CIVIL AVIATION AUTHORITY OF BANGLADESH

ANS INSPECTOR'S HANDBOOK

(METEOROLOGY)

ISSUE - ONE

FIRST EDITION – 2015

CIVIL AVIATION AUTHORITY

BANGLADESH

Amendments

Amendments and Corrigenda to this "ANS INSPECTOR'S HANDBOOK" (Meteorology) are issued by Chairman of Civil Aviation Authority, Bangladesh. The space below is provided to keep a record of such amendments /corrigenda.

Record of amendments and corrigenda

AMENDMENT			
No.	DATE APPLICABLE	DATE ENTERED	ENTERED BY

CORRIGENDA			
No.	DATE APPLICABLE	DATE ENTERED	ENTERED BY

Table of Contents

Foreword

Bangladesh being a Contracting State of the Convention on International Civil Aviation has an obligation to ensure that the Air Navigation Meteorological Services in Bangladesh are provided as per the Standards and Recommended Practices (SARPs) contained in the Annex 3 to the Convention on International Civil Aviation and the requirements contained in the associated ICAO Documents. The Civil Aviation Authority, Bangladesh (CAAB) is responsible for making rules, making institutional arrangements and conducting safety oversight functions over the Service Providers that it has certified, to fulfill the aforementioned requirement.

This Handbook contains guidance material intended to assist Air Navigation Services Inspectors (MET) in the Civil Aviation Authority, Bangladesh in carrying out their regulatory responsibilities with regard to their safety oversight duties, functions and responsibilities. However it is obvious that all matters pertaining to the inspectors' duties, functions and responsibilities may not cover in this Handbook. As such inspectors are expected to use their best judgment in matters where specific guidance is not provided.

Users of this handbook are reminded that the provisions of the Civil Aviation Ordinance 1960, Rules 97, 98 and 99 of Civil Aviation Rules 1984 (Amended in 2009) concerning Aviation Meteorology, and other applicable regulatory documentation, rather than this handbook, determine the requirements of, and the obligations imposed by or under the Civil Aviation Legislation. Users should refer to the applicable provisions of the legal requirements, whenever any doubt arises.

This document is continually subject to revisions and amendments without any prior notice, if required. Suggestions for the improvement of this document will be highly appreciated and should be addressed to the Chairman, CAA Bangladesh.

It is necessary that the Air Navigation Service Inspectors (MET) of CAA, Bangladesh shall be guided by the provisions contained in this Handbook to the greatest extent possible, when attending to their duties and functions.

Air vice Marshal, M Sanaul Huq, GUP, ndc, psc
Chairman
Civil Aviation Authority Bangladesh

Distribution List and Record of copies of the ANS (MET) Handbook

The total number of copies of this ANS (MET) Handbook produced for use by staff and other users of the FS&R Division is shown below. One printed copy of the Handbook has been designated as the "Master Copy". Some users are provided with printed copy of the Handbook while others are given an electronic/soft copy.

Copy No	Handbook user Name	Print(P)/ Electronic (E)	Signature	Date Provided	Date Returned

CHAPTER 1
DEFINITIONS

When the following terms/abbreviations are used in this document, they have the following meanings. The meanings of the terms/abbreviations given here are limited to this document only.

1.1 Definitions

Aerodrome control service – Air traffic control service for aerodrome traffic.

Aeronautical information service (AIS) – A service established within the defined area of coverage responsible for the provision of aeronautical information/data necessary for the safety, regularity and efficiency of air navigation.

Aeronautical information – Information resulting from the assembly, analysis and formatting of aeronautical data.

Aeronautical telecommunication service – A telecommunication service provided for any aeronautical purpose.

Air Navigation Services – Services provided under following services;

Air Traffic services
- Aeronautical Communication Services
- Aeronautical Information Service

Air traffic control service – A service provided for the purpose of:

Preventing collisions:
a) between aircraft, and
b) On the maneuvering area between aircraft and obstructions; and
Expediting and maintaining an orderly flow of air traffic.

Air traffic service – A generic term meaning variously, flight information service, alerting service, air traffic advisory service, air traffic control service (area control service, approach control service or aerodrome control service).

Alerting service – A service provided to notify appropriate organizations regarding aircraft in need of search and rescue aid, and assist such organizations as required.

Approach control service – Air traffic control service for arriving or departing controlled flights.

Area control service - Air traffic control service for controlled flights in control areas.

Aerodrome - 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.

Aerodrome climatological summary - Concise summary of specified meteorological elements at an aerodrome, based on statistical data.

Aerodrome climatological table - Table providing statistical data on the observed occurrence of one or more meteorological elements at an aerodrome.

Aerodrome control tower - A unit established to provide air traffic control service to aerodrome traffic.

Aerodrome elevation - The elevation of the highest point of the landing area.

Aerodrome meteorological office - An office, located at an aerodrome, designated to provide meteorological service for international air navigation.

Aerodrome reference point - The designated geographical location of an aerodrome.

Aeronautical fixed service (AFS) - A telecommunication service between specified fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services.

Aeronautical fixed telecommunication network (AFTN) - A worldwide system of aeronautical fixed circuits provided, as part of the aeronautical fixed service, for the exchange of messages and/or digital data between aeronautical fixed stations having the same or compatible communications characteristics.

Aeronautical meteorological station - A station designated to make observations and meteorological reports for use in international air navigation.

Aeronautical mobile service (RR S1.32) **-** A mobile service between aeronautical stations and aircraft stations, or between aircraft stations, in which survival craft stations may participate; emergency position-indicating radio beacon stations may also participate in this service on designated distress and emergency frequencies.

Aeronautical telecommunication station - A station in the aeronautical telecommunication service.

Aircraft - Any machine that can derive support in the atmosphere from the reactions of the air other than the reactions of the air against the earth's surface.

Aircraft observation - The evaluation of one or more meteorological elements made from an aircraft in flight.

AIRMET Information - Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of low-level aircraft operations and which was not already included in the

forecast issued for low-level flights in the flight information region concerned or sub-area thereof.

Air-report - A report from an aircraft in flight prepared in conformity with requirements for position, and operational and/or meteorological reporting.

Note - Details of the AIREP form are given in the PANS-ATM (Doc 4444).
Air traffic services unit - A generic term meaning variously, air traffic control unit, flight information centre or air traffic services reporting office.

Alternate aerodrome - An aerodrome to which an aircraft may proceed when it becomes either impossible or inadvisable to precede to or to land at the aerodrome of intended landing. Alternate aerodromes include the following:

Note. — The aerodrome from which a flight departs may also be an en-route or a destination alternate aerodrome for that flight.

Altitude - The vertical distance of a level, a point or an object considered as a point, measured from mean sea level (MSL).

Approach control unit - A unit established to provide air traffic control service to controlled flights arriving at, or departing from, one or more aerodromes.

Appropriate ATS authority - The relevant authority designated by the State responsible for providing air traffic services in the airspace concerned.

Area control centre - A unit established to provide air traffic control service to controlled flights in control areas under its jurisdiction.

Area navigation (RNAV) - A method of navigation which permits aircraft operations on any desired flight path within the coverage of ground- or space-based navigation aids or within the limits of the capability of self-contained aids, or a combination of these.

Note - Area navigation includes performance-based navigation as well as other operations that do not meet the definition of performance-based navigation.

Automatic dependent surveillance (ADS) - A surveillance technique in which aircraft automatically *provide, via a data link,* data derived from on-board navigation and position-fixing systems, including aircraft identification, four-dimensional position and additional data as appropriate.

Briefing - Oral commentary on existing and/or expected meteorological conditions.

Cloud of operational significance - A cloud with the height of cloud base below 1 500 m (5 000 ft) or below the highest minimum sector altitude, whichever is greater, or a cumulonimbus cloud or a towering cumulus cloud at any height.

Consultation - Discussion with a meteorologist or another qualified person of existing and/or expected meteorological conditions relating to flight operations; a discussion includes answers to questions.

Control area - A controlled airspace extending upwards from a specified limit above the earth.

Cruising level - A level maintained during a significant portion of a flight.

Destination alternate - An alternate aerodrome to which an aircraft may proceed should it become either impossible or inadvisable to land at the aerodrome of intended landing.

Note - The aerodrome from which a flight departs may also be an en-route or a destination alternate aerodrome for that flight.

Elevation - The vertical distance of a point or a level, on or affixed to the surface of the earth, measured from mean sea level.

En-route alternate - An aerodrome at which an aircraft would be able to land after experiencing an abnormal or emergency condition while en route.

ETOPS en-route alternate - A suitable and appropriate alternate aerodrome at which an aero plane would be able to land after experiencing an engine shut-down or other abnormal or emergency condition while en route in an ETOPS operation.

Extended range operation - Any flight by an aero plane with two turbine engines where the flight time at the one engine inoperative cruise speed (in ISA and still air conditions), from a point on the route to an adequate alternate aerodrome, is greater than the threshold time approved by the State of the Operator.

Flight information service – A service provided for the purpose of giving advice and information useful for the safe and efficient conduct of flights.

Flight crew member - A licensed crew member charged with duties essential to the operation of an aircraft during a flight duty period.

Flight documentation - Written or printed documents, including charts or forms, containing meteorological information for a flight.

Flight information centre - A unit established to provide flight information service and alerting service.

Flight information region – an airspace of defined dimensions within which flight information service and alerting service are provided.

Flight level - A surface of constant atmospheric pressure which is related to a specific pressure datum, 1 013.2 hectopascals (hpa), and is separated from other such surfaces by specific pressure intervals.

Note 1 - A pressure type altimeter calibrated in accordance with the Standard Atmosphere:

a) When set to a QNH altimeter setting will indicate altitude;
b) When set to a QFE altimeter setting will indicate height above the QFE reference datum;
c) When set to a pressure of 1013.2 hpa, may be used to indicate flight levels.

Note 2 - The terms “height” and “altitude”, used in Note 1, indicate altimetric rather than geometric heights and altitudes.

Forecast - A statement of expected meteorological conditions for a specified time or period, and for a specified area or portion of airspace.

GAMET area forecast - An area forecast in abbreviated plain language for low-level flights for a flight information region or sub-area thereof, prepared by the meteorological office designated by the meteorological authority concerned and exchanged with meteorological offices in adjacent flight information regions, as agreed between the meteorological authorities concerned.

Grid point data in digital form - Computer processed meteorological data for a set of regularly spaced points on a chart, for transmission from a meteorological computer to another computer in a code form suitable for automated use.

Note - In most cases, such data are transmitted on medium- or high-speed telecommunications channels.

Height - The vertical distance of a level, a point or an object considered as a point, measured from a specified datum.

Human Factors principles - Principles which apply to aeronautical design, certification, training, operations and maintenance and which seek safe interface between the human and other system components by proper consideration to human performance.

International airways volcano watch (IAVW) - International arrangements for monitoring and providing warnings to aircraft of volcanic ash in the atmosphere.

Note - The IAVW is based on the cooperation of aviation and non-aviation operational units using information derived from observing sources and networks that are provided by States. The watch is coordinated by ICAO with the cooperation of other concerned international organizations.

Level - A generic term relating to the vertical position of an aircraft in flight and meaning variously height, altitude or flight level.

Meteorological authority - The authority providing or arranging for the provision of meteorological service for international air navigation on behalf of a Contracting State.

Meteorological bulletin - A text comprising meteorological information preceded by an appropriate heading. Meteorological information - Meteorological report, analysis, forecast, and any other statement relating to existing or expected meteorological conditions.

Meteorological office - An office designated to provide meteorological service for international air navigation. Meteorological report - A statement of observed meteorological conditions related to a specified time and location.

Meteorological satellite - An artificial Earth satellite making meteorological observations and transmitting these observations to Earth.

Minimum sector altitude - The lowest altitude which may be used which will provide a minimum clearance of 300 m (1 000 ft) above all objects located in an area contained within a sector of a circle of 46 km (25 NM) radius centered on a radio aid to navigation.

Maneuvering area - That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons.

When the following terms are used in the Standards and Recommended Practices for Meteorological Service for International Air Navigation, they have the following meanings:

Navigation specification - A set of aircraft and flight crew requirements needed to support performance-based navigation operations within a defined airspace. There are two kinds of navigation specifications:

Required navigation performance (RNP) specification - A navigation specification based on area navigation that includes the requirement for performance monitoring and alerting, designated by the prefix RNP, e.g. RNP 4, RNP APCH.

Area navigation (RNAV) specification - A navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1.
Note - The Performance-based Navigation (PBN) Manual (Doc 9613), Volume II, contains detailed guidance on navigation specifications.

Observation (meteorological) - The evaluation of one or more meteorological elements.

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 aero plane performance, other operating limitations and relevant expected conditions on the route to be followed and at the aerodromes concerned.

Operational planning - The planning of flight operations by an operator.

Operator - A person, organization or enterprise engaged in or offering to engage in an aircraft operation.

Performance-based navigation (PBN) - Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace.
Note - Performance requirements are expressed in navigation specification (RNAV specification, RNP specification) in terms of accuracy, integrity, continuity, availability and functionality needed for the proposed operation in the context of a particular airspace concept.
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.

Prevailing visibility - The greatest visibility value, observed in accordance with the definition of "visibility", which is reached within at least half the horizon circle or within at least half of the surface of the aerodrome. These areas could comprise contiguous or non-contiguous sectors.
Note - This value may be assessed by human observation and/or instrumented systems. When instruments are installed, they are used to obtain the best estimate of the prevailing visibility.

Prognostic chart - A forecast of a specified meteorological element(s) for a specified time or period and a specified surface or portion of airspace, depicted graphically on a chart.

Quality assurance - Part of quality management focused on providing confidence that quality requirements will be fulfilled (ISO 9000*).
Quality control - Part of quality management focused on fulfilling quality requirements (ISO 9000*).
Regional air navigation agreement - Agreement approved by the Council of ICAO normally on the advice of a regional air navigation meeting.

Reporting point - A specified geographical location in relation to which the position of an aircraft can be reported.

Rescue coordination centre - A unit responsible for promoting efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region.

Runway - A defined rectangular area on a land aerodrome prepared for the landing and take-off of aircraft.
Runway visual range (RVR) - The range over which the pilot of an aircraft on the centre line of a runway can see the runway surface markings or the lights delineating the runway or identifying its centre line.

Search and rescue services unit - A generic term meaning, as the case may be, rescue coordination centre, rescue sub centre or alerting post.

SIGMET information - Information issued by a meteorological watch office concerning the occurrence or expected occurrence of specified en-route weather phenomena which may affect the safety of aircraft operations.

Standard isobaric surface - An isobaric surface used on a worldwide basis for representing and analyzing the conditions in the atmosphere.

Threshold - The beginning of that portion of the runway usable for landing.
Touchdown zone - The portion of a runway, beyond the threshold, where it is intended landing aero planes first contact the runway.

Take-off alternate - An alternate aerodrome at which an aircraft can land should this become necessary shortly after take-off and it is not possible to use the aerodrome of departure.
Tropical cyclone - Generic term for a non-frontal synoptic-scale cyclone originating over tropical or sub-tropical waters with organized convection and definite cyclonic surface wind circulation.
Tropical cyclone advisory centre (TCAC) - A meteorological centre designated by regional air navigation agreement to provide advisory information to meteorological watch offices, world area forecast centers and international OPMET databanks regarding the position, forecast direction and speed of movement, central pressure and maximum surface wind of tropical cyclones.
Upper-air chart - A meteorological chart relating to a specified upper-air surface or layer of the atmosphere.
Visibility - Visibility for aeronautical purposes is the greater of:

a) the greatest distance at which a black object of suitable dimensions, situated near the ground, can be seen and recognized when observed against a bright background;
b) the greatest distance at which lights in the vicinity of 1 000 candelas can be seen and identified against an unlit background.

Note - The two distances have different values in air of a given extinction coefficient, and the latter b) varies with the background illumination. The former a) is represented by the meteorological optical range (MOR).

Volcanic ash advisory centre (VAAC) - A meteorological centre designated by regional air navigation agreement to provide advisory information to meteorological watch offices, area control centers, flight information centers, world area forecast centers and international OPMET databanks regarding the lateral and vertical extent and forecast movement of volcanic ash in the atmosphere following volcanic eruptions.

VOLMET - Meteorological information for aircraft in flight.

Data link - VOLMET (D-VOLMET) **-** Provision of current aerodrome routine meteorological reports (METAR) and aerodrome special meteorological reports (SPECI), aerodrome forecasts (TAF), SIGMET, special air-reports not covered by a SIGMET and, where available, AIRMET via data link.
VOLMET broadcast - Provision, as appropriate, of current METAR, SPECI, TAF and SIGMET by means of continuous and repetitive voice broadcasts.
World area forecast centre (WAFC) - A meteorological centre designated to prepare and issue significant weather forecasts and upper-air forecasts in digital form on a global basis direct to States by appropriate means as part of the aeronautical fixed service.

World area forecast system (WAFS) - A worldwide system by which world area forecast center provides aeronautical meteorological en-route forecasts in uniform standardized formats.

1.2 Terms used with a limited meaning

For the purpose of this Handbook, the following terms are used with a limited meaning as indicated below:

a) to avoid confusion in respect of the term "service" between the meteorological service considered as an administrative entity and the service which is provided, "meteorological authority" is used for the former and "service" for the latter;
b) "Provide" is used solely in connection with the provision of service;
c) "Issue" is used solely in connection with cases where the obligation specifically extends to sending out the information to a user;
d) "Make available" is used solely in connection with cases where the obligation ends with making the information accessible to a user; and
e) "Supply" is used solely in connection with cases where either c) or d) applies.

1.3 ABBREVIATIONS

ATM	- Air Traffic Management
AIS	- Aeronautical Information service
ANS	- Air Navigation services
ANNEX	- Annex to the Convention on International Civil Aviation
AIB	- Accident Investigation Buru
ATS	- Air Traffic services
ATM	- Air Traffic Management
CAAB	- Civil Aviation Authority, Bangladesh
CAI	- Civil Aviation Inspector
COM	- Communication
CNS	- Communication, Navigation & Surveillance
D/ FS&R	- Director/ Flight Safety and Regulations
ICAO	- International Civil Aviation Organization
MET	- Meteorology
PANS-OPS	- Procedure for Air Navigation services - Operations
PANS-ATM	- Procedure for Air Navigation Services – Air Traffic Management
PANS-OPS	- Procedure for Air Navigation Services – Aircraft Operations
SARPS	- Standards & Recommended Practices
SAR	- Search & Rescue
SCAI	- Senior Civil Aviation Inspection

CHAPTER 2

INTRODUCTION & ORGANIZATION STRUCTURE

2.1 Introduction

Flight Safety and Regulations Divisions is responsible for carrying out Safety Oversight functions of Air Navigation Services (ATS, AIS, Aeronautical Charts, SAR, CNS, PANS-OPS and MET) in Bangladesh airspace. Respective Inspectors in each of the ANS field have been appointed by the Chairman and they will carry out their duties as per the policies laid down in this Handbook.

The Inspectors shall oversight all aspects of ANS concerning services, procedures, method and functions of ANS service provider and their applicability in accordance with relevant Manuals, Civil Aviation Authority, Bangladesh rules, regulations, directives and related documents on the following areas:

a) Air Traffic Services
b) Aeronautical Information Services
c) Communication Navigation and Surveillance (CNS) Services
d) Aeronautical Meteorological Services
e) PANS- OPS Flight Procedures design services
f) Aeronautical Charts and
g) Search and Rescue (SAR).

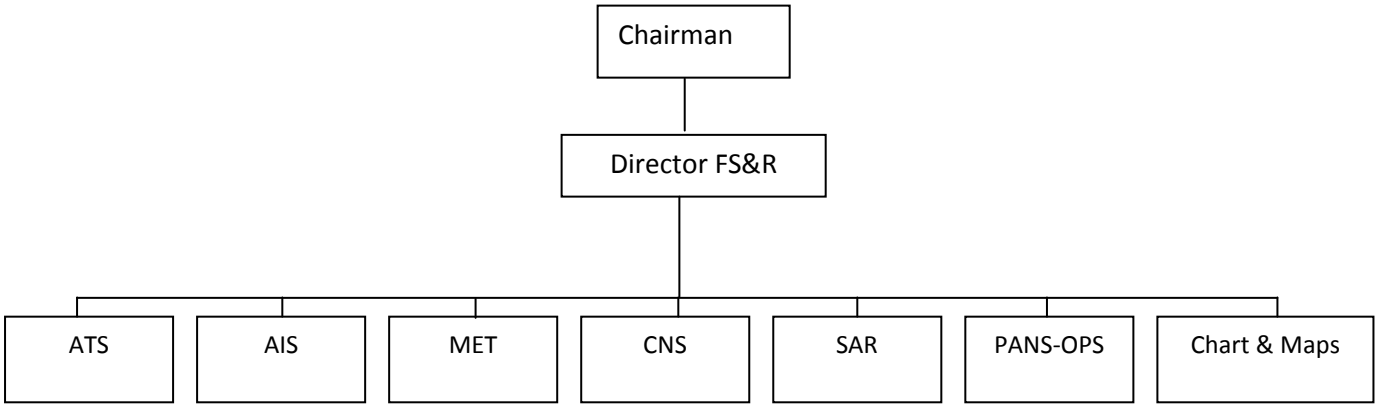
2.2 Statutory Authority

ANS Inspectors are appointed and authorized by the Chairman of Civil Aviation Authority, Bangladesh to carry out all Safety Oversight functions in the field of ATS, PANS-OPS, AIS, Aeronautical Charts, SAR, CNS and MET.

2.3 Staff Requirement

Director (FS& R) shall make available a sufficient number of suitable Inspectors, with sound knowledge in the related fields.

2.4 **Position of ANS MET Inspectors in the Organization of Civil Aviation Authority, Bangladesh.**



CHAPTER 3

SAFETY RESPONSIBILITIES AND ACCOUNTABILITIES

3.1 Job Descriptions:

Safety responsibilities and accountabilities of each element of Air Navigation Services, basic and technical qualifications, experience requirements and working conditions of the regulatory and safety oversight personnel have been prescribed in this chapter.

The Authority may specify additional conditions in order to meet the job requirements and to ensure the conduct of assigned functions in a most efficient manner.

3.2 Job Title: Director (Flight Safety and Regulations)

Unit	:	Directorate of Flight Safety and Regulations
Report to	:	Chairman, Civil Aviation Authority, Bangladesh,
Location	:	Civil Aviation Authority Bangladesh, HQ, Kurmitola, Dhaka

3.3 Job Summary:

3.3.1 Supervise, manage, control and provide guidance and necessary tools to all the constituents/ elements of the Directorate in the discharge of regulatory and safety oversight duties within the frame work of Civil Aviation Authority, Bangladesh.

3.3.2 Maintain close liaison with other regulatory components, concerned Government authorities and service providers to ensure timely response to ICAO, PIRGS, and other concerned International, Regional and National authorities.

3.3.3 Act as the designated point of Responsibility for oversight of Air Navigation Services Standards.

3.4 Primary Responsibilities:

3.4.1 Supervise, manage, control and provide guidance to all the officials /elements of the Directorate in the discharge of functions prescribed in the regulations, this chapter, relevant Inspector's Handbooks, and the orders of the Chairman Civil Aviation Authority, Bangladesh.

3.4.2 a) Maintain close liaison with other regulatory components, concerned Government authorities and service providers to ensure:

i) Development of Regulations, Standards, Procedures, Safety Directives/ Circulars, and
ii) Implementation of Rules, Regulations, Standards, Directives of the government and the Chairman Civil Aviation Authority, Bangladesh.

b) Act as the designated point of Responsibility for oversight of Air Navigation Services Standards and should:
   i) Receive the audit and inspection reports produced by the auditors/ inspectors;

   ii) Ensure that the audit/inspection findings are communicated to the senior management of the organization and unit audited/inspected;
   iii) Advise the Service Providers /Aerodrome Operators to submit Corrective Action Plan of the non-conformities identified;
   iv) Assess the Corrective Action Plan submitted by the audited unit, and take actions as appropriate.

c) Undertake additional actions, if required, such as providing inputs to:
   i) Support the decisions related to the initial oversight (e.g. issuance / renewal of certificates licenses).
   ii) Allow the audit /inspection Management Function to maintain and refine the Annual program of follow up audits/ inspections; and
   iii) Apprise the Chairman and other concerned authorities as regards to the need for sanctions, restrictions, and safety performance of the Air Navigation Service Providers and Aerodrome Operators in accordance with the existing regulatory framework and procedures in vogue.

d) Development of Rules and continuous review to meet the requirements of the Convention and Annexes thereto in accordance with the Civil Aviation Ordinance 1960 and Bangladesh Civil Aviation Authority Ordinance 1985 and submission to the Authority for perusal , approval and subsequent promulgation regarding the disciplines
e) Development of Operating Regulations in accordance with the Rule, submission to the Authority for perusal, approval of the Government and subsequent promulgation.
f) Filing of difference with ICAO between National Practices and Annexes to the Convention and its promulgation in AIP Bangladesh with the approval of the Chairman Civil Aviation Authority, Bangladesh.
g) Development of Standards, Procedures, Air Navigation Orders, Safety Circulars /Directives and subsequent promulgation after the approval of the competent Authority.
h) Determine and review the acceptable and target levels of safety in consultation with the Air Navigation Service Providers and Aerodrome Operators viz-a -viz safety performance.
i) Process the cases of designation of ATS Providers for necessary approval of the Authority.
j) Evaluate and approve the acceptable level of safety submitted by the service providers.

k) Determine the human, technical and training needs of DFS&R and appraise the Authority for arrangement and provision of the same to meet the national oversight obligations in accordance with the Convention.

l) Ensure continuous oversight of Air Navigation Service Providers, Aerodrome Operators and associated maintenance organizations to monitor implementation and compliance of National Aviation Legislation, Civil Aviation Rules, Operating Regulations, Standards, Procedures and Air Navigation Orders, Directives of the Government and Chairman, and Safety Circulars.

m) Ensure that ANS Providers and Aerodrome Operators adopt policies and procedures on human factors principles.

n) Coordinate with ANSPs and Aerodrome Operators to plan the elimination of deficiencies identified within the framework of Planning and Implementation Regional Groups (PIRGs).

o) Review the scope of inspections and related techniques/procedures in order to evaluate specific areas of interest.

p) Ensure cost effective use of resources of the inspections.

q) Ensure the maintenance of the safety record and its analysis to monitor /oversee the safety performance of Air Navigation Service Providers and Aerodrome Operators continuously.

r) Issue warning notices to service providers /Aerodrome Operators whenever immediate action is required to correct a significant unsafe condition. In emergency situations, where a time does not permit the issuances of a warning notice, issue a safety directive without a warning notice with the approval of Chairman, Civil Aviation Authority, Bangladesh.

s) Make effective arrangements to promote safety and processing of safety issues.

t) Evaluate the performance of safety oversight mechanism, associated personnel, and submit for the perusal of the Chairman, Civil Aviation Authority, Bangladesh.

u) Keep the Chairman, Civil Aviation Authority, Bangladesh apprised of the safety performance of the Air Navigation Service Providers and Aerodrome Operators.

3.5 Knowledge and Skill Requirements:

Personal Characteristics

a) Strong administrative skills such as decision making, organizing and planning
b) Strong analytical, creative, presentation and convincing abilities.
c) Professional interpersonal /communication and negotiation skills.
d) High level of integrity, motivation and drive.

3.6 Working Conditions:

Working conditions are normal for an office environment. However, the officer may be required to visit all concerned units for oversight and inspection functions.

CHAPTER 4
DUTIES AND RESPONSIBILITIES OF MET INSPECTORS

4.1 Position of MET Inspector

(a) Name of the Office: Civil Aviation Authority of Bangladesh, Dhaka.
(b) Title of Position: MET Inspector
(c) Service: Technical
(d) Group: ANS
(e) Sub Group: Meteorology
(f) Directorate: Flight Safety and Regulations
(g) Reporting Officer: Director (FS&R)

4.2 Purpose of MET Inspector

The holder of this position shall be responsible for performing Safety Oversight function of MET service providers in Bangladesh. The purpose of MET Inspectors is to ensure the compliance of relevant ANOs, manuals, documents, Civil Aviation Authority, Bangladesh rules, regulations, directives and upgrade the safety level of MET service provider.

4.3 Qualifications of MET Inspectors

Individuals seeking positions as MET inspector should have extensive academic and technical education and have progressed through positions of increased technical and supervisory responsibility in the civil aviation operations. A MET inspector will be required to have the following qualifications and professional experience:

(a) Have training in basic ATC & 15 years experience in ATC.

(b) Trained in MET basic/advance course.

(c) Experienced and competent in MET field.

(d) Wide knowledge in MET field.

(e) Adequate knowledge of ICAO Annex-3 and relevant documents.

(f) Knowledge of Civil Aviation Ordinances, Civil Aviation Authority, Bangladesh Rules and regulations.

(g) Knowledge of State Safety Program and Safety Management System (SMS).

(h) Knowledge of ICAO Safety Audit Program.

(i) Knowledge of Human Factors involved in MET.

(j) Knowledge of Quality Management System.

(k) Possess adequate knowledge of MET procedure and experienced in MET through practical field/practices.

4.4 Duties and Responsibilities

ANS (MET) Inspector is responsible for carrying out regulatory functions in the following area:

(a) To develop Handbook/Checklist necessary for inspection.

(b) To prepare Inspection schedule to inspect MET units of all international/domestic airports of Bangladesh.

(c) To prepare inspection report and highlight the deficiencies, if any, and propose the corrective action plan.

(d) Initiate to amend CAR '84 Part III from time to time for compliance with ICAO Annexes if required.

(e) Ensuring the proper implementation of relevant ANOs, related documents, manuals and directives issued by Civil Aviation Authority, Bangladesh.

(f) To assist service provider in preparing the procedure/policy to provide the service, the remedial/corrective action plan and follow up its progress

(g) To participate in MET related meetings, seminars, workshops, symposiums etc.

(h) To develop training program for inspectors.

(i) Approval and surveillance of service provider training program.

(j) Surveillance of service and procedure of service provider.

(k) To follow-up the action as agreed by the service provider to mitigate/eliminate the deficiencies.

(l) Ensure service provider has developed training program including refresher training for MET staff.

(m) Ensure procedure developed by MET service provider for continued competency of MET service in new equipment, procedures and updated communication.

4.5 Operating Regulations

1. Assist other ANS Inspector (MET) to implement relevant SARPS contained in ICAO, Annex 3, in Bangladesh and update as necessary.

2. Assist other ANS Inspector (MET) to Publish Guidance Materials and other necessary Documents issued by ICAO related to Aeronautical Meteorology and update as necessary.

4.6 Organization

1. Maintain office discipline of the staff working under the incumbent, if any.

2. Ensure employees working under the incumbent, if any carry out all job functions as laid down in the job descriptions issued by Civil Aviation Authority, Bangladesh.

3. Assist other ANS Inspector (MET) to maintain statistics relating to all important duties, functions or activities performed by the incumbent and the staff working under the incumbent.

4.7 Personnel & Training

1. Identify and advise the training needs of the incumbent and the staff working under the incumbent, if any to the D/FS &R

2. Assist other ANS Inspector (MET) to organize refresher and/or recurrent training as required.

3. Assist other ANS Inspector (MET) to maintain records of all individual training offered to employees.
4. Assist other ANS Inspector (MET) to provide “on the job training” for inspectors when required.

4.8 Guidance Materials

1. Assist other ANS Inspector (MET) to prepare written Office Procedures in respect of each activity being performed in the ANS Section with regard to Aeronautical Meteorology.

2. Assist other ANS Inspector (MET) to prepare required toolkits for efficient and effective surveillance of Aeronautical Meteorology, Service providers such as Inspectors Hand Books, Checklists; Survey Forms, Audit Forms etc. and make readily available at the Section. This should include toolkits for efficient

inspections, surveying and Certification audits of Aeronautical Meteorology service providers.

3. Assist other ANS Inspector (MET) to review all Manuals, Written Procedures and Handbooks issued by the ANS (MET) Section with regard to, Aeronautical Meteorology, Services and update when required.

4. Identify and advice DFS&R the relevant guidance and reference materials, documents, annexes and other useful publications relating to, Aeronautical Meteorology, which should be available in the ANS (MET) Section.

4.9 Certification

1. Assist other ANS Inspector (MET) to perform duties related to certification of Aeronautical Meteorological Information Services Providers in Bangladesh in accordance with applicable regulations.

2. Assist other ANS Inspector (MET) to issue, renew, amend, suspend or cancel Aeronautical Information and Aeronautical Communication Services Provider Certificates as the case may be.

4.10 Surveillance

1. Assist other ANS Inspector (MET) to maintain continued surveillance on Certified Aeronautical Meteorology in order to ensure that they maintain required safety standards specified by the Chairman, Civil Aviation Authority, Bangladesh.

2. Maintain continued surveillance/Safety Oversight on MET. Service Providers in Bangladesh in order to ensure that they maintain required safety standards.

4.11 Enforcement

1. Assist other ANS Inspector (MET) to take enforcement actions in accordance with available regulations in case of safety violations made by the Aeronautical Meteorology Information Service Providers.

2. As directed by D /FS&R assist Bangladesh AIB members and /or AIB authorities of other states to carry out formal investigations/enquires pertinent to aircraft accidents/incidents. Submit accurate reports to the Chairman on same as required.
3. Assist D/FS&R and other ANS Inspector (MET) to organize and update information in the Civil Aviation Authority, Bangladesh website pertaining to Aeronautical Meteorology.

4. If / when required assist other ANS Inspector (MET) to process, verify or grant approval or authorization for the certified AIS units to promulgate aeronautical information among users, in the form of AIP, AIRAC, AIC.

CHAPTER 5
INSPECTION /AUDIT-- PROCEDURES

5.1 Surveillance Programme

The Surveillance Programme includes inspections, surveys and audits. The surveillance programme of the FS&R Section for the calendar year is prepared by the D/FS&R, in consultation with the inspectors of the section at the beginning of the year taking into account the nature and scope of activities taking place in the industry. The main objective of the surveillance plan is to ensure through performance based surveillance, that the State's Acceptable Level of Safety will be maintained. Once the Surveillance Plan is developed it will be forwarded to the Chairman and approval is obtained from the Chairman.

This surveillance programme may be altered or revised based on the evidence gathered during the preceding surveillance programme in order to maintain required safety in the system. Such changes will be notified to the Inspectors immediately and reason for the change will be documented.

5.2 Inspection

5.2.1 Responsibilities of the Inspectors with Regard to Carrying out Inspections

Once the surveillance programme is approved by the Chairman Civil Aviation Authority, Bangladesh it will be distributed among relevant inspectors in the section. It is the responsibility of relevant inspectors to conduct inspections as per the approved schedule. In case inspectors are unable to conduct inspections on scheduled dates due to unavoidable circumstances, approval should be obtained from the Chairman through D/ FS&R to conduct the inspection in the closest possible date to the scheduled date. Inspectors are required to forward inspection reports to the D/ FS&R in the relevant file (soft & hard copies) within 10 (ten) working days of the date of the inspection. Inspection reports should be completed as per the instructions provided in the checklists in clear language. The responsibility of sending the inspection report to the service provider through D/FS&R lies with the individual inspector who conducted the inspection.

5.2.2 Planning and Preparation for Inspection

Before the inspection is conducted the inspectors are required to prepare for the inspection properly. The preparation process should include following;

1) Refer previous inspection reports and corrective action plans (Feed Back Reports) received from the service provider.

2) Identify deficiencies observed in previous inspections and corrective actions taken by the service provider to correct those deficiencies.

3) Identify special areas to be inspected which need special attention.
4) Inspectors should refresh themselves with the previous recommendations, of the Civil Aviation Authority, Bangladesh to check whether those recommendations are implemented.

5) Inspectors should be familiar with all documents issued by the Civil Aviation Authority, Bangladesh relevant to the operations carried out by the centre.

6) Inspector should be familiar with the staff requirements, licensing/rating & training requirements, operational & technical requirements and other relevant regulatory requirements applicable to the centre.

7) Inspectors should be thorough with the documents need to be kept at the centre.

8) If the Inspector intends meeting the Senior Manager/Managers to clarify certain issues, he /she should inform Head of the Section/In charge of the Centre of the Service Provider concerned, the date/time of the inspection and the officers needs to be present at the inspection at least three days before the inspection.

5.2.3 Conducting the Inspection

1) Meet Head of the Section, relevant or in charge of the section and identify the Inspector with credentials, before the inspection is conducted and make necessary arrangements for the inspection.

2) Always be polite and respect the duties being performed and the person being inspected

3) do not disturb the performance of the duties of the person being inspected or get involved with unnecessary arguments outside official scope during the inspection process

4) Use appropriate check list for the inspection (See Appendix A) and use the Civil Aviation Authority, Bangladesh “Inspector Hand Book” to record the salient features observed during the inspection

5) At the end of the inspection brief the Head of the Section, Relevant or In charge of the section of the findings (deficiencies and appreciations).

5.2.4 Inspection Report

1) Use the softcopy of the Inspection Report (Appendix A)

2) Use only the Abbreviations given in the check list to fill the form

3) Indicate comments in the space provided in clear language

4) If observation is "Unsatisfactory (U)" or "Improvements Needed (I), it is essential to give comments to explain why it is unsatisfactory and what improvements needed.
5) Prepare the inspection report within five working days from the date of the inspection and forward same to the D/ FS&R with the soft copy for review.

6) Send the report to the Service Provider within seven working days.

7) Update the Inspection Result Database.

5.3 **Air Navigation Services (MET) Audit**

5.3.1 Objectives of an Audit

The objectives of an Audit should be:

- To ascertain compliance with ICAO Standards and Recommended Practices.
- To ensure adherence with prescribed standards and procedures in the provision of Air Navigation Services (MET).
- To determine the effectiveness of safety planning in ANS (MET) operations.
- To highlight commendable findings (where appropriate)

5.3.2 Scope of an ANS (MET) Audit

During an Audit following areas should be addressed;

- Licensing and Training Issues
- Regulatory Issues
- Operational and Technical Issues, criteria & requirements as specified in:

1. ICAO Annex 3
2. Manual of quality management system (QMS)
3. Documents
4. MET Circulars

5.3.3 Planning and Preparation for Audits

Safety Audits can be of great benefit provided they are carried out professionally and thoroughly. Careful and comprehensive preparation is essential to the overall success of any audit. Inadequate preparation can result in:

- Devalued audit findings
- A loss of credibility in the audit function overall
- A waste of both auditor's and audit tee's time

Therefore a good rule of the thumb for the allocation of time for a safety audit is as flows;

- devote 40% of the total hours estimated for the audit in
- preparation activities

- devote another 40% on conducting the audit
- devote remaining 20% for the preparation of the reports and follow- actions

An audit programme should always contain provision for:

- an opening and a closing meetings with the senior management of the Audi tee
- regular (at least twice daily) audit team meetings
- contingency or 'mopping-up' operations

5.3.4 Questions and Checklists

Prior to conducting an audit, it is important to have a vehicle to enable the auditor to;

- identify which elements are to be audited
- refer to relevant documents in the system
- record preliminary findings and observations

As such relevant Check Lists, Questions and forms to record Findings and Observations should be prepared before the audit. Questions for Audit Checklist are given in the Appendix A. Additions can be made as required before or during the audit. A properly prepared check list will;

- provide a useful guide or memory aid to the auditor
- form a record of what was checked during the audit
- ensure that all major points are covered
- help to save time in note taking during an audit
- assist in the preparation of the exit meeting

However all inspectors should clearly understand that checklists should not be considered as an inflexible procedure to conduct a safety audit.

Audit Convening Authority

The Chairman Civil Aviation Authority, Bangladesh is responsible for all regulatory audits/inspections and is normally the Convening Authority.

5.3.5 Audit Team

The audit team should consist of the lead auditor and at least two safety auditors. This number may depend on the size and complexity of the unit/area to be audited. The lead auditor should have been successfully completed an approved MET Safety Audit Training. One member of the team should be an ANS inspector (MET) and the other member should be an AIS Inspector serving in the Civil Aviation Authority, Bangladesh.

5.3.6 Audit Notification/Audit Time Table

The Lead Auditor should notify the audit tee the proposed date of the audit at least one month prior to the audit and get the concurrence of the audit tee with the proposed dates for the audit. At least two weeks prior to the audit the lead auditor should inform the audit tee the audit team and the audit time table.

5.3.7 Audit Process

Upon the confirmation of the audit Time Table, the Lead Auditor should prepare the Audit Check List based on four elements below.

- Personnel & Training
- Documentation
- Procedures & Environment
- Equipment

Questions in Check Lists given in Appendix A can be used for this purpose.

5.3.8 Audit Procedure

Conduct of audit

When Conducting the Audit remember following important facts;

- Should be conducted in accordance with audit plan.
- Interview audit tee to gather information to determine effectiveness of safety planning and practices.
- Use questions checklists prepared based on four main elements, namely Personnel and Training, Equipment, Procedures and Documentation.
- Deficiencies when identified should be recorded as observations or findings.
- All audit findings for non-compliance or non-adherence must be verified.
- Ensure that findings are supported by evidence and documented in a clear and concise manner.

5.3.9 Entry Meeting

Lead Auditor should conduct the entry meeting in the first day before the audit is started. During the entry meeting it is required to;

- Introduce the Audit Team to the Audit tee.
- Explain scope and objectives of the Safety Audit.
- review of programme & resolve queries
- Confirm the Audit standards / Confidentiality.
- Explain the corrective action process.
- Check administrative Arrangements. I
- Confirm the format /date/ time of the exit meeting

5.3.10 Documentation review

During the documentation review the auditors should;

- Ensure required documents are available, updated and accessible.
- Examine Centre Logbooks and Records for reports on:

    - equipment un serviceability
    - abnormal reports
    - animal hazards

5.3.11 On-site observation

During on site observations remember to Check

- work practices
- Staff Requirements
- Control Centre discipline

Gather information through interview of Watch Supervisors and Controller / Working staff

5.3.12 Evidence Gathering

Audit team must always verify audit tee's response during interview by gathering documentary and physical evidence. Objective evidence should be used to confirm of refute what has been said by the audit tee or actually practiced by operational staff. It is important not to accept what is said at face value, always ask for verification of spoken claims.

5.3.13 Confirmation Request Form (CRF)

The CRF is an effective audit tool in the following cases

- Where evidence indicates an audit finding, the audit tee will be given the opportunity to show otherwise.
- The auditor will determine the course of action to be adapted based on the audit tee's response to CRF.
- The auditor will observe the state of the audit tee's company record management system from the audit tee's point of view.
- Arbitrary audit findings based on subjective examples will be eliminated.
- The audit tee will not be surprised at the end of the audit as all contentious issues have been discussed openly during the physical audit.
- The auditor can concentrate on auditing rather than on researching audit tee's files and records.

The CRF will be sent to the team leader or a delegate of the audit tee at the outset to avoid untimely surprises. The format of the CRF will be decided by the Team Leader. . It may range from a simple title, time and date log to a file of photocopied duplicates. All CRFs will be issued sequentially to ensure that, upon completion of the physical audit, the CRFs have responses and appropriate action has been taken.

When the CRF has been returned and appropriate action taken, this material should be filed according to the appropriate audit area, allowing documentation relating to high-profile items to be maintained for later reference.

5.3.14 Audit Finding Form

Audit Finding Forms must be completed accurately as they form the basis of the audit report and a successful audit.

Since a number of team members will be completing audit finding forms, it is important follow a standard method to input data into the form to reduce number of data entry errors.

All supporting documentation will be included with the completed audit finding forms for review by the lead auditor.

All hand-written copies of audit finding forms will be filed according to functional area and will form part of the supporting documentation in the audit report for easy reference.

Definitions of Audit Findings

- Non-Compliance:
  An audit finding that identifies areas where ICAO SARPs are not implemented

- Non-Adherence:
  An audit finding that identifies areas where standards and procedures as specified in the concerned Manual and related documents are not applied or not applied correctly.

- Observations:

  An area which, in the audit team's views could improve efficiency and/ or generate an improved safety outcome and which the audit tee should note and address.

5.3.15 Exit Meeting

At the end of the audit the Lead auditor should convene a exit meeting with the audit tee (Head of the Section) during the exit meeting the Lead auditor should:

- Brief the audit tee on the audit findings of the unit's safety oversight activities.
- Provide information on the findings and recommendations that would be included in the final audit report.
- Allow audit findings to be discussed or even challenged.
- Be prepared to modify or even withdraw certain audit findings should there be reasonable grounds to do so.
- When the audit tee agrees with the audit team's findings, corrective actions must be taken to address the issues.

- Agree on a time-frame for the unit to come up with a corrective action plan to resolve the findings.

5.3.16 Audit Report

The audit report is an objective reflection of the results of safety audit. It provides information on the status of implementation of ICAO SARPs, standards, procedures and practices contained in the Manual of MET. The report would also serve to identify the need to initiate corrective actions on deficiencies identified in the MET system during the audit.

The Lead Auditor should prepare the Final Audit report in consultation with audit team members and should be sent to the audit tee within 30 working days after the end of safety audit. Primary objective of submitting the report is to enhance safety in Air Navigation Services (MET).

5.3.17 Post audit follow-up

The purpose of post audit follow-up is to validate the effective implementation of the corrective action plan submitted by the audit tee. The audit tee should complete Audit follow-up reporting forms for each finding and submit within the agreed period.

5.3.18 closing of safety audit

The safety audit would be completed when;
the final report has been published and accepted

- an action plan to address deficiencies and/or non-standard practices has been completed
- The deficiencies and non-standard practices have been closed by Lead Auditor

APPENDDIX –A

MET INSPECTION CHECKLIST

Civil Aviation Authority, Bangladesh
Headquarters, Kurmitola, Dhaka
Directorate of Flight Safety and Regulation

Unit Inspected:	
Dates of Inspection:	
Time of Inspection:	
Name of Inspector(s):	

Following abbreviations indicate observations as shown:
S = Satisfactory; P = Poor and Improvements required; U = Unsatisfactory; N = Not Checked. (Extra paper to be used if required for putting comments, with appropriate reference number according to the Area of Inspection.)

Ref: No.	Area of Inspection	Observations				Comments
1.	PERSONNEL	S	P	U	N	
1.1	Is minimum number of staff available in the unit?					
1.2	Are all positions manned?					
1.3	Are all staffs properly trained?					
1.4	Are the Aerodrome Meteorological Observation staff qualified and trained according to the WMO guideline for qualifications and training of Meteorological Assistants?					
1.5	Does the training program include re-current and refresher training?					
2.	PROCEDURES					
2.1	Are meteorological procedures available / up dated timely with regard to : i.METAR ii.SPECI iii.TAF iv. Aviation Warning					
2.2	Are Meteorological information promptly supplied to concerned ATS units ?					
2.3	Are the routine MET observations and reports being made at prescribed intervals					

2.4	Are the Meteorological reports being issued in accordance with the format prescribed in WMO?					
2.5	Do the Aerodrome MET Office displays the available Meteorological information?					
2.6	Has BMD made available Technical Handbook of Meteorological equipment / systems to its Technical Officers?					
2.7	Are incidents, malfunctions of MET Equipment, Suggestions and Log Book being maintained and examined regularly?					
2.8	Does the Technical Handbook contain the followings items: a. Daily check b. Weekly check c. Monthly check d. Bi- annual check e Annual check					
2.9	Has BMD developed and planned for schedule maintenance and calibration of its MET equipment, for forecasting systems and associated facilities?					
2.10	Has the scheduled maintenance plan been implemented?					
2.11	Have the previous recommendations issued by the ANS Inspectorate Division been implemented?					
2.12	Are the following updated documents available in the centre? i.Annex-3 ii. Documents iii. WMO. Manuals iv. Job descriptions of Officers/ Staff in each position to the centre. v. Procedures and local instructions vi. All updated charts relevant to the centre vii. Technical publications, procedures and guide lines, etc.					

3.	WORK ENVIRONMENT					
3.1	Do the Inspectors ensure that the following items are at an acceptable? i. Ambient lighting ii. Ambient temperature iii. Noise level iv. Exterior glare					
3.2	Whether adequate rest facilities are available for the staff?					
3.3	Do the telecommunication facilities exist between Meteorological Offices and as necessary between Aeronautical Meteorological Stations : i. Aerodrome Control Tower ii. Approach Control Centre iii. Approach Control Centre (Radar) iv. Area Control Centre v. Area Control Centre (Radar) vi. Rescue Co Ordination Centre vii. Airline Operators, etc.					
4.	EQUIPMENT					
4.1	Do the locations of the wind sensors are in proper positions in relation to the Runway?					
4.2	Do MET Briefing; Consultation, Flight Documentations to Flight Crew members/other operators are made available by MET Officials?					
4.3	Whether any defects observed in Meteorological Equipment.					
4.4	Does operational staff take action to notify appropriate officer regarding unserviceabilities?					
4.5	Has BMD made available sufficient spares and /or make arrangements for immediate delivery to its Technical Staff for timely maintenance of its Equipment?					.
4.6	Has BMD developed job description for its Technical Officials engaged in the maintenance, calibration, and installations of its Equipments?					

5. Recommendations:

6. Signature of the Inspectors:

ATTACHMENT-A

CIVIL AVIATION AUTHORITY, BANGLADESH
SAFETY OVERSIGHT AUDIT /INSPECTION FEED BACK FORM,
FS & R DIVISION.

Please return this form duly completed to Director /FS&R of Civil Aviation Authority, Bangladesh in a sealed envelope marked confidential.

Name of the unit: ---------- Date: ----------

The purpose of this feedback form is to provide for continuous improvement of the Safety Oversight Audit/Inspection programme of Civil Aviation Authority, Bangladesh by gathering feedback from Service Providers on the Civil Aviation Authority, Bangladesh Safety oversight audit /inspection process.

Part I of the questionnaire addresses pre-audit /inspection activities beginning with the official notification of the audit /inspection dates and on- site activities, including the conduct of the audit / inspection through the closing meeting.

Part: II of the questionnaire addresses the audit / inspection report production process up to the publication of the Final Safety Oversight Audit/Inspection Report. This portion should be completed after the Final Report has been received by the service Provider.

This form constitutes part of the internal quality assurance programme of the Safety Audit / Inspections. The information provided by each Service Provider will primarily be used to improve the Safety Oversight Audit /Inspection process.

PART I
PRE- AUDIT ACTIVITIES

1.1 **Communications:**

1.1.2 Was the letter in which the schedule for the on –site audit /inspection received in time to enable the unit/ office to plan and prepare for the audit /inspection prior to the arrival of the audit/Inspection team?

 Yes No

Comments:

1.1.2 Were other communications and correspondence relating to the safety oversight audit/inspection, which were sent by DFS&R prior to the conduct of the on-site audit /inspection, clear and timely?

 Yes No

Comments:

1.1.3 Did you, at any time, encounter any difficulties in communicating with DFS&R during the pre- audit phase of the processes?

 Yes No

Comments:

1.1.4 Did you request any assistance from DFS&R, and if so, were you able to get the required assistance at any time during the pre- audit phase?

 Yes No

Comments:

1.1.5 Was information relating to the on –site audit /inspection , such as the draft work plan and work program, the list of auditors /inspectors and other pertinent documentation, received in time to enable your office / unit to respond to the information prior to conduct of the on-site audit/inspection ?

 Yes No

Comments:

1.2 On- Site Audit Activities

1.2.1. Briefings

Was the briefing provided during the audit / inspection opening meeting clear to understand and useful for the conduct of the on –site audit –inspection?

 Yes No

Comments:

1.2.2 Where the objectives of the on –site audit /inspection and the impending activities of the audit/inspection team and the ANS-DFS&R clearly explained?

 Yes No

Comments:

1.2.3 During the closing meeting were you provided with a debriefing of the draft findings for each technical area in a clear and concise manner?

 Yes No

Comments:

1.2.4 Where the actions to be taken by you and by ANS-DFS&R following the safety oversight audit/inspection clearly explained during the audit closing meeting?

 Yes No

Comments:

1.2.5 In your opinion, are there any items which you believe should be covered either during the audit/inspection opening meeting or the closing meeting?

 Yes No

If" yes ", please list them below.

Suggestion for items to be included in the briefings made by ANS-DFS&R audit/inspection terms:

1.2.6 In your opinion, was the on –site audit/inspection conducted in accordance with the specific safety oversight audit/inspection plan and audit/inspection program agreed upon?

 Yes No

Comments:

1.2.7 In your opinion, was the on-site audit/inspection conducted in accordance with the auditing police principles and guidelines contained in the ANO-did inspectors handbook, and explained during the opening meeting?

 Yes No

Comments:

1.2.8 In your opinion, did the draft findings and recommendations provided at the end of the audit/inspection Closing meeting reflect fair presentation, due professional care and independence on the the auditors /inspectors, and were they fully based on the evidence presented?

Closing meeting reflect fair presentation, due professional care and independence on the the auditors /inspectors, and were they fully based on the evidence presented?

Yes No

Comments:

1.2.9 Where there any incidents during the conduct of the on –site audit/inspection which require intervention to resolve differences and /or misunderstandings between the members of the audit /inspection team and location?

 Yes No

If yes, kindly describe the incident briefly and explain how it was handled

1.3 **General Comments**

1.3.1 What is your overall impression on the preparation, planning and conduct of the safety oversight audit/inspection just completed?

1.3.2 Are there any areas or elements on which you would like to comment to provide suggestions in order to improve the overall audit/inspection process? Please be as specific as possible.

We would like to take this opportunity to thank you for your cooperation, and also to express our sincere appreciation to you and your officials for the continued support of the Civil Aviation Authority, Bangladesh's safety oversight system/program.

| --- | --- | --- |
| Title (Team Leader) | Signature | Date |

PART II
POST AUDIT / INSPECTION ACTIVITIES

2.1 Report production process:

2.1.1 Did the audit /inspection interim report present the findings and recommendations in a clear manner to allow you to develop an effective Corrective Action Plan (CAP)?

 Yes No

Comments:

2.1.2 Did the final audit /inspection report provide information on the level of your capability for the provision of air navigation services and safety management as assessed by the audit/inspection team and based on the level of effective implementation of the applicable aviation legislation, Rules, Regulations, Air Navigation Orders, Safety Directives/Circulars, and Standards?

 Yes No

Comments:

2.1.3 Where the comments provided by your officials satisfactorily incorporated into the final audit/inspection report?

 Yes No

Comments:

2.1.4 Was the assessment of the Corrective Action Plan (CAP) provided helpful?

 Yes No

Comments:

2.1.5 Where you given every opportunity to comment and respond to the interim Safety Oversight Audit/inspection Report and Final Safety Oversight Audit/inspection Report within the established timeframes ?

☐ Yes ☐ No

Comments:

2.1.6 Where the interim Safety Oversight Audit/ inspection Report and Final Safety Oversight Audit/inspection Report submitted by ANS-DFS&R team within the established timelines?

☐ Yes ☐ No

Comments:

We would like to take this opportunity to thank you for your cooperation, and also to express our sincere appreciation to you and your officials for the continued support of the Civil Aviation Authority, Bangladesh Regulatory Oversight Program.

| --- | --- | --- |
| **Title (Team Leader)** | **Signature** | **Date** |