input forces*: control wheel, control column, rudder pedal cockpit input forces
(xxx) Vertical deviation*: ILS glide path, MLS elevation, GNSS approach path
(xxxi) Horizontal deviation*: ILS localizer, MLS azimuth, GNSS approach path

(xxxii) DME 1 and 2 distances*
(xxxiii)Primary navigation system reference*: GNSS, INS, VOR/DME, MLS, Loran C, ILS
(xxxiv)Brakes*: left and right brake pressure, left and right brake pedal position.
(xxxv) Date*
(xxxvi)Event marker*
(xxxvii) Head up display in use*
(xxxviii) Para visual display on*

(n) All FDRs shall be cpable of retaining the information recorded during at least the last 25 hours of their operation, except for the Type IIA FDR which shall be capable of retaining the information recorded during at least the last 30 minutes of its operation.

(o) Flight data recorders – aeroplanes for which the individual certificate of airworthiness is first issued on or after 1 January 1989.-

(i) All aeroplanes of a maximum certificated take-off mass of over 27000 kg shall be equipped with a Type I FDR.

(ii) All aeroplanes of a maximum certificated take-off mass of over 5700 kg, up to and including 27 000 kg, shall be equipped with a Type II FDR.

(p) Flight data recorders – aeroplanes for which the individual certificate of airworthiness was first issued on or after 1 January 1987 but before 1 January 1989.-

(i) All turbine-engined aeroplanes of a maximum certificated take-off mass of over 5700 kg, except those in rule 129 sub rule 7 (m) (iv) shall be equipped with a FDR which shall record time, altitude, airspeed, normal acceleration and heading.

(ii) All turbine-engined aeroplanes of a maximum certificated take-off mass of over 27000 kg that are of types of which the prototype was certificated by the appropriate national authority after 30 September 1969 shall be equipped with a Type II FDR.

(q) Flight data recorders – aeroplanes for which the individual certificate of airworthiness was first issued before 1 January 1987.- All turbine-engined aeroplanes of a maximum certificated take-off mass of over 5700 kg shall be equipped with a FDR which shall record time, altitude, airspeed, normal acceleration and heading.

(r) Flight data recorders – aeroplanes for which the individual certificate of airworthiness is first issued after 1 January 2005.- All aeroplanes of a maximum certificated take-off mass of over 5700 kg shall be equipped with a Type IA FDR.

(s) Cockpit voice recorders – aeroplanes for which the individual certificate of airworthiness is first issued on or after 1 January 1987.- All aeroplanes of a maximum certificated take-off mass of over 5700 kg shall be equipped with a CVR, the

objective of which is the recording of the aural environment of the flight deck during flight time.

(t) Cockpit voice recorders – aeroplanes for which the individual certificate of airworthiness was first issued before 1 January 1987.- All turbine-engined aeroplanes of a maximum certificated take-off mass of over 27000 kg that are of types of which the prototype was certificated by the appropriate national authority after 30 September 1969 shall be equipped with a CVR, the objective of which is the recording of the aural environment on hte flight deck during flight time.

(u) Cockpit voice recorders – duration.-

(i) A CVR shall be capable of retaining the information recorded during at least the last 30 minutes of its operation.

(ii) A CVR, installed in aeroplanes of a maximum certificated take-off mass of over 5700 kg for which the individual certificate of airworthiness is first issued after 1 January 2003, shalll be capable of retaining the information recorded during at least the last two hours of its operation.

(v) Flight recorders – construction and installation.- Flight recorders shall be constructed, located and installed so as to provide maximum practical protection for the recordings in order that the recorded information may be preserved, recovered and transcribed. Flight recorders shall meet the prescribed crashworthiness and fire protection specifications.

(w) Flight recorders – operation.-

(i) Flight recorders shall not be switched off during flight time.

(ii) To preserve flight recorder records, flight recorders shall be de-activated upon completion of flight time following an accident or incident. The flight recorders shall not be re-activated before their disposition as determined in accordance with Annex 13.

(x) Flight recorders – continued serviceability.- Operational checks and evaluations of recordings from the FDR and CVR systems shall be conducted to ensure the continued serviceability of the recorders.

(8) (a) Aeroplanes shall be equipped with a ground proximity warning system and airborne collision avoidance system as specified by the Chairman.

(b) All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5700 kg or authorized to carry more than nine passengers shall be equipped with a ground proximity warning system.

(c) All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 15 000 kg or authorized to carry more than 30 passengers shall be equipped with a ground proximity warning system which has a forward looking terrain avoidance function.

(d) All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5700 kg or authorized to carry more than nine passengers, for which the individual certificate of airworthiness is first issued on or after 1 January 2004, shall be equipped with a ground proximity warning system which has a forward looking terrain avoidance function.

(e) All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorized to carry more than nine passengers, shall be equipped with a ground proximity warning system which has a forward looking terrain avoidance function.

(f) All piston-engined aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorized to carry more than nine passengers shall be equipped with a ground proximity warning system which provides the warnings in (h) (i) and iii), warning of unsafe terrain clearance and a forward looking terrain avoidance function.

(g) A ground proximity warning system shall provide automatically a timely and distinctive warning to the flight crew when the aeroplane is in potentially hazardous proximity to the earth's surface.

(h) A ground proximity warning system shall provide, unless otherwise specified herein, warnings of the following circumstances:

(i) excessive descent rate;
(ii) excessive terrain closure rate;
(iii) excessive altitude loss after take-off or go-around;
(iv) unsafe terrain clearance while not in landing configuration:
  (1) gear not locked down;
  (2) flaps not in a landing position; and
(v) excessive descent below the instrument glide path.

(9) All aeroplanes shall be equipped with a pressure-altitude reporting transponder, which operates in accordance with the relevant provision of Part X of this rule.

(10) All flight crew members required to be on flight deck duty shall communicate through boom or throat microphones below the transition level/altitude.

(11) Aeroplanes shall be equipped with forward looking wind shear warning system as specified by the Chairman.

130. Requirements of Instrument, Equipment and Flight Documents under certain

conditions.- (1) All aeroplanes when operated as VFR flights shall be equipped with:

(a) a magnetic compass;
(b) an accurate timepiece indicating the time in hours, minutes and seconds;
(c) a sensitive pressure altimeter;
(d) an airspeed indicator; and
(e) such additional instruments or equipment as may be prescribe by the appropriate authority.

(2) VFR flights which are operated as controlled flights shall be equipped in accordance with sub-rule (15), (16) and (17) of this rule.

(3) All seaplanes for all flights shall be equipped with:

(a) one life jacket, or equivalent individual flotation device, for each person on board, stowed in a position easily accessible from the seat or berth of the person for whose use it is provided;

(b) equipment for making the sound signals prescribed in the International Regulations for Preventing Collisions at Sea, where applicable; and

(c) one sea anchor (drogue).

Note: "Seaplanes" includes amphibians operated as seaplanes.

(4) Landplanes shall carry the equipment prescribed in sub-rule (5) of this rule:

(a) when flying over water and at a distance of more than 93 km (50 NM) away form the shore, in the case of landplanes operated in accordance with rule 161;

(b) when flying en-route over water beyond gliding distance from the shore, in the case of all other landplanes; and

(c) when taking off or landing at an aerodrome where, in the opinion of the State of the Operator, the take-off or approach path is so disposed over water that in the event of a mishap there would be a likelihood of a ditching.

(5) The equipment referred to in sub-rule (4) of this rule shall comprise one life jacket or equivalent individual flotation device for each person on board, stowed in a position easily accessible from the seat or berth of the person for whose use it is provided.

Note: "Landplanes" includes amphibians operated as landplanes.

(6) In addition to the equipment prescribed in sub-rule (3) or sub-rule (4) and (5) of this rule, whichever is applicable, the following equipment shall be installed at all aeroplanes when used over routes on which the aeroplane may be over water and at more than a distance corresponding to 120 minutes at cruising speed or 740 km (400 NM), whichever is the lesser,

away from land suitable for making an emergency landing in the case of aircraft operated in accordance with rule 161, and 30 minutes or 185 km(100 NM), whichever is the lesser, for all other aeroplanes:

(a) life-saving rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in emergency, provided with such life-saving equipment including means of sustaining life as is appropriate to the flight to be undertaken; and

(b) equipment for making the pyrotechnical distress signals described in Part II of these rules.

(7) Each life jacket and equivalent individual flotation device, when carried in accordance with sub-rule (3)(a), (4) and (5) of this rule shall be equipped with a means of electric illumination for the purpose of facilitating the location of person, except where the equipment of sub-rule 4(c) of this rule is met by the provision of individual flotation devices other than life jackets.

(8) Aeroplanes, when operated across land areas, which have been designated by the State, concerned as areas in which search and rescue would be especially difficult, shall be equipped with such signalling devices and life-saving equipment (including means of sustaining life) as may be appropriate to the area over flown.

(9) An aeroplane intended to be operated al flight altitudes at which the atmospheric pressure is less than 700 hpa in personnel compartments shall be equipped with oxygen storage and dispensing apparatus capable of storing and dispensing the oxygen supplies required in rule 146.

(10) An aeroplane intended to be operated at flight altitudes at which the atmospheric pressure is less than 700 hPa but which is provided with means of maintaining pressures greater than 700 hPa in personnel compartments shall be provided with oxygen storage and dispensing apparatus cable of storing and dispensing the oxygen supplies required in rule 146.

(11) Pressurized aeroplanes newly introduced into service on or after 1 July 1962 and intended to be operated at flight altitudes at which the atmospheric pressure is less than 376 hPa shall be equipped with a device to provide positive warning to the pilot of any dangerous loss of pressurization.

(12) Pressurized aeroplanes introduced into service before 1 July 1962 and intended to be operated at flight altitudes at which the atmospheric pressure is less than 376 hPa should be equipped with a device to provide positive warning to the pilot of any dangerous loss of pressurization.

(13) An aeroplane intended to be operated at flight altitudes at which the atmospheric pressure is less than 376 hPa, or which, if operated at flight altitudes at which the atmospheric pressure is more than 376 hPa, cannot descend safely within four minutes to a

flight altitude at which the atmospheric pressure is equal to 620 hPa and for which the individual certificate of airworthiness is first issued on or after 9 November 1998, shall be provided with automatically displayable oxygen equipment to satisfy the requirements of rule 146. The total number of oxygen dispensing units shall exceed the number of passenger and cabin crew seats by at least 10 per cent.

(14) An aeroplane intended to be operated at flight altitudes at which the atmospheric pressure is less than 376 hPa, or which, if operated at flight altitudes at which the atmospheric pressure is more than 376 hPa cannot descend safely within four minutes to a flight altitude at which the atmospheric pressure is equal to 620 hPa, and for which the individual certificate of airworthiness was first issued before 9 November 1988, should be provided with automatically deployable oxygen equipment to satisfy the requirements of rule 146. The total number of oxygen dispensing units should exceed the number of passenger and cabin crew sets by at least 10 per cent.

(15) All aeroplanes when operated in accordance with the instrument flight rules, or when the aeroplane cannot be maintained in a desired attitude without reference to one or more flight instruments, shall be equipped with:

(a) a magnetic compass;
(b) an accurate timepiece indicating the time in hours, minutes and seconds;
(c) two sensitive pressure altimeters with counter drum pointer or equivalent presentation;
(d) an airspeed indicating system with means of preventing malfunctioning due to either condensation or icing;
(e) a turn and slip indicator;
(f) an attitude indicator (artificial horizon);
(g) a heading indicator (directional gyroscope);
(h) a means of indicating whether the power supply to the gyroscopic instrument is adequate;
(i) a means of indicating in the flight crew compartment the outside air temperature;
(j) a rate-of-climb and descent indicator; and
(k) such additional instruments or equipment as may be prescribed by the appropriate authority.

(16) All aeroplanes of a maximum certificated take-off mass of over 5700 kg newly introduced into service after 1 January 1975 shall be fitted with an emergency power supply, independent of the main electrical generating system, for the purpose of operating and illuminating, for a minimum period of 30 minutes, an attitude indicating instrument (artificial horizon), clearly visible to the pilot-in-command. The emergency power supply shall be automatically operative after the total failure of the main electrical generating system and clear indication shall be given on the instrument panel that the attitude indicator(s) is being operated by emergency power.

(17) Those instruments that are used by any one pilot shall be so arranged as to permit the pilot to see their indications readily from his or her station, with the minimum practicable

deviation from the position and line of vision normally assumed when looking forward along the flight path.

(18) All aeroplanes, when operated at night shall be equipped with:

(a) all equipment specified in sub-rule (15), (16) and (17) of this rule;
(b) the lights required, as mentioned in Part II, for aircraft in flight or operating on the movement area of an aerodrome;
(c) two landing lights;
(d) illumination for all instruments and equipment that are essential for the safe operation of the aeroplane that are used by the flight crew;
(e) lights in all passenger compartments; and
(f) an electric torch for each crew member station.

(19) Pressurized aeroplanes when carrying passengers should be equipped with operative weather radar whenever such aeroplanes are being operated in areas where thunderstorms or other potentially hazardous weather conditions, regarded as detectable with airborne weather radar, may be expected to exercise along the route either at night or under instrument meteorological conditions.

(20) Operator(s) shall maintain, for all flights above 15000m (49000Ft), records so that the total cosmic radiation dose received by each crew member over a period of 12 consecutive months can be determined.

(21) An aeroplane shall carry a document attesting noise certification. When the document, or a suitable statement attesting noise certification as contained in another document approved by the Chairman, is issued in a language other than English, it shall include an English translation.

(22) All aeroplanes with speed limitations expressed in terms of Mach number, shall be equipped with a Mach number indicator.

(23) For approval in accordance with sub-rule (14) of rule 123, all aeroplanes operated by a single pilot under the IFR or at night shall be equipped with:

(a) a serviceable autopilot that has at least altitude hold and heading select modes;
(b) a headset with a boom microphone or equivalent; and
(c) means of displaying charts that enables them to be readable in all ambient light conditions.

131. Proving tests of new type of aircraft.- (1) An aircraft of a new type shall not be used to carry passengers on a scheduled commercial air transport service until it has undergone proving tests in accordance with the instructions issued by the Chairman.

(2) In the case of major changes to an aircraft previously in operation on scheduled

commercial air transport services or previously proved for such operations, or the use of such an aircraft in an operation different to that in which it was previously used; the Chairman may require the aircraft to undergo such proving tests as he considers necessary in the circumstances.

(3) No person other than those essential to the test, shall be carried in the aircraft during the tests required under sub-rules (1) and (2) of this rule, but mail or cargo may be carried with the permission of the Chairman.

132. Operator to ensure employees and crew familiar with local laws and regulations. An operator of an aircraft registered in Bangladesh engaged in air navigation outside Bangladesh shall ensure that -

(a) the operating crew of his aircraft when abroad know that they must comply with the laws, regulations and procedures in force in the countries in which his aircraft is operated;

(b) the pilots of the aircraft are familiar with the regulations and procedures for the time being in force in the area in which the aircraft is operated and, in particular, with such of those regulations and procedures as relate to the operation of the aircraft; and

(c) members of the flight crew, other than pilots, are familiar with such of the regulation and procedures of the countries in which the aircraft is operated as relate to the performance of their respective duties in the operating of the aircraft.

133. Pilot-in-Command. (1) For each flight, the operator shall designate one pilot to act as pilot-in-command.

(2) The pilot-in-command shall be responsible for the safety of all crew members, passengers and cargo on board when the doors are closed. The pilot-in-command shall also be responsible for the operation and safety of the aeroplane from the moment the aeroplane is ready to move for the purpose of taking off until the moment it finally comes to rest at the end of the flight and the engine(s) used as primary propulsion units are shut down.

(3) The pilot-in-command shall ensure that the checklists specified in sub-rule (4) of this rule are complied with in detail.

(4) The checklists provided in accordance with rule 129 (3) shall be used by flight crews prior to, during and after all phases of operations, and in emergency, to ensure compliance with the operating procedures contained in the aircraft operating manual and the aeroplane flight manual or other documents associated with the certificate of airworthiness and otherwise in the operations manual, are followed. The design and utilization of checklists shall observe Human Factors principles.

(5) The pilot-in-command shall be responsible for notifying the nearest appropriate authority by the quickest available means of any accident involving the aeroplane, resulting in serious injury or death of any person or substantial damage to the aeroplane or property.

(6) The pilot-in-command shall be responsible for reporting all known or suspected

defects in the aeroplane, to the operator, at the termination of the flight.

(7) The pilot-in-command shall be responsible for the journey log book or the general declaration containing the information listed in rule 167.

(8) The Pilot-in-command shall have the authority to disembark any person, or any part of the cargo, which in his opinion may represent a potential hazard to the safety of the aircraft or its occupants.

(9) The Pilot-in-command shall have the right to refuse a person to be carried in the aeroplane who appears under the influence of alcohol or drugs to the extend that the safety of the aircraft or its occupants is likely to be endangered.

(10) The Pilot-in-command shall have the right to refuse transportation of inadmissible passengers, deportees or persons in custody if their carriage poses any risk to the safety of the aeroplane or its occupants.

(11) The Pilot-in-command shall have final authority as to the disposition of the aircraft while he is in command and for the maintenance of discipline by all persons on board.

(12) (a) Before an aircraft is taxied on the manoeuvring area of an aerodrome for the purpose of take-off, the pilot-in-command shall check that the radio apparatus fitted to the aircraft and to be used in flight is functioning correctly.

(b) If the check indicates any malfunctioning of any portion of the radio apparatus, the aircraft shall not be flown until the apparatus has been certified by a person licensed or approved for the purpose as beginning proper working order.

(13) (a) Immediately before taking-off on any flight, the pilot-in-command of an aircraft shall -

(i) test the flight controls on the ground and make such other tests as are necessary to ensure that those controls are functioning correctly;
(ii) ensure that locking and safety devices are removed and that hatches, doors and tank caps are secured;
(iii) ensure that all external surfaces of the aircraft are completely free from frost and ice;
(iv) test all flight instruments, and in particular, all gyroscopic flight instruments to ensure that they are functioning correctly;
(v) ensure that all gyroscopic flight instruments are correctly set and uncaged; and
(vi) perform such checks and tests as are required by the flight manual for, or the operations manual of the aircraft.

(b) If an inspection, check or test made under sub-rule (12)(a) of this rule, indicates any departure from the permissible limits or any malfunctioning in any particular (not being a departure or malfunctioning that is permissible unserviceability), the pilot-in-command shall not commence the take-off or, if he has commenced the take-off, shall abandon the take-off or take such other action as he considers appropriate to ensure the safety of the aircraft and of persons on board the aircraft.

134. Control of an aircraft.- (1) One pilot shall be at the control of an aircraft from the time at which the engine is started prior to a flight until the engine is stopped at the termination of a flight.

(2) When in accordance with these rules, two or more pilots are required to be on board an aircraft, two pilots shall remain at the controls at all times when the aircraft is taking off, landing and during turbulent conditions in flight.

(3) The control seat of an aircraft equipped with fully or partially functioning dual control shall not be occupied in flight except by a person:

(a) who holds an appropriate pilot license in respect of the type of aircraft and the class of operations in which the aircraft is flown; or
(b) who is authorized by the Chairman.

(4) In authorizing a person to occupy a control seat in pursuance of sub-rule (3) of this rule, the Chairman may grant the authority subject to such conditions, as he considers necessary in the interests of safety.

(5) A person shall not manipulate the controls of an aircraft in flight unless he is:

(a) The pilot assigned for duty in the aircraft; or

(b) The aircraft holder of a student pilot's licence assigned for instruction in the aircraft.

135. Deleted.

136. Flight security.- (1) Security of the flight crew compartment.-

(a) In all aeroplanes which are equipped with a flight crew compartment door, this door shall be capable of being locked, and means shall be provided by which cabin crew can discreetly notify the flight crew in the event of suspicious activity or security breaches in the cabin.

(b) All passenger-carrying aeroplanes of a maximum certificated take-off mass in excess of 45,500 kg or with a passenger seating capacity greater than 60 shall be equipped with an approved flight crew compartment door that is designed to resist penetration by small arms fire and grenade shrapnel, and to resist forcible intrusions by unauthorized persons. This door shall be capable of being locked and unlocked form either pilot's station.
(c) In all aeroplanes, which are equipped with a flight crew compartment door in accordance with sub-rule (1)(b) of this rule:

(i) this door shall be closed and locked from the time all external doors are closed following embarkation until any such door is opened for disembarkation, except when necessary to permit access and egress by authorized persons; and

(ii) means shall be provided for monitoring from either pilot's station the entire door area outside the flight crew compartment to identify persons requesting entry and to detect suspicious behaviour or potential threat.

(d) All passenger-carrying aeroplanes should be equipped with an approved flight crew compartment door, where practicable, that is designed to resist penetration by

small arms fire and grenade shrapnel and to resist forcible intrusions by unauthorized persons. This door should be capable of being locked and unlocked from either pilot's station.

(e) In all aeroplanes, which are equipped with a flight crew compartment door in accordance with sub-rule (1)(d) of this rule:

(i) the door should be closed and locked from the time all external doors are closed following embarkation until any such door is opened for disembarkation, except when necessary to permit access and egress by authorized persons; and

(ii) Means should be provided for monitoring from either pilot's station the entire door area outside the flight crew compartment to identify persons requesting entry and to detect suspicious behaviour or potential threat.

(2) Aeroplane search procedure checklist.- An operator shall ensure that there is on board a checklist of the procedures to be followed in searching for a bomb in case of suspected sabotage and for inspecting aeroplanes for concealed weapons, explosives or other dangerous devices when a well-founded suspicion exists that the aeroplane may be the object of an act of unlawful interference. The checklist shall be supported by guidance on the appropriate course of action to be taken should a-bomb or suspicious object be found and information on the least-risk bomb location specific to the aeroplane.

(3) Security Training programmes.-

(a) An operator shall establish and maintain an approved security training programme which ensures crew members act in the most appropriate manner to minimize the consequences of acts of unlawful interference. As a minimum, this programme shall include the following elements:

(i) determination of the seriousness of any occurrences;
(ii) crew communication and coordination;
(iii) appropriate self-defense responses;
(iv) use of non-lethal protective devices assigned to crew members whose use is authorized by the State of the Operator;
(v) understanding of behaviour of terrorists so as to facilitate the ability of crew members to cope with hijacker behaviour and passenger responses;
(vi) live situational training exercises regarding various threat conditions;
(vii) flight check procedures to protect the aeroplane; and
(viii) aeroplane search procedures and guidance on least-risk bomb locations where practicable.

(b) An operator shall also establish and maintain a training programme to acquaint appropriate employees with preventive measures and techniques in relation to passengers, baggage, cargo, mail, equipment, stores and supplies intended for carriage on an aeroplane so that they contribute to the prevention of acts of sabotage

or other forms of unlawful interference.

(4) Reporting acts of unlawful inference: Following an act of unlawful interference, the pilot-in-command shall submit, without delay, a report of such an act to the designated local authority.

(5) Miscellaneous.- (a) Specialized means of attenuating and directing the blast should be provided for use at the least-risk bomb location.

(b) Where an operator accepts the carriage of weapons removed from passengers, the aeroplane should have provision for stowing such weapons in a place so that they are inaccessible to any person during flight time.

137. Operator's responsibility.- An operator shall ensure that all operations personnel are properly instructed in their particular duties and responsibilities and the relationship of such duties to the operation as a whole.

138. Taxying of Aircraft.- An aeroplane shall not be taxied on the movement area of an aerodrome unless the person at the controls:

(a) has been duly authorized by the operator or a designated agent;
(b) is fully competent to taxi the aeroplane;
(c) is qualified to use the radio telephone; and
(d) has received instruction from a competent person in respect of aerodrome layout, routes, signs, marking, lights, air traffic control (ATC) signals and instructions, phraseology and procedures, and is able to conform to the operational standards required for safe aeroplane movement at the aerodrome.

139. Engine running.- A person shall not start the engine of an aircraft or permit the engine of an aircraft to run while any person is in the aircraft unless an appropriately licensed pilot or an approved person occupies the control seat.

140. Deleted.

141. Marking of break-in point.- (1) If areas of the fuselage suitable for break-in by rescue crews in emergency are marked on an aircraft such areas shall be marked as specified by the Chairman. The colour of the markings shall be red or yellow, ant if necessary they shall be outlined in white to contrast with the background.

(2) If the corner markings are more than 2 m apart, intermediate lines 9 cm x 3 cm shall be inserted so that there is no more than 2 m between adjacent markings.

142. Fuel supply, Fuel records and refuelling.- (1) A flight shall not be commenced unless, taking into account both the meteorological conditions and any delays that are expected in flight, the aeroplane carries sufficient fuel and oil to ensure that it can safely complete the flight. In addition, a reserve shall be carried to provide for contingencies.

(2) The fuel and oil carried in order to comply with sub-rule (1) of this rule shall, in the case of propeller-driven aeroplanes, be at least the amount sufficient to allow the aeroplane:

(a) When a destination alternate aerodrome is required, either:

(i) to fly to the aerodrome to which the flight is planned thence to the most critical (in terms of fuel consumption) alternate aerodrome specified in the operational and ATS flight plans and thereafter for a period of 45 minutes; or

(ii) to fly to the alternate aerodrome via any predetermined point and thereafter for 45 minutes, provided that this shall not be less than the amount required to fly to the aerodrome to which the flight is planned and thereafter for:

(1) 45 minutes plus 15 percent of the flight time planned to be spent at the cruising level(s), or
(2) two hours,

whichever is less.

(b) When a destination alternate aerodrome is not required:

(i) in terms of sub-rule (8)(a) of rule 145, to fly to the aerodrome to which the flight is planned and thereafter for a period of 45 minutes; or

(ii) in terms of sub-rule (8)(b) of rule 145, to fly to the aerodrome to which the flight is planned and thereafter for:

(1) 45 minutes plus 15 percent of the flight time planned to be spent at the cruising level(s), or
(2) two hours,

whichever is less.

(3) The fuel and oil carried in order to comply with the sub-rule (1) of this rule shall, in the case of turbo-jet aeroplanes, be at least the amount sufficient to allow the aeroplane:

(a) When a destination alternate aerodrome is required, either:

(i) to fly to and execute an approach, and a missed approach, at the aerodrome to which the flight is planned, and thereafter:

(A) to fly to the alternate aerodrome specified in the operational and ATS flight plans; and then
(B) to fly for 30 minutes at holding speed at 450m (1500 ft) above the alternate aerodrome under standard temperature conditions, and approach and land; and

(C) to have an additional amount of fuel sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the Chairman; or

(ii) to fly to the alternate aerodrome via any predetermined point and thereafter for 30 minutes at 450m (1500ft) above the alternate aerodrome, due provision having been made for an additional amount of fuel sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the Chairman; provided that fuel shall not be less than the amount of fuel required to fly to the aerodrome to which the flight is planned and thereafter for two hours at normal cruise consumption.

(b) When a destination alternate aerodrome is not required:

(i) in terms of sub-rule (8)(a) of rule 145, to fly to the aerodrome to which the flight is planned and additionally:

(A) to fly 30 minutes at holding speed at 450 m (1500 ft) above the aerodrome to which the flight is planned under standard temperature conditions; and

(B) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the Chairman; and

(ii) in terms of sub-rule (8)(b) of rule 145, to fly to the aerodrome to which the flight is planned and thereafter for a period of two hours at normal cruise consumption.

(4) In computing the fuel and oil required in sub-rule (1) of this rule at least the following shall be considered:

(a) meteorological conditions forecast;
(b) expected air traffic control routings and traffic delays;
(c) for IFR flight, one instrument approach at the destination aerodrome, including a missed approach;
(d) the procedures prescribed in the operations manual for loss of pressurization, where applicable, or failure of one power init while en-route; and
(e) any other conditions that may delay the landing of the aeroplane or increase fuel and/or oil consumption.

(5) An operator shall maintain fuel and oil records to enable the Chairman to ascertain that, for each flight, the requirements of sub-rule (1) and (2) of rule 142 have been complied with.

(6) Fuel and oil records shall be retained by the operator for a period of three months.

(7) An aeroplane shall not be refuelled when passengers are embarking, on board or disembarking unless it is properly attended by qualified personnel ready to initiate and direct an evacuation of the aeroplane by the most practical and expeditious means available.

(8) When refuelling with passengers embarking, on board or disembarking, two-way communication shall be maintained by the aeroplane's inter-communication system or other suitable means between the ground crew supervising the refuelling and the qualified personnel on board the aeroplane.

(9) Additional precautions are required when refuelling with fuels other than aviation kerosene or when refuelling results in a mixture of aviation kerosene with other aviation turbine fuels, or when an open line is used.

143. Aeroplane communication and navigation equipment.- (1) Communication equipment:

(a) An aeroplane shall be provided with radio communication equipment capable of-

(i) conducting two-way communication for aerodrome control purposes;
(ii) receiving metrological information at any time during flight; and
(iii) conducting two-way communication at any time during flight with at least one aeronautical station and with such other aeronautical stations and on such frequencies as may be prescribed by the chairman.

(b) The radio communication equipment required in accordance with sub-rule 1(a) of this rule shall provide for communications on the aeronautical emergency frequency 121.5 MHz.

(c) For flights in defined portions of airspace or on routes where an RCP type has been prescribed, an aeroplane shall, in addition to the requirements specified in rule-143.

(i) be provided with communication equipment which will enable it to operate in accordance with the prescribed RCP type(s); and
(ii) be authorized by the state of the operator for operations in such airspace

(2) Navigation equipment: (a) An aeroplane shall be provided with navigation equipment which will enable it to proceed:

(i) in accordance with its operational flight plan; and
(ii) in accordance with the requirements of air traffic services;

except when, if not so precluded by the Chairman, navigation for flights under the visual

flight rules is accomplished by visual reference to landmark.

(b) For flights in defined portions of airspace or on routes where an RNP type has been prescribed, an airplane shall, in addition to the requirements specified in sub-rule 2(a) of this rule:

(i) be provided with navigation equipment which will enable it to operate in accordance with the prescribed RNP type (s); and
(ii) be authorized by the Chairman for operations in such airspace.

(c) For flights in defined portions of airspace where, based on Regional Air Navigation Agreement, minimum navigation performance specifications (MNPS) are prescribed, an aeroplane shall be provided with navigation equipment which:

(i) continuously provides indications to the flight crew of adherence to or departure from track to the required degree of accuracy at any point along that track; and
(ii) has been authorized by the Chairman for MNPS operations concerned.

(d) For flights in defined portions of airspace where, based on Regional Air Navigation Agreement, a reduced vertical separation minimum (RVSM) of 300m (1,000 ft) is applied between FL 290 and FL 410 inclusive, an aeroplane:

(i) shall be provided with equipment which is capable of:

(A) indicating to the flight crew the flight level being flown;
(B) automatically maintaining a selected flight level;
(C) providing an alert to the flight crew when a deviation occurs from the selected flight level. The threshold for the alert shall not exceed ± 90m (300 ft); and
(D) automatically reporting pressure-altitude; and

(ii) shall be authorized by the Chairman for operation in the airspace concerned.

(e) Prior to granting the RVSM approval required in accordance with sub-rule 2(d)(ii) of this rule, the Chairman shall be satisfied that:

(i) the vertical navigation performance capability of the aeroplane satisfies the requirements specified by the Chairman;
(ii) the operator has instituted appropriate procedures in respect of continued airworthiness (maintenance and repair) practices and programmes; and
(iii) the operator has instituted appropriate flight crew procedures for operations in RVSM airspace.

(f) The Chairman, in consultation with the State of Registry if appropriate, shall ensure that, in respect of those aeroplanes mentioned in sub-rule (2)(d) of this rule,

adequate provisions exist for:

(i) receiving the reports of height-keeping performance issued by the monitoring agencies established in accordance with the procedure made for this purpose; and
(ii) taking immediate corrective action for individual aircraft, or aircraft type groups, identified in such reports as not complying with the height-keeping requirements for operation in airspace where RVSM is applied.

(g) Chairman, shall establish provisions and procedures which ensure that appropriate action will be taken in respect of aircraft and operators found to be operating in RVSM airspace without a valid RVSM approval.

(h) The aeroplane shall be sufficiently provided with navigation equipment to ensure that, in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment will enable the aeroplane to navigate in accordance with sub-rule (2)(a) and where applicable sub-rule (2)(b), (2)(c) and (2)(d) of this rule.

(i) On flights in which it is intended to land in instrument meteorological conditions, an aeroplane shall be provided with radio equipment capable of receiving signals providing guidance to a point from which a visual landing can be effected. This equipment shall be capable of providing such guidance for each aerodrome at which it is intended to land in instrument meteorological conditions and for any designated alternate aerodromes.

(3) Installation: The equipment installation shall be such that the failure of any single unit required for either communications or navigation purposes or both will not result in the failure of another unit required for communications or navigation purposes.

(4) Electronic navigation data management: (a) An operator shall not employ electronic navigation data products that have been processed for application in air and on the ground unless the Chairman has approved the operator's procedures for ensuring that the process applied and the products delivered have met acceptable standards of integrity and that the products are compatible with the intended function of the equipment that will use them. The Chairman shall ensure that the operator continues to monitor both process and products.

(b) An operator shall implement procedures that ensure the timely distribution and insertion of current and unaltered electronic navigation data to all aircraft that require it.

144. Operation of flights under different weather conditions.- (1) A flight to be conducted in accordance with the visual flight rules shall not be commenced unless current meteorological reports or a combination of current reports and forecasts indicate that the meteorological conditions along the route or that part of the route to be flown under the visual flight rules will, at appropriate time, be such as to render compliance with these rules possible.

(2) A flight to be conducted in accordance with instrument flight rules shall not be commenced unless information is available which indicates that conditions at the aerodrome of intended landing or, where a destination alternate is required, at least one destination alternate aerodrome will, at the estimated time of arrival, be at or above the aerodrome operating minima.

(3) All aeroplanes shall be equipped with suitable de-icing and/or anti-icing devices when operated in circumstances in which icing conditions are reported to exist or are expected to be encountered.

(4) A flight to be operated in known or expected icing conditions shall not be commenced unless the aeroplane is certificated and equipped to cope with such conditions.

(5) A flight to be planned or expected to operate in suspected or known ground icing conditions shall not take-off unless the aeroplane has been inspected for icing and, if necessary, has been given appropriate de-icing/anti-icing treatment. Accumulation of ice or other naturally occurring contaminants shall be removed so that the aeroplane is kept in an airworthy condition prior to take-off.

145. Alternate Aerodrome.- (1) A take-off alternate aerodrome shall be selected and specified in the operational flight plan if the weather conditions at the aerodrome of departure are at or below the applicable aerodrome operating minima or it would not be possible to return to the aerodrome of departure for other reasons.

(2) The take-off alternate aerodrome shall be located within the following distance from the aerodrome of departure:

(a) aeroplanes having two power-units. Not more than a distance equivalent to a flight time of one hour at the single-engine cruise speed; and

(b) not more than a distance equivalent to a flight time of two hours at the one-engine inoperative cruise speed if the aeroplane is having three or more power-units.

(3) For an aerodrome to be selected as a take-off alternate the available information shall indicate that, at the estimated time of use, the conditions will be at or above the aerodrome operating minima for that operation.

(4) En-route alternate aerodrome, required by sub-rule (19) of rule 123 for extended range operations by aeroplanes with two turbine power-units, shall be selected and specified in the operational and air traffic services (ATS) flight plans.

(5) For a flight to be conducted in accordance with the instrument flight rules, at least one destination alternate aerodrome shall be selected and specified in the operational and ATS flight plans, unless:

(a) the duration of the flight and the meteorological conditions prevailing are such

that there is reasonable certainty that, at the estimated time of arrival at the aerodrome of intended landing, and for a reasonable period before and after such time, the approach and landing may be made under visual meteorological conditions; or

(b) the aerodrome of intended landing is isolated and there is no suitable destination alternate aerodrome.

146. Oxygen supply and use of oxygen.- (1) A flight to be operated at flight altitudes at which the atmospheric pressure in personnel compartments will be less than 700 hpa shall not be commenced unless sufficient stored breathing oxygen is carried to supply:

(a) all crew members and 10 percent of the passengers for any period in excess of 30 minutes that the pressure in compartments occupied by them will be between 700 hPa and 620 hPa; and

(b) the crew and passengers for any period that the atmospheric pressure in compartments occupied by them will be less than 620 hPa.

(2) A flight to be operated with a pressurized aeroplane shall not be commenced unless a sufficient quantity of stored breathing oxygen is carried to supply all the crew members and passengers, as is appropriate to the circumstances of the flight being undertaken, in the event of loss of pressurization, for any period that the atmospheric pressure in any compartment occupied by them would be less than 700 hPa. In addition, when an aeroplane is operated at flight altitudes at which the atmospheric pressure is less than 376 hPa, or which, if operated at flight altitudes at which the atmospheric pressure is more than 376 hPa and cannot descend safely within four minutes to a flight altitude at which the atmospheric pressure is equal to 620 hPa, there shall be no less than a 10 minute supply for the occupants of he passenger compartment.

(3) All flight crew members, when engaged in performing duties essential to the safe operation of an aeroplane in flight, shall use breathing oxygen continuously whenever the circumstances prevail for which its supply has been required in sub-rule (1) and (2) of this rule.

(4) All flight crew members of pressurized aeroplanes operating above an altitude where the atmospheric pressure is less than 376 hPa shall have available at the flight duty station a quick-donning type of oxygen mask, which will readily supply oxygen upon demand.

147. Emergency locator transmitter (ELT).- (1) Except as provided for in sub-rule (2) of this rule all aeroplanes operated on long-range over-water flights as described in sub-rule (6) & (7) of rule 130 shall be equipped with at least two ELT(s).

(2) All aeroplanes for which the individual certificate of airworthiness is first issued after 1 January 2002, operated on long-range over-water flights as described in sub-rule (6) & (7) of rule 130, shall be equipped with at least two ELTs, one of which shall be automatic.

(3) (a) All aeroplanes operated on long range over water flights as described in sub-rule

(6) and (7) of rule 130 shall be equipped with at least two ELT's, one of which shall be automatic.

(b) Aeroplanes on flights over designated land areas as described in sub-rule (8) rule 130 shall be equipped with at least one automatic ELT.

(4) All aeroplanes for which the individual certificate of airworthiness is first issued after 1 January 2002, on flights over designated land areas as described in sub-rule (8) of rule 130, shall be equipped with at least one automatic ELT.

(5) All aeroplanes should carry an automatic ELT.

(6) ELT equipment carried to satisfy the requirements of this rule shall operate in accordance with the relevant provisions of the Convention.

(7) Except as provided for in sub-rule (8) of rule 147, all aeroplanes authorized to carry more than 19 passengers shall be equipped with at least one automatic ELT or two ELTs of any type.

(8) All aeroplanes authorized to carry more than 19 passengers for which the individual certificate of airworthiness is first issued after 1 July 2008 shall be equipped with at least two ELTs, one of which shall be automatic.

(9) Except as provided for in sub-rule (11) of this rule, all aeroplanes authorized to carry 19 passengers or less shall be equipped with at least one ELT of any type.

(10) Except as proviced for in sub-rule (11) of this rule, all aeroplanes authorized to carry 19 passengers or less shall be equipped with at least one ELT of any type.

(11) All aeroplanes authorized to carry 19 passengers or less for which the individual certificate or airworthiness is first issued after 1 July 2008 shall be equipped with at least one automatic ELT.

(12) ELT equipment carried to satisfy the requirements of sub-rules (7), (8), (9), (10) & (11) of this rule shall operate in accordance with the relevant provisions of the Convention.

(13) All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 15 000 kg or authorized to carry more than 30 passengers shall be equipped with an airborne collision avoidance system (ACAS II).

(14) All turbine-engined aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorized to carry more than 19 passengers shall be equipped with an airborne collision avoidance system (ACAS II).

(15) An airborne collision avoidance system shall operate in accordance with the relevant provisions of the Convention.

(16) All aeroplanes for which the individual certificate of airworthiness is first issued after 1 January 2009 shall be equipped with a data source that provides pressure altitude information with a resolution of 7.62 m (25 ft), or better.

(17) After 1 January 2012 all aero planes shall be equipped with a data source that provides pressure-altitude information with a resolution of 7.62 m (25 ft), or better.

147A. Flight Preparation.- (1) A flight shall not be commenced until fight preparation forms have been completed certifying that the pilot-in-command is satisfied that:

(a) the aeroplane is airworthy;
(b) the instruments and equipment prescribed in rule 129 & 130, for the particular type of operation to be undertaken, are installed and are sufficient for the flight;
(c) a maintenance release as prescribed in rule 201 has been issued in respect of the aeroplane;
(d) the mass of the aeroplane and center of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected;
(e) any load carried is properly distributed and safely secured;
(f) a check has been completed indicating that the operating limitations of specified in rule 161 can be complied with for the flight to be undertaken; and
(g) the requirements specified in the sub-rule (3) of this rule relating to operational flight planning have been complied with.

(2) Completed flight preparation forms shall be kept by an operator for a period of three months.

(3) An operational flight plan shall be completed for every intended flight. The operational flight plan shall be approved and signed by the pilot-in-command and, where applicable, signed by the flight operations officer/flight dispatcher, and a copy shall be filed with the operator or a designated agent, or, if these procedures are not possible, it shall be left with the aerodrome authority or on record in a suitable place at the point of departure.

(4) Before beginning a flight, the pilot-in-command shall study all available information appropriate to the intended operation and in cases of flights away form the vicinity of an aerodrome and all IFR flights shall make a careful study of:

(a) current weather reports and forecasts for the route to be followed and at aerodromes to be used;
(b) the airways facilities available on the route to be followed and the condition of those facilities;
(c) the conditions of aerodromes to be used and their suitability for the aircraft to be used; and
(d) the air traffic rules and procedures pertaining to the particular flight, and he shall plan the flight in relation to the information obtained.

148. Testing of radio apparatus.- (1) Before an aircraft is taxied on the manoeuvring

area of an aerodrome for the purpose of take-off, the pilot – in- command shall check that the radio apparatus fitted to the aircraft and to be used in flight is functioning correctly.

(2) If the check indicates any malfunctioning of any portion of the radio apparatus, the aircraft shall not be flown until the apparatus has been certified by a person licensed or approved for the purpose as beginning proper working order.

149. Listening watch.- (1) When an aircraft is equipped with radio apparatus for use during flight, a listening watch shall be maintained at all times when the aircraft commences moving on the manoeuvering area prior to a flight and lasting until the aircraft is brought to a stop at the termination of the flight.

(2) When an aircraft is under the control of an air traffic control unit which issues instructions and information directly to aircraft by a voice communication channel, the pilot-in-command and any other pilot for the time being operating the controls of the aircraft shall personally maintain a listening watch on the appropriate radio frequency.

150. Safety precautions before flight.- (1) Immediately before taking-off on any flight, the pilot-in-command of an aircraft shall -

(a) test the flight controls on the ground and make such other tests as are necessary to ensure that those controls are functioning correctly;

(b) ensure that locking and safety devices are removed and that hatches, doors and tank caps are secured;

(c) ensure that all external surfaces of the aircraft are completely free from frost and ice;

(d) test all flight instruments, and in particular, all gyroscopic flight instruments to ensure that they are functioning correctly;

(e) ensure that all gyroscopic flight instruments are correctly set and uncaged; and

(f) perform such checks and tests as are required by the flight manual for, or the operations manual of the aircraft.

(2) If an inspection, check or test made under sub-rule (1) indicates any departure from the permissible limits or any malfunctioning in any particular (not being a departure or malfunctioning that is permissible unserviceability), the pilot-in-command shall not commence the take-off or, if he has commenced the take-off, shall abandon the take-off or take such other action as he considers appropriate to ensure the safety of the aircraft and of persons on board the aircraft.

151. Pilot to report meteorological conditions.- (1) The pilot-in command shall report, if requested by a meteorological unit, the meteorological conditions observed en-route.

(2) When meteorological condition hazardous to flight is encountered en-route, the pilot-in-command shall report the condition to the appropriate air traffic services unit as soon as possible, giving such details as appear to the safety of the aircraft.

152. Reporting of accidents, incidents, defects and occurrences: (1) Following occurrence of any of the under mentioned events, a written report shall be submitted to the Chairman within a specified period as mentioned

(a) accident or serious incidents or incident under rule 235 -

(i) the Pilot-in-command, the owner, the operator and the hirer, if any, of an aeroplane shall submit a report to the Authority of any accident or serious incident or incident under rule 235 that has endangered or may have endangered safe operation of a flight.

(ii) notification shall be made immediately after being aware of the occurrence of the accident or incident followed by a written to the Chairman, within 72 (seventy-two) hours of the event, unless exceptional circumstances prevent this;

(b) technical defects and exceeding technical limitations: the Pilot-in-command shall ensure that all technical defects and exceeding technical limitations occurring under rule 205, while he was responsible for the flight, are recorded in the Aircraft Maintenance Log on Termination of the sector flight.

(c) air traffic incidents.- the Pilot-in-command shall submit an air traffic incident report in accordance with ICAO PANS RAC whenever an aircraft in flight has been endangered by-

(i) a near collision or airmiss as under rule 94 with any other flying device,

(ii) faulty air traffic procedures or lack of compliance with applicable procedures by air traffic services (ATS) or by the flight crew, or

(iii) defects in any aerodromes or failure of ATS facilities which have come to his notice.

(d) bird hazards and strikes.- the pilot-in-command shall -

(i) immediately inform the appropriate ground station whenever a potential bird-hazard is observed.

(ii) submit a written bird-strike report after landing whenever an aeroplane for which he is responsible suffers a bird strike;

(e) in-flight emergencies with dangerous goods on board - if an in-flight emergency occurs and the situation permits, the Pilot-in-command shall inform the appropriate Air Traffic Services unit of any dangerous goods on board;

(f) unlawful interference - if an act of unlawful interference under rule 285 occurs on board an aeroplane, the Pilot-in-command shall submit a report, as soon as practicable, to the local authority and the Chairman;

(g) irregularities of ground and navigational facilities and hazardous meteorological conditions - the pilot-in-command shall notify the appropriate ground station, as soon as practicable, whenever a potentially hazardous condition as mentioned below is encountered during flight:-

(i) an irregularity in a ground or navigational facility;

(ii) a meteorological phenomenon (as referred in rule 151);

(iii) a volcanic ash cloud; or

(iv) a high radiation level.

(2) Where no period is specified, the report shall be submitted as soon as possible but not exceeding 10 (ten) days from the occurrence.

(3) Where a defect in the aircraft is reported under sub-rule (1), the operator of the aircraft shall take such action in relation to that defect as is required under these Rules.

153. Prohibition of carriage of passengers.- (1) An aircraft that carries a passenger shall not be engaged in any of the following types of flying:-

(a) practice for the issue of any pilot licence;

(b) practice for the purpose of obtaining an endorsement of the aircraft type in a pilot licence;

(c) low flying practice; or

(d) testing an aircraft or its component, power plant or equipment.

(2) An aircraft while engaged in flying of the type specified in sub-rule (1) may carry engineering and maintenance personnel who are required as part of their duties to be present in the aircraft during the flight for the purpose of the maintenance, inspection or adjustment of the aircraft or its aircraft components.

Explanation.- For the purpose of sub-rule (1), "passenger" does not include an approved person or a person engaged in instructing personnel or testing the aircraft in flight.

154. Carriage on wings, landing gear, etc.- A person shall not be carried on the wings or landing gear of any aircraft or in any other part of the aircraft which is not designed for the accommodation of the crew or passenger.

155. Seat, seat belts and safety harness.- (1) An aeroplane shall be equipped with:

(a) a seat or berth for each person over an age to be determined by the Chairman;
(b) a seat belt for each seat and restraining belts for each berth; and
(c) a safety harness for each flight crew seat. The safety harness for each pilot seat shall incorporate a device, which will automatically restrain the occupant's torso in the event of rapid deceleration. The safety harness for each pilot seat should incorporate a device to prevent a suddenly incapacitated pilot from interfering with the flight controls. Safety harness includes shoulder straps and a seat belt, which may be used independently.

(2) All flight crew members shall keep their seat belts fastened when at their stations.

(3) Any flight crew member occupying a pilot's seat shall keep the safety harness fastened during the take-off and landing phases; all other flight crew members shall keep their safety harnesses fastened during the take-off and landing phases unless the shoulder straps interfere with the performance of their duties, in which case the shoulder straps may be unfastened but the seat belt must remain fastened.

(4) The seats of the cabin crew shall be in accordance with rule 157(3) and each cabin crew member shall occupy a seat as specified in the sub-rule (2) and (4) of rule 157.

(5) Each passenger shall keep their seat belts fastened when so directed or indicated in the flight.

(6) Subject to sub-rule (7) of this rule, the operator shall detail a member of the crew to ensure that a seat belt or safety harness is worn by each occupant of the aircraft during the times specified in this rule and to ensure that each belt or harness is adjusted to fit the wearer without slack.

(7) The Chairman may, for the purpose of ensuring the safety of air navigation, give directions requiring the owner or operator of an aircraft to install in the aircraft an approved communications system to enable the pilot-in-command to notify passengers when a seat belt or safety harness is to be worn.

156. Provision of emergency equipment: (1) The Chairman may give directions with respect to the provision in aircraft registered in Bangladesh of such emergency systems and equipment, and such life-saving equipment, as he considers necessary to safeguard the aircraft and persons on board the aircraft.

(2) In giving a direction under sub-rule (1), the Chairman shall have regard to the type of

operation in which the aircraft is to be used.

(3) (a) Operators shall at all times have available for immediate communication to rescue coordination centers, lists containing information on the emergency and survival equipment carried on board any of their aeroplanes engaged in international air navigation. The information shall include, as applicable, the number, colour and type of life rafts and pyrotechnics, details of emergency medical supplies, water supplies and the type and frequencies of the emergency portable radio equipment.

(b) An operator shall ensure, to the extend possible, in the event the aeroplane becomes involved in an accident or incident, the preservation of all related flight recorder records and if necessary, the associated flight recorders, and their retention in safe custody pending their disposition as determined in accordance with part-XIII of these rule.

(4) An operator shall ensure, to the extent possible, in the event the aeroplane becomes involved in an accident or incident, the preservation of all related flight recorder records and, if necessary, the associated flight recorders, and their retention in safe custody pending their disposition as determined in accordance with part-XIII of these rules.

157. Cabin Crew – Emergency duties & Training.- (1) An operator shall establish, to the satisfaction of the Chairman, the minimum number of cabin crew required for each type of aeroplane, based on seating capacity or the number of passengers carried, in order to effect a safe and expeditious evacuation of the aeroplane, and the necessary functions to be performed in an emergency or a situation requiring evacuation. The operator shall assign these functions for each type of aeroplane.

(2) Each cabin crew member assigned to emergency evacuation duties shall occupy a seat provided in accordance with the procedure mentioned sub-rule (3) of this rule, during take-off and landing and whenever the pilot-in-command so directs.

(3) (a) All aeroplanes shall be equipped with a forward or rearward facing (within 15 degrees of the longitudinal axis of the aeroplane) seat, fitted with a safety harness for the use of each cabin crew member required to satisfy the intent of sub-rule (1) of this rule in respect of emergency evacuation. This is applicable for aeroplane for which the individual certificate of Airworthiness is first issued on or after 1st January 1981.

(b) All aeroplanes should be equipped with a forward or rearward facing (within 15 degrees of the longitudinal axis of the aeroplanes) seat, fitted with a safety harness for the use of each cabin crew member required to satisfy the intent of sub-rule (1) of this rule in respect of emergency evacuation. This is for aeroplanes for which the individual certificate of airworthiness is first issued before 1 January 1981.

Note: Safety harness includes shoulder straps and a seat belt, which may be used independently.

(c) Cabin crew seats provided in accordance with sub-rule (3)(a) and (3)(b) of this rule shall be located near floor level and other emergency exists as required by the Chairman for emergency evacuation.

(4) Each cabin crew member shall be seated with seat belt or, when provided, safety harness fastened during take-off and landing and whenever the pilot-in-command so directs. This does not preclude the pilot-in-command from directing the fastening of the seat belt only, at time other than during take-off and landing.

(5) An operator shall establish and maintain a training programme, approved by the Chairman, to be completed by all persons before being assigned as a cabin crew member. Cabin crew shall complete a recurrent training programme annually. These training programmes shall ensure that each person is:

(a) competent to execute those safety duties and functions which the cabin crew member is assigned to perform in the event of an emergency or in a situation requiring emergency evacuation;

(b) drilled and capable in the use of emergency and life-saving equipment required to be carried, such as life jackets, life rafts, evacuation slides, emergency exits, portable fire extinguishers, oxygen equipment and first-aid kits;

(c) when serving on aeroplanes operated above 3000m (10000 ft), knowledgeable as regards the effect of lack of oxygen and, in the case of pressurized aeroplane, as regards physiological phenomena accompanying a loss of pressurization;

(d) aware of other crew members' assignments and functions in the event of an emergency so far as is necessary for the fulfillment of the cabin crew member's own duties;

(e) aware of the types of dangerous goods which may, and may not, be carried in a passenger cabin and has completed the dangerous goods training programme required by part XVIIIA of these rule; and

(f) Knowledgeable about human performance as related to passenger cabin safety duties including flight crew-cabin crew coordination.

(6) An operator shall not assign a person to act as a crew member of an aircraft, and a person shall not act as a crew member of an aircraft, unless the person is competent in the use of the emergency and life saving equipments carried in the aircraft.

(7) The operator shall ensure that each crew member of an aircraft which is used in flight over water mass is instructed in "ditching" and "abandon ship" procedures in so far as is practicable and that he is periodically tested as to his knowledge of those procedures.

(8) The operator shall detail a crew member to ensure that passengers are made familiar

with the location of emergency exits in the aircraft in which they are traveling and the location and use of emergency equipments carried in the aircraft.

(9) (a) It is not envisaged that cabin crew will always be able to provide assistance to passengers during emergency descent procedures which may be required in the event of loss of pressurization.

(b) Cabin crew should be safeguarded so as to ensure reasonable probability of their retaining consciousness during any emergency descent which may necessary in the event of loss of pressurization and, in addition, they should have such means of protection as will enable them to administer first aid to passengers during stabilized flight following the emergency. Passengers should be safeguarded by such devices or operational procedures as will ensure reasonable probability of their surviving the effects of hypoxia in the event of loss of pressurization.

(10) Flight time, flight duty periods and rest periods.- The Operator shall establish the limits applicable to flight time, flight duty periods and rest periods for cabin crew approved by Chairman.

158. Information & instruction to passengers.- (1) An operator shall ensure that passengers are made familiar with the location and use of:

(a) seat belts;
(b) emergency exits;
(c) life jackets, if the carriage of life jackets is prescribed;
(d) oxygen dispensing equipment, if the provision of oxygen for the use of passengers is prescribed; and
(e) other emergency equipment provided for individual use including passenger emergency briefing cards.

(2) The operator shall inform the passengers of location and general manner of use of the principal emergency equipment carried for collective use.

(3) In an emergency during flight, passengers shall be instructed in such emergency action as may be appropriate to the circumstances.

(4) The operator shall ensure that during take-off landing and whenever, by reason of turbulence or any emergency occurring during flight, the precaution is considered necessary, all passengers on board an aeroplane shall be secured in their seats by means of the seat belts or harness provided.

(5) An aeroplane shall be equipped with:

(a) means of ensuring that the following information and instructions are conveyed to passengers:
(b) when seat belts are to be fastened;

(c) when and how oxygen equipment is to be used if the carriage of oxygen is required;
(d) restrictions on smoking;
(e) location and use of life jackets or equivalent individual flotation devices where their carriage is required; and
(f) location and method of opening emergency exits.

(6) A person shall not smoke.- (a) in any part of an aircraft in which a notice is permanently displayed indicating that smoking is prohibited at all times or without specifying a period during which smoking is prohibited;

(b) anywhere in an aircraft during take-off, landing or refuelling or during a period:
(i) in which a notice is temporarily displayed indicating that smoking is prohibited; or
(ii) which is specified in a permanently displayed notice as a period during which smoking is prohibited.

(7) The pilot-in-command shall ensure that the notice indicating that smoking is prohibited is displayed:

(a) during take-off, landing or refuelling;
(b) during such periods as are specified in the flight manual; and
(c) during a period in which he considers that smoking should be prohibited in the interests of safety.

(8) A notice required to be displayed shall be legible and shall be displayed in a conspicuous place.

(9) Not withstanding anything contained in sub-rules (6) & (7) of this rule, the Chairman may declare certain flights or all flight as non-smoking flight.

(10) The operator shall ensure that all baggage carried onto an aeroplane and taken into the passenger cabin is adequately and securely stowed.

159. Intoxicated person.- (1) A person shall not, while in a state of intoxication, enter any aircraft.

(2) A person acting as a member of the operating crew, or carried in the aircraft for the purpose of so acting, shall not, while so acting or carried, be in a state in which, by reason of having taken or used any alcoholic liquor, drug or medicinal preparation or other substance, his capacity so to act is impaired.

(3) A person shall not act as, or perform duties or functions preparatory to acting as, a member of the operating crew if he has, during the period of twelve hours immediately preceding the departure of the aircraft consumed any alcoholic liquor.

(4) A person shall not, while acting in any capacity in either Air Traffic Control or Flight

Service, be in a state in which, by reason of his having taken or used any alcoholic liquor, drug or medicinal preparation or other substance, his capacity so to act is impaired.

(5) A person shall not act in any capacity in either Air Traffic Control or Flight Service if he has, during the period of twelve hours immediately preceding the commencement of the period of duty in which he so acts, consumed any alcoholic liquor.

160. Aerodrome meteorological minima.- The Chairman may determine meteorological minima in respect of each aerodrome.

161. Aeroplane performance and operating limitations.-

(1) General:

(a) Aeroplanes shall be operated in accordance with a comprehensive and detailed code of performance established by the Chairman in compliance with the applicable requirements of this rule.

(b) Except as provided in sub-rule (4) of this rule, single-engine aeroplanes shall only be operated in conditions of weather and light, and over such routes and diversions there from, that permit a safe forced landing to be executed in the event of engine failure.

(c) Except for the aeroplanes for which Chairman has granted exemption in accordance with Article 41 of the Convention, the Chairman should ensure that the level of performance specified in sub-rule (2) of this rule should be met as far as possible.

(2) (a) The requirements contained in sub-rule (2)(b) to (2)(k) of this rule, both inclusive, are applicable to all the aeroplanes except exempted as per sub-rule (1)(c) of this rule.

(b) The level of performance defined by the appropriate parts of the comprehensive and detailed code of performance referred to in sub-rule (1)(a) of this rule for the aeroplanes designated in sub-rule (2)(a) of this rule shall be at least substantially equivalent to the overall level embodied in the requirements of this rule.

(c) An aeroplane shall be operated in compliance with the terms of its certificate of airworthiness and within the approved operating limitations contained in its flight manual.

(d) The Chairman shall take such precautions as are reasonably possible to ensure that the general level of safety contemplated by these provisions is maintained under all expected operating conditions, including those not covered specifically by the provisions of this rule.

(e) A flight shall not be commenced unless the performance information provided in the flight manual indicates that the requirements sub-rule (2)(f) to (2) (k) of this rule can be complied with for the flight to be undertaken.

(f) In applying the requirements of this rule, account shall be taken of all factors that significantly affect the performance of the aeroplane (such as: mass, operating procedures, the pressure-altitude appropriate to the elevation of the aerodrome, temperature, wind, runway gradient and condition of runway, i.e. presence of slush, water and/or ice, for landplanes, water surface condition for seaplanes). Such factors shall be taken into account directly a operational parameters or indirectly by means of allowances or margins, which may be provided in the scheduling of performance data or in the comprehensive and detailed code of performance in accordance with which the aeroplane is being operated.

(g) Mass limitations:

(i) The mass of the aeroplane at the start of take-off shall not exceed the mass at which sub-rule (2)(h) of this rule is complied with, nor the mass at which sub-rule (2)(i), (2)(j) and (2)(k) of this rule is complied with, allowing or expected reductions in mass as the flight proceeds, and for such fuel jettisoning as is envisaged in applying sub-rule (2)(j) and (2)(k) of this rule and, in respect of alternate aerodrome, sub-rule (2)(g) (iii) and (2)(k) of this rule.

(ii) In no case shall the mass at the start of take-off exceed the maximum take-off mass specified in the flight manual for the pressure-altitude appropriate to the elevation of the aerodrome, and, if used as a parameter to determine the maximum take-off mass, any other local atmospheric condition.

(iii) In no case shall the estimated mass for the expected time of landing at the aerodrome of intended landing and at any destination alternate aerodrome, exceed the maximum landing mass specified in the flight manual for the pressure-altitude appropriate to the elevation of those aerodromes, and if used as a parameter to determine the maximum landing mass, any other local atmospheric condition.

(iv) In no case shall the mass at the start of take-off, or at the expected time of landing at the aerodrome of intended landing and at any destination alternate aerodromes exceed the relevant maximum masses at which compliance has been demonstrated with the applicable noise certification requirements of Part XVI, unless otherwise authorized in exceptional circumstances for a certain aerodrome or a runway where there is no noise disturbance problem, by the competent authority of the State in which the aerodrome is situated.

(v) The Chairman may, for the purposes ensuring safety, give directions regarding:

(A) the mass of the aircraft, together with the mass of all persons and goods

(including fuel) of board the aircraft, at that time; and
(B) the center of gravity of the aircraft at that time.

(vi) The Chairman may, for the purpose of ensuring the safety of air navigation, give directions with respect to the method of loading of persons and goods (including fuel) on aircraft.

(vii) An aircraft shall not take-off, or attempt to take-off, unless any directions with respect to the loading of the aircraft given under this rule have been complied with.

(viii) The load of an aircraft throughout a flight shall be so distributed that the center of gravity of the aircraft falls within the limitations specified in its certificate of airworthiness or its flight manual.

(h) Take-off:

(i) The aeroplane shall be able, in the event of a critical power-unit failing at any point in the take-off, either to discontinue the take-off and stop within the accelerate-stop distance available, or to continue the take-off and clear all obstacles along the flight path by an adequate margin until the aeroplane is in a position to comply with sub-rule 2(i) of this rule.

(ii) In determining the length of the runway available, account shall be taken of the loss, if any, of runway length due to alignment of the aeroplane prior to take-off.

(i) En route-one power-unit inoperative: The aeroplane shall be able, in the event of the critical power-unit becoming inoperative at any point along the route or planned diversions there from, to continue the flight to an aerodrome at which the requirements of sub-rule (2)(k) of this rule can be met, without flying below the minimum flight altitude at any point.

(j) En route-two power-units inoperative: In the case of aeroplanes having three or more power-units, on any part of a route where the location of en-route alternate aerodromes and the total duration of the flight are such that the probability of a second power-unit becoming inoperative must be allowed for if the general level of safety implied by the requirements of this rule are to be maintained, the aeroplane shall be able, in the event of any two power-units becoming inoperative, to continue the flight to an en-route alternate aerodrome and land.

(k) Landing: The aeroplane shall, at the aerodrome of intended landing and at any alternate aerodrome, after clearing all obstacles in the approach path by a safe margin, be able to land, with assurance that it can come to a stop or, for a seaplane, to a satisfactorily low speed, within the landing distance available. Allowance shall be made for expected variation in the approach and landing techniques, if such

allowance has not been made in the scheduling of performance data.

(3) Obstacle data: (a) Obstacle data shall be provided to enable the operator to develop procedures to comply with the requirements of sub-rule (2)(h) of this rule.

(b) The operator shall take account of charting accuracy when assessing compliance with the requirements of sub-rule (2)(h) of this rule.

(4) Additional requirements for operations of single-engine turbine-powered aeroplanes at night and/or in Instrument Meteorological Conditions (IMC):

(a) In approving operations by single-engine turbine-powered aeroplanes at night and/or in IMC, the Chairman shall ensure that the airworthiness certification of the aeroplane is appropriate and that the overall level of safety intended by the provisions of this Part and Part-VIII of these rules is provided by:

(i) the reliability of the turbine engine;
(ii) the operator's maintenance procedures, operating practices, flight dispatch procedures and crew training programmes; and
(iii) equipment and other requirements provided in accordance with the requirements set by Chairman.

(b) All single-engine turbine-powered aeroplanes operated at night and/or in IMC shall have an engine trend monitoring system, and those aeroplanes for which the individual certificate of airworthiness is first issued on or after 1 January 2005 shall have an automatic trend monitoring system**.**

162. Free balloons.- A free balloon shall not be flown except with the express permission of the Chairman and only in accordance with the terms of that permission.

163. Fixed balloons and kites.- (1) A fixed balloon or kites may be flown at a height not exceeding 91 meters (300 feet), but a fixed balloon or kite shall not be flown within a radius of 4,000 meters (13,000 feet) of an aerodrome or at a height in excess of 91 meters (300 feet) except with the express permission of the Chairman and only in accordance with the terms of that permission.

(2) A fixed balloon or kite shall not be flown other than under visual flight conditions.

164. Aeronautical mobile radio service.- (1) A land station shall not engage in the aeronautical mobile radio service without the permission of the Chairman.

(2) A person shall not employed at a land station as a radio operator in the aeronautical mobile radio service unless-

(a) he has such qualifications and experience relative to the duties to be performed as the Chairman directs; and

(b) the Chairman approves of his being so employed.

165. Carriage of Examiners or Authorized Officers and Overseas investigation costs.- (1) The Chairman may authorize Flight operations Inspector or any officer to undertake examination, inspection or check of the work of the operating crew, the operation of the aircraft or its equipment or the ground organization provided by the operator.

(2) Any officer authorized under this rule shall be provided with accommodation on the aircraft on a priority basis.

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(3) Where the Chairman or an authorized person may, upon an application made to him, finds it necessary to travel outside Bangladesh for the purpose of investigation of an application for the grant, issue or renewal of licence, certificate or approval referred to in this part, the applicant shall meet the costs involved in that travel.

166. Log books.- (1) The following log books shall be kept in respect of an aircraft registered in Bangladesh, namely-

(a) a journey log book;
(b) an aircraft log book;
(c) for an aircraft fitted with one engine, an engine log book and, if fitted with more than one engine, a separate log book for each engine;
(d) for an aircraft fitted with a variable pitch propeller, a variable pitch propeller log book and, if fitted with more than one such propeller, a separate log book for each propeller;
(e) an aircraft maintenance log book in respect of each aircraft for which a Certificate of Registration is in force.
(f) a modification record book for each aircraft, engine, propeller and radio.

(2) The journey log book, aircraft log book, engine log book, variable propeller log book and modification record book for each aircraft, engine and propeller shall be issued by the Chairman. Other log books shall be of such a type and character, and shall contain such additional information, as the Chairman may direct.

(3) Such arrangement as the Chairman approves shall be made for ensuring that copies of the entries made in any log book which is carried in the aircraft are recorded on a suitable form and kept in a safe place on the ground.

(4) Entries in the journey log book in respect of each journey shall be currently made by the crew and the pilot-in-command shall ensure that such entries are made in accordance with the requirements of this rule.

(5) Entries in the aircraft, engine and variable pitch propeller log books (other than the entries made by the constructor thereof) shall be made and signed by an appropriately licensed Aircraft Maintenance Engineer or an authorized person except that in the case of a

general aviation aircraft used for transportation for personal or corporate use, the entries may be made by the owner or the pilot of the aircraft.

(6) Entries in the radio apparatus log book shall be made and signed by a licensed Aircraft Maintenance Engineer licenced in Radio category or by an authorized person.

(7) Entries in the aircraft, engine, variable pitch propeller and radio apparatus log books shall be made within seven days from the date of issue of certificate of compliance for the maintenance.

(8) Entries in any log book shall be made in the form and manner as may be specified by the Chairman and all entries and signatures in these log books shall be made in ink or indelible pencil.

(9) No person shall destroy, mutilate, alter or render illegible any entry made in any log book, or will fully make or procure or assist in the making of any fraudulent entry in, or omission from, any log book referred to in rule 57.

(10) The log books shall be preserved until such time the aircraft is permanently withdrawn from use and its Certificate of Registration is cancelled. Provided that in the case of an aircraft meeting with an accident resulting in damage beyond economical repairs, the log books shall be preserved for a period of two years after the date of the accident.

167. Journey log book.- (1) The operator of an aircraft shall take such action as is necessary to ensure that a journey log book may be kept in accordance with these rules and the pilot-in-command shall keep that log book.

(2) The journey log book should contain the following items and the corresponding roman numbers:

I — Aeroplane nationality and registration.
II — Date.
III — Names of crew members.
IV — Duty assignments of crew members.
V — Place of departure.
VI — Place of arrival.
VII — Time of departure.
VIII — Time of arrival.
IX — Hours of flight.
X — Nature of flight (General aviation, aerial work and scheduled or non-scheduled commercial air transport).
XI — Incidents, observations, if any.
XII — Signature of person in charge.

(3) Entries in the journey log book should be made currently and in ink or indelible pencil.

(4) Completed journey log book should be retained to provide a continuous record of the last six months' operations.

(5) Information from a journey log book shall, as soon as practicable, be entered in any other appropriate log book for record.

168. Navigation log book.- (1) The operator shall take such action as is necessary to ensure that a navigation log book may be kept in accordance with these rules and the pilot-in-command shall keep that log book.

(2) The navigation log book shall be kept in chronological order and shall contain such navigational data as is required to enable the geographical position of the aircraft to be determined at any time while the aircraft is in flight.

(3) The navigation log book of a Bangladesh aircraft engaged on an international flight shall include the following information:-

(a) points of departure and destination;
(b) required track;
(c) wind velocity used for calculations;
(d) headings flown;
(e) true airspeed;
(f) position lines, fixes and pin points obtained;
(g) times of alteration of heading;
(h) estimated times of arrival at turning points and destinations; and
(i) such other information relevant to the navigation of the aircraft as the Chairman directs.

169. General Aviation-Helicopter.- The rules contained in this part shall be applicable to all helicopters engaged in general aviation operations, except that these rules are not applicable to helicopters engaged in aerial work.

(1) General:

(a) The pilot-in-command shall comply with the relevant laws, regulations and procedures of the states in which the helicopter is operated.

(b) The pilot-in-command shall be responsible for the operation and safety of the helicopter and for the safety of all crew members, passengers and cargo on board, from the moment the engine(s) are started until the helicopter shut down and the rotor blades stopped.

(c) If an emergency situation which endangers the safety of the helicopter or persons necessitates the taking of action which involves a violation of local regulations or procedures, the pilot-in-command shall notify the appropriate local authority without

delay. If required by the state in which the incident occurs, the pilot-in-command shall submit a report on any such violation to the appropriate authority of such state; in that event, the pilot-in-command shall also submit a copy of it to the Chairman such reports shall be submitted as soon as possible and normally within ten days.

(d) The pilot-in-command shall be responsible for notifying the nearest appropriate authority by the quickest available means of any accident involving the helicopter resulting in serious injury or death of any person or substantial damage to the helicopter or property.

(2) Flight Operation: (a) Adequacy of operating facilities.- The pilot-in-command shall not commence a flight unless it has been ascertained by every reasonable means available that the ground and/or water areas and facilities available and directly required for such flight and for the safe operation of the helicopter are adequate including communication facilities and navigation aids.

(b) Heliport operating minima.- Except with the specific approval of the Chairman the pilot-in–command shall not operate to or from a heliport using operating minima lower than those established for that heliport.

(3) Briefing: (a) The pilot-in-command shall ensure that crew members and passengers are made familiar, by means of an oral briefing or by other means, with the location and the use of :

(i) seat belts; and , as appropriate,
(ii) emergency exits;
(iii) life jackets;
(iv) oxygen dispensing equipment; and
(v) other emergency equipment provided for individual use, including passenger emergency briefing cards.

(b) The pilot-in-command shall ensure that all persons on board are aware of the location and general manner of use of the principal emergency equipment carried for collective use.

(4) Helicopter airworthiness and safety precautions: A flight shall not be commenced until the pilot-in-command is satisfied that:

(a) the helicopter is airworthy, duly registered and that appropriate certificates with respect thereto are aboard the helicopter;
(b) the instruments and equipment installed in the helicopter are appropriate, taking into account the expected flight conditions;
(c) any necessary maintenance has been performed in accordance with sub-rule (26) of this rule;
(d) the mass of the helicopter and centre of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected;
(e) any load carried is properly distributed and safely secured; and

(f) the helicopter operating limitations contained in the flight manual, or its equivalent, will not be exceeded.

(5) Weather reports and forecasts: Before commencing a flight the pilot-in-command shall be familiar with all available meteorological information appropriate to the intended flight. Preparation for a flight away from the vicinity of the place of departure, and for every flight under IFR, shall include:

(a) a study of available current weather reports and forecasts; and

(b) the planning of an alternative course of action to provide for the eventuality that the flight cannot be completed as planned, because of weather conditions.

(6) Limitations imposed by weather conditions: (a) Flight in accordance with the VFR: A flight, except one of purely local character in visual meteorological conditions. to be conducted in accordance with the visual flight rules shall not be commenced unless available current meteorological reports, or a combination of current reports and forecasts, indicate that the meteorological conditions along the route, or that part of the route to be flown under the visual flight rules, will at the appropriate time, be such as to render compliance with these rules possible.

(b) Flight in accordance with the IFR: When an alternate is required- A flight to be conducted in accordance with the instrument flight rules shall not be commenced unless the available information indicates that conditions, at the heliport of intended landing and at least one alternate heliport will, at the estimated time of arrival, be at or above the heliport operating minima.

(c) When no alternate is required- A flight to be conducted in accordance with the instrument flight rules to a heliport when no alternate heliport is required shall not be commenced unless available current meteorological information indicates that the following meteorological conditions will exist from two hours before to two hours after the estimated time of arrival; or from the actual time of departure to tow hours after the estimated time of arrival, whichever is the shorter period:

(i) A Cloud base of at least 120, M (400ft) above the minimum associated with the instrument approach procedure; and

(ii) Visibility of at least 1.5 km more than the minimum associated with the procedure.

(7) Heliport operating minima: (a) A flight shall not be continued towards the heliport of intended landing unless the latest available meteorological information indicates that conditions at that heliport, or at least one alternate heliport, will, at the estimated time of arrival, be at or above the specified heliport operating minima.

(b) An instrument approach shall not be continued beyond the outer marker fix in case of precision approach, or below 300m (1000 ft) above the heliport in case of

non-precision approach, unless the reported visibility or controlling RVR is above the specified minimum.

(c) If, after passing the outer marker fix in case of precision approach, or after descending below 300 m (1000 ft) above the heliport in case of non-precision approach, the reported visibility or controlling RVR falls below the specified MDA/H. in any case, a helicopter shall not continue its approach-to-land beyond a point at which the limits of the heliport operating minima would be infringed.

(8) Flight in icing conditions: A flight to be operated in known or expected icing conditions shall not be commenced unless the helicopter is certificated and equipped to cope with such conditions.

(9) Alternate heliports: (a) For a flight to be conducted in accordance with the instrument flight rules, at least one suitable alternate shall be specified in the operational flight plan and the flight plan, unless:

(i) the weather conditions in sub-rule (6)(c) prevail, or

(ii) (A) The heliport of intended landing is isolated and no suitable alternate is available; and

(B) An instrument approach procedure is prescribed for the isolated heliport of intended landing; and

(C) A point of on return(PNR) is determined in case of an off-shore destination.

(b) Suitable off- shore alternates may be specified subject to the following:

(i) the off-shore alternates shall be used only after passing a point of no return (PNR). Prior to PNR on –shore alternates shall be used;

(ii) mechanical reliability of critical control systems and critical components shall be considered and taken into account when determining the suitability of the alternate;

(iii) one engine inoperative performance capability shall be attainable prior to arrival at the alternate:

(iv) to the extent possible deck availability shall be guaranteed; and

(v) weather information must be reliable and accurate.

(10) Fuel and oil supply: A flight shall not be commenced unless, taking into account both the meteorological conditions and any delays that are expected in flight, the helicopter carries sufficient fuel and oil to ensure that it can safely complete the flight. In addition, a

reserve shall be carried to provide for contingencies.

(11) Visual flight rules (VFR) operations. the fuel and oil carried in order to comply with sub-rule (10) shall, in the case of VFR operations be at least the amount sufficient to allow the helicopter:

(a) to fly to the heliport to which the flight is planned;
(b) to fly thereafter for a period of 20 minutes at best-range speed ; and
(c) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of potential contingencies, as determined by the Chairman and specified in these rules governing general aviation.

(12) Instrument flight rules (IFR) operations: The fuel and oil carried in order to comply with sub-rule (10) shall, in the case of IFR operations, be at least the amount sufficient to allow the helicopter:

(a) when no alternate is required, in terms sub-rule (6)(c) to fly to the heliport to which the flight is planned, and thereafter.

(i) to fly 30 minutes at holding speed at 450 m (1500 ft) above the destination heliport under standard temperature conditions and approach and land; and

(ii) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of potential contingencies;

(b) when an alternate is required, in terms of sub-rule (6)(b) to fly to and execute and approach, and a missed approach, at the heliport to which the flight is planned, and thereafter:

(i) to fly to the alternate specified in the flight plan; and then
(ii) to fly for 30 minutes at holding speed at 450 m (1500 ft) above the alternate under standard temperature conditions, and approach and land; and
(iii) to have an additional amount of fuel sufficient to provide for the increased consumption on the occurrence of potential contingencies;

(c) when no suitable alternate is available (i.e. the heliport of intended landing is isolated and no suitable alternate is available), to fly to the heliport to which the flight is planned and thereafter for a period as specified by the Chairman.

(d) in computing the fuel and oil required in sub-rule (10), at least the following shall be considered:
(i) meteorological conditions forecast;
(ii) expected air traffic control routings and traffic delays;
(iii) for IFR flight , one instrument approach at the destination heliport, including a missed approach;
(iv) the procedures for loss of pressurization, where applicable, or failure of one

power-unit while en route; and
(v) any other conditions that may delay the landing of the helicopter or increase fuel and/or oil consumption.

(13) Oxygen supply: (a) A flight to be operated at altitudes at which the atmospheric pressure in personnel compartments will be less than 700 hpa shall not be commenced unless sufficient stored breathing oxygen is carried to supply:

(i) all crew members and 10 percent of the passengers for any period in excess of 30 minutes that the pressure in compartments occupied by them will be between 700 hpa and 620 hpa.

(ii) the crew and passengers for any period that the atmospheric pressure in compartments occupied by them will be less than 620 hpa.

(b) A flight to be operated with a pressurized helicopter shall not be commenced unless a sufficient quantity of stored breathing oxygen is carried to supply all the crew members and a proportion of the passengers, as is appropriate to the circumstances of the flight being undertaken, in the event of loss of pressurization, for any period that the atmospheric pressure in any compartment occupied by them would be less than 700 hPa.

(14) Use of Oxygen: All flight crew members, when engaged in performing duties essential to the safe operation of a helicopter in flight, shall use breathing oxygen continuously whenever the circumstances prevail for which its supply has been required in sub-rule (13)(a) or (13)(b).

(15) In-flight emergency instruction: In an emergency during flight, the pilot-in-command shall ensure that all persons on board are instructed in such emergency action as may be appropriate to the circumstances.

(16) Fitness of flight crew members: The pilot-in-command shall be responsible for ensuring that a flight:

(a) will not be commenced if any flight crew member is incapacitated from performing duties by any cause such as injury, sickness, fatigue, the effects of alcohol or drugs; and

(b) will not be continued beyond the nearest suitable heliport when flight crew members capacity to perform functions is significantly reduced by impairment of faculties from causes such as fatigue, sickness, lack of oxygen.

(17) Flight crew members at duty stations: (a) Take of and landing: All flight crew members required to be on flight deck duty shall be at their stations.

(b) En route: All flight crew members required to be on flight deck duty shall remain

at their stations except when their absence is necessary for the performance of duties in connection with the operation of the helicopter, or for physiological needs.

(18) Seat belts: All flight crew members shall keep their seat belt fastened when at their stations.

(19) All helicopters operated in accordance with IFR shall comply with the instrument approach procedures approved by the State in which the heliport is located, or by the State which is responsible for the heliport when located outside the territory of any State.

(20) Instruction –general: A helicopter rotor shall not be turned under power without a qualified pilot at the controls.

(21) Over-water flights: All helicopters on flights over water in accordance with sub-rule (23)(g) shall be certificated for ditching. Sea state shall be an integral part of ditching information.

(22) Helicopter Performance Operating Limitations: (a) A helicopter shall be operated:

(i) in compliance with the terms of its airworthiness certificate or equivalent approved document;
(ii) within the operating limitations prescribed by the Chairman and
(iii) within the mass limitations imposed by compliance with the applicable noise certification standards in part-XVI of these rules, unless otherwise authorized, in exceptional circumstances for a certain heliport where there is no noise disturbance problem, by the competent authority of the state in which the heliport is situated.

(b) Placards, listings, instrument markings, or combinations thereof, containing those operating limitations prescribed by the Chairman for visual presentation, shall be displayed in the helicopter.

(c) Where helicopters are operating to or from heliports in a congested hostile environment, the competent authority of the State in which the heliport is situated shall take such precautions as are necessary to control the risk associated with a power unit failure.

(23) Helicopter Instruments, Equipment and Flight Document: (a) General: In addition to the minimum equipment necessary for the issuance of a certificate of airworthiness, the instruments, equipment and flight documents prescribed in the following paragraphs shall be installed or carried, as appropriate, in helicopters according to the helicopter used and to the circumstances under which the flight is to be conducted. The prescribed instruments and equipment, including their installation, shall be approved or accepted by the Chairman.

(b) Instruments: A helicopter shall be equipped with instruments which will enable the flight crew to control the flight path of the helicopter, carry out any required procedural man oeuvre, and observe the operating limitations of the helicopter in the

expected operating conditions.

(c) Equipment: All helicopters on all flights shall be equipped with:

(i) an accessible first-aid kit;
(ii) portable fire extinguishers of a type which, when discharged, will not cause dangerous contamination of the air within the helicopter. At least one shall be located in:

(A) the Pilot's compartment; and
(B) each passenger compartment that is separate from the pilot's compartment and not readily accessible to the pilot or co-pilot;

(iii) (A) a seat or berth for each person over an age to be determined by the Chairman and
(B) a seat belt for each and restraining belts for each berth;

(iv) the following manuals, charts and information:
(A) the flight manual or other documents or information concerning any operating limitations prescribed for the helicopter by the Chairman, required for the application of sub-rule (22);
(B) current and suitable charts for the route of the proposed flight and all routes along which it is reasonable to expect that the flight bay be diverted;
(C) procedures, as prescribed in part-II of these rules, for pilots-in-command of intercepted aircraft; and
(D) a list of visual signals for use by intercepting and intercepted aircraft, as contained in part-II; and

(v) spare electrical fuses of appropriate ratings for replacement of those accessible in flight.

(d) Instruments and equipment for flights operated under VFR and IFR –by day and night: All helicopters when operating in accordance with VFR by day shall be equipped with-

(i) a magnetic compass;
(ii) an accurate timepiece indicating the time in hours, minutes and seconds;
(iii) a sensitive pressure altimeter;
(iv) an airspeed indicator; and
(v) such additional instruments or equipment as may be prescribed by the appropriate authority.

(e) All helicopters when operating in accordance with VFR at night shall be equipped with:

(i) the equipment specified in para-(d);

(ii) an attitude indicator (artificial horizon) for each required pilot;
(iii) a slip indicator;
(iv) a heading indicator (directional gyroscope);
(v) a rate of climb and descent indicator;
(vi) such additional instruments or equipment as may be prescribed by the appropriate authority; and the following lights:

(A) the lights required by part-II for aircraft in flight or operating on the movement area of a heliport;

(B) a landing light;

(vii) illumination for all flight instruments and equipment that are essential for the safe operation of the helicopter;
(viii) lights in all passenger compartments; and

(ix) a flashlight for each crew member station.

(f) All helicopters, when operating in accordance with IFR, or when the helicopter cannot be maintained in a desired attitude without reference to one or more flight instruments, shall be equipped with:
(i) a magnetic compass:
(ii) an accurate timepiece indicating the time in hours, minutes and seconds;
(iii) a sensitive pressure altimeter;
(iv) an airspeed indicating system with a means of preventing malfunctioning due to either condensation or icing;
(v) a slip indicator;
(vi) an attitude indicator (artificial horizon) for each required pilot and one additional attitude indicator;
(vii) a heading indicator (directional gyroscope);
(viii) means of indicating whether the supply of power to the gyroscopic instruments is adequate;
(ix) a means of indicating in the flight crew compartment the outside air temperature;
(x) a rate of climb and descent indicator;
(xi) such additional instruments or equipment as may be prescribed by the appropriate authority; and
(xii) if operated by night, the lights specified in para-(e)

(g) All helicopters on flight over water:

(i) Means of flotation.- All helicopters intended to be flown over water shall be fitted with a permanent or rapidly deployable means of flotation so as to ensure a safe ditching of the helicopter when:

(A) engaged in offshore operations or other over water operations as prescribed by the Chairman or,

(B) flying at a distance from land specified by the Chairman.

(ii) Emergency equipment.- Helicopters operating in accordance with the provisions of para-(i) shall be equipped with:

(A) one life jacket, or equivalent individual flotation device, for each person on board, stowed in a position easily accessible from the seat of the person for whose use it is provided;

(B) when not precluded by consideration related to the type of helicopter used, life-saving rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in emergency, provided with such life-saving equipment including means of sustaining life as is appropriate to the flight to be undertaken; and

(C) equipment for making the pyrotechnical distress signals described in Part-II of these rules.

(iii) When taking off or landing at a heliport where, in the opinion of the Chairman the take-off or approach path is so disposed over water that in the event of a mishap there would be likelihood of a ditching, at least the equipment required in para-(ii)(1) shall be carried.

(iv) Each life jacket and equivalent individual floatation device, when carried in accordance with para-(i) shall be equipped with a means of electric illumination for the purpose of facilitating the location of persons.

(h) All helicopters on flights over designated land areas: Helicopters, when operated across land areas which have been designated by the state concerned as areas in which search and rescue would be especially difficult, shall be equipped with such signalling devices and life saving equipment (including means of sustaining life) as may be appropriate to the area over flown.

(i) All helicopters on high altitude flights: Un pressurized helicopters.- Un pressurized helicopters intended to be operated at high altitudes shall carry equipment for storing and dispensing the oxygen supplies required in sub-rule (13)(a).

(j) All helicopters required to comply with the noise certification Standards in CAR part-16: All helicopters required to comply with the noise certification Standards of part-1XVI of these rules shall carry a document attesting noise certification. When the document, or a suitable statement attesting noise certification as contained in another document approved by the Chairman is issued in a language other than English, it shall include an English translation.

(k) Flight data recorders:

(i) Type IV FDR shall record the parameters required to determine accurately the helicopter flight path speed, attitude, engine power and operation.

(ii) A Type IVA FDR shall record the parameters required to determine accurately the helicopter flight path, speed, attitude, engine power, operation and configuration.

(iii) A Type V FDR shall record the parameters required to determine accurately the helicopter flight path, speed attitude and engine power.

(iv) The use of Engraving metal foil FDR s and photographic film FDRs shall not be used.

(v) Types IV and V FDRs shall be capable of retaining the information recorded during at least the last ten hours of their operation.

(vi) All helicopters of a maximum certificated take-off mass of over 7000 kg, for which the individual certificate of airworthiness is first issued on or after 1 January 1989 shall be equipped with a Type IV FDR.

(vii) All helicopters of a maximum certificated take-off mass of over 3175 kg, for which the individual certificate of airworthiness is first issued after 1 January 2005 shall be equipped with a Type IVA FDR with a recording duration of at least 10 hours.

(l) Cockpit Voice Recorders:

(i) All helicopters for which the individual certificate of airworthiness is first issued after 1 January 2005. which utilize data link communications and are required to carry a CVR, shall record on a flight recorder all data link communications to and from the helicopter. The minimum recording duration shall be equal to the duration of the CVR, and shall be correlated to the recorded cockpit audio.

(ii) All helicopters which utilize data link communications and are required to carry a CVR, shall record on a flight recorder, all data link communications to and from the helicopter, The minimum recording duration shall be equal to the duration of the CVR, and shall be correlated to the recorded cockpit audio.

(iii) Sufficient information to derive the content of the data link communications message, and, whenever practical, the time the message was displayed to or generated by the crew shall be recorded.

(iv) All helicopters of a maximum certificated take-off mass or over 7 000 kg, for which the individual certificate of airworthiness is first issued on or after 1 January 1987 shall be equipped with a CVR the objective of which is the recording of the aural environment on the flight deck during flight time. For helicopters not equipped with an FDR, at least main rotor speed shall be recorded

on one track of the CVR.

(v) A CVR shall be capable of retaining the information recorded during at least the last 30 minutes of its operation.

(vi) A CVR, installed in helicopters for which the individual certificate of airworthiness is first issued after 1 January 2003, shall be capable of retaining the information recorded during at least the last two hours of its operation.

(m) Flight recorders:

(i) construction and installation: Flight recorders shall be constructed, located and installed so as to provide maximum practical protection for the recordings in order that the recorded information may be preserved, recovered and transcribed.

(ii) operation:

(A) Flight recorders shall not be switched off during flight time.

(B) To preserve flight recorder, flight recorders shall be de-activated upon completion of flight time following an accident or incident.

(C) The flight recorders shall not be re-activated before their disposition as determined in accordance with part-XIII of these rules.

(iii) continued serviceability: Operational checks and evaluations of recordings from the FDR and CVR systems shall be conducted to ensure the continued serviceability of the recorders.

(n) Emergency locator transmitter (ELT): Applicable until 30 June 2008: Performance class 1 and 2 helicopters for which the individual certificate of airworthiness is first issued after 1 January 2002, operating on flights over water as described in sub-rule (23)(g)(i)(A) and performance class 3 helicopters for which the individual certificate of airworthiness is first issued after 1 January 2002, operating as described in sub-rule (23)(g)(i)(B) shall be equipped with at least one automatic ELT and one ELT (s) in a raft.

(i) All performance class 1 and 2 helicopters operating on flights over water as described in sub-rule 23(g)(i)(A) and performance class 3 helicopters operating as described in sub-rule 23(g)(i)(B) shall be equipped with at least one automatic ELT and one ELT (s) in a raft.

(ii) Helicopters for which the individual certificate of airworthiness is first issued after 1 January 2002, on flights over designated land areas as described in para-(h) shall be equipped with at least one automatic ELT.

(iii) Helicopters on flights over designate land areas as described in (h) shall be

equipped with at least one automatic ELT.

(iv) ELT equipment carried to satisfy the requirements of para-(i), (ii), and (iii) shall operate in accordance with the relevant provisions of part-X of these rules.

(v) All helicopters operating in performance Class 1 and 2 shall be equipped with, at least one automatic ELT and, when operating on flights over water as described in para-(g)(i)(A) with at least one automatic ELT and one ELT(S) in a raft or life jacket.

(vi) All helicopters operating in performance Class 3 shall be equipped with, at least one automatic ELT and when operating of flights over water as described in para-(g)(i)(B) with at least one automatic ELT and one ELT(S) in a raft or life jacket.

(vii) ELT equipment carried to satisfy the requirements of para-(v) and para-(vi) shall operate in accordance with the relevant provisions part-X of these rules.

(viii) Unless exempted by the Chairman, all helicopters shall be equipped with a pressure-altitude reporting transponder which operates in accordance with the relevant provisions of part-X of these rules.

(24) Helicopter Communication Equipment: (a) A helicopter to be operated in accordance with the instrument flight rules or at night shall be provided with radio communication equipment. Such equipment shall be capable of conducting two-way communication with those aeronautical stations and on those frequencies prescribed by the appropriate authority.

(b) When compliance with (a) requires that more than one communication equipment unit be provided, each shall be independent of the other or others to the extent that a failure in any one will not result in failure of any other.

(c) A helicopter to be operated in accordance with the visual flight rules, but as a controlled flight, shall, unless exempted by the appropriate authority, be provided with radio communication equipment capable of conducting two-way communication at any time during flight with such aeronautical stations and on such frequencies as may be prescribed by the appropriate authority.

(d) A helicopter to be operated on a flight to which the provisions of sub-rule (23)(g)(i) or (23)(h) apply shall, unless exempted by the appropriate authority, be provided with radio communication equipment capable of conducting two-way communication at any time during flight with such aeronautical stations and on such frequencies as may be prescribed by the appropriate authority.

(e) For flights in defined portions of airspace or on routes where an RCP type has been prescribed, a helicopter shall in addition to the requirements specified in para-(a)

to para-(d)-

(i) be provided with communication equipment which will enable it to operate in accordance with the prescribed RCP type(s): and

(ii) be authorized by the Chairman for operations in such airspace.

(25) Helicopter Navigation Equipment: (a) A helicopter shall be provided with navigation equipment which will enable it to proceed:

(i) in accordance with its flight plan; and
(ii) in accordance with the requirements of air traffic services;

except when, if not so precluded by the appropriate authority navigation for flights under the visual flight rules is accomplished by visual reference to landmarks. For international general aviation, Landmarks shall be located at least every 110 km (60 NM).

(b) For flights in defined portions of airspace or on routes where an RNP type has been prescribed, a helicopter shall, in addition to the requirements specified in para-(a):

(i) be provided with navigation equipment which will enable it to operate in accordance with the prescribed RNP type (s); and

(ii) be authority by the Chairman for operations in such airspace.

(c) The helicopter shall be sufficiently provided with navigation equipment to ensure that, in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment will enable the helicopter to navigate in accordance with para-(a)and where applicable in para-(b).

(d) On flights in which it is intended to land in instrument meteorological conditions a helicopter shall be provided with radio equipment capable of receiving signals providing guidance to a point from which a visual landing can be effected. This equipment shall be capable of providing such guidance at each helicopter at which it is intended to land in instrument meteorological conditions and at any designated alternate helicopters.

(26) Helicopter Maintenance: (a) Maintenance responsibilities: The owner of a helicopter, or in the case where it is leased, the lessee shall ensure that-

(i) the helicopter is maintained in an airworthy condition;

(ii) the operational and emergency equipment necessary for the intended flight is serviceable;

(iii) The Certificate of Airworthiness of the helicopter remains valid; and

(iv) the maintenance of the helicopter is performed in accordance with a maintenance programme acceptable to the Chairman.

(b) The helicopter shall not be operated unless it is maintained and released to service under a system acceptable to the Chairman.

(c) When the maintenance release in not issued by an organization approved in accordance with part-VI of these rules, the person signing the maintenance release shall be licensed in accordance with part-I of these rules.

(d) Maintenance records: The owner shall ensure that the following records are kept for the periods mentioned in para-(e).

(i) The total time in service hours, calendar time and cycles, as appropriate of the helicopter and all life-limited components;

(ii) The current status of compliance with all mandatory continuing airworthiness information;

(iii) Appropriate details of modifications and repairs to the helicopter;

(iv) The Time in service (hours, calendar time and cycles, as appropriate) since last overhaul of the helicopter or its components subject to a mandatory overhaul life;

(v) The current status of the helicopter's compliance with the maintenance programme; and

(vi) The detailed maintenance records to show that all requirements for signing of a maintenance release have been met.

(e) The records in para-(d)(i) to para-(d)(v) shall be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service, and the records in para-(d)(vi) for a minimum period of one year after the signing of the maintenance release. The lessee of a helicopter shall comply with the requirements of para-(d) and para-(e) as applicable, while the helicopter is leased.

(f) Continuing airworthiness information: The owner of a helicopter over 3175 kg maximum certificated take –off mass, or in the case where it is leased, the lessee, shall, ass required by the Chairman, ensure that, the information resulting from maintenance and operational experience with respect to continuing airworthiness, is transmitted as required by part-XIII of these rules.

(g) Modifications and repairs: All modifications and repairs shall comply with airworthiness requirements acceptable to the Chairman. Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness' requirements are retained.

(h) Maintenance release: A maintenance release shall be completed and signed, as prescribed by the Chairman, to certify that the maintenance work performed has been completed satisfactorily.

(i) A maintenance release shall contain a certification including:

(A) basic details of the maintenance carried out;
(B) date such maintenance was completed;
(C) when applicable, the identity of the approved maintenance organization; and
(D) the identity of the person or persons signing the release.

(27) Helicopter Flight Crew: (a) Qualifications: The pilot-in-command shall ensure that the licenses of each flight crew member have been issued or rendered valid by the Chairman and are properly rated and of current validity. and shall be satisfied that flight crew members have maintained competence.

(b) Composition of the flight crew: The number and composition of the flight crew shall not be less that that specified in the flight manual or other documents associated with the certificate of airworthiness.

170. Commercial Air Transport Helicopter: (1) The Rules contained in part-VI of these rules shall be applicable to all helicopters engaged in commercial air transport operations except that these rules are not applicable to helicopters engaged in aerial work.

DEFINITIONS: For the purposes of this rule when the following terms are used for domestic and international operations with helicopters, they have the following meanings:

Alternate heliport. A heliport to which a helicopter may proceed when it becomes cither impossible or inadvisable to proceed to or to land at the heliport of intended landing. Alternate heliports include the following:

Take-off alternate. An alternate heliport at which a helicopter can land should this become necessary shortly after take-off and it is not possible to use the heliport of departure.

En-route alternate. A heliport at which a helicopter would be able to land after experiencing an abnormal or emergency condition while on route.

Destination alternate. An alternate heliport to which a helicopter may proceed should it

become either impossible or inadvisable to land at the heliport of intended landing.

Approach and landing operations using instrument approach procedures. Instrument approach and landing operations are classified as follows:

Non-precision approach and landing operations. An instrument approach and landing which utilizes lateral guidance but does not utilize vertical guidance.

Approach and landing operations with vertical guidance. An instrument approach and landing which utilizes lateral and vertical guidance but does not meet the requirements established for precision approach and landing operations.

Precision approach and landing operations. An instrument approach and landing using precision lateral and vertical guidance with minima as determined by the category of operation.

Categories of precision approach and landing operations:

Category 1 (CAT I) operation. A precision instrument approach and landing with a decision height not lower than 60 m (200 ft) and with either a visibility not loess than 800 m or a runway visual range not less that 550 m.

Category II (CAT II) operation. A precision instrument approach and landing with a decision height lower that 60 m (200 ft), but not lower than 30 m (100ft) , and a runway visual range not less than 350 m.

Category IIIA (CAT IIIA) Operation. A precision instrument approach and landing with:

a) A decision height lower than 30 m (100 ft) or no decision height; and
b) A runway visual range not less than 200 m.

Category IIIB (CAT IIIB) Operation. A precision instrument approach and landing with:

a) A decision height lower than 15 m (50 ft) or no decision height; and
b) A runway visual range less than 200 m but not less than 50m.

Category IIIC (CAT IIIC) Operation. A precision instrument approach and landing with no decision height and no runway visual range limitations.

Approach and landing phase-helicopters. That part of the flight from 300 m (1 000 ft) above the elevation of the FATO, if the flight is planned to exceed this height, or from the commencement of the descent in the other cases, to landing or to the balked landing point.

Cabin crew member. A crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member.

Configuration deviation list (CDL) . A list established by the organization responsible for the type design with the approval of the state of design which identifies any external parts of an aircraft type which may be missing at the commencement of a flight, and which contains, where necessary, any information on associated operating limitations and performance correction.

Congested area. In relating to a city, town or settlement, any area which is substantially used for residential, commercial or recreational purposes.

Congested hostile environment. A hostile environment within a congested area.

Crew member. A person assigned by an operator to duty on an aircraft during a flight duty period.

Dangerous goods. Articles or substances which are capable of posing a risk to health, safety, property or the environment and which are shown in the list of dangerous goods in the Technical Instructions or which are classified according to those Instructions.

Decision altitude (DA) or decision height (DH). A specified altitude or height in the precision approach or approach with vertical guidance at which a missed approach must be initiated if the required visual reference to continue the approach has not been established.

Defined point after take-off (DPATO). The point, within the take-off and initial climb phase, before which the helicopter's ability to continue the flight safely, with one engine inoperative, is not assured and a forced landing may be required.

Elevated heliport. A heliport located on a raised structure on land.

Emergency locator transmitter (ELT). A generic term describing equipment which broadcast distinctive signals on designated frequencies and, depending on application, may be automatically activated by impact or be manually activated . An ELT may be of the following:

Automatic fixed ELT (ELT(AF)). An automatically activated ELT which is permanently attached to an aircraft.

Automatic portable ELT (ELT(AP)). An automatically activated ELT which is rigidly attached to an aircraft but readily removable from the aircraft.

Automatic deployable ELT (ELT (AD)). An ELT which is rigidly attached to an aircraft and which is automatically deployed and activated by impact, and, in some cases,

also by hydrostatic sensors. Manual deployment is also provided.

Survival ELT (ELT(S)). An ELT which is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and manually activated by survivors.

En-route phase. That part of the flight from the end of the take-off and initial climb phase to the commencement of the approach and landing phase.

Final approach and take-off area (FATO) . A defined areas over which the final phase of the approach manicure to hover or landing is completed and from which the take-off manoeuvre is commenced. Where the FATO is to be used by helicopters operating in performance Class 1, the defined area includes the rejected take-off area available.

Flight crew member. A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.

Flight duty period. The total time from the moment a flight crew member commences duty, immediately subsequent to a rest period and prior to making a flight or a series of flights, to the moment the flight crew member is relieved of all duties having completed such flight or series of flights.

Flight manual. A manual , associated with the certificate of airworthiness, containing limitations within which the aircraft is to be considered airworthy, and instructions and information necessary to the flight crew members for the safe operation of the aircraft.

Flight operations officer/flight dispatcher. A person designated by the operator to engage in the control and supervision of flight operations, whether licensed or not, suitably qualified in accordance with CAR Part 1, who supports, briefs and /or assists the pilot-in-command in the safe conduct of the flight.

Flight plan. Specified information provided to air traffic services units, relative to an intended flight or portion of a flight of an aircraft.

Flight recorder. Any type of recorder installed in the aircraft for the purpose of complementing accident/incident investigation.

Flight safety documents system. A set of inter-related documentation established by the operator, compiling and organizing information necessary for flight and ground operations manual and the operator's maintenance control manual.

Flight time- helicopters. The total time from the moment a helicopter's rotor blades start turning until the moment the helicopter finally comes to rest at the end of the flight, and the rotor blades are stopped.

General aviation operation. An aircraft operation other than a commercial air transport operation or an aerial work operation.

Ground handling. Services necessary for an aircrafts arrival at, and departure from , an airport, other than air traffic services.

Helicopter. A heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power driven rotors on substantially vertical axes.
Helideck. A heliport located on a floating or fixed offshore structure.

Heliport. An aerodrome or a defined area on a structure intended to be used wholly or in part for the arrival, departure and surface movement of helicopters.

Heliport operating minima. The limits of usability of a heliport for:

(A) Take-off expressed in terms of runway visual range and/or visibility and, if necessary, cloud conditions;

(B) Landing in precision approach and landing operations, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA/H) as appropriate to the category of the operation;

(C) Landing in approach and landing operations with vertical guidance, expressed in terms of visibility and/or runway visual range and decision altitude/height (DA.H);and

(D) Landing in non-precision approach and landing operations, expressed in terms of visibility and/or runway visual range, minimum descent altitude/height (MDA/H) and, if necessary, cloud conditions.

Hostile environment. An environment in which:

(A) A safe forced landing cannot be accomplished because the surface and surrounding environment are inadequate/ or

(B) The helicopter occupants cannot be adequately protected from the elements; or

(C) Search and rescue response/capability is not provided consistent with anticipated exposure; or

(D) There is an unacceptable risk or endangering persons or property on the ground.

Human performance. Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

Instrument meteorological conditions (IMC). Meteorological conditions expressed in terms of visibility, distance from cloud, and ceiling*, less than the minima specified for visual meteorological conditions.
*As defined in Part-II.

Integrated CAR survival suit. A survival suit which meets the combined requirements or the survival suit and life jacket.

Landing decision point (LDP). The point used in determining landing performance from which, a power unit failure occurring at this point, the landing may be safely continued or a balked landing initiated.

Maintenance. The performance of tasks required to ensure the continuing airworthiness of an aircraft, including any one or combination of overhaul, inspection, replacement, defect rectification, and the embodiment of a modification or repair.

Maintenance organization's procedures manual. A document endorsed by the head of the maintenance organization which details the maintenance organization's structure and management responsibilities scope of work, description of facilities, maintenance procedures and quality assurance or inspection systems.

Maintenance programme. A document which describes the specific scheduled maintenance tasks and their frequency of completion and related procedures, such as a reliability programme, necessary for the safe operation of those aircraft to which it applies.

Maintenance release. A document which contains a certification confirming that the maintenance work to certification confirming that the maintenance work to which it relates has been completed in a satisfactory manner, either in accordance with the approved data and the procedures described in the maintenance organization's procedures manual or under an equivalent system.

Master minimum equipment list (MMEL). A list established for a particular aircraft type by the organization responsible for the type design with the approval of the state of Design containing items, one or more of which is permitted to be unserviceable at the commencement of a flight. The MMEL may be associated with special operating conditions, limitations or procedures.

Maximum mass. Maximum certificated take-off mass.

Minimum descent altitude (MDA) or minimum descent height (MDH). A specified altitude or height in a non precision approach or circling approach below which descent must not be made without the required visual reference.

Minimum equipment list (MEL). A list which provides for the operation of aircraft, subject to specified conditions, with particular equipment inoperative, prepared by an operator in conformity with, or more restrictive than, the MMEL established for the aircraft type.

Night. The hours between the end of evening civil twilight and the beginning of morning civil twilight or such other period between sunset and sunrise, as may be prescribed by the appropriate authority.

Non-congested hostile environment. A hostile environment outside a congested area.

Non-hostile environment. An environment in which:

a) A safe forced landing can be accomplished because the surface and surrounding environment are adequate;
b) The helicopter occupants can be adequately protected from the elements;
c) Search and rescue response/capability is provided consistent with anticipated exposure; and
d) The assessed risk of endangering persons or property on the ground is acceptable.

Obstacle clearance altitude (OCA) or obstacle clearance height (OCH). the lowest altitude or the lowest height above the elevation of the relevant runway threshold or the aerodrome elevation as applicable, used in establishing compliance with appropriate obstacle clearance criteria.

Offshore operations. An activity or group of activities which are subject to the same or similar hazards and which require a set of equipment to be specified, or the achievement and maintenance of a set of pilot competencies to eliminate or mitigate the risk of such hazards.

Operational control. The exercise of authority over the initiation, continuation, diversion or termination of a flight in the interest of the safety of the aircraft and the regularity and efficiency of the flight.

Operational flight plan. The operator's plan for the safe conduct of the flight based on considerations of helicopter performance, other operating limitations and relevant expected conditions on the route to be followed and at the heliports concerned.

Operations manual. A manual containing procedures, instructions and guidance for use by operational personnel in the execution of their duties.

Operator. A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

Operator's maintenance control manual. A document which describes the operator's procedures necessary to ensure that all scheduled and unscheduled maintenance in performed on the operator's aircraft on time and in a controlled and satisfactory manner.

Operations in performance class 1. Operations with performance such that in the vent of a critical power unit failure, performance is available to enable the helicopter to safely continue the flight to an appropriate landing area, unless the failure occurs prior to reaching the take-off decision point (TDP) or after passing the landing decision pint (LDP), in which cases the helicopter must be able to land within rejected take-off or landing area.

Operations in performance Class 2. Operations with performance such that, in the event of critical power-unit failure, performance is available to enable the helicopter to safely continue the flight to an appropriate landing area, except when the failure occurs early during the take-off man oeuvre or late in the landing man oeuvre, in which cases a

forced landing may be required.

Operations in performance Class3. Operations with performance such that in the event of a power-unit performance such that , in the event of a power-unit failure at any time during the flight, a forced landing will be required.

Pilot-in-command. The pilot designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.

Psychoactive Substances. Alcohol, opioids, cannabinoids, sedatives and hypnotics, cocaine, other psycho stimulants, hallucinogens, and volatile solvents, whereas coffee and tobacco are excluded.

Repair. The restoration of an aeronautical product to an airworthy condition to ensure that the aircraft continues to comply with the design aspects of the appropriate airworthiness requirements used for the issuance of the type certificate for the respective aircraft type, after it has been damaged or subjected to wear.

Required communication performance (RCP). A statement of the performance requirements for operational communication in support of specific ATM functions.

Required communication performance type (RCP type). A label (e.g. RCP 240) that represents the values assigned to RCP parameters for communication transaction time, continuity availability and integrity.

Required navigation performance (RNP) A statement of the navigation performance necessary for operation within a defined airspace.

Rest period. Any period of time on the ground during which a flight crew member is relieved of all duties by the operator.

RNP type. A containment value expressed as a distance in nautical miles from the intended position within which flights would be for at least 95 percent of the total flying time.

Example- RNP 4 represents a navigation accuracy of plus or minus 7.4 km (4 NM) on a 95 percent containment bases.

Runway visual range (RVR). The range over which the pilot of an aircraft on the center line of a runway can see the runway surface markings or the lights delineating the runway or identifying its center line.

Safe forced landing. Unavoidable landing or ditching with a reasonable expectancy of no injuries to persons in the aircraft or on the surface.

Safety programme. An integrated set of regulations and activities aimed at improving

safety.

Safety management system. A systematic approach to managing safety, including the necessary organizational structures, accountabilities, policies and procedures.

Series of flights. Series of flights are consecutive flights that:

(A) Begin and end within a period of 24 hours; and
(B) Are all conducted bys the same pilot-in-command.

State of Registry. the state on whose register the aircraft is entered.

State of the operator. The state in which the operator's principal place of business is located or, if there is no such place of business, the operator's permanent residence.

Flight simulation training device. Any one of the following three types of apparatus in which flight conditions are simulated on the ground:

a) a flight simulator , which provides an accurate representation of the flight deck of a particular aircraft type to the extent that the mechanical, electrical, electronic, etc. aircraft systems control functions, the normal environment of flight crew members, and the performance and flight characteristics of that type of aircraft are realistically simulated;

b) a flight procedures trainer, which provides a realistic flight deck environment, and which simulates instrument responses, simple control function s of mechanical, electrical, electronic, etc. aircraft systems, and the performance and flight characteristics of aircraft of a particular class;

c) a basic instrument flight trainer, which is equipped with appropriate instruments, and which simulates the flight deck environment of an aircraft in flight in instrument flight conditions.

Take –off and initial climb phase. that part of the flight from the start of take-off to 300m (1000 ft) above the elevation of the FATO, if the flight is planned to exceed this height, or to the end of the climb in the other cases.

Take-off decision point (TDP). The point used ion determining take-off performance from which, a power unit failure occurring at this point, either a rejected take-off may be made or a take-off safely continued.

Visual meteorological conditions (VMC). Meteorological conditions expressed in terms of visibility, distance form cloud, and ceiling,* equal to or better than specified minima.

V_{TOSS}. The minimum speed at which climb shall be achieved with the critical power-unit inoperative, the remaining power-units operating within approved operating limits.

(2) Commercial Air Transport – Helicopter.-

(1) General:

(a) Compliance with laws, regulations and procedures: Operators shall ensure that their employees when abroad know that they must comply with the laws, regulations and procedures of the states in which their helicopters are operated.

(b) Operators shall ensure that all pilots are familiar with the laws, regulations and procedures, pertinent to the performance of their duties, prescribed for the areas to be traversed, the heliports to be used and the air navigation facilities relating thereto. The operator shall ensure that other members of the flight crew are familiar with such of these regulations and procedures as are pertinent to the performance of their respective duties in the operation of the helicopter.

(c) Operators shall ensure that flight crew members demonstrate the ability to speak and understand the language used for communications as specified in part-I of these rules.

(d) An operator or a designated representative shall have responsibility for operational control.

(e) Responsibility for operational control shall be delegated only to the pilot-in-command and to a flight operations officer/flight dispatcher if an operator's approved method of control and supervision of flight operations requires the use of flight operations officer/flight dispatcher personnel.

(f) If an emergency situation which endangers the safety of the helicopter or persons becomes known first to the flight operations officer/flight dispatcher, action by that person in accordance with sub-rule (22) of this rule shall include, where necessary, notification to the appropriate authorities of the nature of the situation without delay, and requests for assistance if required.

(g) If an emergency situation which endangers the safety of the helicopter or persons necessitates the taking of action which involves a violation of local regulations or procedures, the pilot-in-command shall notify the appropriate local authority without delay. if required by the state in which the incident occurs, the pilot-in-command shall submit a report on any such violation to the appropriate authority of such state; in that event, the pilot-in-command shall also submit a copy of it to the Chairman. Such reports shall be submitted as soon as possible and normally within ten days.

(h) Operators shall ensure that pilots-in-command have available on board the helicopter all the essential information concerning the search and rescue services in the area over which the helicopter will be flown.

(i) An operator shall establish and maintain an accident prevention and flight safety programme.

(j) An operator of a helicopter of a certificated take-off mass in excess of 7000 kg or having a passenger seating configuration of more than 9 and fitted with a flight data recorder should establish and maintain a flight data analysis programme as part of its accident prevention and flight safety programme.

(k) Any flight data analysis programme shall be non-punitive and contain adequate safeguards to protect the source(s) of the data.

(l) Safety management:

(i) Chairman shall establish a safety programme in order to achieve an acceptable level of safety in the operation of aircraft.

(ii) The acceptable level of safety to be achieved shall be established by the Chairman.

(iii) All operators shall implement a safety management system acceptable to the Chairman as part of their safety programme, as minimum:

(A) identifies safety hazards;
(B) ensures that remedial action necessary to maintain an acceptable level of safety is implemented;
(C) provides for continuous monitoring and regular assessment of the safety level achieved; and
(D) aims to make continuous improvement to the overall level of safety.

(iv) A safety management system shall clearly define lines of safety accountability throughout the operator's organization including a direct accountability for safety on the part of senior management.

(v) An operator shall establish a flight safety documents system, for the use and guidance of operational personnel, as part of its safety management system.

(2) Operating facilities:

(a) An operator shall ensure that a flight will not be commenced unless it has been ascertained by every reasonable means available that the ground and/or water facilities available and directly required on such flight, for the safe operation of the helicopter and the protection of the passengers, are adequate for the type of operation under which the flight is to be conducted and are adequately operated for this purpose.

(b) An operator shall ensure that any inadequacy of facilities observed in the course

of operations is reported to the authority responsible for them, without undue delay.
(c) An operator shall not engage in commercial air transport operations unless in possession of a valid air operator certificate issued by the Chairman.

(d) The air operator certificate shall authorize the operator to conduct commercial air transport operations in accordance with specified authorizations, conditions and limitations.

(e) An air operator certificate issued by another Contraction state shall be recognised as valid provided that the requirements under which the certificate was issued are at least equal to the applicable rules specified in this part.

(f) The issue of an air operator certificate shall be dependent upon the operator demonstrating an adequate organization, method of control and supervision of flight operations, training programme as well as ground handling and maintenance arrangements consistent with the nature and extent of the operations specified

(g) the continued validity of an air operator certificate or equivalent document shall depend upon the operator maintaining the requirements of para-(f) under the supervision of the Chairman.

(h) The air operator certificate shall contain at least the following:

(i) operator's identification (name, location);
(ii) date of issue and period of validity;
(iii) description of the types of operations authorized;
(iv) the type(s) of aircraft authorized for use; and
(v) authorized areas of operation or routes.

(i) The Chairman shall establish a system for both the certification and the continued surveillance of the operator in accordance with to ensure that the required standards of operations established in para-(c)are maintained.

(3) Operations manual: (a) An operator shall make available, for the use and guidance of operations personnel concerned, an operations manual constructed using the guidance contained in the operations manual shall be amended or revised as is necessary to ensure that the information contained therein is kept up to date. All such amendments or revision shall be notified to all personnel that are required to use this manual.

(b) Operator shall provide to the Chairman, a copy of the operations manual together with all amendments and/or revisions, for review, acceptance and approval. The operator shall incorporate in the operations manual such mandatory material as the Chairman may require.

(4) Operating instructions- general:

(a) An operator shall ensure that all operations personnel are properly instructed in their particular duties and responsibilities and the relationship of such duties to the operation as a whole.

(b) A helicopter rotor shall not be turned under power, for the purpose of flight, without a qualified pilot at the controls. The operator shall provide appropriately specific training and procedures to be followed for all personnel, other than qualified pilots, who are likely to carry out the turning of a rotor under power for purposes other than flight.

(c) No emergency or abnormal situations shall be simulated when passengers or cargo are being carried.

(d) Category II and Category III instrument approach and landing operations shall not be authorized unless RVR information is provided.

(5) Checklists: The checklists provided in accordance with sub-rule (32)(d) shall be used by flight crews prior to, during and after all phases of operations, and in emergency, to ensure compliance with the operating procedures contained in the aircraft operating manual, the flight manual or other documents associated with the certificate of airworthiness and otherwise in the operations manual. The design and utilization of checklists shall observe human Factors principles.

(6) Minimum flight altitudes:

(a) An operator shall establish minimum flight altitudes for those routes flown, which shall not be less than established by the Chairman.

(b) An operator shall specify the method by which it is intended to determine minimum flight altitudes for operations conducted over routes for which minimum flight altitudes have not been established and shall include this method in the operations manual. The minimum flight altitudes determined in accordance with the above method shall not be lower than specified in part-II of these rules.

(7) Heliport operating minima:

(a) Except when specifically approved by the Chairman an operator shall establish heliport operating minima for each heliport to be used in operations.

(b) In establishing heliport the operating minima, which will apply to any particular operation, full account shall be taken of:

(i) the type performance and handling characteristics of the helicopter;
(ii) the composition of the flight crew, their competence and experience;
(iii) the physical characteristics of the heliport, and direction of approach;
(iv) the adequacy and performance of the available visual and non-visual ground

aids;
(v) the equipment available on the helicopter for the purpose of navigation and/or control of the flight path during the approach to landing and the missed approach;
(vi) the obstacles in the approach and missed approach areas and the obstacle clearance altitude/height for the instrument approach procedures;
(vii) the means used to determine and report meteorological conditions; and
(viii) the obstacles in the climb-out areas and necessary clearance margins.

(c) A flight shall not be continued towards the heliport of intended landing, unless the latest available information indicates that at the expected time of arrival, a landing cab be effected at that heliport, or at least one alternate heliport, in compliance with the operating minima established in accordance with sub-rule (7)(a).

(d) An instrument approach shall not be continued beyond the outer marker fix case of precision approach or the outer marker fix in case of precision approach, or below 300m (1000 ft) above the heliport in case of non-precision approach, unless the reported visibility or controlling RVR is above the specified minimum.

(e) If, after passing the outer marker fix in case of precision approach, or after descending below 300m (1000 ft) above the heliport in case of non-precision approach, the reported visibility or controlling RVR falls below the specified minimum, the approach may be continued to DA/H or MDA/H . In any case, a helicopter shall not continue its approach-to-land at any heliport beyond a point at which the limits of the operating minima specified for that heliport would be infringed.

(8) Fuel and oil records:

(a) An operator shall maintain fuel and oil records to enable the Chairman to ascertain that, for each flight, the requirements of sub-rule (16) of this rule have been complied with.

(b) Fuel and oil records shall be retained by the operator for a period of three months.

(9) Crew:

(a) Pilot-in-command. For each flight the operator shall designate one pilot to act as pilot-in-command.

(b) Flight time, flight duty periods and rest periods. An operator shall formulate rules to limit flight time and flight duty periods and for the provision of adequate rest periods for all its crewmembers. These rules shall be in accordance with the regulations established by the Chairman and included in the operations manual.

(c) An operator shall maintain current records of the flight time, flight duty periods and rest periods of all its crewmembers.

(d) During take-off and landing all flight crewmembers required to be on flight deck duty shall be at their stations.

(e) During en-route phase all flight crew members required to be on flight deck duty shall remain at their stations except when their absence is necessary for the performance of duties in connection with the operation of the helicopter or for physiological needs.

(f) All flight crew members shall keep their seat belt fastened when at their stations.

(g) Any flight crew member occupying a pilot's shall keep the safety harness fastened during the take-off and landing phases; all other flight crew members shall keep their safety harness fastened during the take-off and landing phases unless the shoulder straps interfere with the performance of their duties, in which case the shoulder straps may be unfastened but the seat belt must remain fastened.

(10) Passengers: (a) An operator shall ensure that passengers are made familiar with the location and use of:

(i) seat belts or harnesses;
(ii) emergency exits;
(iii) life jackets, if the carriage of life jackets is prescribed;
(iv) oxygen dispensing equipment, if the provision of oxygen for the use of passengers is prescribed; and
(v) other emergency equipment provided for individual use, including passenger emergency briefing cards.

(b) In an emergency during flight, passengers shall be instructed in such emergency action as may be appropriate to the circumstances.

(c) The operator shall ensure that, during take-off and landing and whenever considered necessary by reason of turbulence or any emergency occurring during flight, all passengers on board a helicopter shall be secured in their seats by means of the seat belts or harnesses provided.

(11) Over-water flights: All helicopters on flight over water in a hostile environment in accordance with sub-rule 32(n)(I) shall be certificated for ditching. Sea state shall be an integral part of ditching information.

(12) Flight preparation: (a) A flight, or series of flights, shall not be commenced until flight preparation forms have been completed certifying that the pilot-in-command is satisfied that-

(i) the helicopter is airworthy;
(ii) the instruments and equipment prescribed in sub-rule (32), for the particular

type of operation to be undertaken, are installed and are sufficient for the flight;
(iii)a maintenance release as prescribed in sub-rule (35)(g) has been issued in respect of the helicopter;
(iv)the mass of the helicopter and center of gravity location are such that the flight can be conducted safely, taking into account the flight conditions expected;
(v) any load carried is properly distributed and safely secured;
(vi) a check has been completed indicating that the operating limitations can be complied with for the flight to be undertaken; and
(vii) the standards of sub-rule (13)(a) relating to operational flight planning have been complied with.

(b) Completed flight preparation forms shall be kept by an operator for a period of three months.

(13) Operational flight planning: (a) An operational flight plan shall be completed for every intended flight or series of flight, or series of flights, and approved by the pilot-in-command, and shall be lodged with the appropriate authority. The operator shall determine the most efficient means of lodging the operational flight plan.

(b) The operations manual shall describe the content and use of the operational flight plan.

(14) Alternate heliports:

(a) Take-off alternate heliport:

(i) A take-off alternate heliport shall be selected and specified in the operational flight plan if the weather conditions at the heliport of departure are at or below the applicable heliport operating minima.

(ii) For a heliport to be selected as a take-off alternate, the available information shall indicate that, at the estimated time of use, the conditions will be at or above the heliport operating minima for that operation.

(b) Destination alternate heliport: For a flight to be conducted in accordance with IFR , at least one destination alternate shall be specified in the operational flight plan and the flight plan, unless-

(i) the duration of the flight and the meteorological conditions prevailing are such that there is reasonable certainty that, at the estimated time of arrival at the heliport of intended landing, and for a reasonable period before and after such time, the approach and landing may be made under visual meteorological conditions as prescribed by the Chairman.

(ii) the heliport of intended landing is isolated and no suitable alternate is available. A point of no return (PNR) shall be determined.

(iii) for a heliport to be selected as a destination alternate. The available information shall indicate that, at the estimated time of use, the conditions will be at or above the heliport operating minima for that operation.

(iv) suitable offshore alternates shall be specified subject to the following-

(1) the offshore alternates shall be used only after a PNR. Prior to PNR on – shore alternates shall be used.

(2) mechanical reliability of critical control systems and critical components shall be considered and taken into account. When determining the suitability of the alternates;

(3) one engine inoperative performance capability shall be attainability shall be attainable prior to arrival at the alternate;

(4) to the extent possible, deck availability shall be guaranteed; and

(5) weather information must be reliable and accurate.

(15) Weather conditions:

(a) A flight to be conducted in accordance with VFR shall not be commenced unless current meteorological reports or a combination of current reports and forecasts indicate that the meteorological conditions along the route or that part of the route to be flown or in the intended area of operations under VFR will, at the appropriate time, be such as to render compliance with these rules possible.

(b) Flight to be conducted in accordance with IFR shall not be commenced unless the information is available which indicates that conditions at the heliport of intended landing or, when an alternate is required, at least one alternate heliport will, at the estimated time of arrival, be at or above the heliport operating minima.

(c) A flight to be operated in known or expected icing conditions shall not be commenced unless the helicopter is certificated and equipped to cope with such conditions.

(d) A flight to be planned or expected to operate in suspected or known ground icing conditions shall not be commenced unless the helicopter has been inspected for icing and, if necessary, has been given appropriate deicing/anti-icing treatment. Accumulation of ice or other naturally occurring contaminants shall be removed so that the helicopter is kept in an airworthy condition prior to take-off.

(16) Fuel and oil supply:

(a) A flight shall not be commenced unless, taking into account both the meteorological conditions and any delays that are expected in flight, the helicopter carries sufficient fuel and oil to ensure that it can safely complete the flight. In addition, a reserve shall be carried to provide for contingencies.

(b) VFR Operation: The fuel and oil carried in order to comply with sub-rule (a) shall, in the case of VFR operations, be at least the amount sufficient to allow the helicopter:

(i) to fly to the heliport to which the flight is planned;
(ii) to fly thereafter for a period of 20 minutes at best range speed; and
(iii) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the state of the Operator.

(c) IFR operations: The fuel and oil carried in order to comply with (a) shall, in the case of IFR operations, be at least the amount sufficient to allow the helicopter:

(i) when an alternate is not required, in terms of sub-rule (14)(b)-

(A) to fly to the heliport to which the flight is planned, and thereafter.
(B) to fly 30 minutes at holding speed at 450 m (1500 ft) above the destination heliport under standard temperature conditions and approach and land; and
(C) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the state of the operator.

(ii) when an alternate is required: to fly to and execute an approach, and a missed approach, at the heliport to which the flight is planned, and thereafter:

(A) to fly to the alternate specified in the flight plan; and then
(B) to fly for 30 minutes at holding speed at 450 m (1500ft) above the alternate under standard temperature conditions, and approach and land; and
(C) to have an additional amount of fuel, sufficient to provide for the increased consumption on the occurrence of any of the potential contingencies specified by the operator to the satisfaction of the state of the operator.

(d) When no suitable alternate is available, in terms of 14(b)(e.g the destination is isolated), sufficient fuel shall be carried to enable the helicopter to fly to the destination to which the flight is planned and thereafter for a period that will, based on geographic and environmental considerations, enable a safe landing to be made.

(e) In computing the fuel and oil required in sub-rule (16)(a), at least the following shall be considered:

(i) meteorological conditions forecast;

(ii) expected air traffic control routings and traffic delays;
(iii) for IFR flight, one instrument approach at the destination heliport, including a missed approach;
(iv) the procedures prescribed in the operations manual for loss of pressurization, where applicable, or failure of one power-unit while en route; and
(v) any other conditions that may delay the landing of the helicopter or increase fuel and /or oil consumption.

(17) Oxygen supply: (a) A flight to be operated at flight altitudes at which the atmospheric pressure in personnel compartments will be less than 700 hpa shall not be commenced unless sufficient stored breathing oxygen is carried to supply:

(i) all crew members and 10 percent of the passengers for any period in excess of 30 minutes that the pressure in compartments occupied by them will be between 700 hpa and 620 hpa;

(ii) the crew and passengers for any period that the atmospheric pressure in compartments occupied by them will be less than 620 hpa.

(b) A flight to be operated with a pressurized helicopter shall not be commenced unless a sufficient quantity of stored breathing oxygen is carried to supply all the crew members and passengers, as is appropriate to the circumstances of the flight being undertaken, in the event of loss of pressure in any compartment occupied by them would be less than 700 hpa. In addition, when the helicopter is operated at flight altitudes at which the atmospheric pressure is more than 376 hpa and cannot descent safely to a flight altitude at which the atmospheric pressure is equal to 620 hpa within four minutes, there shall be no less than a 10-minute supply for the occupants of the passenger compartment.

(18) Hazardous flight conditions: Hazardous flight conditions encountered, other than those associated with meteorological conditions, shall be reported to the appropriate aeronautical station as soon as possible. The reports so rendered shall give such details as may be pertinent to the safety of other aircraft.

(19) Use of oxygen: All flight crew members, when engaged in performing duties essential to the safe operation of a helicopter in flight, shall use breathing oxygen continuously whenever the circumstances prevail for which its supply has been required in sub-rule (17)(a) or(16)(e).

(20) Instrument flight procedures: (a) One or more instrument approach procedures to serve each final approach and take-off area or heliport utilized for instrument flight operations shall be approved and promulgated by the state in which the heliport is located, or by the state which is responsible for the heliport when located outside the territory of any state.

(b) All helicopters operated in accordance with IFR shall comply with the instrument

approach procedures approved by the Chairman.

(21) Responsibility of P-In-C: (a) The pilot-in-command shall be responsible for the operation and safety of the helicopter and for the safety of all crew members, passengers and cargo on board, from the moment the engine(s) are started until the helicopter finally comes to rest at the end of the flight, which the engine(s) shut down and the rotor blades stopped.

(b) The pilot-in-command shall ensure that the checklists specified in sub-rule (5) are complied with in detail.

(c) The pilot-in-command shall be responsible for notifying the nearest appropriate authority by the quickest available means of any accident involving the helicopter, resulting in serious injury or death of any person or substantial damage to the helicopter or property.

(d) The pilot-in-command shall be responsible for reporting all known or suspected defects in the helicopter, to the operator, at the termination of the flight.

(e) The pilot-in- command shall be responsible for the journey log book or the general declaration containing the information listed in sub-rule (38)(e).

(22) A flight operation officer/flight dispatcher in conjunction with a method of control and supervision of flight operations in accordance with sub-rule 2(f) of this rule shall:

(a) assist the pilot-in-command in flight preparation and provide the relevant information.

(b) assist the pilot-in-command in preparing the operational and the ATS flight plans, sign when applicable and file the ATS flight plan with the appropriate ATS unit; and

(c) furnish the pilot-in-command while in flight, by appropriate means, with information, which may be necessary for the safe conduct of the flight.

(23) In the event of an emergency, a flight operations officer/flight dispatcher shall:

(a) initiate such procedures as outlined in the operations manual while avoiding taking any action that would conflict with ATC procedures; and

(b) convey safety –related information to the pilot-in-command that may be necessary for the safe conduct of the flight, including information related to any amendments to the flight plan that become necessary in the course of the flight.

(24) The operator shall ensure that all baggage carried onto a helicopter and taken into the passenger cabin is adequately and securely stowed.

(25) Operating Limitations: (a) Helicopter shall be operated in accordance with a code of

performance established by Chairman, in compliance with the applicable rules:

(b) In conditions where the safe continuation of flight is not ensured in the event of a critical power-unit failure, helicopter operations shall be conducted in a manner that gives appropriate consideration for achieving a safe forced landing.

(c) Where helicopters are operated to or form heliports in a congested hostile environment, the Chairman shall specify the requirements to enable these operations to be conducted in a manner that gives appropriate consideration for the risk associated with a power-unit failure.

(26) Following rules are applicable to the helicopters to which Part-VI or part-VIII is applicable:

(a) The level of performance defined by the appropriate parts of the code of performance referred to in sub-rule (25)(a) for the helicopters designated in sub-rule (26)(a) to (f) shall be consistent with to the overall level embodied in the rule of this chapter.

(b) A helicopter shall be operated in compliance with the terms of its certificate of airworthiness and within the approved operating limitations contained in its flight manual.

(c) The Chairman issuing instruction that are reasonable possible to ensure that the general level of safety contemplated by these provisions is maintained under all expected operating conditions, including those not covered specifically by the provisions of this chapter.

(d) A flight shall not be commenced unless the performance information provided in the flight manual indicates that the sub-rule (26)(e) and (26)(f) can be complied with for the flight to be undertaken.

(e) In applying the rules of this chapter, account shall be taken of all factors that significantly affect the performance of the helicopter (such as: mass, operating procedures, the pressure-altitude appropriate to the elevation of the operating site, temperature, wind and condition of the surface). Such factors shall be taken into account directly as operational parameters or indirectly provided in the scheduling of performance date or in the code of performance in accordance with which the helicopter is being operated.

(f) Mass limitations:

(i) The mass of the helicopter at the start of take-off shall not exceed the mass at which the code of performance referred to in sub-rule (25)(a) if complied with, allowing for expected reductions in mass as the flight proceeds and for such fuel jettisoning as is appropriate.

(ii) In no case shall the mass at the start of take-off exceed the maximum take-off mass specified in the helicopter flight manual taking into account the factors specified in sub-rule (26)(e).

(iii) In no case shall the estimated mass for the expected time of landing at the destination and at any alternate exceed the maximum landing mass specified in the helicopter flight manual taking into account the factors specified in sub-rule (26)(e).

(iv) In no case shall the mass at the start of take-off or at the expected time of landing at the destination and at any alternate exceed the relevant maximum mass at which compliance has been demonstrated with the applicable noise certification in part-XVI of these rules, unless otherwise authorized in exceptional circumstances for a certain operating site where there is no noise disturbance problem, by the competent authority of the state in which the operating site is situated.

(v) In developing a code of performance, Chairman shall apply in sub-rule (27), (28) & (29).

(27) Take-off and initial climb phase: (a) Operations in performance Class 1. The helicopter shall be able, in the event of the failure of the critical power-unit being recognized at or before the take-off decision point, to discontinue take-off and stop within the rejected take-off area available or, or in the event of the failure of the critical power-unit being recognized at or after the take-off decision point, to continue the take-off, clearing all obstacles along the flight path by an adequate margin until the helicopter is in a position to comply with sub-rule (28)(a).

(b) Operations in performance Class 2. the helicopter shall be able, in the event of the failure of the critical power-unit at any time after reaching DPATO, to continue the take-off, clearing all obstacles along the flight path by an adequate margin until the helicopter is in a position to comply with sub-rule (28)(a) Before the DPATO, failure of the critical power-unit may cause the helicopter to force-land; therefore the conditions stated in sub-rule (25)(b) shall apply.

(c) Operations in performance Class 3. At any point of the flight path, failure of a power-unit will cause the helicopter to force-land; therefore the conditions stated in sub-rule (25)(b) shall apply.

(28) En-route phase:

(a) Operations in performance Classes 1 and 2 the helicopter shall be able, in the event of the failure of the critical power-unit at any point in the en-route phase, to continue the flight to a site at which the conditions of sub-rule (29)(a) for operations in performance Class 1, or the conditions of sub-rule (29)(b) for operations in

performance Class 2 can be met, without flying below the appropriate minimum flight altitude at any point.

(b) Operation in performance Class 3. the helicopter shall be able with all power-units operating to continue along its intended route or planned diversions without flying at any point below the appropriate minimum flight altitude. At any point of the flight path, failure of a power-unit will cause the helicopter to force-land; therefore the conditions stated in sub-rule (29)(b) shall apply.

(29) Approach and landing phase:

(a) Operations in performance Class 1. In the event of the failure of the critical power –unit being recognized at any point during the approach and landing phase, before the landing decision point, the helicopter shall, at the destination and at any alternate, after clearing all obstacles in the approach path, be able to land and stop within the landing distance available or to perform a balked landing and clear all obstacles in the flight path by an adequate margin equivalent to that specified in sub-rule (27)(a). In case of the failure occurring after the landing decision point, the helicopter shall be able to land and stop within the landing distance available.

(b) Operations in performance Class 2. In the event of the failure of the critical power-unit before the DPBL, the helicopter shall, at the destination and at any alternate, after clearing all obstacles in the approach path, be able either to land and stop within the landing distance available or to perform a balked landing and clear all obstacles in the flight path by an adequate margin equivalent to that specified in sub-rule (27)(b). After the DPBL, failure of a power-unit may cause the helicopter to force-land; therefore the conditions stated in sub-rule (25)(b) shall apply.

(c) Operations in performance Class 3. At any point of the flight path, failure of a power-unit will cause the helicopter to force-land; therefore the conditions stated in sub-rule (25)(b) shall apply.

(30) Obstacle data: The operator shall use available obstacle data to develop procedures to comply with the take-off, initial climb approach and landing phases detailed in the code of performance established by the state.

(31) Additional requirements for operations of helicopters in performance Class 3 in IMC, except special VFR flights:

(a) Operations in performance Class 3 in IMC shall be conducted only over a surface environment acceptable to the competent authority of the state over which the operations are performed.

(b) In approving operations by helicopters operating in performance Class 3 in IMC, the Chairman shall ensure that the helicopter is certificated for flight under IFR and that the overall level of safety intended by the provisions of part 6 and 8 is provided

by:

(i) the reliability of the engines;
(ii) the operator's maintenance procedures, operating practices and crew training programmes;

(c) Operations of helicopters operating in performance Class 3 in IMC shall have a programme for engine trend monitoring and shall utilize the engine and helicopter manufactures recommended instruments, systems and operational/maintenance procedures to monitor the engines.

(32) Helicopter Instruments, Equipment, and Flight Documents:

(a) In addition to the minimum equipment necessary for the issuance of a certificate of airworthiness, the instruments, equipment and flight documents prescribed in the following paragraphs shall be installed or carried, as appropriate, in helicopters according to the helicopter used and to the circumstances under which the flight is to be conducted. The prescribed instruments and equipment, including their installation, shall be approved or accepted by the Chairman.

(b) A helicopter shall carry a certified true copy of the air operator certificate specified in sub rule (2)(c) and a copy of the authorizations, conditions and limitations relevant to the helicopter type, issued in conjunction with the certificate. When the certificate and the associated authorizations, conditions and limitations are issued by Chairman , will be in English.

(c) The operator shall include in the operations manual a minimum equipment list (MEL), approved by the Chairman which will enable the pilot-in-command to determine whether a flight may be commenced or continued from any intermediate stop should any instrument, equipment or systems become inoperative. Where the state of the Operator is not the state of Registry, the state of the Operator shall ensure that the MEL does not affect the helicopter's compliance with the airworthiness requirements applicable in the state of Registry.

(d) The operator shall make available to operations staff and members an aircraft operating manual, for each aircraft type operated, containing the normal, abnormal and emergency procedures relating to the operation of the aircraft. The manual shall include details of the aircraft systems and of the checklists to be sued. The design of the manual shall observe. Human Factors principles. The manual shall be easily accessible to the flight crew during all flight operations.

(e) A helicopter shall be equipped with instruments that will enable the flight crew to control the flight path of the helicopter, carry out any required procedural manoeuvres and observe the operating limitations of the helicopter in the expected operating conditions.

(f) A helicopter shall be equipped with:

(i) One or more first-aid kits as appropriate to the number of passengers the helicopter is authorized to carry;

(ii) Portable fire extinguishers of a type which, when discharged, will not cause dangerous contamination of the air within the helicopter. At least one shall be located in-

(A) the pilot's compartment; and
(B) each passenger compartment that is separate from the pilot's compartment and that is not readily accessible to the flight crew;
(C) A seat or berth for each person over an age to be determined by the Chairman;
(D) seat belt for each seat and restraining belts for each berth; and
(E) safety harness for each flight crew seat. The safety harness for each pilot seat shall incorporate a device, which will automatically restrain the occupant's torso in the event of rapid deceleration.

(g) A helicopter shall be equipped with the means of ensuring that the following information and instructions are conveyed to passengers:
(i) when seat belts or harnesses are to be fastened:
(ii) when and how oxygen equipment is to be used if the carriage of oxygen is required;
(iii) restrictions on smoking;
(iv) location and use of life jackets or equivalent individual floatation devices where their carriage is required; and
(v) location and method of opening emergency exits; and
(vi) If fuses are used, spare electrical fuses of appropriate ratings for replacement of those accessible in flight.

(h) A helicopter shall carry:

(i) The operations manual prescribed in sub rule (3)(a) or those parts of it that pertain to flight operations;
(ii) The helicopter flight manual for the helicopter, or other documents containing performance data required for the application and any other information necessary for the operation of the helicopter within the terms of its certificate of airworthiness, unless these data are available in the operations manual; and
(iii) Current and suitable charts to cover the route of the proposed flight and any route along which it is reasonable to expect that the flight may be diverted.

(i) Flight data recorders:

(i) A Type IV FDR shall record the parameters required to determine accurately the helicopter flight path, speed, attitude, engine power and operation.

(ii) A Type IVA FDR shall record the parameters required to determine accurately the helicopter flight path, speed, attitude, engine power, operation and configuration.

(iii) A type V FDR shall record the parameters required to determine accurately the helicopter flight path, speed, attitude and engine power.

(iv) Engraving metal foil FDRs and photographic film FDRs shall not be used.

(v) All helicopters for which the individual certificate of airworthiness is first issued after 1 January 2005, that utilize data link communications and are required to carry a CVR shall record, on a flight recorder, all data link communications to and from the helicopter. The minimum recording duration shall be equal to the duration of the CVR, and shall be correlated to the recorded cockpit audio.

(vi) All helicopters that utilize data link communications and are required to carry a CVR shall record, on a flight recorder, all data link communications to and from the helicopter. The minimum recording duration shall be equal to the duration of the CVR, and shall be correlated to the recorded cockpit audio.

(vii) Sufficient information to derive the content of the data link communications message and, whenever practical, the time the message was displayed to or generated by the crew shall be recorded.

(viii) Flight data recorders – duration: Types IV and V FDRs shall be capable of retaining the information recorded during at least the last ten hours of their operation.

(ix) All helicopters of a maximum certificated take-off mass of over 7000 kg, for which the Individual certificate of airworthiness is first issued on or after 1 January 1989, shall be equipped with a Type IV FDR.

(x) All helicopters of a maximum certificate take-off mass of over 3175 kg, for which the individual certificate of airworthiness is first issued after 1 January 2005 shall be equipped with a Type IVA FDR with a recording duration of at least 10 hours.

(j) Cockpit voice recorders:

(i) All helicopters of a maximum certificated take-off mass of over 7000 kg, for which the individual certificate of airworthiness is first issued on or after 1 January 1987, shall be equipped with a CVR, the objective of which is the recording of the aural environment on the flight deck during flight time. For helicopters not equipped with an FDR, at least main rotor speed shall be recorded

on one track of the CVR.

(ii) All helicopters of a maximum certificate take-off mass of over 3175 kg, up to and including 7000 kg, shall be equipped with a CVR, the objective of which is the recording of the aural environment on the flight deck during flight time. For helicopters not equipped with an FDR, at least main rotor speed shall be recorded on one track of the CVR.

(iii) All helicopters of a maximum certificated take-off mass of over 7000 kg, for which the individual certificate of airworthiness was first issued before 1 January 1987, shall be equipped with a CVR, the objective of which is the recording of the aural environment on the flight deck during flight time. For helicopters not equipped with an FDR, at least main rotor speed shall be recorded on one track of the CVR.

(iv) A CVR shall be capable of retaining the information recorded during at least the last 30 minutes of its operation.

(v) A CVR, installed in helicopters for which the individual certificate of airworthiness is first issued after 1 January 2003, shall be capable for retaining the information recorded during at least the last two hours of its operation.

(k) Flight recorders:

(i) Flight recorders shall be constructed, located and installed so as to provide maximum practical protection for the recordings in order that the recorded information may be preserved, recovered and transcribed. Flight recorders shall meet the prescribed crashworthiness and fire protection specifications.

(ii) Flight recorders shall not be switched off during flight time.

(iii) To preserve flight recorder records, flight recorders shall be deactivated upon completion of flight time following an accident or incident. The flight recorders shall not be reactivated before their disposition as determined in accordance with part-XIII of these rules.

(iv) Operational checks and evaluations of recordings from the FDR and CVR systems shall be conducted to ensure the continued serviceability of the recorders.

(l) Instruments and equipment for flights operated under VFR - by day and night:

(i) All helicopters when operating in accordance with VFR by day shall be equipped with:

(A) a magnetic compass;
(B) an accurate timepiece indicating the time in hours, minutes and seconds;
(C) a sensitive pressure altimeter;

(D) an airspeed indicator; and
(E) such additional instruments or equipment as may be prescribed by the appropriate authority.

(ii) All helicopters, when operating in accordance with VFR at night shall be equipped with:
(A) the equipment specified in sub-rule (32)(e)(i);
(B) an attitude indicator (artificial horizon) for each required pilot and one additional attitude indicator;
(C) a slip indicator;
(D) a heading indicator (directional gyroscope);
(E) a rate of climb and descent indicator;
(F) such additional instruments or equipment as may be prescribed by the appropriate authority;
(G) the lights required by Part-II of these rules for aircraft in flight or operating on the movement area of a heliport;
(H) two landing lights;
(I) illumination for all instruments and equipment that are essential for the safe operation of the helicopter that are used by the flight crew;
(J) lights in all passenger compartments; and
(K) a flashlight for each crew member station.

(m) Instruments and equipment for flights operated under IFR - by day and night:

(i) All helicopters when operating in accordance with IFR, or when the helicopter cannot be maintained in a desired attitude without reference to one or more flight instruments, shall be equipped with-

(A) a magnetic compass;
(B) an accurate timepiece indicating the time in hours, minutes and seconds;
(C) two sensitive pressure altimeters;
(D) an airspeed indication system with means of preventing malfunctioning due to either condensation or icing;
(E) a slip indicator;
(F) an attitude indicator (artificial horizon), for each required pilot and one additional attitude indicator;
(G) a heading indicator (directional gyroscope);
(H) a means of indicating whether the power supply to the gyroscopic instrument is adequate;
(I) a means of indicating in the flight crew compartment the outside air temperature;
(J) a rate of climb and descent indicator;

(K) a stabilization system, unless it has been demonstrated to the satisfaction of the certificating authority that the helicopter possesses, by nature of its design, adequate stability without such a system; and

(L) such additional instruments or equipment as may be prescribed by the Chairman; and
(M) if operated at night, the lights as specified.

(ii) All helicopters when operating in accordance with IFR shall be fitted with an emergency power supply, independent of the main electrical generation system, for the purpose of operating and illuminating, for a minimum period of 30 minutes, an attitude ideating instrument (artificial horizon), clearly visible to the pilot-in-command. The emergency power supply shall be automatically operative after the total failure of the main electrical generating system and clear indicating shall be given on the instrument panel that the attitude indicator(s) is being operated by emergency power.

(n) All helicopters on flights over water:

(i) Means of flotation:

(A) Engaged in offshore operations, or other over water operations as prescribed by the Chairman; or

(B) Flying over water in a hostile environment at a distance form land corresponding to more than 10 minutes at normal cruise speed when operating in performance Class 1 or 2; or

(C) Flying over water in a non-hostile environment at a distance from land specified by the appropriate authority of the responsible state when operating in performance Class 1; or

(D) Flying over water beyond auto rotational or safe forced landing distance from land when operating in performance Class 3.

(ii) Emergency equipment: Helicopters operating in performance Class 1 or 2 and operating in accordance with the provisions of sub-rule (32)(n)(ii) shall be equipped with:

(A) one life jacket, or equivalent individual flotation device, for each person on board, stowed in a position easily accessible from the seat or berth of the person for whose use it is provided. For offshore operations the life jacket shall be worm constantly unless the occupant is wearing an integrated survival suit that includes the functionality of the life jacket;

(B) life –saving rafts in sufficient numbers to carry all persons on board, stowed so as to facilitate their ready use in emergency, provided with such life-saving equipment including means of sustaining life as is appropriate to the flight to be undertaken; and

(C) equipment for making the pyrotechnical distress signals described in part-II of these rules.

(iii) Helicopters operating in performance class 3 when operating beyond auto rotational distance form land but within a distance from land specified by the Chairman shall be equipped with for each person on board, stowed in a position easily accessible from the seat or berth of the person for whose use it is provide.

(iv) For offshore operations, when operating beyond auto rotational distance form the land, the life jacket shall be worm unless the occupant is wearing an integrated survival suit that includes the functionality of the life jacket.

(v) Helicopters operating in performance Class 3 when operating beyond the distance specified in sub-rule (32)(n)(iii) shall be equipped as. sub-rule (32)(n)(ii).

(vi) In the case of helicopters operating in performance Class 2 or 3 when taking off or landing at a heliport where, in the opinion of the Chairman, the take-off or approach path is so disposed over water that in the event of a mishap there would be likelihood of a ditching , at least the equipment required in sub-rule (32)(n)(ii)(A) shall be carried.

(vii) Each life jacket and equivalent individual flotation device, when carried in accordance with these rules shall be equipped with a means of electric illumination for the purpose of facilitation the location of persons.

(o) All helicopters on fights over designated sea areas: Helicopters, when operating over sea areas which have been designated by the Chairman as areas in which search and rescue would be especially difficult, shall be equipped with life-saving equipment (including means of sustaining life) as may be appropriate to the area over flown.

(p) All helicopters on flights over designated land areas: Helicopters, when operated across land areas which have been designated by the Chairman as areas in which search and rescue would be especially difficult, shall be equipped with such signalling devices and life-saving equipment (including means of sustaining life) as may be appropriate to the area over flown.

(q) Emergency locator transmitter (ELT):

(i) Until 30 June 2008 performance Class 1 and 2 helicopters for which the individual certificate of airworthiness is first issued after 1 January 2002, operating on flights over water as described in sub-rule (32)(n)(vi) and performance Class 3 helicopters for which the individual certificate of airworthiness is first issued after 1 January 2002, operating as described in sub-rule (32)(n)(i)(B) shall be equipped with at least one automatic ELT and at least one ELST(s) in a raft.

(ii) All performance Class 1 and 2 helicopters operating on flights over water as described in sub-rule (32)(m)(i)(A) and performance Class 3 helicopters operating as described in sub-rule (32)(m)(i)(B) shall be equipped with at least one automatic ELT and at least one ELT(s) in a raft.

(iii) Helicopters for which the individual certificate of airworthiness is first issued after 1 January 2002, on flights over designated land areas as described in sub-rule (32)(p) shall be equipped with at least one automatic ELT.

(iv) Helicopters on flights over designated land areas described in sub-rule (32)(p) shall be equipped with at least one automatic ELT.

(v) ELT equipment carried to satisfy the requirements of sub-rule (32)(q)(i) to (iv) shall operate in accordance with the relevant provisions of the Convention.

(vi) All helicopters operating in performance Class 1 and 2 shall be equipped with at lest one automatic ELT and, when operating on flights over water as described in sub-rule (32)(n)(i)(A) with at least one automatic ELT and one ELT(s) in a raft or life jacket.

(vii) All helicopters operating in performance Class 3 shall be equipped with at lest one automatic ELT and, when operating on flights over water as described in sub-rule (32)(n)(i)(B), with at least one automatic ELT and one ELT(s) in a raft or life jacket.

(viii) ELT equipment carried to satisfy the requirements of sub-rule (32)(q)(vi) and (vii) shall operate in accordance with the relevant provisions of part-X of these rules.

(r) All helicopters on high altitude flights:

(i) A helicopter intended to be operated at flight altitudes at which the atmospheric pressure is less than 700 hpa in personnel compartments shall be equipped with oxygen storage and dispensing apparatus capable of storing and dispensing the oxygen supplies required in sub-rule (17)(a).

(ii) A helicopter intended to be operated at flight altitudes at which the atmospheric pressure is less than 700 hpa but which is provided with means of maintaining pressures greater than 700 hpa in personnel compartments shall be provided with oxygen storage and dispensing apparatus capable of storing and storing and dispensing the oxygen supplies required in sub-rule (17)(b).

(iii) A helicopter intended to be operated at flight altitudes at which the atmospheric pressure is more than 376 hpa which cannot descend safely within four minutes to a flight altitude at which the atmospheric pressure is equal to 620 hpa, and for which the individual certificate of airworthiness was issued on or

after 9 November 1998, shall be provided with automatically deployable oxygen equipment to satisfy the requirements of sub-rule(16)(c)(i). The total number of oxygen dispensing units shall exceed the number of passenger and cabin crew seats by at least 10 percent.

(s) All helicopters in icing conditions: All helicopters shall be equipped with suitable anti-icing and/or de-icing devices when operated in circumstances in which icing conditions are reported to exist or are expected to be encountered.

(t) Noise certification: All helicopters required to comply with the noise certification rules of part-XVI of these rules shall carry a document attesting noise certification. When the document or a suitable statement attesting noise certification as contained in another document approved by the Chairman shall be in English language.

(u) Helicopters carrying passengers-cabin crew seats:

(i) All helicopters shall be equipped with a forward or rearward facing within 15 degrees of the longitudinal axis of the helicopter) seat, fitted with a safety harness for the use of each cabin crew member required to satisfy the intent of sub-rule (39)(a) in respect of emergency evacuation.

(ii) Cabin crew seats shall be located near floor level and other emergency exits as required by the Chairman for emergency evacuation.

(v) Helicopters required to be equipped with a pressure-altitude reporting transponder: Except as may be otherwise authorized by the appropriate authority, all helicopters shall be equipped with a pressure-altitude reporting transponder which operates in accordance with the provisions of part-X of these rules.

(w) Microphones: All flight crew members required to be on flight deck duty shall communicate through boom or throat microphones.

(33) Helicopter Communication Equipment:

(a) A helicopter shall be provided with radio communication equipment capable of:
(i) conduction two-way communication for heliport control purposes;
(ii) receiving meteorological information at any time during flight;
(iii) conducting two-way communication at any time during flight with at least one aeronautical station and with such other aeronautical stations and on such frequencies as may be prescribed by the appropriate authority.

(b) The radio communication equipment required in accordance with (a) shall provide for communications on the aeronautical emergency frequency.

(c) For flights in defined portions of airspace or on routes where an RCP type has been prescribed, a helicopter shall, in addition to the requirements specified in para-

(a):

(i) be provided with communication equipment which will enable it to operate in accordance with the prescribed RCP type(s) and

(ii) be authorized by the Chairman for operations in such airspace.

(34) Helicopter Navigation equipment: (a) A helicopter shall be provided with navigation equipment which will enable it to proceed:

(i) in accordance with its operational flight plan; and

(ii) in accordance with the requirements of air traffic services;

Except when, if not so precluded by the appropriate authority, navigation for flight under VFR is accomplished by visual reference to landmarks.

(b) For flights in defined portions of airspace or on routes where an RNP type has been prescribed, a helicopter shall, in addition to the requirements specified in para-(a):

(i) be provided with navigation equipment which will enable it to operate in accordance with the prescribed RNP type(s) and

(ii) be authorized by the Chairman for operations in such airspace.

(c) The helicopter shall be sufficiently provide with navigation equipment to ensure that, in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment will enable the helicopter to navigate in accordance with para-(a) and where applicable para-(b).

(d) On flights in which it is intended to land in instrument meteorological conditions, a helicopter shall be provided with appropriate navigation equipment providing guidance to a point from which a visual landing can be effected. This equipment shall be capable of providing such guidance at each heliport at which it is intended to land in instrument meteorological conditions and at any designated ultimate heliports.

(e) Installation: The equipment installation shall be such that the failure of any single unit required for either communications or navigation purposes or both will not result in the failure of another unit required for communications or navigation purposes.

(35) Helicopter Maintenance: (a) Operators shall ensure that, in accordance with procedures acceptable to the Chairman-

(i) each helicopter they operate is maintained in an airworthy condition;

(ii) the operational and emergency equipment necessary for the intended flight is serviceable; and

(iii) the certificate of airworthiness of the helicopter they operate remains valid.

(b) An operator shall not operate a helicopter unless it is maintained and releases to service by an organization approved in accordance with part 6.

(c) An operator shall employ a person or group of persons to ensure that all maintenance is carried out in accordance with the maintenance control manual.

(d) The operator shall ensure that he maintenance of its helicopters is performed in accordance with the maintenance programme approved by the Chairman.

(e) Operator's maintenance control manual: The operator shall provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance control manual, acceptable to the state of Registry, in accordance with the requirements of the design of the manual shall observe Human Factors principles.

(f) The operator shall ensure that the maintenance control manual is amended as necessary to keep the information contained therein up to date.

(g) Copies of all amendments to the operator's maintenance control manual shall be furnished promptly to all organizations or persons to whom the manual has been issued.

(h) The operator shall provide the state of the operator and the state of Registry with a copy of the operator's maintenance control manual, together with all amendments and/or revisions to it and shall incorporate in it such mandatory material as the state of the operator or the state of Registry may require.

(i) Maintenance programme: The operator shall provide, for the use and guidance of maintenance and operational personnel concerned, a maintenance programme, approved by the Chairman, containing the information required by the design and application of the operator's maintenance programme shall observe Human Factors principles.

(j) Copies of all amendments to the maintenance programme shall be furnished promptly to all organizations or persons to whom the maintenance programme has been issued.

(k) Maintenance records: An operator shall ensure that the following records are kept for the periods mentioned in(l):

(i) The total time in service (hours, calendar time and cycles, as appropriate) of the helicopter and all life-limited components;

(ii) The current status of compliance with all mandatory continuing airworthiness information;

(iii) Appropriate details of modifications and repairs to the helicopter and its major components;

(iv) The time in service (hours, calendar time and cycles, as appropriate) since last overhaul of the helicopter or its components subject to a mandatory overhaul life;

(v) The current status of the helicopter's compliance with the maintenance programme; and

(vi) The detailed maintenance records to show that all requirements for a maintenance release have been met.

(l) The records in para (k) (i) to (v)shall be kept for a minimum period of 90 days after the unit to which they refer has been permanently withdrawn from service, and the records in para (k)(vi) for a minimum period of one year after the signing of the maintenance release.

(m)In the event of a temporary change of operator, the records shall be made available to the new operator. In the event of any permanent change of operator, the records shall be transferred to the new operator.

(n) Continuing airworthiness information: The operator of a helicopter over 3175 kg maximum mass shall monitor and assess maintenance and operational experience with respect to continuing airworthiness and provide the information as prescribed by the Chairman and report through the system specified in part-VIII of these rules.

(o) The operator of a helicopter over 3175 kg maximum mass shall obtain and assess containing airworthiness information and recommendations available from the organization responsible for the type design and shall implement resulting actions considered necessary in accordance with a procedure acceptable to the Chairman.

(p) Modifications and repairs: All modifications and repairs shall comply with airworthiness requirements acceptable to the Chairman. Procedures shall be established to ensure that the substantiating data supporting compliance with the airworthiness requirements are retained.

(q) Maintenance release: A maintenance release shall be completed and signed to certify that the maintenance work has been completed satisfactorily and in accordance with approved data and the procedures described in the maintenance organization's procedures manual.

(r) A maintenance release shall contain a certification including:

(i) basic details of the maintenance carried out including detailed reference of the approved data used;

(ii) data such maintenance was completed;

(iii) when applicable, the identity of the approved maintenance organization; and

(iv) the identity of the person or persons signing the release.

(s) Records: An operator shall ensure that the following records are kept-

(i) in respect of the entire helicopter: the total time in service;
(ii) in respect of the major components of the helicopter:

(A) the total time in service;
(B) the date of the last overhaul;
(C) the date of the last inspection;

(iii) in respect of those instruments and equipment, the serviceability and operating life of which are determined by their time in service:

(A) such records of the time in service as are necessary to determine their serviceability or to compute their operating life;
(B) the date of the last inspection.

(t) These records shall be kept for a period of 90 days after the end of the operating life of the unit to which they refer.

(36) Helicopter Flight Crew: (a) The number and composition of the flight crew shall not be less than that specified in the operations manual. The flight crews shall include flight crew members in addition to the minimum numbers specified in the flight manual or other documents associated with the certificate of airworthiness, when necessitated by considerations related to the type of helicopter used, the type of operation involved and the duration of flight between points where flight crews are changed.

(b) The flight crew shall include at least one member authorized by the Chairman to operate the type of radio transmitting equipment to be used.

(c) Flight crew member emergency duties: An operator shall, for each type of helicopter, assign to all flight crew members the necessary functions they are to perform in an emergency or in a situation requiring emergency evacuation. Annual training in accomplishing these functions shall be contained in the operator's training programme and shall include instruction in the use of all emergency and life-saving equipment required to be carried, and drills in the emergency evacuation of the helicopter.

(d) Flight crew member training programmes: An operator shall establish and maintain a ground and flight training programme, approved by the Chairman, which ensures that all flight crew members are adequately trained to perform their assigned duties. The training programme shall:

(i) include ground and flight training facilities and properly qualified instructors as determined by the Chairman.

(ii) consist of ground and flight training for the type(s) of helicopter on which the flight crew member serves;

(iii) include proper flight crew coordination and training for all types of emergency and abnormal situations or procedures caused by power plant, transmission, rotor, airframe or systems malfunctions, fire or other abnormalities

(iv) include training to knowledge and skills related to visual and instrument flight procedures for the intended area of operation, human performance and threat and error management, the transport of dangerous goods and where applicable, procedures specific to the environment in which the helicopter is to be operate;

(v) ensure that all flight crew members know the functions for which they are responsible and the relation of these functions to the functions of other crew members. Particularly in regard to abnormal or emergency procedures; and

(vi) be given on a recurrent basis, as determined by the state of the operator and shall include an assessment of competence.

(e) The requirement for recurrent flight training in a particular type of helicopter shall be considered fulfilled by:

(i) the use, to the extent deemed feasible by the Chairman, of flight simulation training devices approved by that state for that purpose; or

(ii) the Completion within the appropriate period of the proficiency check required by (m) in that type of helicopter.

(f) Qualifications: Recent experience-pilot-in-command: An operator shall not assign a pilot to act as pilot-in-command of a type or variant of a type of helicopter unless, on the same type of helicopter within the preceding 90 days, that pilot has made at least three take-offs and landings.

(g) Recent experience-co-pilot: An operator shall not assign a co-pilot to operate at the flight controls during take-off and landing of a type or variant of a type of helicopter unless, on the same type of helicopter within the preceding 90 days, that

co-pilot has operated the flight controls, as pilot-in-command or as co-pilot, during three take-offs and landings or has otherwise demonstrated competence to act as co-pilot on a flight simulation training device approved for the purpose.

(h) Pilot-in-command operational qualification: An operator shall not utilize a pilot as pilot-in-command of a helicopter on an operation for which that pilot is not currently qualified until such pilot has complied with para-(i) and (j).

(i) Each such pilot shall demonstrate to the operator an adequate knowledge of:

(i) The operation to be flown. This shall include knowledge of:

(A) the terrain and minimum safe altitudes;
(B) the seasonal meteorological Conditions;
(C) the meteorological, communication and air traffic facilities, services and procedures;
(D) the search and rescue procedures; and
(E) the navigation facilities and procedures associated with the route or area in which the flight is to take place; and

(ii) Procedures applicable to flight paths over heavily populated areas and areas of high air traffic density, obstructions physical layout, lighting , approach aids and arrival, departure, holding and instrument approach procedures, and applicable operating minima.

(j) A pilot-in-command shall have made a flight, reprehensive of the operation with which the pilot is to be engaged which must include a landing at a representative heliport, as a member of the flight crew and accompanied by a pilot who is qualified for the operation.
(k) The operator shall maintain a record, sufficient to satisfy the Chairman of the qualification of the pilot and of the manner in which such qualification of the pilot and of the manner in which such qualification has been achieved.

(l) An operator shall not continue to utilize a pilot as a pilot-in-command on an operation unless, within the preceding 12 months, the pilot has made at least one representative flight as a pilot member of the flight crew, or as a check pilot, or as an observer on the flight check. In the event that more than 12 months elapse in which a pilot has not made such a representative flight, prior to again serving as a pilot-in-command on that operation. that pilot must rituality in accordance with (i)and(j).

(m) Pilot proficiency checks: An operator shall ensure that piloting technique and the ability to execute emergency procedures is checked in such a way as to demonstrate the pilot's competence on each type or variant of a type of helicopter. Where the operation may be conducted under IFR, an operator shall ensure that the pilot's competence to comply with such rules is demonstrated to either a check pilot of the operator or to a representative of the Chairman. Such checks shall be performed twice

within any period of one year. Any two such checks which are similar and which occur within a period of four consecutive months shall not alone satisfy this requirement.

(n) Flight crew equipment: A flight crew member assessed as fit to exercise the privileges of a licence, subject to the use of suitable correcting lenses, subject to the use of suitable correcting lenses, shall have a spare set of the correcting lenses readily available when exercising those privileges.

(o) Flight time, flight duty periods and rest periods: The Chairman shall establish regulations specifying the limitations applicable to the flight time and flight duty periods for flight crew members. These regulations shall also make provision for adequate rest periods and shall be such as to ensure that fatigue occurring either in a flight or successive flights or accumulated over a period of time due to these and other tasks, does not endanger the safety of a flight.

(37) Flight Operations Officer/Flight Dispatcher:

(a) When the Chairman requires that a flight operations officer/flight dispatcher, employed in conjunction with an approved method of control and supervision of flight operations be licensed, that flight operations officer/flight dispatcher shall be licensed in accordance with the provisions of part 1.

(b) In accepting proof of qualifications other than the option of holding of a flight operations officer/flight dispatcher licence, the Chairman, in accordance with the approved method of control and supervision of flight operations, shall require that, as a minimum, such persons meet the requirements specified in part 1 for the flight operations officer/flight dispatcher licence.

(c) A flight operations officer/flight dispatcher shall not be assigned to duty unless that person has:

(i) satisfactorily completed an operator-specific training course that addresses all the specific components of its approved method of control and supervision of flight operations specified in sub-rule (2)(f);

(ii) made within the preceding 12 months, as least of one-way qualification flight in a helicopter over any area for supervision. The flight should include landings at as many heliports as practicable;

(iii) demonstrated to the operator a knowledge of:

(A) the contents of the operations manual;
(B) the radio equipment in the helicopters used; and
(C) the navigation equipment in the helicopters used;

(iv) Demonstrated to the operator knowledge of the following details concerning operations for which the officer is responsible and areas in which that individual is authorized to exercise flight supervision:

(A) the seasonal meteorological conditions and the sources of meteorological information;
(B) the effects of meteorological conditions on radio reception in the helicopters used;
(C) the peculiarities and limitations of each navigation system which is used by the operation; and
(D) the helicopter loading instructions;

(v) Satisfied the operator as to knowledge and skills related to human performance as they apply to dispatch duties; and

(vi) Demonstrated to the operator the ability to perform the duties specified in sub-rule (2)(e).

(38) Manuals, Logs and Records: (a) The flight manual shall be updated by implementing changes made mandatory by the Chairman.

(b) Operator's maintenance control manual: The operator's maintenance control manual provided in accordance with 35(e) which may be issued in separated parts, shall contain the following information:

(i) Description of the procedures required by sub-rule (35)(a) including, when applicable:

(A) a description of the administrative arrangements between the operator and the approved maintenance organization;

(B) a description of the maintenance procedures and the procedures for completing and signing a maintenance release when maintenance is based on a system other than that of an approved maintenance organization;

(ii) Names and duties of the person or persons required by sub-rule (35)(c);

(iii) A reference to the maintenance programme required by sub-rule (35)(i);

(iv) A description of the methods used for the completion and retention of the operator's maintenance records required by sub-rule (35)(k);

(v) A description of the procedures for monitoring, assessing and reporting maintenance and operational experience required by sub-rule (35)(n);

(vi) A description of the procedures for complying with the service information

reporting requirements of part-VIII of these rules ;

(vii) A description of procedures for assessing continuing airworthiness information and implementing any resulting actions, as required sub-rule (35)(o);

(viii) A description of the procedures for implementing action resulting from mandatory continuing airworthiness information;

(ix) A description of established and maintaining a system of analysis and continued monitoring of the performance and efficiency of the maintenance programme, in order to correct any deficiency in that programme;

(x) A description of helicopter types and models to which the manual applies;

(xi) A description of procedures for ensuring that unserviceabilities affecting airworthiness are recorded and rectified;

(xii) A description of the procedures for advising the state of Registry of significant in service occurrences;

(xiii) A description of procedures to control the leasing of aircraft and related aeronautical products; and

(xiv) A description of the maintenance control manual amendment procedures.

(c) Maintenance programme: A maintenance programme for each helicopter as required by sub-rule (35)(i) shall contain the following information:

(i) Maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilization of the helicopter;

(ii) When applicable, a continuing structural integrity programme;

(iii) Procedures for changing or deviating form para-(a) and (b) above; and

(iv) When applicable, condition monitoring and reliability programme descriptions for helicopter systems components, power transmissions, rotors and power plants.

(d) Maintenance tasks and intervals that have been specified as mandatory in approval of the type design shall be identified as such.

(e) Journey log book:

I- Helicopter nationality and registration.
II- Date.
III- Names of crew members.
IV- Duty assignments of crew members.

V- Place of departure.
VI- Place of arrival.
VII- Time of departure.
VIII- Time of arrival.
IX- Hours of flight.
X- Nature of flight (private,scheduled or non-scheduled).
XI- Incidents, observations, if any.
XII- Signature of person in charge.

(f) Records of emergency and survival equipment carried: Operators shall at all times have available for immediate communication to rescue coordination centers, lists containing information on the emergency and survival equipment carried on board any of their helicopters engaged in international air navigation. The information shall include, as applicable, the number, color and type of life rafts and pyrotechnics, details of emergency medical supplies, water supplies and the type and frequencies of the emergency portable radio equipment.

(g) Flight recorder records: An operator shall ensure, to the extent possible, in the event the helicopter becomes involved in an accident or incident, the preservation of all related flight recorder records, and if necessary the associated flight recorders, and their retention in safe custody pending their disposition as determined in accordance with part-XIII of these rules.

(39) Cabin Crew: (a) An operator shall establish, to the satisfaction of the Chairman the minimum number of cabin crew required for each type of helicopter , based on seating capacity or the number of passengers carried, in order to effect a safe and expeditious evacuation of the helicopter , and the necessary functions to be performed in an emergency or a situation requiring emergency evacuation. the operator shall assign these functions for each type of helicopter.

(b) Protection of cabin crew during flight: Each cabin crew member shall be seated with seat belt or, when provided, safety harness fastened during take-off and landing and whenever the pilot-in-command so directs.

(c) Training: An operator shall establish and maintain a training programme, approved by the Chairman to be completed by all persons being assigned as a cabin crew member. Cabin crew shall complete a recurrent training programme annually. these training programmes shall ensure that each person is:

(i) Competent to execute those safety duties and functions that the cabin attendant is assigned to perform in the event of an emergency or in a situation requiring emergency evacuation;

(ii) Drilled and capable in the use of emergency and life-saving equipment required to be carried , such as life jackets, life rafts, evacuation slides, emergency exits, portable fire extinguishers, oxygen equipment and first-aid kits;

(iii) When serving on helicopters operated above 3000m (10000 ft) knowledgeable as regards the effect of lack of oxygen and, in the case of pressurized helicopters, as regards physiological phenomena accompanying a loss of pressurization;

(iv) Aware of other crew member's assignments and functions in the event of an emergency so far as is necessary for the fulfilment of the cabin crew member's own duties;

(v) Aware of the types of dangerous goods which may, and may not, be carried in a passenger cabin and has completed the dangerous goods training programme required by part-XVIIIA of these rules; and

(vi) Knowledgeable about human performance as related to passenger cabin safety duties and including flight crew cabin crew coordination.

(d) The Chairman shall establish regulations specifying the limits applicable to flight time, flight duty periods and rest periods for cabin crew.

(40) Security: (a) Helicopter search procedure checklist: An operator shall ensure that there is on board a checklist of the procedures to be followed in searching for a bomb in case of suspected sabotage. The checklist shall be supported by guidance on the course of action to be taken should a bomb or suspicious object be found.

(b) Training programmes: An operator shall establish and maintain a training programme which enables crew members to act in the most appropriate manner to minimize the consequences of acts of unlawful interference.

(c) An operator shall also establish and maintain a training programme to acquaint appropriate employees with preventive measures and techniques in relation to passengers, baggage, cargo, mail, equipment, stores and supplies intended for carriage on a helicopter so that they contribute to the prevention of acts of sabotage or other forms of unlawful interference.

(d) Reporting acts of unlawful interference: Following an act of unlawful interference the pilot-in-command shall submit, without delay, a report of such an act to the designated local authority.

(e) Within the mass limitations imposed by compliance with the applicable noise certification standards, unless otherwise authorized, in exceptional circumstances for a certain aerodrome or a runway where there is no noise disturbance problem, by the Chairman.

PART VII
REGISTRATION AND MARKING OF AIRCRAFT

171. Register of Bangladesh aircraft.- (1) The Chairman shall keep and maintain a current register of Bangladesh registered aircraft and unmanned free balloons.

(a) The register of aircraft shall contain all the information as required under the sub-rule (5) of this rule for each of the aircraft registered therein and the information that will be stated in the Certificate of Registration of each aircraft.

(b) The register of unmanned free balloons shall contain the date, time and location of release, the type of balloon and the name of its operator.

(c) The rules of this part shall not apply to meteorological pilot balloons used exclusively for meteorological purposes or to unmanned free balloons without a payload."

(2) An application for the registration of an aircraft shall be made in the Form specified by the Chairman by or on behalf of, a qualified person who is-

(a) the owner of the aircraft ; or

(b) where the aircraft is the subject of a contract of hire or charter (including a hire-purchase agreement) the effect of which is that the control, maintenance and operation of the aircraft is, or is to be, vested in a party to the contract, that party.

(3) Subject to sub-rule (2), an application for the registration of an aircraft may be made by or on behalf of two or more qualified persons who, jointly or in common, hold an interest as owner, purchaser under a hire-purchase agreement, hirer or chatterer of the aircraft and, if such an application is made the applicants shall nominate one of them as the person in whose name the certificate of registration of the aircraft shall be issued by the Chairman..

(4) For the purposes of this rule, "qualified person" means-

(a) a citizen of Bangladesh;

(b) a body corporate established under any Bangladesh law for the time being in force;

(c) a company registered in Bangladesh and carrying on business in Bangladesh;

(d) a company registered elsewhere than in Bangladesh but having its principal place of business in Bangladesh having as its Chairman a citizen of Bangladesh ; or

(e) a foreign company that has secured business or a contract in Bangladesh from the Government that such business or contract is not, in the opinion of the Chairman,

likely to be completed in less than six months.

(5) The register of Bangladesh aircraft shall include the following details in relation to each aircraft:-

(a) the date of registration of the aircraft;

(b) a description of the aircraft;

(c) the number or other identification mark given to the aircraft by the manufacturer;

(d) the nationality and registration marks referred to in rule 178 with respect to the aircraft;

(e) the name, nationality and residential or registered address of the owner of the aircraft;

(f) in the case of an aircraft referred to in clause(b) of sub-rule (2), the name, nationality and address of the hirer, the purchaser (if any) under a hire-purchase agreement or the charter, as the case may be, of the aircraft; and

(g) any other information necessary to establish the applicant for registration as being a qualified person under this rule.

(6) When an aircraft is registered in the register of Bangladesh aircraft, the Chairman shall issue a certificate of registration in the form adopted in pursuance of the Convention in respect of the aircraft to a qualified person.

(7) The Chairman may notify through ANO fee for issue of Certificate of Registration including issue of a duplicate copy of a Certificate of Registration.

172. Refusal to register.- The Chairman may refuse to register an aircraft unless the conditions for its registration are fulfilled.

173. Change of interest in an aircraft.- (1) Where the holder of a certificate of registration in respect of a Bangladesh aircraft-

(a) cases to have an interest, or acquires a different interest, in the aircraft; or

(b) becomes aware that another person who had an interest as owner, purchaser under a hire-purchase agreement, hirer or charterer in the aircraft has cease to have that interest, the holder shall within two weeks thereafter, forward to the Chairman a notification giving the nationality mark and the registration mark of the aircraft and setting out to the best of his knowledge-

(i) the nature of the change of interest that has occurred;

(ii) the date of the change;

(iii) the names and address of the persons affected by the change; and

(iv) the certificate registration of the aircraft if it is in his possession.

(2) A person who has acquired an interest as owner, purchaser under a hire-purchase agreement, hire or charterer in a Bangladesh aircraft shall, within two weeks after acquiring that interest, forward to the Chairman a notification giving the nationality mark and the registration mark of the aircraft and setting out-

(a) the nature of the interest;

(b) the manner in which, and the date on which, the interest was acquired;

(c) the name and address of the previous owner of the interest;

(d) his own name, nationality and address; and

(e) any other information necessary to establish whether the person is a qualified person within the meaning of rule 171.

(3) Where a notification under sub-rule (2) is forwarded by two or more qualified person who jointly have acquired an interest as owner, purchaser under a hire purchase agreement, hirer or charterer in Bangladesh aircraft, those persons shall, in the notification, nominate one of them as the person in whose name the new certificate of registration in respect of the aircraft shall be issued.

(4) Where the Chairman is satisfied about the truth of the statement forwarded to him under this rule and is satisfied that the person acquiring the interest is a qualified person under this Part, the Chairman shall-

(a) make the necessary changes in the registration, in respect of the aircraft; and

(b) issue a new certificate of registration, subject sub-rule (3) of this rule, to-

(i) the owner of the aircraft; or

(ii) where the aircraft is the subject of contract of hire of charter (including a hire purchase agreement) the effect of which is that the control, maintenance and operation of the aircraft is, or is to be vested in a party to the contracting party.

174. Cancellation of registration.- (1) Where a Bangladesh aircraft has been destroyed or permanently withdrawn from use, the holder of a certificate of registration in respect of the aircraft shall, within fifteen days from the date of such destruction or withdrawal, forward to the Chairman a statement of the circumstances of the destruction or withdrawal together

with the certificate of registration.

(2) Where the Chairman is satisfied that a Bangladesh aircraft has been destroyed or permanently withdrawn from use, he shall cancel the registration of the aircraft from the register of Bangladesh aircraft.

(3) The holder of a certificate of registration in respect of a Bangladesh aircraft may, at any time, apply to the Chairman for the cancellation of the registration of the aircraft from the register of Bangladesh aircraft, and shall forward the certificate of registration along with his application to the Chairman.

(4) Where the Chairman is satisfied with a request made to him under sub-rule (3), he may cancel the registration accordingly.

(5) Where the Government is satisfied that the ownership or other aspects or the registration of a Bangladesh aircraft do not comply with these rules and proper and timely advice of the matter has not been supplied to the Chairman, the Government may direct the Chairman to cancel the registration of the aircraft and the Chairman shall so cancel.

175. Availability of register.- The register of Bangladesh aircraft shall be made available for the information of interested persons at such times and subject to such conditions, as the Chairman determines.

176. Foreign aircraft.- An aircraft shall not be registered under these rules if it is registered in a foreign country.

177. Nationality of aircraft.- (1) Where an aircraft is registered under these rules, it shall have Bangladesh nationality.

(2) Where an aircraft is registered under a joint registration plan or an international registration plan, it shall to the extent set out in the Resolution on Nationality and Registration of Aircraft operated by International Operating Agencies adopted by the International Civil Aviation Organization Council on the fourteenth day of December, 1967, be deemed to have the nationality of each of the Contracting State that constitute the International Operating Agency by which the aircraft is operated.

178. Nationality, common and registration marks.- (1) A Bangladesh aircraft shall bear the nationality mark and registration mark as required by this Part.

(2) The nationality mark of a Bangladesh aircraft is the symbol "S2" which shall precede the registration mark.

(3) The registration mark of a Bangladesh aircraft is a group of three letters, being the letters assigned to the aircraft on its registration. This letter group shall be preceded by a hyphen.

(4) The nationality mark and the registration mark of a Bangladesh aircraft shall be-

(a) affixed on the aircraft by painting or by any other means that ensures a similar degree of permanency; and

(b) clean and visible at all times.

(5) A Bangladesh aircraft shall carry, secured to the aircraft in a permanent position near the main entrance, a plate of fireproof metal or other fireproof material of suitable physical properties inscribed with the nationality mark and registration mark of the aircraft and with such other details as the Chairman requires to give effect to the Convention.

(6) When letters are used for the registration mark, combinations shall not be used which might be confused with the five-letter combinations used in the International Code of Signals, Part II, the three-letter combinations beginning with Q used in the Q Code, for example QNH, QFE and QNE, and with the distress signal SOS, or other similar urgent signals, for example XXX, PAN and TTT.

179. Location of marks on a lighter-than-air aircraft.- (1) The location of nationality and registration marks on a Bangladesh lighter-than-air aircraft shall be in accordance with this Part and-

(a) if an airship---The marks on an airship shall appear either on the hull or on the stabilizer surfaces. Where the marks appear on the hull, they shall be located lengthwise on each side of the hull and also on its upper surface on the line of symmetry. Where the marks appear on the stabilizer surfaces, they shall appear on the horizontal and on the vertical stabilizers; the marks on the horizontal stabilizer shall be located on the right half of the upper surface and on the left half of the lower surface, with the tops of the letters and numbers towards the leading edge; the marks on the vertical stabilizer shall be located on each side of the bottom half stabilizer, with the letters and numbers placed horizontally;

(b) if a spherical balloon other than unmanned free balloon---the marks shall appear in two places diametrically opposite and shall be located near the maximum horizontal circumference of the balloon;

(c) if a non-spherical balloon other than unmanned free balloon-- the marks shall appear on each side and shall be located near the maximum cross-section of the balloon immediately above either the rigging band or the points of attachment of the basket suspension cables; or

(d) if an unmanned free balloon---the marks shall appear on the identification plate.

(2) The side marks of all lighter-than-air aircraft (other than unmanned free balloons) shall be so located that they are clearly visible both from the sides and from the ground.

180. Location of marks on a heavier-than-air aircraft.- (1) The location of nationality and registration marks on a Bangladesh heavier-than-air aircraft shall be in accordance with this Part and shall-

(a) appear on the wings of the aircraft; and

(b) also appear either on the fuselage, or equivalent structure, of the aircraft or on the vertical tail surfaces of the aircraft.

(2) On aircraft having a fixed wing surface, the marks shall appear on the lower surface of the wing structure, and shall be on the left wing unless they extend across the whole surface of both wings.

(3) The wing marks of a heavier-than-air aircraft shall, so far as is possible, be located equidistant from the leading and tailing edges of the wings and the tops of the letters shall be toward the leading edge of the wing.

(4) The marks on the fuselage, or equivalent structure, of a heavier-than-air aircraft shall be on each side of the fuselage or equivalent structure between the wings and the tail surfaces.

(5) The marks on the vertical tail surfaces of a heavier-than-air aircraft shall be -

(a) where the tail structure of the aircraft includes a single vertical surface only- on each side of that surface; or

(b) where the tail structure of the aircraft includes multi-vertical surfaces- on each of the outboard sides of the outer vertical surfaces of the tail structure.

(6) If a heavier-than-air aircraft does not possess parts corresponding with those mentioned in sub-rule (l) and clause (g) of rule 181, the marks shall appear on the aircraft in such manner as the Chairman determines so that the aircraft can be identified readily.

(7) On rotary wing aircraft the marks shall appear on each side of the fuselage and also on the lower surface of the fuselage as close to the line of symmetry as is practicable and shall be placed with the tops of the letters towards the nose.

181. Type and measurement of marks.- The type of letters and figures for the nationality and registration marks and their measurements shall be as follows:-

(a) the letters shall be capital letters in Roman characters and the letters and the figures shall be without ornamentation;

(b) the letters and figures in each separate group of marks shall be of equal height;

(c) the width of the figure and of each letter (except the letter I & the number 1) and the length of the hyphen shall be two-thirds of the height of a letter or figure;

(d) the letters, figures and hyphens shall be formed by solid lines the thickness of which shall be one-sixth of the height of a letter or figure and which shall be of a colour contrasting clearly with the background;

(e) each letter and figure shall be separated from that which it immediately precedes or follows by a space of not less than one quarter of the width of a letter or the figure, and, for the purpose of this clause, and hyphen shall be regarded as a letter

(f) in the case of a lighter-than-air aircraft-

(i) the height of the marks on these type (other than unmanned free balloons) shall be at least 50 cms (20 inches); and

(ii) The measurements of the marks related to Bangladesh registered un-manned free balloon shall be determined by the Chairman, taking into account the size of the payload to which the identification plate is affixed."

(g) in the case of a heavier-than-air aircraft-

(i) the height of the marks on the wings shall be at least 50 cms (20 inches); and

(ii) the marks on the fuselage (or equivalent structure) and on any vertical tail surface shall be of at least 30 cm of height and shall be as nearly as possible parallel to the longitudinal axis of the aircraft and shall be as large as practicable, but shall not interfere with the visible outlines of the fuselage (or equivalent structure) and shall leave at least a 5 cms (2 inches) margin each edge of any vertical tail surface:

Provided that this sub-clause shall not be interpreted as requiring the use of marks exceeding 15 cms (6 inches) in height.

(h) in the case of rotary wing aircraft where owing to the structure of the aircraft the greatest height practicable for the marks on the sides of the fuselage (or equivalent structure) is less than 30 (thirty) centimetres the marks shall also appear on the lower surface of the fuselage as close to the line of symmetry as is practicable and shall be placed with the tops of the letters towards the nose.

(i) the height of the letters constituting each group of marks shall be at least 50 (fifty) centimetres;

(j) if a heavier than air aircraft does not posses parts corresponding to those mentioned in sub-rule (g) above, the measurements of the marks shall be such that the aircraft can be identified readily.

Provided that if the lower surface of the fuselage is not large enough for the marks to be of 50 (fifty) centimeters in height, marks of the greatest height practicable in the circumstances shall be displayed.

182. Advertising marks.- (1) Except with approval in writing of the Chairman, a Bangladesh aircraft shall not bear on any part of its exterior surfaces an advertisement, sign or lettering as required or permitted by or under these rules.

(2) The name of a Bangladesh aircraft and the name and emblems of the owner of a Bangladesh aircraft may be displayed on the aircraft if the location, size, shape and color of the lettering and signs do not interfere with the easy recognition of and is not capable of confusion with the nationality and registration marks of the aircraft.

RART VIII
AIRWORTHINESS REQUIREMENTS

183. Definitions.- In this Part, unless there is anything repugnant in the subject or context,-

" **aircraft component**" means any equipment or part of an aircraft which when fitted to an aircraft may, if it is not sound or not functioning correctly, affect the safety of the aircraft;

"**major damage**", in relation to an aircraft, means damage of such a kind that it may affect the safety of the aircraft or the persons on board the aircraft, whether the damage occurs in flight or on the ground;

"**major defect**", in relation to an aircraft, means a defect of such a kind that it may affect the safety of the aircraft or of persons on board the aircraft, whether the defect occurs in flight or on the ground.

"**anticipated operating conditions"** means those conditions which are known from experience or which can be reasonably envisaged to occur during the operational life of the aircraft taking into account the operations for which the aircraft is made eligible, the conditions so considered being relative to the meteorology State of the atmosphere, to the configuration of terrain, to the functioning of the aircraft, to the efficiency of personnel and to all the factors affecting safety in flight. Anticipated operating conditions do not include:

(i) those extremes which can be effectively avoided by means of operating procedures; and

(ii) those extremes which occur so infrequently that to require the Standards to be met in such extremes would give a higher level of airworthiness than experience has shown to be necessary and practical.

"aircraft component" means any equipment or part of an aircraft which when fitted to an aircraft may, if it is not sound or not functioning correctly, affect the safety of the aircraft.

or

any part the soundness and correct functioning of which when fitted to an aircraft, is essential to the continuous airworthiness or safety of the aircraft and includes any items or equipment.

"airworthiness" means the continuing capability of the aircraft to perform in a satisfactory manner the flight operations for which it was designed.

"airworthiness directives" means an instruction issued by an Airworthiness Authority that amends an approved document or requires a modification, restriction, replacement or special inspection of an aircraft, aircraft component or item of equipment necessary to maintain it in an airworthy condition.
"airworthiness officials" means personnel who have been delegated and authorised to exercise powers on behalf of the Chairman, relating to Airworthiness and Engineering Licensing functions in general and any other additional specific powers and authority; such personnel may be known by the
designation of Inspector of Aircraft, Senior Inspector of Aircraft, Deputy Director (AELD) or by any other designation as may be notified from time to time.

"appropriate airworthiness requirements" means the comprehensive and detailed airworthiness code established, adopted or accepted for the class of aircraft, engine or propeller under consideration.

"approved" means accepted by Chairman, Civil Aviation as suitable for a particular purpose.

"aircraft components" means any part the soundness and correct functioning of which, when fitted to an aircraft, is essential to the continuous airworthiness or safety of the aircraft and includes any items of equipment.
"aircraft goods" means aircraft components or materials including paints, dopes, thinner, fuels, lubricants & special petroleum products, intended for use in civil aircraft and which are required to be produced and certified in conformity with an approved specification drawing or process.

"bilge area" means the almost flat part of the bottom of the aircraft where dirty water is collected.

"condition monitoring" means a failure preventive process having neither Hard Time nor On Condition elements but one in which information on items gained from operational experience is collected, analyzed and interpreted on a continuing basis as a means of implementing corrective procedures.

"continuing airworthiness of an aircraft" means the continuing capability of the aircraft to perform in a satisfactory manner the flight operation for which it was designed.

"certificate of approval" means a document issued to an organization approved by the Chairman, defining the scope of approval granted.

"certificate of airworthiness" means a document issued by the Chairman on the basis of the satisfactory evidence that the aircraft complies with the design aspects of the appropriate airworthiness requirements.

"configuration" means a particular combination of the position of the moveable elements such as wing flaps and landing gears, etc., that affect the aerodynamic

characteristics of the aircraft.

"category A" means with respect to helicopters, means a multi-engined helicopter designed with engine and system isolation futures capable of operations using take-off and landing data schedule under a critical engine failure concept which assures adequate designated surface area and adequate performance capability for continued safe flight or safe rejected take-off.
"category B" means with respect to helicopters means a single engine or multi-engined helicopter which does not meet category standards. Category B helicopters have no guaranteed capability to continue safe flight in the event of an engine failure, and a force landing is assumed.

"critical power-unit(s)" means the power-unit (s) failure of which gives the most adverse effect on the aircraft characteristics relative to the case under consideration.

"design landing mass" means the maximum mass of the aircraft at which, for structural design purposes, it is assumed that it will be planned to land.

"design take-off mass" means the maximum mass at which the aircraft, for structural design purposes, is assumed to be planned to be at the start of the take-off run.

"design taxiing mass" means the maximum mass of the aircraft at which structural provision is made for load liable to occur during use of the aircraft on the ground prior to the start of take-off.

"discrete source damage" means structural damage of the aeroplane that is likely to result from impact with a bird, uncontained fan blade failure, uncontained engine failure, uncontained high energy rotating machinery failure or similar causes.

"engine" means a unit used or intended to be used for aircraft propulsion. It consists of at least those
components and equipment necessary for the functioning & control but excludes the propeller.

"export certificate of airworthiness" means a document issued by the Chairman in respect of a complete aircraft, complete engine, complete propeller being exported from Bangladesh which attests that the aircraft engine or propeller with any stated exceptions meets the airworthiness and design standards established by the Chairman, but which is neither a certificate of airworthiness nor an authority to fly.

"flight test" means the flying of an aircraft exclusively for the purpose of ensuring that the flight performance and characteristics of the aircraft and functioning in flight of the aircraft parts do not differ significantly in adverse sense from those of its prototype.

"fire proof" means the capability to withstand the application of heat by a flame for a period of 15 minutes.

“fire resistant” means the capability to withstand the application of heat by a flame for a period of 5 minutes.

“factor of safety” means a design factor used to provide for the possibility of loads greater than those assumed and for uncertainties in design and fabrication.
“final approach and take-off area (FATO)” means a defined area over which the final phase of the approach manoeuvre to hover or landing is completed and from which the take-off manoeuvre is commenced. Where the FATO is to be used by performance Class 1 helicopters, the defined area includes the rejected take-off area available.

“helicopter” means a heavier-than-air aircraft supported in flight chiefly by the reactions of the air on one or more power-driven rotors on substantially vertical axes.

“human factors principles” means principles which apply to aero-nautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance.

“human performance” means human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations

“hard Time” means this is failure preventive process in which deterioration of an item is limited to an acceptable level by the maintenance which is carried out at periods related to time in service e. g. calendar time, number of cycles, number of landings.

“item of equipment” means any self contained unit, which, when attached, to or installed in an aircraft, performance a function essential under certain operating conditions of airworthiness or safety of the aircraft or it's occupants.

“landing surface” means the part of the surface of an aerodrome which the aerodrome authority has declared available for the normal ground or water run of aircraft landing in a particular direction.
“limit load” means the maximum loads assumed to occur in the anticipated conditions.

“load factor” means the ratio of a specified load to the wet of the aircraft, the former being expressed in terms of aerodynamic forces, inertia forces, or ground reactions.

“major damage” means in relation to an aircraft, means damage of such an extent that it may affect the safety of the aircraft or the person on board the aircraft, whether the damage occurs in flight or on the ground.
“major defect” means in relation to an aircraft, means a defect of such an extent that it may affect the safety of the aircraft or of persons on board the aircraft, whether the defect occurs in flight or on the ground.

“maintenance schedule” means a document approved by the Chairman, containing a list

of items to be inspected, calibrated, tested, overhauled, replaced, serviced or otherwise maintained at specified intervals for
each aircraft and details the period at which maintenance certification shall be issued.

"mandatory modification" means the modification incorporated in an aircraft, aircraft component & item of equipment after type certification to maintain it in an airworthy condition.

"maintenance" means the action or a set of actions including inspection, servicing and determination of condition required to achieve a desired outcome which restores an aircraft part, equipment in serviceable condition.

"on condition" means failure preventive process but one in which the item in inspected or tested at a specific period to an appropriate standard in order to determine whether it can continue in service such an
inspection or test may reveal a need for servicing action.

"overhaul" means stripping a unit and restoring to its original design performance level after replacing/reworking parts to a given standard.

"processing" means workshop process & inspection of aircraft components by electroplating, anodic treatment, metal spraying, heat treatment & chemical analysis etc.

"performance Class 1 helicopter" means a helicopter with performance such that, in case of engine failure,
it is able to land on the rejected take-off area or safely continue the flight to an appropriate landing area.

"performance Class 2 helicopter" means a helicopter with performance such that, in case of engine failure, it is able to safely continue the flight, except when the failure occurs prior to a defined point after take-off or after a defined point before landing, in which cases a forced landing may be required.

"performance Class 3 helicopter" means a helicopter with performance such that, in case of engine failure at any point in the flight profile, a forced landing must be performed.

"power unit" means a system of one or more engines and ancillary parts which are together necessary to provide thrust, independently of the continued operation of any other power-unit(s), but not including short period thrust-producing devices.

"pressure-altitude" means an atmospheric pressure expressed in terms of altitude which corresponds to that pressure in the Standard Atmosphere.

"repair" means restoration of an aeronautical product to an airworthy condition as defined by the appropriate airworthiness requirements.

“rendering a certificate of airworthiness valid” means the action taken by the contracting state, as an alternative to issuing its own certificate of airworthiness, in accepting a certificate of airworthiness issued by any other contracting State as the equivalent of its own certificate of airworthiness.

“satisfactory evidence” means a set of documents or activities that a Contracting State accepts as sufficient to show compliance with airworthiness requirements.

“standard atmosphere” means an atmosphere defined as follows:

(a) the air is a perfect dry gas;

(b) the physical constants are:
-- Sea level mean molar mass
M = 28.964420 X 10 kg mol
-- Sea level atmospheric pressure:
P = 1013.250 hp
-- Sea level temperature:
t = 15 C
T = 288.15 K
-- Sea level atmospheric density:
p = 1.2250 kg m
-- Temperature of the ice point:
T = 273.15 K

-- Universal gas constant:
R = 8.31432 JK mol
(c) the temperature gradients are:

Geopotential altitude Temperature gradient (Kelvin per standard geopotential kilometre) (km)

From	To	
		-6.0
-5.0	11.0	0.0
11.0	20.0	+1.0
20.0	32.0	+ 2.0
32.0	47.0	0.0
47.0	51.0	-2.8
51.0	71.0	-2.0
71.0	80.0	

“State of design” means the State having jurisdiction over the organization responsible for the type design.

“structural significant item” means a structural detail; structural element or structural assembly is judged significant because of the reduction in aircraft residual strength or

loss of structural function which are subsequent to its failure.

"State of manufacture" means the State having jurisdiction over the organization responsible for the final assembly of the aircraft.
"State of registry" means the State on whose register the aircraft is entered.

"take-off surface" means that part of the surface of an aerodrome which the aerodrome authority has declared available for the normal ground or water run of aircraft taking-off in a particular direction.

"type certificate" means a document issued by a contracting State to define the design of an aircraft type and to certify that this design meets the appropriate airworthiness requirements of the state.

"ultimate load" means the limit load multiplied by the appropriate factor of safety."

184. Design standards.- (1) The Chairman shall issue such design standards as are necessary from time to time.

(2) A design standard shall set out the specifications which the Chairman considers an aircraft or aircraft component of the relevant type should conform if it is to be used safely for aviation purposes.

(3) The design shall not have any features or characteristics that render it unsafe under the anticipated operating conditions.

(4) There shall be an approved design consisting of such drawings, specifications, reports and documentary evidence as are necessary to define the design of the aircraft and to show compliance with the design of the aircraft and to show compliance with the design aspects of the appropriate airworthiness requirements.

(5) The aircraft shall be subjected to such inspections and ground and flight tests as are deemed necessary by the Chairman to show him compliance with the design aspect of the appropriate airworthiness requirements.

(6) The Chairman upon receipt of satisfactory evidence that the aircraft type is in compliance with the design aspect of the appropriate airworthiness requirements, shall issue a type certificate to define the design and to signify approval of the design of the aircraft type.

185. Certificate of type approval.- (1) The Chairman may notify in the Air Navigation Orders that there shall be a certificate of type approval in respect of a type of aircraft or aircraft component manufactured, sold or distributed in Bangladesh as a pre-requisite to the issue, renewal or continued validity of a certificate of airworthiness in respect of an aircraft of that type/or in respect of an aircraft in which an aircraft component of that type has been fitted.

(2) A person may apply to the Chairman for the issue of a certificate of type approval in respect of a type of aircraft or aircraft component.

(3) The Chairman may issue a certificate of type approval where the applicant-

(a) furnishes such document or other evidence relating to the suitability of the aircraft or aircraft component for aviation purposes as the Chairman requires; and

(b) satisfies the Chairman that the aircraft or aircraft component conforms with the applicable design standards and is suitable for aviation purposes.

(4) Any modification considered necessary by the Chairman as a result of the inspection/performance test carried out by the airworthiness officials, shall be incorporated.

(5) If the Chairman is satisfied that types component or item or equipment conforms to the relevant acceptable standard in respect of the design and performance, he may issue to the applicant a type approval in respect of the type. The type approval shall refer only to the aircraft/component/items of equipment conforming in detail with the documents specified on such approval.

186. Certificate of airworthiness.- (1) The owner or operator of a Bangladesh aircraft may apply to the Chairman for the issue or renewal of a certificate of airworthiness in respect of the aircraft or for the validation of a certificate of airworthiness issued by a Contracting State in respect of the aircraft.

(2) The Chairman may issue, renew or validate a certificate of airworthiness in respect of an aircraft where the applicant -

(a) furnishes to the Chairman such documents or other evidence relating to the airworthiness of the aircraft as the Chairman requires; and

(b) satisfies the Chairman that the aircraft is fit to fly.

(3) The Chairman may direct the owner or operator or an aircraft in respect of which a certificate of airworthiness is in force to furnish to the Chairman such documents or other evidence as the Chairman requires relating to the airworthiness of the aircraft.

(4) A certificate of airworthiness shall be issued by the Chairman on the basis of satisfactory evidence that the aircraft complies with the design aspects of the appropriate airworthiness requirements.

(5) The Chairman shall not issue or render valid a Certificate of Airworthiness for which it intends to claim recognition pursuant to Article 33 of the Convention on International Civil Aviation unless it has satisfactory evidence that the aircraft complies with the applicable standards of this Annex through compliance with appropriate airworthiness

requirements.

(6) A certificate of airworthiness shall be renewed or shall remain valid, provided that the continuing airworthiness of the aircraft shall be determined by a periodical inspection at appropriate intervals having regard to lapse of time and type of service or, alternatively, by means of a system of inspection, approved by the Chairman, that will produce at least an equivalent result.

(7) Any failure to maintain an aircraft in an airworthy condition, as defined by the appropriate airworthiness requirements, the Chairman may render the aircraft ineligible for operation until the aircraft is restored to an airworthy condition.

(8) When an aircraft possessing a valid certificate of airworthiness (C of A) issued by a contracting State is entered on the register of Bangladesh, The Chairman, when issuing it's certificate of airworthiness may consider the previous certificate of airworthiness as satisfactory evidence in whole or in part that the aircraft complies with the applicable standards through compliance with the appropriate airworthiness requirements. However, the validity of the certificate of airworthiness shall not extend beyond the period of validity of certificate of airworthiness being rendered.

(9) When the Chairman renders valid a certificate of airworthiness issued by another contracting state, as an alternative to issuance of its own certificate of airworthiness, he shall establish validity by suitable authorization to be carried with the formal certificate of airworthiness accepting it as the equivalent of the later. The validity of the authorization shall not extend beyond the period of validity of the certificate of airworthiness being rendered valid.

(10) When a certificate of airworthiness issued by another contracting Stateis in a language other than English, it shall include an authentic English translation certified by the State of registry for acceptance of the Chairman.

(11) Each aircraft shall be provided with a flight manual, placards, or other documents stating the approved limitations within which the aircraft is considered airworthy as defined by the appropriate airworthiness requirements and additional instruction and information necessary for the safe operation of the aircraft.

(12) When a Bangladesh registered aircraft has sustained damage within Bangladesh, the Chairman shall judge whether the damage is of a nature such that the aircraft is no longer airworthy as defined by the appropriate airworthiness requirements.

(13) When the Chairman considers that the damage sustained is of a nature such that the aircraft is no longer airworthy, it shall prohibit the aircraft from resuming flight until it is restored to an airworthy condition. The Chairman may, however, in exceptional circumstances, prescribe particular limiting conditions to permit the aircraft to fly a non-commercial air transport operation to an aerodrome at which it will be restored to an airworthy condition.

(14) When the Chairman considers that the damage sustained is of a nature such that the aircraft is still airworthy, the aircraft shall be allowed to resuming its flight.

(15) When a Bangladesh registered aircraft suffers damage while in the territory of another contracting state, and if the appropriate aviation authority of that State notifies any restriction on operation of that aircraft, then the Pilot-in –Command of that Bangladesh registered aircraft shall comply with the direction. In such circumstances, it shall be the joint responsibility of the Pilot-in Command of that aircraft and the Operator to immediately inform all details to the Chairman, who shall finally decide in liaison with the appropriate authority of that State regarding operation of the aircraft under the circumstance.

(16) The owner or operator of Bangladesh aircraft may apply to the Chairman for the issue and (or) renewal of certificate of airworthiness in respect of the aircraft or for the validation certificate of airworthiness issued by a contracting State in respect of the aircraft.

(17) Every certificate of airworthiness shall specify the category or categories of aircraft mentioned below as are in the opinion of the Chairman appropriate to the aircraft, and the certificate issued subject to the condition that the aircraft shall be operated for the purpose and class(es) of operations as endorsed on the Air Operator Certificate (AOC):

(a) Transport category;

(b) Normal category;

(c) Utility category;

(d) Acrobatic category;

(e) Commuter category;

(f) Sailplanes category;

(g) Manned free balloons; and

(h) Special category.

(18) The purposes for which the aircraft may fly are as follows:

(a) Transport category-Non-acrobatic manoeuvre and any classes of operations;

(b) Normal category-Non-acrobatic manoeuvre and nay classes of operations other than Commercial Air Transport Operations.

(c) Utility category-Limited acrobatic manoeuvre and any classes of operations other than Commercial Air Transport Operations.

(d) Acrobatic category- Acrobatic manoeuvre and any classes of operations other than Commercial Air Transport Operations.

(e) Commuter category- Non-acrobatic manoeuvres any classes of operations.

(f) Sailplanes category- For General Aviation Operations.

(g) Manned free balloons- For General Aviation Operations.

(h) Special category- Any purpose as may be specified in the certificate of airworthiness but not including the carriage of passengers unless expressly permitted.

(19) The Chairman may notify through ANO (Airworthiness) fee for issue and renewal of certificate of airworthiness including issue of a duplicate copy of a certificate of airworthiness.

187. Duration of certificate of airworthiness and its renewal process.-

(1) Period of validity: Validity period of certificate of airworthiness is indicated on the certificate itself and shall be limited to a period of one year.

(2) Renewal procedure: The operator/owner of an aircraft may apply for renewal of certificate of airworthiness giving the information as per certificate of inspection envisaged in the ANO (Airworthiness) with appropriate fees. The application shall be made to the Chairman in advance of the expiry date of the certificate of airworthiness (preferable 30 days in advance) to enable the airworthiness officials to complete inspection of the documents & of the aircraft before the C of A expires. This will enable the operator to undertake test flight (if applicable) and other time consuming tasks like compass swing and weighing of the aircraft.

(3) It is imperative that at the time of submitting an aircraft for inspection to the airworthiness officials, for the purpose of renewal of C of A, all equipment on board the aircraft are in serviceable condition. If it is not so, the owner/operator of the aircraft shall notify the Chairman in writing and the Chairman may consult the airworthiness officials prior to affecting the renewal of certificate of airworthiness.

(4) As the aircraft is required to be subjected to a continuous cycle of approved maintenance schedule therefore, for the purpose of renewal of certificate of airworthiness, the aircraft would simply be required to be inspected in accordance with maintenance schedule followed by test flight (if due). In case major maintenance schedules are not due at the time of renewal of certificate of airworthiness, the operator/owner shall intimate the Chairman about carrying out such maintenance schedules as and when these are due. But at least thirty days before these are due, to enable the airworthiness officials to carry out such physical inspections of the aircraft as considered necessary by the Chairman during the year.

(5) Procedure for renewal of certificate of airworthiness of Bangladesh registered aircraft abroad: There may he situation where certificate of airworthiness of Bangladesh registered aircraft may set lapsed while operating in foreign countries for prolong period in this case, the owner/operator may apply to the Chairman for renewal of certificate of airworthiness abiding by the renewal procedure rule in advance of the expiry date of the certificate (preferable forty five days in advance) to enable the airworthiness officials to inspect the aircraft abroad cost of which shall fully be born by the owner/operator including daily allowances of the airworthiness officials assigned by the Chairman to accomplish the task of inspection abroad.

(6) The certificate of airworthiness shall cease to be valid if:

(a) approved inspection schedules are not completed when due

(b) "lifed" components are not replaced on expiry of stipulated "lives"

(c) mandatory modifications/inspections/SBs are not carried out as and when called for

(d) unapproved repair/modifications are carried out

(e) unapproved materials/procedures/practices are used

(f) aircraft has suffered major damage/defect.

(7) In case the airworthiness official(s) completes his final inspection of the aircraft and its documents within validity period of the certificate of airworthiness, the certificate shall be renewed i. e. the validity of the next currency of C of A shall start right from the expiration date of the certificate of airworthiness on continuous basis.

(8) In case the airworthiness officials complete final inspection of the aircraft and its documents after the expiry of the certificate of airworthiness which resulted due to the back log of the owner/operator of the aircraft, then the validity of the next currency of C of A shall start from the date of inspection for complete one year.

(9) In case the C of A of aircraft is suspended on account of a major accident or due to any other reason (s), the same may be re-validated/restored by the Chairman, subject to the completion of the required repairs/modifications maintenance action(s) from the date of inspection by the airworthiness official(s) for complete one year.

(10) The certificate of airworthiness shall not be renewed if it is observed by the Chairman that mandatory modifications/inspections due on the aircraft, components or items of equipment installed on the aircraft, along with all other applicable mandatory tasks have not been complied with.

188. Export certificate of airworthiness.- (1) Where an aircraft is to be exported from

Bangladesh, the Chairman may issue an export certificate of airworthiness in accordance with such form as he considers appropriate in respect of the aircraft.

(2) An export certificate of airworthiness is not a certificate of airworthiness for the purposes of these rules.

(3) An export certificate of airworthiness shall be issued only in respect of a product of the following types when of such a product is to be exported from angladesh.

(a) a complete aircraft, including engine and propeller

(b) a single complete engine

(c) a single complete propeller

(4) An export certificate of airworthiness shall not be issued unless the Chairman is satisfied that at the time of issue, with any stated expectations, the aircraft engine or propeller:

(a) conforms to the type approval or type certificate for the product identified.

(b) is airworthy and in a condition for safe operation.

(c) complies with all pertinent Civil Aviation Rules, Air Navigation Orders and Airworthiness Directives.

(5) In respect of complete aircraft, the Chairman shall issue export certificate of airworthiness of the aircraft:

(a) has in force a valid certificate of airworthiness, or satisfy the requirements for issue of Bangladesh certificate of airworthiness.

(b) have been submitted for survey to an approved maintenance organization as specified by the Chairman through the Air Navigation Orders (Airworthiness) within the preceding thirty days, except that if the aircraft has been maintained in accordance with an approved continuous airworthiness programme, the Chairman may waive the inspection and survey requirements following assessment of the aircraft maintenance records.

(6) An application for issue of export certificate of airworthiness shall be made to the Chairman not later than thirty days before the required date.

(7) The application for issue of export certificate of airworthiness shall provide the following document to the purchaser of each product for which an export certificate of airworthiness is issued:

(a) current log book of aircraft, engine, propeller & radio station licence, as applicable appropriately certificate to show the modification status and airworthiness directives compliance status.

(b) the method used, if any for the preservation and packing of the aircraft and it's components to prevent these from corrosion and damage during transit and storage, and the duration or the effectiveness of such method preservation.

(c) the extent of dismantling of the aircraft for shipment and the identification of the pertinent instructions to be used for reassemble and testing.

189. Foreign operators.- (1) Where an aircraft of foreign nationality is in Bangladesh and is found to have suffered major damage or to have developed a major defect, the Chairman shall direct that the aircraft be grounded and shall not fly.

(2) Where the Chairman so directs that an aircraft shall not fly, he shall notify the appropriate authority of the country of registration of his action and a report of the damage or defect.

(3) The Chairman may revoke a direction given under this rule if the appropriate authority of the country of registration of the aircraft notifies him that-

(a) any suspension of the certificate of airworthiness regarding that aircraft imposed by that authority in respect of the damage or defect has been removed;

(b) it considers that the damage or defect is not of such a nature as to prevent the aircraft from fulfilling the minimum requirements of safety adopted in pursuance of the convention; or

(c) it considers that the aircraft should be permitted to fly without passengers to a place at which the necessary repairs or modifications can be made.

(4) In revoking a direction given under this rule, the Chairman may impose such conditions on the operation of the aircraft as are notified to him by the appropriate authority of the country of registration.

(5) When a foreign registered aircraft or an aircraft of a foreign nationality has sustained damage in the territory of Bangladesh and the damage is of a nature such that the aircraft is no longer airworthy, the Chairman shall prevent the damaged unairworthy aircraft from resuming flight on the condition that he (the Chairman) shall advise the State of registry immediately communicating to it all details necessary to formulate the judgement of damage of aircraft.

(6) When the State of registry considers that the damage sustained is of a nature such that the aircraft is no longer airworthy, it shall prohibit the aircraft from resuming flight until it is restored to an airworthy condition, the State of registry, may, however in exceptional

circumstance prescribe particular limiting condition (s) acceptable to the Chairman to permit the aircraft fly without fare paying passengers to an aerodrome at which it shall be restored to an airworthy condition.

(7) The Chairman, if satisfied as mentioned in sub-rule (5) prevented the aircraft from resuming flights shall permit such flights

(8) When the State of registry considers that the damage sustained is of a nature such that the aircraft is still airworthy, the aircraft shall be allowed by the Chairman to resume its flights.

190. Certificate of approval: (1) Any Bangladesh based person or organization intending to be engaged in any State of design, manufacture, distribution, maintenance, modifications, repair, processing, testing of aircraft, aircraft components, items of equipment or other aircraft goods, establishment of training schools to impart training in aviation sector, storage & distribution of civil aircraft components, items of equipment or aircraft materials, parts & goods may apply to the Chairman for a certificate of approval in respect of the above activities but not limited to and for renewal of such certificate (s).

(2) Any foreign based aircraft maintenance organization intends to accomplish the task of maintenance of airframe, engines electrical systems, instruments systems, radio systems & associated parts any of the components installed on the Bangladesh registered civil aircraft may apply to the Chairman for a certificate of approval in respect of the tasks mentioned above, but not limited to and for renewal of such certificate(s).

(3) An organization either local based or foreign seeking certificate of approval in any of the activities mentioned at para-1 & 2 of this rule shall have to apply to the Chairman on the prescribed form available in the airworthiness & engineering licensing division along with supporting documents & appropriate fees. On receipt of the completed application forms, Chairman shall assign the airworthiness official (s) to visit and inspect the engineering facilities of the organization (s).

(4) It shall be the function of the airworthiness official(s), in course of his (their) visit to satisfy himself (themselves) that the organization can satisfactorily accomplish the tasks relevant to the "scope of approval" applied for.

(5) The Chairman on the basis of the satisfactory inspection report being made by his assigned airworthiness official(s) shall issue the certificate of approval period of which shall be indicated on the certificate itself and shall be limited for a period of one year. An organization either local or foreign based, seeking an approval for renewal of the certificate of approval of the activities mentioned in the sub-rule (1) and (2) of this rule, may apply to the Chairman at least forty-five days in advance. Renewal of certificate of approval of either local or foreign-based organization shall be processed upon compliance of sub-rule 3 & 4 of this rule by the organization(s).

(6) In the event an organization willing to increase the scope of it's existing approval, it

shall have to make fresh application to the Chairman & the Chairman on being satisfied on compliance of sub-rule (3) shall grant extension of scope of approval applied for.

(7) Total expenditure involved in the inspection tour to either local or foreign based organization shall have to be borne by the organization concerned.

(8) The Chairman may notify through ANO (Airworthiness) fees for issue, extension and renewal of certificate of approval including its duplicate copy."

191. Maintenance Systems and Directions.- (1) The Chairman may give directions specifying requirements for maintenance of aircraft registered in Bangladesh.

(2) The Chairman may give a directions to the owner or operator of an aircraft registered in Bangladesh or holder of an Air Transport Operating Licence issued by the Chairman, requiring him to submit a proposed system of maintenance of the aircraft, including any subsequent amendments of the system of maintenance for approval.

(3) The Chairman may approve a proposed system of maintenance with or without amendments and direct the person to institute the approved system for the use and guidance of his maintenance and operational personnel, details of which shall be set out in a manual or manuals, which shall at least include-

(a) instructions for maintenance, control and maintenance procedures;

(b) reference to the maintenance schedule or programme as applicable; and

(c) quality control or quality assurance system as applicable.

(4) A person who has been directed to institute a system of maintenance shall furnish copies of the Maintenance System Manual to -

(a) The Chairman; and

(b) such other persons associated with the maintenance of the aircraft as the Chairman directs.

(5) A person who has been directed to institute a system of maintenance shall not fail to comply with the requirements of the system in so far as they apply to him or to take all steps reasonably required to ensure that persons in his employ or working under an arrangement with him comply with the requirements of the system in so far as those requirements apply to them.

(6) A person who has been directed to institute a system of maintenance may, at any time, request the Chairman to approve a change in the system and the approval may be given accordingly following which the person shall ensure that the change is incorporated in all copies of the Maintenance System Manual and that notice of those changes is forwarded to

all persons to whom copies of the Manual have been furnished.

(7) A person who has been directed to institute a system of maintenance shall ensure the airworthiness of the aeroplane and the serviceability of both operational and emergency equipment must be performed in accordance with procedures acceptable to the Chairman and by:

(a) the accomplishment of pre-flight inspections;

(b) the rectification to an approved standard of any defect and damage affecting safe operation, taking into account the Minimum Equipment List and Configuration Deviation List if available for the aeroplane type;

(c) the accomplishment of all maintenance in accordance with the approved operator's Aeroplane Maintenance Programme;

(d) the analysis of the effectiveness of the operator's approved Aeroplane Maintenance Programme;

(e) the accomplishment of any operational directive, airworthiness directive and any other continued airworthiness requirement made mandatory by the Chairman or the regulatory authority responsible for issue of Type Certificate of the aircraft; and

(f) the accomplishment of modifications in accordance with an approved standard and, for non- mandatory modifications, the establishment of an embodiment policy.

(8) An operator shall ensure that the Certificate of Airworthiness for each aeroplane operated remains valid in respect of:

(a) the requirements in sub-rule (7) ;

(b) any calendar expiry date specified in the Certificate; and

(c) any other maintenance condition specified in the Certificate.

(9) An operator shall not operate an aeroplane unless it is maintained and released to service by an organisation approved in accordance with Rule 190 and is holder of a valid Certificate of Approval issued by the Chairman.

(10) The Chairman may direct the operators of Bangladesh registered aircraft to ascertain airworthiness of aircraft and safety of their operations to adopt appropriate maintenance philosophy as may be directed through ANO (Airworthiness).

(11) Approval of the system: An operator depending on the capability, staff and other support organization may apply to the Chairman for approval of his maintenance schedule or maintenance program as may be applicable.

192. System of Certification: (1) All Bangladesh registered civil aircraft are required to possess a current certificate of airworthiness issued by the Chairman before taking any flight. It is, therefore, obligatory that the aircraft are maintained as per maintenance schedule approved by the Chairman certified by the maintenance engineers accordingly. System components are replaced when due, modifications are effected when required, special due inspection are accomplished, defects are rectified.

(2) On completion of approved inspection schedule or any major maintenance, repair, overhaul, modification, replacement etc. a certificate is required to be issued by appropriately licensed AMEs, approved or authorized person.

(3) For each type of aircraft routine periodical maintenance schedule and other important schedule like heavy landing, post lighting strike, post propeller strike etc shall be prepared by the owner/operator/ and submitted to the Chairman for approval before the operation of the aircraft is undertaken.

(4) Owner/operator shall submit a proposal to the Chairman regarding operational lives between overhauls in respect of the major components installed on each type of aircraft for approval. Once approved by the Chairman, lives shall not be enhanced without obtaining proper approval. However, lives can be reduced by the operators on their own.

(5) All maintenance schedules shall be signed & also certified in the logbooks by appropriately licensed AMEs, approved or authorized persons. The signature on the schedules and on the certificate shall indicate that the work performed complies with the airworthiness requirements and while carrying out the inspection/repair/ replacement/modification, approved materials and methods have been used.

(6) All works on aircraft shall have to be recorded in the relevant logbooks & sign by licensed AMEs, authorized persons and dated. The copies of certificate of flight release shall have to be preserved.

(7) The certificate of flight release shall be rendered in valid in case the aircraft suffers any major damage or defect and subsequent to the necessary rectification/repair, a fresh certificate shall have to be issued.

(8) In case an aircraft makes a series of Take-Offs on the same day, then the pre flight inspection may be carried out once before the first flight of the day, unless the aircraft is suspected to have suffered same defect or damage.

(9) The certificate of flight release shall have to be signed in duplicate and one copy shall be carried in aircraft and other copy shall be kept by the operator in the office folder.

(10) If the aircraft is operated in an area where radio navigation communication on board the aircraft is not required due to the absence of corresponding facilities on ground, the certification by the AME in "R" category may be deferred to the next inspection schedule

provided the operating captain/pilot is satisfied with the operation of the equipment.

(11) Certificate of flight release shall be preserved for a period of six months from the date of issue unless otherwise directed by the Chairman.

(12) Form of certificate of flight release or maintenance release may be reflected in ANO (Airworthiness).

193. Modification and repair.- (1) The Chairman may notify aircraft owners / operators regarding a mandatory modification / inspection to be accomplished in the aircraft to avoid unsafe and other conditions affecting the airworthiness of their aircraft and / or accessories.

(2) The Chairman may declare those Service Bulletins/instructions are mandatory which affect the safety of aircraft operations. These shall be notified to operators in the form of mandatory modification.

(3) The Chairman may declare all mandatory modifications issued by FAA (USA), DGAC (France) or CAA (UK) as mandatory on the aircraft, aircraft components or item of equipment depending on the country of the manufacture. Operators shall have to get copies of such Airworthiness Directives (AD) from the manufacturer or through the foreign airworthiness authorities where these are normally available.

(4) The Chairman may not renew the certificate of airworthiness of an aircraft if he observes that any mandatory modification/inspection due on the aircraft, aircraft component or item of equipment installed on the aircraft has not been complied with.

(5) Normally a type certified product shall not be altered or modified by the operator unless prior approval is obtained from the Chairman. However, products can be modified in accordance with the manufacturers' Service Bulletin or instructions provided the recommended material, spare parts & procedure as suggested their in are used and in corporation of the said Service Bulletin/modification is certified by licensed/approved person or organization. Any deviation from the above shall require prior approval of the Chairman. In case of experiencing difficulties in complying with the modification, the operator may apply for concession with prior justification to the Chairman. Incorporation of an unapproved modification/inspection to a type certified product shall render the C of A invalid.

(6) Any operator may apply to the Chairman for approval of the design or modification or repair of an aircraft or aircraft component.

(7) The Chairman may approve the design or a modification or repair when the applicant furnishes to the Chairman such evidence relating to the design which conforms to any relevant design standard in force under these rules.

194. Approval of replacement of component.- (1) A person may apply to the Chairman for approval of an aircraft component as a replacement for another aircraft component.

(2) The Chairman may approve an aircraft component as a replacement for another

aircraft component where the applicant furnishes to the Chairman such evidence relating to the suitability of the aircraft component as the replacement set out in the application that the design of any such aircraft component conforms with any relevant design standard in force under these rules.

195. Permissible unserviceabilities, Minimum Equipment List. (1) The Chairman may, for the purposes of these rules, approve a defect in, or damage to, a Bangladesh registered aircraft, as a permissible unserviceability in relation to the aircraft.

(2) The Chairman may direct that the use of a Bangladesh registered aircraft with permissibility is subject to such condition as he directs.

(3) The Chairman may direct that an operator shall establish, for each aeroplane, a Minimum Equipment List (MEL) listing permissible unserviceabilities approved by the Chairman which shall be based upon, nut not less restrictive than the relevant Master Minimum Equipment List (MMEL), if such list exists and is accepted by the Chairman.

(4) An operator shall not operate an aeroplane other than in accordance with the MEL unless permitted by the Chairman, any such permission will in no circumstances permit operation outside the constraints of the MMEL.

(5) Minimum Equipment List (MEL) need not include items like wings, flight controls, complete engines, landing gears etc. the airworthiness and correct functioning of which is absolutely necessary before any flight. It may not also include item like galley equipment, entertainment system which does not affect the airworthiness of an aircraft.

(6) All items which affect the airworthiness of aircraft or safety of those carried on board are not included in MEL are automatically required to be operative.

(7) An operator shall be responsible for exercising necessary control to ensure that no aircraft is dispatched with multiple items in operative, which shall increase the crew workload. In such cases the crews shall be consulted.

196. Maintenance of aircraft within Bangladesh.- (1) The owner, operator or pilot-in-command of a Bangladesh aircraft in Bangladesh shall not authorise or permit any maintenance to be carried out on the aircraft except by an appropriate person.

(2) A person shall not carry out maintenance in Bangladesh of a Bangladesh aircraft unless he is an appropriate person in relation to the maintenance.

(3) An appropriate person shall not carry out a modification or repair in Bangladesh of a Bangladesh aircraft unless-

(a) the design of the modification or repair has been approved under rule 193 or has been specified by the Chairman by a direction under rule 191; and

(b) the modification or repair is carried out in accordance with that design.

(4) When carrying out maintenance of a Bangladesh aircraft in Bangladesh, an appropriate person shall not replace one aircraft component with another unless the aircraft component that he installs-

(a) is identical with the aircraft component that it replaces; or

(b) has been approved under rule 194 as replacement for that aircraft component.

(5) Unless the Chairman otherwise approves, no aircraft material or aircraft component may be used or installed in a Bangladesh aircraft in Bangladesh by an appropriate person unless-

(a) where the aircraft material or aircraft component has been manufactured or maintained by or on behalf of the appropriate person, the work of manufacturing or maintenance has been certified to have been completed in accordance with a system of certification instituted under rule 192; or

(b) where the aircraft material or aircraft component has been supplied to the appropriate person by another person, the aircraft material or aircraft component so supplied under cover of a certificate or other document specified by the Chairman for such purposes.

(6) In this rule, "appropriate person", in relation to any maintenance, means-

(a) the holder of a certificate of approval covering the maintenance or a person working under an arrangement with such a holder, or
(b) the holder of an aircraft maintenance engineers license who has in his employ a person who is the holder of an aircraft maintenance engineer's license covering the maintenance; or

(c) a person authorised to carry out maintenance.

197. Manufacture and maintenance of aircraft components.- Unless the Chairman otherwise approves, the holder of a certificate of approval shall not manufacture or carry out maintenance of an aircraft component or aircraft material unless-

(a) where, in the course of such maintenance, any aircraft component that was manufactured or overhauled by that holder was incorporated in that first mentioned aircraft component - the work of manufacturing or overhauling that aircraft component has been certified in accordance with a system or certification instituted under rule 192 to have been completed;

(b) where, in the course of such maintenance which includes a modification or repair, the design of the modification or repair has been approved under rule 193 or has been

specified by the Chairman by a direction under rule 191 and the modification or repair is carried out in accordance with that design; and

(c) where, in the course of such maintenance, any aircraft component that was supplied to that holder by another person and was incorporated in that first mentioned aircraft component - the aircraft component was so supplied under cover of a certificate or other document specified by the chairman for such purposes

198. Use of aircraft material.- Where, in the flight manual or in the maintenance documents of a Bangladesh aircraft or in Air Navigation Orders, provision is made for the use in the servicing or operation of the aircraft of a specified aircraft material, the owner, operator or pilot-in-command of the aircraft shall not, unless the Chairman otherwise approves, use, or permit the use of, anything other than that kind of aircraft material for that purpose.

199. Maintenance of an aircraft registered in Bangladesh when it is outside of Bangladesh. - (1) Unless the Chairman otherwise approves, the owner, operator or pilot-in-command of a Bangladesh registered aircraft when it is outside Bangladesh shall not, in the maintenance of the aircraft, use, or permit the use of, any aircraft component, aircraft material or other thing of its use in Bangladesh would be an offence against this rules.

(2) The owner, operator, or pilot-in-command of Bangladesh registered aircraft when it is outside Bangladesh shall not authorize or permit any maintenance to be carried out on the aircraft except by

(a) the holder of an aircraft maintenance engineer's licence covering that maintenance;

(b) a person authorized to carry out that maintenance;

(c) a person who is authorized by the appropriate authority of a Contracting State to carry out aircraft maintenance in that State of the same type; or
(d) a person who possesses qualifications that are recognized by the Chairman as sufficient for the purpose.

(3) The owner, operator or pilot-in -command of a Bangladesh registered aircraft on which maintenance has been carried out outside Bangladesh shall not fly the aircraft or permit it to be flown, until the completion of the maintenance has been certified in a manner approved by the Chairman."

200. Serviceability of replacement items.- A person shall not make a certification in accordance with a system of certification instituted under rule 192 with respect to the installation or use in a Bangladesh aircraft of an aircraft component or aircraft material unless he considers that the component or material is serviceable.

201. Maintenance releases.- (1) Maintenance releases in respect of Bangladesh aircraft

shall be issued only by authorised persons and only in such manner, and in accordance with such form, as the Chairman directs.

(2) The Chairman may give a direction specifying the information to be entered on maintenance release before its issue.

(3) Where a person authorised to issue a maintenance release is a body corporate, the Chairman shall specify in the instrument of authorisation that any maintenance release issued by the authorised person is to be signed by a specified person or by a person included in a specified class of persons.

(4) The Chairman may give a direction with respect to the retention and transfer of maintenance releases and copies of maintenance releases issued undo this rule.

(5) The Chairman may give a direction specifying the period, or the maximum period, that a maintenance release of a specified kind is to be expressed to remain in force.

(6) Unless the Chairman otherwise approves, a maintenance release shall not be issued in respect of an aircraft unless there is in force a certificate of airworthiness in respect of that aircraft.

(7) A maintenance release shall not be issued in respect of an aircraft unless-

(a) all kinds of maintenance in respect of the aircraft required to be carried out to comply with any requirement or condition imposed under these rules has been certified, in accordance with a system of certification instituted under rule 192 or in a manner acceptable to the Chairman for the purposes of sub-rule (3) or rule 199, to have been completed; or

(b) in the case of a maintenance release in respect of a flight for which permission has been given by the Chairman any maintenance specified as a condition of that permission has been certified, in accordance with a system of certification instituted under rule 192, to have been completed.

(8) For the purpose of clause (a) of sub-rule (7) the existence of an earlier maintenance release issued under that clause in respect of an aircraft may in the absence of any evidence to the contrary, be accepted by an authorised person for the purposes of this rule as proof that all maintenance required under these rules to be carried out on the aircraft before the date of issue of the earlier maintenance release has been certified to have been completed as required by that clause.

(9) A maintenance release may bear an endorsement that the release is issued subject to a condition set out in the endorsement, being a condition imposed for the purpose of ensuring the safety of air navigation.

(10) Where an aircraft has a permissible unserviceability, a maintenance release issued in

respect of the aircraft shall bear an endorsement-

(a) setting out each permissible unserviceability that exists with respect to the aircraft;

(b) setting out such of the conditions, if any, with respect to the use of aircraft with those permissible unserviceabilities set out in any direction given under rule 195 in relation to those permissible unserviceabilities as are not set out in any operations manual issued with respect to the aircraft; and

(c) stating that the maintenance release is issued subject to those conditions, whether set out in the maintenance release or otherwise.

(11) A person shall not sign a maintenance release to be issued by virtue of clause (a) of sub-rule (7) in respect of an aircraft if-

(a) he considers that the aircraft is suffering major damage or a major defect and the damage or defect is not a permissible unserviceability;

(b) he considers that maintenance carried out on the aircraft may have adversely affected to such an extent as to affect the safety of the aircraft, the flight characteristics of the aircraft or the operating characteristics of any aircraft component or of any system of aircraft components installed in the aircraft;

(c) he is aware that certain maintenance that has been carried out on the aircraft has not been certified in accordance with a system of certification instituted under rule 192 or in manner acceptable to the Chairman for the purposes of sub-rule (3) of rule 199, to have been completed; or

(d) he is aware that information entered on the maintenance release is incorrect or that the maintenance release does not contain all information that it is required by or under these rule to contain.

(12) Clause (a) of sub-rule (7) and clause (c) of sub-rule (11) do not apply in relation to approved maintenance carried out by the pilot-in-command of the aircraft.

(13) Where a maintenance release is issued under this rule, or again commences to be in force by virtue of rule 203, in respect of an aircraft, any other maintenance release in force in respect of the aircraft immediately before that issue or that commencement ceases to be in force.

(14) Where the Chairman is satisfied that a condition set out in, or applying in relation to a maintenance release has not been complied with, he may suspend or cancel the maintenance release.

202. Endorsements on maintenance release.- (1) Where the owner, operator or a flight crewmember of, or an authorised person engaged in the maintenance of an aircraft in respect of which a maintenance release is in force or a person authorised by the chairman considers-

(a) that-

(i) a requirement or condition imposed under these rules in respect of the maintenance of the aircraft has not been completed with;

(ii) the aircraft has suffered major damage or has developed a major defect, other tan damage or a defect that is a permissible unserviceability;

(iii) abnormal flight or ground loads have been imposed on the aircraft; or

(iv) maintenance carried out on the aircraft may have adversely affected to such an extent as to affect the safety of the aircraft, the flight characteristics of the aircraft or the operating characteristics of any aircraft component or any system of aircraft components installed in the aircraft; and

(b) that there is a likelihood that aircraft will be flown before-

(i) the requirement or condition referred to in sub-clause (i) of clause (a) has been complied with;

(ii) the damage or defect referred to in sub-clause (ii) or clause (a) has been remedied;

(iii)any damage caused by the imposition of the abnormal loads referred to in sub-clause(iii) of clause (a) has been remedied; or

(iv)the characteristics referred to in sub-clause (iv) of clause (a) have been corrected,

he shall enter on the maintenance release an endorsement signed by him setting out the facts of the situation and stating that the aircraft is unairworthy, and thereupon the maintenance release ceases to be in force.

(2) A person is not required under sub-rule (1) to enter an endorsement on a maintenance release if-

(a) the maintenance release was issued by virtue of clause (b) of sub-rule (7) of rule 201; and

(b) the person considers that the ground for entering the endorsement existed when the maintenance release was issued and was known to the person who issued the maintenance release or to a responsible employee of that person.

(3) Where the owner, operator or the pilot-in-command of, or an authorised person engaged in the maintenance of, an aircraft in respect of which a maintenance release is in force, becomes aware that the certificate of airworthiness in respect of the aircraft has been

suspended or cancelled, he shall enter on the maintenance release an endorsement signed by him setting out the facts of the situation and stating that the aircraft is unairworthy, and thereupon the maintenance release ceases to be in force.

203. Maintenance release recommences.- (1) Where a maintenance release ceases to be in force by virtue of an endorsement made under sub-rule (1) of rule 202, the maintenance release shall again commence to be in force if there is entered on the maintenance release a certification, in accordance with system of certification instituted under rule 192, that-

(a) where the endorsement refers to a requirement or condition in respect of the maintenance of the aircraft not having been compiled with the maintenance to which the requirement or condition relates has been completed;

(b) where the endorsement refers to the aircraft having suffered major damage or developed a major defect- the maintenance required to remedy the damage or the defect has been completed;

(c) where the endorsement refers to the aircraft having had imposed on it abnormal flight or ground loads - the maintenance required to be carried out to check whether that imposition has cause any damage to the aircraft, and if any damage so caused, has been remedied;

(d) where the endorsement relaters to the flight characteristics of the aircraft or the operating characteristics of an aircraft component, or system of aircraft components, installed in the aircraft - the maintenance required to correct the flight characteristics or the operating characteristics has been completed.

(2) Where a maintenance release ceases to be in force by virtue of an endorsement made under sub-rule (1) of rule 202 the maintenance release shall again commence to be in force if there is entered on it a further endorsement signed by an authorised person canceling the first-mentioned endorsement.

(3) An authorised person shall not make an endorsement under sub-rule (2) unless he is satisfied that there is no reason why the endorsement to be cancelled should continue in force.

(4) A maintenance release that has ceased to be in force by virtue of an endorsement made under sub-rule (1) of rule 202 shall not again commence to be in force except by virtue of an endorsement made under this rule.

(5) This rule does not have effect in relation to a maintenance release issued in respect of an aircraft if-

(a) the period during which the maintenance release is expressed to remain in force has expired; or

(b) a subsequent maintenance release has been issued in respect of the aircraft by virtue of clause (a) of sub-rule (7) of rule 201.

204. Permissible unserviceabilities endorsed on maintenance release.- Where the owner, operator or a flight crewmember of, or an authorised person engaged in the maintenance of, an aircraft in respect of which a maintenance release is in force considers-

(a) that the aircraft has developed a defect, or has suffered damage, that is a permissible unserviceability; and

(b) that there is a likelihood that the aircraft will be flown before the permissible unserviceability is rectified,

he shall enter on the maintenance release an endorsement signed by him-

(c) setting out each permissible unserviceability that exists with respect to the aircraft;

(d) setting out such of the conditions, if any, with respect to the use of an aircraft with those permissible unserviceabilities as are not set out in any operations manual issued with respect to the aircraft; and

(e) stating that the maintenance release has effect subject to those conditions, whether set out in the maintenance release or otherwise.

205. Defects and major damage endorsed on maintenance release.- Where the owner, operator or a flight crew member of a Bangladesh aircraft-

(a) becomes aware of the existence of a defect in the aircraft; or

(b) becomes aware that the aircraft has suffered damage that in the opinion of the owner, operator or the flight crew member is major damage,

he shall enter on the maintenance release an endorsement signed by him setting out the particulars of the defect or damage.

206. Documents alternative to the maintenance release.- Where under sub-rule (9) of rule 201, sub-rules (1) and (2) of rule 202, sub-rule (1) and (2) of rule 203 or rule 204 or 205, reference is made to the placement of an endorsement on a maintenance release, the Chairman may approve the use of another document as an alternative to the maintenance release for the purposes of the particular sub-rule or rule.

207. Reporting of defects in aircraft.- (1) Where a person who, in the course of his employment is engaged in the maintenance of a Bangladesh aircraft becomes aware of the existence of a defect in the aircraft, the personal shall report the defect to his employer.

(2) where a person engaged, other than as an employee, in the maintenance of a

Bangladesh aircraft, other than an aircraft owned or operated by him becomes aware of the existence of a defect in the aircraft, he shall, if he considers it is a major defect, report the defect to the owner or operator of the aircraft and make a report to the Chairman in the manner specified by the Chairman for the purposes of this sub-rule.

(3) Where the owner or operator of a Bangladesh aircraft becomes aware of the existence of a defect in the aircraft he shall-

(a) have an investigation made of the defect; and

(b) if it is a major defect - have a report made to the Chairman with respect to the defect and to any matters revealed by the investigation, in the manner specified by the Chairman for the purpose of this sub-rule.

207A. Continuing airworthiness information.- (1) The operator of an aeroplane over 5700 kg maximum certificated take-off mass shall obtain and assess continuing airworthiness information and recommendations available from the manufacturer and the airworthiness authority responsible for the type and design, and shall implement resulting actions considered necessary in accordance with the procedure issued by the Chairman.

(2) The Chairman may direct to an operator to develop or adopt requirements to ensure continued airworthiness of an aircraft during its service life, including requirements to ensure that the aircraft:

(a) continues to comply with the appropriate airworthiness requirements after a modification, a repair or the installation of a replacement part; and

(b) is maintained in an airworthy condition and in compliance with the maintenance requirements.

(3) The continuing airworthiness of an aircraft shall be determined by the Chairman in relation to the appropriate airworthiness requirements in force for that aircraft.

(4) When CAAB first enters on its register an aircraft of a particular type for which it is not the State of design and issues or validates a certificate of airworthiness, the Chairman shall advise the State of design that he has entered such an aircraft on the register of civil aircraft of Bangladesh.

(5) Chairman shall determine the continuing airworthiness of an aircraft in relation to the appropriate airworthiness requirements in force for that aircraft.

(6) The Chairman shall develop or adopt requirements to ensure the continuing airworthiness of the aircraft during its service life.

(7) Upon receipt of mandatory continuing airworthiness information from the State of design, the Chairman shall adopt the mandatory information directly or assess the information received and take appropriate action.

(8) Chairman shall ensure the transmission to the State of Design of all mandatory continuing airworthiness information which it, as the State of registry, originated in respect of that aircraft.

(9) The Chairman shall establish, in respect of aeroplanes over 5700 kg and helicopter over 3175 kg maximum certificate of take-off mass, the type of service information that it is to be reported to its airworthiness authority by operators, organization responsible for type design and maintenance organizations. Procedures for reporting this information shall also be established.

(10) Maintenance information shall include a description of the aeroplane and recommended methods for the accomplishment of maintenance tasks. Such information shall include guidance on defect diagnosis.

(11) Maintenance program information shall include the maintenance tasks and the recommended intervals at which these tasks are to be performed.

(12) Maintenance information resulting from the type design approval.

208. Reporting of defects in aircraft components.- (1) Where the holder of a certificate of approval covering the maintenance of aircraft components owned by him becomes aware that an aircraft component owned by him has developed a defect, he shall-

(a) have an investigation made of the defect; and

(b) if the defect is such that, if the components were installed in an aircraft, the safety of the aircraft or persons on board the aircraft might be affected - have a report made of the Chairman with respect to the defect and of any matters revealed by the investigation, in a manner specified by the Chairman for the purpose of this sub-rule.

(2) Where the holder of a certificate of approval covering the maintenance of aircraft components becomes aware of the existence of a defect in an aircraft component in the maintenance of which he is engaged (other than an aircraft component owned by him). he shall, if the defect is such that if the components were installed in an aircraft, the safety of the aircraft might be affected, report the defect to the owner of the aircraft components and make a report to the Chairman in the manner specified by the Chairman for the purposes of this sub-rule.

(3) where the holder of an air operator license issued by the Chairman becomes aware of the existence of a defect in an aircraft component, owned by him and intended for use in aircraft used in operation under his licence, he shall-

(a) have an investigation made of the defect; and

(b) if the defect is such that, if the components were installed in aircraft, the safety of

the aircraft or of persons on board the aircraft might be affected - have a report made to the Chairman with respect to the defect and of any matters revealed by the investigation, in a manner specified by the Chairman for the purpose of this rub-rule.

209. Investigation of defects in aircraft.- (1) An authorised person may conduct an investigation into any matter connected with any defect in a Bangladesh aircraft including the making of a test of an aircraft or of any aircraft component installed or provided in an aircraft.

(2) An investigation under sub-rule (1) may extend to defects generally or may be limited to the investigation of a particular defect or a particular kind of defect.

(3) The authorised person may, for the purposes of carrying out the investigation-

(a) by order in writing served on a person, require the production to the authorised person of any documents, aircraft components or other things that are in the possession, or under the control, of the person on whom the order is served;

(b) retain any document, aircraft component or other thing produced during the course of the investigation for such period as is necessary for the purpose of carrying out the investigation; and

(c) make and retain copies of, or take extracts from, any document so produced.

(4) Where the retention of a document, aircraft component or other thing produced for the purposes of an investigation is no longer necessary the authorised person shall return the document, aircraft component or other thing to the person by whom it was produced.

210. Maintenance records.- (1) The Chairman may give direction specifying-

(a) the records to be kept in relation to-

(i) the maintenance done on each Bangladesh aircraft (including any aircraft component fitted in that aircraft); and

(ii) the time in service and the aircraft;

(b) the form of and the manner of keeping, a record referred to in sub-clause (ii) of clause(a); and

(c) the period during which a record kept in compliance with a direction under this rule is to be retained and the circumstances in which the record may, during that period, be transferred to another person.

(2) The owner or operator shall take such action as is necessary to ensure that records with respect to the aircraft are kept, retained and transferred in accordance with any direction

under this rule.

(3) The Chairman or an authorised person may, at any time, inspect any records kept in compliance with a direction under this rule, and the person keeping the records shall make them available for that purpose.

(4) The Chairman may direct the owner or operator to arrange for copies of the entries made in any record kept in compliance with a direction under this rule and carried on the aircraft during a flight be also kept in a safe place on the ground.

211. Flight manuals.- (1) The Chairman may-

(a) approve a flight manual for an aircraft and any subsequent alteration to that flight manual, prepared by, or an behalf of, the manufacturer, owner or operator;

(b) authorise the manufacturer, owner or operator to issue a flight manual for the aircraft and to issue subsequent alterations to that flight manual; or

(c) prepare and issue a flight manual for each Bangladesh aircraft and any subsequent alterations to that flight manual.

(2) A flight manual referred to in sub-rule (1) shall contain information and instructions relating to-

(a) the identification of the aircraft;

(b) unless the Chairman otherwise approves, the operating procedures and the limitations of the aircraft;

(c) the performance and loading of the aircraft; and

(d) the date (if any) of which, or the period (if any) after which, the flight manual ceases to have effect.

(3) The pilot-in-command of a Bangladesh aircraft shall comply with all the requirements, procedures and limitations with respect to the operation of the aircraft set out in the flight manual for the aircraft.

212. Provision of maintenance facilities,- (1) An operator engaged in, or offering to be engaged in, an aircraft operation for hire or reward shall provide an adequate organisation including training staff, together with workshop and other equipment and facilities in such quantities and at such places as the Chairman directs in order to ensure that his airframes, engines, propellers, instruments, equipment and accessories are properly maintained at all times when they are in use.

(2) An operator engaged in, or offering to be engaged in, an aircraft operation for hire or reward shall ensure that provision is made for imparting of proper and periodic instructions to all maintenance personnel, particularly in connection with the introduction into service of

new equipment or equipment with which the maintenance personnel are not familiar, and the training program shall be subject to the approval of the Chairman.

213. Overseas investigation costs,- Where the Chairman or an authorised person may, upon an application made to him, finds it necessary to travel outside Bangladesh for the purpose of investigation of an application for the grant, issue or renewal of a licence, certificate of approval referred to in this part, the applicant shall meet the costs involved in that travel.

PART IX
FACILITATION

214. General provisions.- (1) The Chairman shall make such arrangements as may be necessary for dealing with customs, immigration and health procedures and such other matters concerned with the safety, regularity and efficiency of air navigation in pursuance of the Convention.

(2) The Chairman shall adopt all practical measures to facilitate and expedite navigation of aircraft and prevent unnecessary delays to aircraft crews, passengers and cargo.

215. Entry, transit and departure of civil aircraft on international flights.- All flights into, from or over Bangladesh territory and landings in Bangladesh territory shall be carried out in accordance with the permission issued by the Chairman.

216. The aircraft after landing at an international airport shall not proceed further unless the pilot-in-command or authorised agent has obtained a clearance certificate in writing from an officer duly authorised by the appropriate authority.

217. Scheduled flights.- (1) An airline operating scheduled flights must be designated pursuant to a bilateral agreement signed by the State in which the airline is registered, or obtain a special permission issued by the Chairman.

(2) The designated airline must have the appropriate operating authorisation in order to satisfy the Chairman that it is qualified to fulfil the conditions specified under the laws normally applied to the operation of international air services.

218. Non-scheduled flights.- If an operator intends to perform one or more non-scheduled flights originating from Bangladesh or destined for Bangladesh for the purpose of taking on or discharging passengers, cargo or mail, he shall apply to the Chairman well in advance of the intended landing. The application must include the following information, namely : -

(a) name of operator;

(b) type of aircraft and registration marks;

(c) date and time of arrival at, and departure from, Bangladesh;

(d) place or places of embarkation or disembarkation aboard of passengers or freight;

(e) name, address and business of charterer; and

(f) route of flight.

219. Transit and non-traffic stops.- If an operator intends to carry out one or more non-scheduled flights in transit across, or making non-traffic stops in the territory of Bangladesh, he shall notify the Chairman well in advance of the entry, The notification must include the following information, namely: -

(a) name of operator;

(b) type of aircraft and registration marks;

(c) date and timing;

(d) route of flight; and

(e) intended duration of stay in the event of technical landing.

220. General aviation flights.- If an operator intends to perform one or more flights such as business flights, survey flights or agricultural flights in Bangladesh, he shall apply giving details of the flights to the Chairman for permission to carry out such operations.

221. Flights of State aircraft.- (1) If any State intends to perform a flight into Bangladesh to operate military, customs or police aircraft it shall apply to the Government through the Ministry of Foreign Affairs for permission. The application must include the following information, namely : -

(a) type, model and call sign of the aircraft;

(b) registration marls;

(c) agency to which the aircraft belongs;

(d) captain's name and nationality;

(e) names and nationality of the crew;

(f) names and nationality of passengers other than the crew members (list shall be comprehensive);

(g) time schedules and itinerary;

(h) route proposed to be followed (with entry and exit points);

(i) description of cargo, if any;

(j) cruising level; and

(k) type and quantity of fuel, if required.

(2) A certificate to the effect that "NO" war-like materials, such as arms, ammunition, explosives (except escape-aid explosives) pyrotechniques (except vary pistol signal cartridges), nuclear fissionable materials, chemical weapons, photographic equipment and materials (whether installed or not) electronic devices other than required for normal operation of the aircraft, are being carried by the aircraft.

(3) The provisions of sub-rules (1) and (2), except clauses (f) and (k) of sub-rule (1), shall also apply to foreign state aircraft intending to overfly Bangladesh territory.

222. Cabotage.- No passenger of freight originating at a point in Bangladesh and destined for another point in Bangladesh may be picked up by a foreign operator.

223. Documentary requirements.- (1) All airline operators shall, in pursuance to the Convention, submit the required documents in English to the appropriate authority for clearance on entry and departure of their aircraft to and from Bangladesh.

(2) If no passengers are embarking or disembarking or articles are laden or unladen, no aircraft documents except copies of the general declaration need be submitted to appropriate authorities.

224. Security provisions (carriage of weapons).- (1) Carriage of arms, explosive or dangerous goods by any person on board an aircraft is strictly prohibited.

(2) All persons shall declare their arms, ammunition, weapons, explosives and dangerous goods before embarkation to the operator.

(3) The carriage of weapons by (law enforcement officers and others) any authorised person may be allowed only when authorised by the Chairman.