CIVIL AVIATION AUTHORITY OF BANGLADESH

ANS Inspectors Handbook

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RECORDS OF AMENDMENTS

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FOREWORD

Bangladesh as a contracting state to the convention of International Civil Aviation has an obligation to the International community to ensure that Civil Aviation activities under its jurisdiction are carried out compliance with the Standards and Recommended Practices contained in the Annexes to the convention on International Civil Aviation in order to maintain the required standards to meet the requirement of Universal Safety Audit Programme. This manual referred to as ANS INSPECTOR'S HANDBOOK has been prepared for the use and guidance of ANS Inspectors of Flight Safety and Regulation Division to dispose of their duties effectively.

It is emphasized that all matters pertaining to an Inspector's duties and responsibilities cannot be covered in this Handbook. Keeping in mind the standards prescribed in Air Navigation Orders on the respective field, state policies, and local orders ANS Inspectors are expected to use their good judgment in matters where specific guidance has not been given.

It will be worth mentioning that the First edition of ANS (ATS/AIS/PANS-OPS/CNS/SAR) Inspector's Handbook dated 26 April 2009 will be substituted by this ANS Inspector's Handbook, version 2.

This manual shall have immediate effect.

Air Vice Marshal Ehsanul Gani Choudhury
GUP, ndu, psc
Chairman
Civil Aviation Authority of Bangladesh

Readers should forward advice of errors, inconsistencies or suggestions for improvement to this Manual to the addressee stipulated below.

Director (Flight Safety & Regulations/ANS Inspection)
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GLOSSARY OF ABBREVIATIONS/ACRONYMS

AFTN	:	Aeronautical Fixed Telecommunication Network
AMHS	:	ATS Message Handling System
ANO	:	Air Navigation Order
ANP	:	Air Navigation Plan
ATN	:	Aeronautical Telecommunication Network
ATS	:	Air Traffic Service
CAAB	:	Civil Aviation Authority, Bangladesh
CARs	:	Civil Aviation Rules
CATC	:	Civil Aviation Training Centre
CNS	:	Communication Navigation and Surveillance
CVOR	:	Conventional Very High Frequency Omni Range
DME	:	Distance Measuring Equipment
DVOR	:	Doppler Very High Frequency Omni Range
HQCAAB	:	Headquarters Civil Aviation Authority, Bangladesh
ICAO	:	International Civil Aviation Organization
ILS	:	Instrument Landing System
ISO	:	International Organization for Standardization
JDs	:	Job Description
NDB	:	Non Directional Beacon
NOTAM	:	Notice to Airmen
OEM	:	Original Equipment Manufacturer
OJT	:	On Job Training
SARPS	:	Standard and Recommended Practices
SOP	:	Standard Operating Procedure
SSR	:	Secondary Surveillance Radar
UHF	:	Ultra High Frequency
VHF	:	Very High Frequency

CHAPTER 1

DEFINITIONS

The following terms when used in this Handbook have the meanings assigned to them respectively. Any terms used in this document but not defined herein shall have the same meaning as given in the Civil Aviation Ordinance 1960, Civil Aviation Rules 1984, Civil Aviation Ordinance 1985 (CAA Act 2016) and relevant Air Navigation Orders.

Air Navigation Service: Service provided to air traffic during all phases of operations including Air Traffic Management (ATM), Communication, Navigation and Surveillance (CNS), Meteorological Services for air navigation (MET), Search and Rescue (SAR) and Aeronautical Information Services (AIS).

Approval: The formal act of approving a change submitted by a requesting organization. This action is required prior to the proposed change being implemented.

Assessment: An evaluation based on engineering, operational judgment and/or analysis methods or an appraisal of procedures or operations based largely on experience and professional judgment

ATM Service: A service for the purpose of Air Traffic Management

Closing Meeting: A meeting of the inspection team and the representatives of the service provider at the end of the inspection, the purpose of which is to provide the service provider authorities with preliminary information on inspection findings and proposed recommendations to enable the service provider to start working on its corrective action plan.

Conformance: The state of meeting the requirements of a Standard.

Corrective action: Action to eliminate the cause of a detected non-conformity or noncompliance or other undesirable situation.

Note: - *Corrective action does not mean the action taken to restore a non-conforming situation to a conforming situation. This is known as remedial action. If the root cause of non-conformity is not addressed then it is very likely that similar non-conformities will recur)*

Corrective Action Plan: An action plan submitted to CAA by an audited/inspected Service Provider, detailing the proposed action the service provider to resolve identified deficiencies (safety concerns), on the basis of recommendations made by an audit/inspection team. Implementation of the corrective action plan should bring the service provider into full compliance with the provisions of the National Rules/Regulations, conformance with or adherence to prescribed Standards and Recommended Practices (SARPs), procedures and good aviation safety practices.

Deficiency: Lacking of something essential, imperfect, defective and if such hazards allowed to exist within a system, result in a system deficiency.

Event: Any incident that occurs or a situation arises at a particular place during a particular interval of time.

Hazard: Conditions, object or activity with the potential of causing injuries to personnel, damage to equipment or structures, loss of material, or reduction of ability to perform a prescribed function.

Hazard Identification: The process of determining what can happen, why and how.

Human Factor: The factor pertaining to human's capabilities, limitations, and behaviors and its integration into the design of a system to enhance the safety performance.

Human Performance: Human capabilities and performance limitations which have an impact on the safety and efficiency of aeronautical operations.

Incident: An occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operation.

Inspection: The basic activity of an audit, which involves examination of the specific characteristics of the safety oversight programme/function.

Inspection Activities: Those activities and procedures by which information is obtained in order to verify that the inspected location/airport is in conformance with, or adherence to, applicable Standards and Recommended Practices (SARPs), described in Civil Aviation Ordinance 1960, Civil Aviation Rules 1984, Civil Aviation Ordinance 1985, relevant Air Navigation Orders and CNS Inspectors Hand Book. Such activities may include, but are not limited to, interviews, observations, inspections, and the review of files and documents.

Inspection Report: A standardized means of reporting the inspection findings to the designated authorities.

Inspector: A person trained and authorized to undertake oversight inspections/audits.

Monitoring: The processes to check, supervise, observe critically, or record the progress of an activity/function or system on a regular basis in order to identify change

Non-adherence: A deficiency in characteristic, documentation or procedure with respect to a Recommended Practice, procedure, guideline or good aviation safety practice.

Non-compliance: A deficiency in characteristic, documentation or procedure with respect to provisions of the Chicago Convention or a national regulation.

Non-conformance: A deficiency in characteristic, documentation or procedure with respect to an ICAO Standard.

Opening meeting: A meeting of the inspection team and the representatives of the Service provider to be audited/inspected before the commencement of the inspection the purpose of which is to provide the Authorities with information on the audit/inspection process and the scope of the audit/inspection.

Operations Manual: A manual containing procedures, instructions and guidance, for use by the operational personnel in the execution of their duties.

Recommendation: Those controls that have the potential to mitigate a hazard or risk but have not yet been validated as a part of the system or its requirements.

Regulation: The giving of authoritative direction to bring about and maintain a desired degree of order

Safety: Safety is the state in which the risk of harm to persons or of property damage is reduced to, and maintained at or below, an acceptable level through a continuing process of hazard identification and risk management. Safety may also be defined: as a condition in which the risk of harm or damage is limited to an acceptable level.

Safety Directive (SD): A mandate from the Authority/DGCAA (Regulator) to Service Provider(s)/Operator(s) to take immediate corrective action to address a noncompliance/ non-conformance issue that creates a significant unsafe condition.

Safety Circular (SC): A guidance and/or information from the Director General /Regulator for Service Provider(s) and Operator(s), necessary to take appropriate measures regarding safety-related issue(s).

Standard Operating Procedure (SOP): A written procedure prescribed for repetitive use as a practice, in accordance with agreed upon specifications aimed at obtaining a desired outcome.

Safety Oversight: A function by means of which the Authority ensures effective implementation of the National Aviation Legislation, Rules, safety-related Standards and Recommended Practices (SARPs) and associated procedures prescribed in the Air Navigation Orders/Manuals/Directives including amendments thereto; to meet the obligations as contained in the Annexes to the Convention on international Civil Aviation and related ICAO documents. Safety oversight also ensures that the national aviation industry provides a safety level equal to, or better than, that defined by the SARPs.

CHAPTECR 2

INTRODUCTION

2.1 GENERAL

The Directorate of Flight Safety and Regulations of the Civil Aviation Authority, Bangladesh (CAAB) is responsible for the safety oversight functions in the field of Air Navigation Services (ANS). This ANS INSPECTORS' HANDBOOK primarily deals with job and responsibilities of ANS Inspectors. ANS inspectors have been appointed by the Chairman CAAB and will carry out their duties as per the policies laid down in this handbook/manual. The Inspectors shall oversight all aspects of ANS concerning services, procedures, methods and functions of ANS service provider and their applicability in accordance with CARs, relevant ANOs, Advisory Circulars, Manuals, directives and related documents.

2.2 STATUTORY AUTHIRITY

ANS Inspectors are appointed and authorized by the Chairman of CAAB to carry out all required Safety Oversight functions in the fields of ANS.

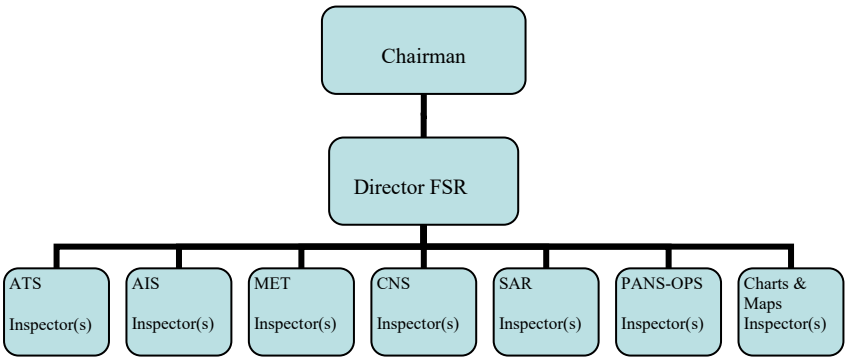
2.3 STAFF REQUIREMENT

Director (FSR) shall make available a sufficient number of Inspectors and trade staff, as per work load requirement, enabling them to carry out oversight inspection of all installations of ANS Equipment & procedures, with qualification, experience & knowledge in related field as elaborated in Job Description.

Based on the volume and activities relating to the safety oversight of the seven fields of ANS, it is considered that two inspectors in each field are adequate to conduct the safety oversight functions.

2.4 POSITION OF ANS INSPECTORS IN ORGANIZATION

The following chart shows each position of the ANS inspectors in the organization of CAAB.



Current Organizational Set-up

Approved **Organization Structure of ANS Inspectorate**
by the Ministry of Public Administration, the Government of People's Republic of Bangladesh

2.5 FUNCTIONS AND RESPONSIBILITIES OFANS INSPECTORATE

The ANS Inspectorate in FSR Division has the mandate:

a. To provide regulatory and safety oversight of ANS service providers. Such oversight is conducted through scheduled and non-scheduled audits and inspections of ANS facilities and equipment.

b. To monitor of the national ANS services safety oversight; risk management processes; and contributing to the development of national/international ANS regulations, standards, policies and practices.

c. To provide assistance to the locations and respective branches regarding explanation of ICAO standards/recommendation/guidance materials pertaining to ANS. This includes preparation of necessary ANOs, evaluation of SOPs/Manuals/TOs etc developed by the service providers before implementation.

d. To monitor the ANS Service Provider operations;

e. To monitor the training and Experience of technical staff deployed by service providers to install, maintain and operate ANS Systems.

f. To evaluate & process the requests from ANS service providers such for exemptions from prescribed standards and recommended practices;

g. To provide operational guidance and interpretations to concerned directorate regarding the application of Standards and Recommended Practices of ANOs, CARs, Annexes and documents of ICAO.

h. To establish and conduct the safety oversight audit and inspection program for ANS systems and procedures to verify compliance with CARs, ANOs and related Annexes and documents of ICAO.

i. To study aviation related occurrence data, analyzing trends, identifying risk indicators, assessing risk and recommending control measures for the provision of safe ANS systems.

j. To provide subject matter expertise to HQ and Service providers, in addition to outside agencies, organizations in general; and

k. To ensure availability of protected aeronautical radio spectrum free from harmful interference for the safe operation of civil aviation.

CHAPTER 3

JOB DESCRIPTION

3.1 Position of ANS Inspectors

Name of the Office	HQs Civil Aviation Authority,Bangladesh
Title/Position	ANS Inspector
Service	Technical
Group	ANS
Sub Group	ATS, AIS, MET, CNS, SAR, PANS-OPS & CHARTS AND MAPS.
Directorate	Flight Safety and Regulations
Reporting Officer	Director, Flight Safety and Regulations

3.2 Job Description: Director (Flight Safety and Regulation/Calibration Pilot)

3.2.1 Job Summary: Director (Flight Safety and Regulations) is responsible for -

a) Planning, Organizing, Leading and Controlling all the activities and functions of Technical Standards Branch pertaining to ANS.

b) Supervising the oversight functions being performed by ANS Inspectorate staffs

c) Keeping close coordination with the concerned Directorates & locations across Bangladesh for the elimination of deficiencies being identified during inspections.

3.2.1.1 Primary Responsibilities:

a) Administration of the Division.

b) To ensure proper manning and readily availability of resources for the man-power (Officers and their staff) of the Inspectorates for their optimum performance.

c) To regulate work load of the deployed man power under control of Director FSR and to advise Chairman, CAAB on issues such as revision/amendment of Organogram.

d) To ensure maximum safety for all Bangladesh registered Aircraft and their passengers and crew through the examination, testing and licensing of aircrew and aircraft maintenance personnel and the approval of aircraft operators operational procedures and maintenance methods and by check and control, maximum safety for all users of Bangladesh airspace.

e) To provide for the economic regulation of Air Transport, the licensing and authorization of Air Service, the implementation of the Air Law conventions and the facilitation of Air Transport in accordance with Annex-9.

f) To examine documents submitted by other countries in regard to bilateral Air Services Agreements, negotiations and prepare brief for the Government.

g) To provide liaison with Aviation International Organizations including the ICAO, IATA. CATC, IFALP and such other organizations with whom liaison services may from time to time be required.

h) To form the Standards for CAA Bangladesh in the field of ANS in the form of Operating Regulations, ANOs or any other document.

i) To ensure updating and implementation of the devised Standards and to make sure that the standards formed in the form of Operating Regulations, ANOs or any other document must be in line with ICAO SARPs.

j) To update Chairman, CAAB on performance of ANS Inspectorates and to discuss and resolve any issues relating to functioning of the Inspectorates.

k) To plan visits of Inspectors for the oversight function and ensure submission of reports to concerned quarters giving a suitable time line for removal of deficiencies.

l) To perform random checks /surprise visits of locations as part of oversight function to authenticate the steps being taken by location for removal of deficiencies.

m) To explore and make arrangement for training of inspectors working in ANS Inspectorates and ensure implementation of training program.

n) To ensure implementation of relevant directives and policy decision of CAAB HQ..

o) To assume any other responsibility that may contribute in the performance enhancement of ANS Inspectorate.

p) To suggest and prepare the Civil Aviation Rules of Bangladesh.

3.2.1.2 Additional Duties

Any additional duties assigned by Authority from time to time.

3.2.1.3 Knowledge and Skills: Personal Characteristics

a) Ambitious for high achievement and capable for performance various management functions.

b) Motivator for Team Members and always eager to create win-win situation for his team. Always respect and make others to respect team's values.

c) Take the opportunity to teach and empower other team members.

d) Focused and task oriented.

e) A good listener and proactive in dealing with issues.

f) Be vigilant and give proper feedback as and when required.

g) The ability to establish connections with people.

h) High level of integrity, motivation, and drive to have better results.

i) Good analytical and interpersonal skills.

j) Strong administrative skills such as decision making, organizing, and planning.

k) Shows Sympathetic behaviors towards team.

3.2.1.4 Experience

As per Bangladesh Gazette, Additional, December 22, 1988. Schedule {Ref. Organogram 2(Cha)}. Serial no.5.

3.2.1.5 Educational Qualifications

As per Bangladesh Gazette, Additional, December 22, 1988. Schedule {Ref. Organogram 2(Cha)}. Serial no.5.

3.2.2 Working Conditions

Normal office working conditions as prescribed by the authority. It is the responsibility of the Management to provide with resources to expect optimum output. Work may require frequent traveling for purpose of inspections of ANS facilities and equipment across the country.

3.3 Duties and Responsibilities of ANS Inspectors

The ANS Inspectors shall-

a) Prepare inspection schedules and conduct periodic inspections of ANS facilities at various airports and en-route stations to ensure the performance and maintenance of the ANS facilities are satisfactory and meet the national requirements and standards stipulated in CARs and other such documents as mentioned in chapter-4.

b) Conduct inspections and prepare reports fairly, truthfully and accurately with due professional care applying diligence and judgment. They shall remain impartial and objective with an evidence-based systematic process to reach reliable conclusions.

c) Prepare inspection report and highlight the deficiencies, if any, and approve the corrective action plan submitted by the ANSPs.

d) Report deficiencies, noted during audit, to service provider for remedial action.

e) Carry out the following oversight function in the respective field:

(i) To ensure ANS service providers adopted policies and procedures on human factors principle experienced, qualified and having the capabilities to accomplish the wide range of safety oversight activities.

(ii) To ensure ANS service providers has developed policy and procedures for determining the capacity of ANS system, including the number of staff required to ensure the provision of an adequate ANS system.

(iii) To ensure ANS service providers has developed training program including refresher training for ANS staff.

(iv)To ensure that training records or files for its ANS staff are maintained.

(v) To ensure procedure, developed by ANS service providers, for continued competency of ANS staff in new ANS equipments, procedures and updated relevant procedures is in place.

Also, the ANS inspectors will-

- Update the Inspector handbook and other CAAB guidance material from time to time for compliance with ICAO Annexes & Documents (if required). The update process will be according to relevant CAAB procedure.

- Examine and analyze the operational manuals, instructions, circulars and similar documents prepared or issued by the ANSPs that affect the performance and maintenance facilities and services of ANSP.

- Guide actively and assist the ANS stations in preparing and developing documents, such as operational manuals and procedures.

- Follow-up the corrective action plan as agreed by the service providers to mitigate/eliminate the deficiencies as long as the case is not closed.

- Participate in ANS related training, meetings, seminars, workshops and symposiums at home and abroad.

- Develop, implement training programs and keep records of training for ANS inspectors.

- Keep records and maintain files as follows:

  (i) ***Inspector's personal file.*** ANS inspectors will maintain individual personal file for keeping his/her personal information, service records and training records etc.

  (ii) ***ANS station file.*** ANS inspectors will maintain separate files for each station regarding its inspection, observation/ recommendations and follow ups and time line for corrective actions.

- Carry out any other duties as assigned by the Authority from time to time.

The **Function and Responsibilities** of ANS Inspectors of each area are described in **Appendix 28**.

3.4 Qualifications of ANS Inspectors

3.4.1 Minimum Educational Qualification:

Minimum Bachelor of Science/Engineering.

3.4.2 Additional Qualifications and Experiences of ANS Inspectors.

3.4.2.1 ANS Inspector (ATM)

An ANS Inspector (ATM) will be required to have the following qualifications and professional experience:

a) Minimum 05 (five) years of experience in Air Traffic Control duties.

b) Successful completion of audit/ ATM Inspection course from an approved institution.

c) Possess adequate knowledge of aviation Law and experience in ATM procedures/practices, personnel licensing/ training, procedure designing.

d) Possess training in SMS in ATM, USOAP, and CNS/ATM system.

e) Possess good analytical ability; good inter personnel skills, flexibility of approach and some auditing experience.

f) Good verbal and writing skills in English, proficiency in preparing manuals and documents, and skills in operating computers.

g) Knowledge of Human Factors involved in ATM.

h) Knowledge of State Safety Program & ICAO Safety Audit Program.

i) At least one Inspector in the team shall have or be having previous Radar rating.

3.4.2.2 ANS Inspector (AIS):

An AIS inspector will be required to have the following qualifications and professional experience:

a) Trained in AIS basic/advance course.

b) Experienced and competent in AIS field.

c) Wide knowledge in ATS, CNS Engineering and Com Ops field.

d) At least 05 (five) years of job experience in ATM/Com operations/Cartography.

e) Adequate knowledge of ICAO Annex-4, Annex-15 and Doc 8126, Doc 8697, Doc 9881 and Doc 9674.

f) Knowledge of Civil Aviation Ordinances, CAAB 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 AIS.

j) Knowledge of Quality Management System.

k) Knowledge of Cartography, Geography, Geodesy and Surveying.

l) Knowledge of Geographic Information System and remote sensing.

3.4.2.3 ANS Inspector (MET)

A MET inspector will be required to have the following qualifications and professional experience:

a) Minimum 05 (five) years of experience in Air Traffic Control duties or Meteorological operational duties having training on MET Basic/Advance Course.

b) Wide knowledge and experience/competent in Aviation Meteorology field.

c) Adequate knowledge in ICAO Annex-3 and relevant documents.

d) Knowledge of Civil Aviation Ordinance, Civil Aviation Authority, Bangladesh Rules and Regulations.

e) Knowledge of State Safety Program, Safety Management System and ICAO Safety Audit Program.

f) Knowledge of Human Factors involved in Aviation Meteorology.

g) Knowledge of Quality Management System.

3.4.2.4 ANS Inspector (CNS):

A CNS inspector will be required to have the following qualifications and professional experience:

a) Certificate in Basic CNS Engineering Course from a recognized Training Institute.

b) Knowledge and expertise in the field of operations & maintenance of CNS facilities and a minimum of 05 (five) years of professional working experience.

c) Good verbal and writing skills in English, proficiency in preparing manuals and documents, and skills in operating computers and word processing.

d) Adequate knowledge in CNS related national rules and regulations, Air Navigation Orders, ICAO SARPs and other relevant documents.

e) Knowledge in State Safety Program (SSP), Safety Management System (SMS) and ICAO Safety Audit Program.

f) Personality to win the respect and confidence of the ANSP. This would require a reasonable level of tact, understanding, firmness, impartiality, integrity and an exemplary personal conduct both in the office and at the ANSP's premises.

3.4.2.5 ANS Inspector (SAR):

A SAR inspector will be required to have the following qualifications and professional experience:

a) Minimum 05(five) years of experience in Air Traffic Control duties.

b) Successfully completed SAR inspection course from an approved institution.

c) Possess adequate knowledge of SAR procedure and experienced in SAR through practical field/practices.

d) Knowledge of Civil Aviation Ordinance, Civil Aviation Authority, Bangladesh Rules and Regulations.

e) Possess good analytical ability; good inter personnel skills, flexibility of approach, some auditing experience and dynamic personality.

f) Good verbal and writing skills in English, proficiency in preparing manuals and documents, and skills in operating computers.

g) Knowledge of State Safety Program, Safety Management System and ICAO Safety Audit Program.

3.4.2.6 ANS Inspector (PANS-OPS)

A PANS-OPS Inspector will be required to have the following qualifications and professional experience:

a) Have passed Basic Course in ATC.

b) Possess basic/advance training including refresher course in PANS-OPS.

c) Successful completion of PANS-OPS inspection course and refresher course.

d) Possess adequate knowledge of aviation Law and experience in PANS-OPS procedures/practices, personnel licensing/ training, procedure designing.

e) Analytical ability, good inter personnel skill, flexibility of approach and some safety oversight experience.

f) Good verbal and writing skills in English, proficiency in preparing manuals and documents, and skills in operating computers.

3.4.2.7 ANS Inspector (Charts & Maps)

A Charts & Maps inspector will be required to have the following qualifications and professional experience:

a) Passed Cartography basic/advance course or having Cartography as one of the principle subject in B.Sc/M.Sc or minimum of 05 (five) years of experience as an Air Traffic Controller.

b) Experienced/Wide Knowledge and competent in Cartography field and designing.

c) Adequate knowledge of ICAO Annex-4 and relevant documents.

d) Knowledge of Civil Aviation Ordinances, CAAB Rules and regulations.

e) Adequate knowledge of State Safety Program and Safety Management System (SMS).

f) Knowledge of ICAO Safety Audit Program.

g) Knowledge of Human Factors involved in Cartography.

h) Knowledge of Quality Management System in Cartography.

i) Possess adequate knowledge of Cartography procedure and experienced in Cartography through practical field/practices.

3.4.3 Inspector's Pre-Requisites:

Inspectors should have:

a) Basic skills & knowledge required to participate as a team member in an inspection.

b) Ability to write an inspection report and findings accurately.

c) Ability to establish sound inspection follow-up practices, including post Inspection surveillance.

CHAPTER 4

INSPECTION PROCEDURES

Safety Regulatory Audit and Inspection

4.1 Introduction

4.1.1 ANS Inspectorate, Flight Safety and Regulatory (FSR) Division shall oversee the compliance of safety regulatory requirements and standards by the ANS providers through regular audits / inspections.

4.1.2 Audit and inspection are techniques employed by the Inspectorate to verify compliance with applicable safety regulatory requirements and standards by the ANS providers. Both of them are tools for evaluating the performance of the ANS providers with a view to ensuring ANS system safety.

4.1.3 In addition to routine audits/inspections, such activities may also be conducted consequent upon significant changes in the ANS provider's system or as a follow-up on corrective actions which have been imposed in previous audit/inspection.

4.2 Objectives of Regulatory Audits and Inspections

4.2.1 The objectives of safety regulatory audits/inspections are as follows:

a) The objectives of safety audit/inspections are:

(i) To observe and assess the Service Provider's adherence to standards and recommended practices related to Air Navigation Services (ANS) equipment, facilities and services described in Air Navigation Orders, National Aviation Legislation, Civil Aviation Rules, Manuals, and operating procedures, Directives and Advisory Circulars of CAAB, other related documents and to facilitate ICAO USOAP (CMA & ICVM).

(ii) Actual operational practices against stipulated procedures;

b) To determine the effectiveness of the procedures in place in meeting specified objectives;

c) To identify areas for improvement in terms of ANS system safety and integrity.

4.3 Differences between Regulatory Audits and Inspections

4.3.1 Major differences between a safety regulatory audit and an inspection are illustrated as follows:

Regulatory Audits	Regulatory Inspections
Apply to the overall arrangements, or elements thereof, of the ANS processes or services.	Apply to particular ANS service or specific parts of the ANS system.
Verify compliance of: - documented provisions and other established arrangements against safety regulatory requirements/standards, ICAO SARPs, CAAB rules/regulations; - actual operational practices against documented procedures and other established arrangements.	Verify by testing and/or examination whether prescriptive safety regulatory requirements/standards have effectively been complied with.
Focus special attention on processes with wider scope.	Focus normally on a particular element of ANS system with smaller scope.
Represent prime safety oversight technique.	May serve as an oversight technique supplementary to audits.
Usually conducted by a team of auditors in accordance with more comprehensive procedures.	May be conducted by one inspector in accordance with simpler procedures.

4.4 Audits/Inspections Conducted by ANS Regulator and ANS Providers

4.4.1 ANS regulator carries out various safety survey activities including audits/inspections on a regular basis as part of its regulatory function and as a means of proactive safety management.

4.4.2 ANS regulator periodically conducts safety audits/inspections on ANS system and services of the ANS providers, which may be referred to as “External” or “Third Party” audits/inspections, whereas the ANS providers carry out periodic “Internal” or “First Party” audits/inspections on its own system and services under the Safety Management System.

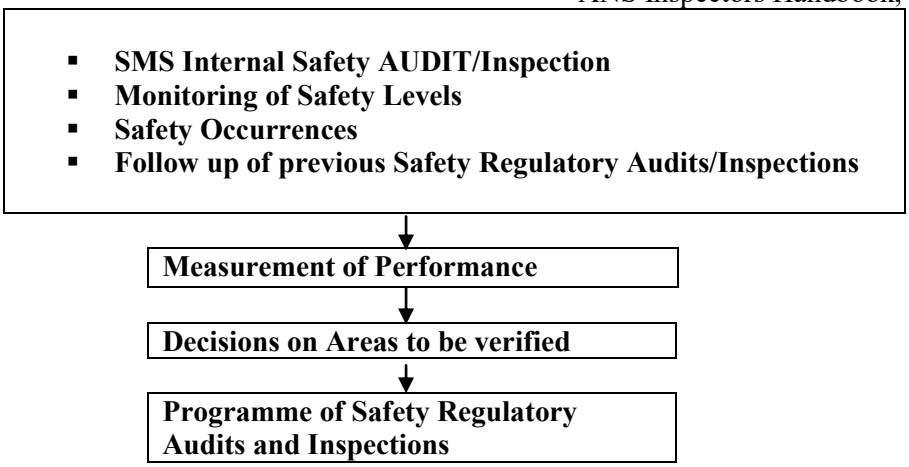
4.4.3 In respect of both “External” and “Internal” audits/inspections, the associated findings and recommendations, if any, shall be documented in reports and made known to the audited party in accordance with applicable audit/inspection protocols and procedures.

4.5 Safety Regulatory Audit and Inspection Programme

4.5.1 Annual Inspection/Audit Plan

4.5.1.1 ANS regulator programmes annual safety regulatory audit/inspection plan to cover all possible areas of safety concern, including arrangements to carry out safety audits, reviews or surveys by the ANS providers.

4.5.1.2 ANS regulator takes necessary steps, to programme safety regulatory audits/inspections as shown in the following diagram. It illustrates the logical flow in programming such activities:



4.5.1.3 Senior/Principle Inspector of ANS Inspectorate prepares an annual audit/inspection plan, by June each year, which may be updated when required. This annual plan shall be submitted to Director, FSR for endorsement.

4.5.1.4 Director, FSR ensures that the annual audit/inspection activities are appropriately prioritized and programmed in the annual plan.

4.5.1.5 Finally the annual plan and programme shall be submitted to Chairman, CAAB for administrative approval.

4.6 The role of Inspectors

The tasks to be undertaken by ANS inspection team member will be assigned by the team leader. These tasks may include conducting interviews with staff of the unit, section or division being inspected, reviewing documentation, observing operations, and writing material for the inspection report.

4.7 Planning and Preparation of Inspection

A formal notification of intention to perform the inspection should be forwarded to the ANSPs office to be inspected well in advance to provide adequate time for necessary preparations for the ANSPs office to be inspected. This notification should specify:

(a) The unit, section or division to be inspected;

(b) The authority under which the inspection is conducted;

(c) The proposed schedule;

(d) The overall purpose of the inspection and the scope of the topics to be discussed;

(e) The number and type of staff who may be required for interview, and the documentation which will need to be available to the inspection team: and

(f) The inspection team members.

4.8 Inspection steps

The inspection conducted by ANS Inspectors in the steps elaborated as per follows:

ANS Inspectors shall

a. Prepare inspection schedules and conduct periodic inspections of ANS procedures, equipment and facilities at least once in a year for International Airports and once in two years for other Airports.

b. Conduct inspections and prepare reports fairly, truthfully and accurately with due professional care applying diligence and judgment. They shall remain impartial and objective with an evidence-based systematic process to reach reliable conclusions.

c. Prepare inspection report and highlight the deficiencies (if any) along with suggested corrective actions to remove deficiencies and submit the same to Director (FSR) for approval.

d. Forward deficiencies noted to service provider(s) for submission of corrective action plan.

4.9 Oversight Functions

The following oversight functions will be covered during inspection in the respective fields:

ANS Inspectors shall ensure that the ANSP has-

a. Adopted policies and procedures on human factors principle deployed experienced, qualified and having the capabilities to accomplish the wide range of safety oversight activities.

b. Developed policy and procedures for determining the capacity of ANS system, including the number of staff required to ensure the provision of an adequate ANS system/service.

c. Developed the job description for its technical staff.

d. Developed training program including refresher training for ANS staff.

e. Maintained training records or files for its staff.

f. Developed required maintenance/operational SOPs' where applicable.

g. Maintained the corrective/preventive maintenance data of ANS equipments, where applicable.

h. Developed by ANS Service provider for continued competency of in new ANS equipment, procedures and updated communication procedure.

4.10 Stations to be inspected

ANS inspectors will carry out inspections and safety oversight functions at the following offices/stations:

(a) All the civil airports in Bangladesh,

(b) Central Engineering Maintenance and Store Unit (CEMSU) of CAAB (if applicable),

(c) Concerned Directorate at the Headquarter of CAAB, and

(d) Civil Aviation Training Centre, Dhaka (if applicable).

4.11 Governing documents

The activities of the ANS inspectors will be governed by the following rules, regulations and directives:-

(a) Civil Aviation Rules 1984.

(b) ICAO Guidance Material Doc 9734.

(c) ANS related Air Navigation Orders:

(d) Circulars/Instructions for ANS Inspectors.

(e) Other relevant directives and instructions that may be issued from time to time by the Chairman or the Director (FSR).

(f) Guidance materials available in related ICAO Annexes

(g) ICAO Doc. 8071 Manual on Testing of Radio Navigation Aids (for CNS Inspectors).

(h) Other relevant ICAO documents as applicable.

4.12 Method of Inspection

4.12.1 The techniques for gathering the information on which the inspection team's assessment will be made include:

(a) Review of documentation,

(b) Interviews with staff, and

(c) Observations by the inspector.

4.12.2 **Checklists & Notebook:** Checklists provide a systematic approach for the conduct of an inspection/audit and are designed to identify specific items for review and make reference to the applicable regulatory requirement, be it to a regulation, standard or control manual requirement. Checklists should not limit the inspector/auditor's ability to explore other areas where required.

Inspection checklists will be:
(a) used to guide the inspection/audit;
(b) completed or have areas that were not completed so annotated; and
(c) signed and dated by the team member using the checklist.

The inspection team should work systematically through the items on the relevant checklists (as mentioned in Appendix).

Observation should be noted on Inspector Notebook.

4.13 Interviews

4.13.1 The principal way in which inspectors obtain information about the functioning of the systems are by asking questions.

4.13.2 The persons to be interviewed should be drawn from a range of management/ supervisory operational positions.

4.13.3 The purpose of inspection interviews is to elicit information, not to enter into discussions. All Inspectors should observe the following guidelines relating to the conduct of inspection interviews:

(a) Listen attentively and let the speaker know you are listening.

(b) Remain neutral. Do not disagree, criticize or interrupt.

(c) Ask 'W' questions – what, why, where, when, who, and how- these are the key words that will bring forward facts and information.

4.14 Inspector's Work Schedule

4.14.1 The following types of audit shall be carried out by ANS inspectors:

4.14.1.1 **Periodic Inspection**: ANS Inspectors shall prepare inspection schedules and conduct periodic inspections of ANS procedures, equipment and facilities at least once in a year for International Airports and at least once in every two years for other Airports.

4.14.1.2 **Special Purpose Audit:** ANS Inspectors shall conduct inspection due to special circumstances such as an incident or any emergency needs when necessary.

4.14.1.3 The work schedule for ANS inspection shall be published annually.

4.15 Submission of Report

4.15.1 Inspection report shall be submitted to the Director (FSR) within 15 (fifteen) working days of conduct of inspection

4.15.2 The Inspection report will be forwarded to the Audit Review Committee for the purpose of:

(a) to confirm the technical accuracy of the report

(b) to ensure that the report is an objective account of the audit and that no subjective statements are included

(c) to ensure that statements made in the functional and specialty area summaries are supported by findings

(d) to determine if any findings should be subject to investigation for punitive enforcement purposes

4.15.3 The inspector shall submit the report with safety recommendations. Upon receiving the report, the Director (FSR) shall forward it to the Chairman for issuing the accepted corrective action plan for the service provider to resolve identified findings and deficiencies or safety shortcomings within the agreed time period.

4.16 Types of Corrective Actions by ANSP:

4.16.1 IMMEDIATE Corrective Actions

This action corrects immediately upon identification of the inspection finding to remove an immediate threat to aviation safety.

4.16.2 SHORT TERM Corrective Actions

To correct a non-conformance that does not pose an immediate threat to aviation safety within 30 days.

This action corrects the specific non-conformance specified in the inspection/audit finding and is preliminary to the long-term action that prevents recurrence of the problem. Short-term corrective action will be completed:
a) by the date/time specified in the corrective action section of the finding form; or
b) per the accepted corrective action plan.

4.16.3 LONG TERM Corrective Actions

Identifying the root cause of the problem and indicating the measures, service provider will take the corrective actions to prevent a recurrence within 12 months.

Long-term corrective action has two components.

a) The first component will involve identifying the root cause of the problem and indicating the measures the ANSP will take to prevent a recurrence. These measures should focus on a system change.

b) The second component is a timetable for the implementation of the long-term corrective action. Subject to the following paragraph, long-term corrective action will take place within 90 days and will include a proposed completion date.

Some long-term corrective actions may require time periods in excess of 90 days (e.g. major equipment purchases). In such case, ANS inspectors will deal with some inspection findings both beyond 90 days and closure of findings within 12 months.

Where applicable, the CAP will include milestones or progress review points at 90 day intervals leading up to the proposed completion date for each inspection finding.

CHAPTER 5

TRAINING OF INSPECTORS

5.1 Formal Class Room Training

Initial and specialized training shall be arranged for ANS Inspectors to perform safety oversight audit function efficiently.

5.2 Since the responsibility of Inspectors is mainly implementing the civil aviation requirement and various rules and orders, their knowledge on the subject must be current, as such a periodic recurrent of the same is considered imperative. Such refresher course should be programmed at least once in a year.

5.3 ANS Inspectors Training System (ITS), approved by Chairman, CAAB shall be followed.

5.4 On Job Training for ANS Inspectors

PURPOSE

The objective of the On Job Training is to provide the ANS new Inspector - with the basic knowledge which will enable newly hired inspectors to perform ANS regulatory functions.

PREREQUISITES

New inspectors will be programmed for initial and ongoing training based on their assigned duties. The inspector's initial training is commonly referred to as, basic indoctrination training, or initial training. Initial courses are mandatory and shall be completed satisfactorily.

PROCESS FOR OJT FOR ANS INSPECTOR

Newly hired inspectors, and inspectors transitioning to a position that they have not previously received OJT for, are assigned an experienced and qualified inspector (Principal Inspector) who is jointly responsible with the inspector for completion of OJT requirements. The inspector will go through the following levels of OJT.

Level-I OJT:

The first level of training is familiarization with Authority guidance relevant to a particular job task.

Level-II OJT:

During the second level the new inspector observes a qualified inspector performing the task.

Level-III OJT:

In level three, a qualified inspector observes the new inspector perform the task.

The OJT record is certified at each level and signed off when the inspector is competent at performing the task.

5.5 Training for re-qualification: An Inspector who has been out of the programme for more than one year shall conduct at least two inspections under supervision.

5.6 Training records shall be maintained in a systematic and organized way.

5.7 ASRTM database software shall be used for maintaining training records.

CHAPTER 6

PERSONAL ETHICS AND CONDUCT

6.1 As Inspectors are always in the public eye, they are expected to exercise good judgment and professional behavior at all times while on and off duty.

6.2 All Inspectors must observe the following rules of conduct:

a. Report for work on time and in a condition that will permit performance of assigned duties

b. Maintain a professional appearance, as appropriate, during duty hours

c. Respond promptly to directions and instructions received from Director (FSR).

d. Exercise courtesy and tact in dealing with co-workers, director and others.

CHAPTER 7

INSPECTOR CREDENTIALS

7.1 ANS Inspector Identification that identifies the Inspector as an "Authorized Person" shall be issued by Chairman, CAAB for the purpose to perform the duties and exercise the powers

7.2 An Inspector must display his/her credential on his/her outer garments to be permitted entry into airport secured areas, and while working in these areas.

7.3 If the credential is lost, stolen, or damaged, the Inspector should report the occurrence immediately to the nearest Police Station and Director (FSR).

APPENDIX-1

ATS INSPECTION CHECKLIST

Station Inspected	**:**
Inspection No.	**:**
Date of Inspection	**:**
Name of Inspectors	*(a)*
	(b)
Reference: Office Order	**:**

Legends: S = Satisfactory; U = Unsatisfactory; N = Not Checked/Not applicable.
(Recommendations are to be raised with the appropriate Ref. No. according to the Area of Inspection.)

SN	Area of Inspection	observations			Comments
		S	U	N	
1.	**PERSONNEL**				
1.1	Are adequate numbers of staff available in the ATC unit(s)?				
1.2	Are all the Control positions manned?				
1.3	Are the Control positions manned with properly rated controllers?				
1.4	Are the Controllers trained on the equipments relevant to the Control positions?				
1.5	Are the Controllers' Ratings/Licenses valid?				
1.6	Are the Controllers working for more than 12/24 hours continuously?				
1.7	Have the Bad practices been developed among the Controllers which may lead to safety hazards?				
	(a) Using mobile phones while controlling.				
	(b) Reading papers/books while controlling.				
	(c) Listening to radios, watching TVs while controlling.				
1.8	Are the Controllers following standard procedures without any deviation or shortcut?				

2.	**DOCUMENTATIONS**				
2.1	Are the updated versions of the following Documents available in the ATS Centre?				
	(a) Doc. 4444				
	(b) Annex 2				
	(c) Annex 11				
	(d) CAR				
	(e) AIP				
	(f) MATS				
	(g) Relevant ATSI's				
	(h) Aerodrome Emergency Plan and short listed Information Flow Chart				
	(i) Relevant SATI's/ATS local instructions				
	(j) Relevant/ Valid NOTAMs				
	(k) Updated Charts/ Approach Charts relevant to the ATC centre				

	(l)	Job descriptions of the ATCOs in each position in the centre				
	(m)	Training programme and plans for ATCOs and staff.				
	(n)	Training records of ATCOs and staff.				
	(o)	Valid Staff instructions				
2.2	Is there any Technical Library for keeping the documents?					
2.3	Where is the location of the Library?					
2.4	Do the Technical/ Operational staffs have easy access to the documents?					
3.	**PROCEDURES**					
3.1	Are up-dated procedures available with regard to the following?					
	(a)	Strip Marking				
	(b)	Check-list for briefing during Handing over /Taking over watches				
	(c)	Coordination procedures (Local)				
	(d)	Coordination procedures (International)				
	(e)	Updating of relevant documents in a timely manner				
3.2	Are the Monthly random checks conducted to evaluate Controllers' performances with regard to the following?					
	(a)	Use of Standard Control Phraseologies;				
	(b)	Use of Standard Strip Markings;				
	(c)	Following of standard procedures correctly.				
	(d)	Are the records of the above mentioned checks available?				
3.3	(a)	Is there any official procedure for Inspection of the Maneuvering areas?				
	(b)	Are the Maneuvering areas inspected as per the procedure?				
	(c)	Are proper records/Log Entries made on the Observations?				
	(d)	Are the observations disseminated properly to the appropriate persons/units?				
	(e)	Are follow-up actions taken promptly and properly?				
3.4	Are the following Runway Safety Data recorded properly and retained?					
	(a)	Raising reports on Bird-hit to aircrafts and taking necessary action				
	(b)	Keeping records of Bird-hit to aircrafts				
	(c)	Keeping records of Bird control (shooting)				
	(d)	Raising reports on Rwy Incursions /Excursions and taking necessary action				
	(e)	Keeping records on Rwy Incursions /Excursions				
	(f)	Dispatching relevant reports to CAAB HQ				
3.5	Are Serviceability/ Unserviceability reports of equipments raised correctly and regularly?					
	(a)	Are follow-up actions taken promptly and properly?				
3.6	Are the following records retained as mentioned?					
	(a)	ATC Log entries for at least 30 days.				

	(b) Strip markings for at least 30 days.				
	(c) Audio recordings for at least 30 days.				
	(d) Video recordings for at least 30.				
3.7	Are the MET information supplied to ATC centres from MET office properly and promptly?				
3.8	Are the following Safety Data Provided to RMA?				
	(a) Submission of LHD report for the last month to MAAR				
	(b) Collection of TSD during the month of December and sending the report				
	(c) Taking of necessary action with regard to the comments given by MAAR in relation to LHD/TSD (Traffic Sample Data) reports				
3.9	Have the previous recommendations issued by the ANS Inspectorate been implemented?				
4.	**EQUIPMENTS**				
4.1	Serviceability status of the following equipments:				
	(a) Are the Communication equipments serviceable?				
	(b) Are the Navigation equipments serviceable?				
	(c) Are Surveillance equipments/ Radar serviceable?				
	(d) Are the ILS serviceable?				
4.2	Are actions taken by operational staff to notify the appropriate offices regarding unserviceabilities?				
	a) Are there records of such notifications and corrective action taken?				
5.	**WORK ENVIORMENT**				
5.1	Are the following environmental factors acceptable as per the judgment of the Inspectors ?				
	(a) Ambient Lighting				
	(b) Ambient Temperature				
	(c) Noise Level				
	(d) Exterior Glare				
5.2	Are the ATC equipments user-friendly and properly installed?				
5.3	Are there adequate rest facilities available for ATCOs & staff?				

6. Recommendations:

Some significant recommendations are as follows:

SN	Recommendations	**Action Office**
6.1		
6.2		

7. Signature of Inspectors with date:

APPENDIX-2A

AIS Inspection Checklist/Report (for HQ)

Centre:	Date:	Time:	Inspector(s)

Use following abbreviations whenever possible,
S = Satisfactory U = Unsatisfactory N = Not Checked

1) PEOPLE/PERSONNEL

1.1 Is minimum number of staff available in the AIS Division (Headquarters)? ☐
Comments:
_____
_____
_____

1.2 Does the AIS Personnel have their job descriptions working in ATS Division (Headquarters)? ☐
Comments:
_____
_____
_____

2) PROCEDURE/SYSTEM FUNCTIONS

2.1 Has AIS Division (Headquarters) developed training program for their technical staff? ☐
Comment:
_____
_____
_____

2.2 Are AIS Technical personnel trained? ☐
Comments:
_____
_____

2.3 Does the AIS Division (Headquarters) maintain training records for AIS technical staff? ☐
Comments:
_____
_____
_____

2.4 Has AIS Division (Headquarters) developed the working procedures for their technical staff? ☐

Comments:
_____
_____
_____

2.5 Has AIS Division (Headquarters) published Aeronautical Information as an integrated aeronautical information package? ☐
Comments:
_____

2.6 Has AIS Division (Headquarters) introduced an organized quality system in AIS? ☐
Comments:
_____
_____

2.7 Has AIP Bangladesh published according to new format? ☐

Comments:
_____
_____

2.8 Do the charts listed in chapter 4 Para 4.1.3 of ANO (AIS) A.1 distributed separately to recipients of the AIP? ☐

Comments:
_____
_____

2.9 Does AIP Amendments published under AIRAC system? ☐
Comments:
_____
_____

2.10 Does NIL notification issued when AIP amendment not published on AIRAC date? ☐

Comments:
_____
_____

2.11 Has the checklist of valid AIP supplements issued at the interval of one month? ☐
Comments:
_____
_____

2.12 Do the aeronautical data meet the requirements of Appendix 7, ANO (AIS) A.1? ☐

Comments:
_____
_____

2.13 Has the terrain and obstacle data collected in accordance with ANO (AIS) A.1, Appendix-8? ☐
Comments:
_____
_____

3) Equipment
Does the equipment available in adequate and fulfilling the requirement of AIS Division (Headquarters)? ☐
Comments:
_____
_____

4) REMARKS
Inspector(s) name and signature with date:

APPENDIX-2B

AIS Inspection Checklist/Report (NOF)

Centre:	Date:	Time:	Inspector(s)

Use following abbreviations whenever possible.

S = Satisfactory U = Unsatisfactory N = Not Checked

1) PEOPLE/PERSONNEL

1.1 Is minimum number of staff available in the AIS Division (NOF)? ☐

Comments:

_____

_____

1.2 Does the International NOTAM office (NOF) have developed job descriptions for their AIS technical staff? ☐

Comments:

_____

_____

1.3 Does the job performed as per the descriptions? ☐

Comments:

_____

_____

1.4 Has NOF developed training program for their technical staff? ☐

Comments:

_____

_____

1.5 Are all AIS technical personnel properly trained? ☐

Comments:

_____

_____

1.6 Are all technical personnel competent to perform their duties? ☐

Comments:

_____

_____

2) PROCEDURE/SYSTEM FUNCTIONS ☐

2.1 Does the NOF maintain training records for AIS technical staff?

Comments:

_____

_____

2.2 Has NOF developed the procedures to receive 'raw data' process it and disseminate as NOTAM? ☐

Comments

_____

2.3 Has NOF documented their working procedures?

Comments

_____
_____

2.4 Has NOF developed the procedures for the exchange of NOTAM Internationally?

Comments:

_____
_____

2.5 Has the existing exchange of NOTAM with other NOF satisfying their needs?

Comments:

_____
_____

2.6 Has NOF introduced a properly organized quality system to implement quality management?

Comments:

_____
_____

2.7 Does NOF introduced automation in their system?
Comments:

_____
_____

2.8 Does the NOTAM contain information according to the NOTAM format as mentioned in ANO (AIS) A.1 Appendix 6?

Comments:

_____
_____

2.9 Whether NOTAM code used by the service provider for the issuance of NOTAM is complemented by ICAO abbreviation and codes or not?

Comments:

_____
_____

2.10 When errors in a NOTAM, a NOTAM with a new number to replace the erroneous NOTAM or with old number correction copy, which one is issued?
Comments:

_____
_____

2.11 Does all issued NOTAM deal with only one subject and one condition of the subject?

Comments:

_____

2.12 Whether a checklist of valid NOTAM issued through AFTN per month is timely or not?

Comments:

_____

_____

2.13 Is there any agreement recorded for international exchange of NOTAM on mutual basis?

Comments:

_____

_____

2.14 Does the service provider issue the NOTAM in services which differentiate international and domestic distribution?

Comments:

_____

_____

2.15 Does the PIB prepared by NOF satisfy the need of operator, is to based on sector wise and according to format?

Comments:

_____

_____

2.17 What are methods to provide AIS briefing?

Comments:

_____

_____

2.18 What are the procedures developed to encourage self briefing?

Comments:

_____

_____

2.19 Is there adequate will display of currents maps and charts?

Comments:

_____

_____

3) Equipment

Does the equipment available in NOF is sufficient, in good condition and fulfilling the requirement of NOF?

Comments:

_____

_____

4) REMARKS

Inspector(s) name and signature with date:

APPENDIX-3

MET INSPECTION/AUDIT CHECKLIST

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:	Area of Inspection	Observations				Comments
1.	**PERSONNEL**	S	P	U	N	
1.1	Is the 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 planed 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**:

SN	Recommendations	Action Office

6. **Signature of the Inspectors:**

APPENDIX-4A

CNS Inspection Checklist (Revised)

		CIVIL AVIATION AUTHORITY, BANGLADESH FLIGHT SAFETY AND REGULATIONS DIVISION AIR NAVIGATION SERVICES HEADQUARTERS, KURMITOLA, DHAKA-1229
Form No. CAAB/FSR/ANS/CNS/06		Title: **CNS Inspection Checklist**
1.	**General information**	
1.1	**Station/Unit Inspected**	
1.2	**Date of Inspection**	
1.3	**Time of Inspection**	
1.4	**Accountable Manager**	Name: Designation: Signature & Date
1.5	**Name of the Inspector**	Name: Designation: Signature & Date:
1.6	**Other Inspector(s)**	Name: Designation: Signature & Date:
1.7	**CNS** Services inspected	
1.8	**No. of Inspection**	
	Assessment Code: *S = Satisfactory* *U = Unsatisfactory* *N/C = Not Checked* *N/A= Not Applicable.*	

CNS Inspection Checklist

	Area of Inspection	Assessment/ Observations				
		S	U	N/C	N/A	Comments
2.	**Management Organization**					
2.1	Does the CNS provider have a documented organizational structure?					
2.2	Does the organizational structure clearly define lines of accountability of personnel in respect to the provision of services?					
2.3	Does the organizational structure show the relationship between operational units within the organization?					
2.4	Does the organizational structure show names of individuals filling appropriate management positions?					
2.5	Are the functions, duties and responsibilities of management staff clearly defined and documented?					
3.	**Personnel**					
3.1	Does the CNS Technical manpower available as per the organization structure?					
3.2	Has the station developed job descriptions for its technical staff?					
3.3	Is minimum required number of staff available in the unit?					
3.4	Are technical personnel properly equipped, authorized and trained to perform the duty?					
4.	**Training**					
4.1	Does the CNS provider have trained personnel dedicated to OJT activities?					
4.2	Does the technical manpower has got refresher training?					
4.3	Is there an established training policy and programs for technical staff?					
4.4	Is the training programme adequate and implemented?					
4.5	Does the CNS provider maintain training files/records for its personnel?					
4.6	Does the CNS provider have a procedure for maintaining the competence of its personnel (recurrent, OJT programme)?					
5.	**Work environment**					
5.1	Is the working environment at the station satisfactory?					
5.2	Does the station have enough space for the CNS facilities?					
5.3	Does the station have sufficient/proper arrangement to meet the human requirement?					
5.4	Are the following factors existing at an acceptable level as per the judgment of the inspector?					
5.4.1	Ambient lighting					

5.4.2	Ambient temperature					
5.4.3	Noise level					
	Additional Observation/Comments:					

Area of Inspection		Assessment/ Observations				
		S	U	N/C	N/A	Comments
6.	**COMMUNICATION FACILITIES**					
6.1	**VHF air to ground Voice Communication Systems**					
6.1 .1	**VHF radio**					
	Serviceability status					
	Availability (97%)					
	Standby equipment					
	Antenna system: - RF cable - Obstruction such as buildings, trees etc					
	Availability of distress radio 121.5MHz					
6.1.2	**VHF area cover**					
	Serviceability status					
	Availability (97%)					
	Remote status monitors					
	Standby equipment					
	Antenna system: - RF cable - Obstruction such as buildings, trees etc - RF switches					
6.1.3	**HF Radio and SELCALL**					
	Serviceability status					
	Availability (97%)					
	Remote status monitors					
	Standby system					
	Standby power supplies					
	Additional Observation/Comments:					

Area of Inspection		Assessment/ Observations				
		S	U	N/C	N/A	Comments
6.1.4	Voice and Data recording systems					
	Serviceability status					
	Availability (97%)					
	Standby system					
	Recording media					
	ATS playback system					
6.2	Point to Point Communication Systems					
6.2.1	International: ATS-DS (VSAT)					
	Serviceability status					
	Availability (97%)					
	Standby equipment					
6.2.2	Domestic: ATS-DS					
	Serviceability status					
	Availability (97%)					
	Standby equipment					
6.2.3	Telephone					
	Intercom systems					
	Direct telephones					
6.2.4	Automatic Terminal Information Systems (ATIS)					
	Serviceability status					
	Availability (97%)					
	Standby equipment					
	Additional Observation/Comments:					

Area of Inspection		Assessment/ Observations				
		S	U	N/C	N/A	Comments
6.3	**Data Communication systems**					
	Automatic Message Switching Systems (AMSS)					
6.3.1	**AFTN main switch**					
	Serviceability status					
	Availability (97%)					
	Remote monitoring					
	Standby equipment					
6.3.2	**AFTN workstations**					
	Serviceability status					
	Availability (97%)					
	Remote monitoring					
	Standby equipment					
	ATM Massage Handling System (AMHS)					
6.3.3	**ATN main switch/Router**					
	Serviceability status					
	Availability (97%)					
	Remote monitoring					
	Standby equipment					
6.3.4	**ATN workstations**					
	Serviceability status					
	Availability (97%)					
	Remote monitoring					
6.3.5	Internet					
	Availability					
	Additional Observation/Comments:					

Area of Inspection		Assessment/ Observations				
		S	U	N/C	N/A	Comments
7.	**NAVIGATION FACILITIES**					
7.1	**Instrument Landing systems (ILS)**					
7.1.1	**Localizer (LLZ)**					
	Serviceability status					
	Availability (97%)					
	Remote status monitoring					
	Standby equipment					
	Flight inspection checks					
	Ground checks					
	Antenna system - RF cable - Obstruction such as buildings, trees etc -RF switches					
7.1.2	**Glide Path (GP)**					
	Serviceability status					
	Availability (97%)					
	Remote status monitoring					
	Standby equipment					
	Flight inspection checks					
	Ground checks					
	Antenna system - RF cable - Obstruction such as buildings, trees etc -RF switches					
7.1.3	**Landing DME**					
	Serviceability status					
	Availability (97%)					
	Remote status monitoring					
	Standby equipment					
	Flight inspection checks					
	Ground checks					

	Antenna system - RF cable - Obstruction such as buildings, trees etc -RF switches					
7.1.4	**Distance Measuring Equipment (DME)**					
	Serviceability status					
	Availability (97%)					
	Remote status monitoring					
	Standby equipment					
	Preventive maintenance					
	Flight inspection checks					
	Ground checks					
	Antenna system - RF cable - Obstruction such as buildings, trees etc -RF switches					
7.1.5	**VHF Omni- directional radio Range (VOR)**					
	Serviceability status					
	Availability (97%)					
	Remote status monitoring					
	Standby equipment					
	Flight inspection checks					
	Ground checks					
	Antenna system - RF cable - Obstruction such as buildings, trees etc -RF switches					
7.2	**Non Directional Beacon (NDB)**					
	Serviceability status					
	Availability (97%)					
	Remote status monitoring					
	Standby equipment					
	Automatic changeover					

	Antenna system - RF cable - Obstruction such as buildings, trees etc					
7.3	**Protection of NAVAIDS**					
	Protect NAVAIDS from vandalism/theft: Does the arrangement made for the safeguard of radio installations or NAVAIDS (site)?					
	Prevent NAVAIDS signal interruptions: Does the arrangement made for the protection of radio facility for electrical and or other interference / obstacle?					
	Additional Observation/Comments:					

Area of Inspection		Assessment/ Observations				
		S	U	N/C	N/A	Comments
8.	**SURVEILLANCE SYSTEMS**					
8.1	**Primary Radar**					
	Serviceability status					
	Availability (97%)					
	Remote status monitoring					
	Standby system					
	Is the physical installation of equipment and antenna system proper?					
	Antenna system - RF cables and control cables - Obstruction such as buildings, trees etc -RF switches					
8.2	**Secondary Radar**					
	Serviceability status					
	Availability (97%)					
	Remote status monitors					
	Standby equipment					
	Site monitor					
	Radar display consoles					
	Is the physical installation of equipment and antenna system proper?					

	Antenna system - RF cable - Obstruction such as buildings, trees etc -RF switches					

Area of Inspection		Assessment/ Observations				
		S	U	N/C	N/A	Comments
8.3	**ADS-B**					
	Serviceability status					
	Availability (97%)					
	Remote status monitors					
	Standby equipment					
	ADS-B display console					
	Antenna system - RF cable - Obstruction such as buildings, trees etc -RF switches					
6.3.4	**MLAT/WAM**					
	Serviceability status					
	Availability (97%)					
	Remote status monitors					
	Standby equipment					
	ADS-B display console					
	Antenna system - RF cable - Obstruction such as buildings, trees etc -RF switches					
	Additional Observation/Comments:					

Area of Inspection		Assessment/ Observations				
		S	U	N/C	N/A	Comments
9.	**Automatic Weather Observing Systems (AWOS)**					
9.1	Sensors - Temperature - Humidity - Wind speed - Wind direction - Visibility - Cloud base					
	Serviceability status					
	Availability (97%)					
	Remote status monitors					
	Standby equipment					
9.2	Aero view displays					
	Serviceability status					
	Availability (97%)					
	Standby equipment					
	Additional Observations/comments:					

Area of Inspection		Assessment/Observations				
		S	U	N/C	N/A	Comments
10.	**Auxiliary facilities**					
10.1	Test equipment for maintenance - Availability - whether the tools/ equipment which requires calibration are periodically calibrated					
10.2	Availability of spares (on site and depot) in sufficient numbers to meet any immediate requirement					
10.3	Is there any policy developed for the retention of spare parts for the safety critical equipment/ system?					
10.4	Maintenance PC/ Laptop					
10.5	Earthing systems					
10.6	Lightening arrestor					
10.7	Smoke Detector					
10.8	Master and Slave Clock					
10.9	Crash alarm					
10.10	Signaling lamp					

10.11	Emergency equipment - Fire extinguisher - First aid kits - Oxygen cylinders					
10.12	Technical Tool Kit - Availability of necessary tools/ special tools to carry out appropriate checks/schedules					
11.	Power supplies					
	Provision of mains power Supply					
	Provision of standby power - Battery back up - Generator - UPS					
	Additional Observations/comments:					

Area of Inspection		Assessment/Observations				
		S	U	N/C	N/A	Comments
12. Documentation and Records						
12.1	Site Logbooks: History log book, Shift duty log book, General duty log book and fault log book.					
12.2	Serviceability monthly reports					
12.3	NAVAIDS flight checks results and reports					
12.4	NAVAIDS ground checks results					
12.5	Records of Installations, initial testing and commissioning					
12.6	Test equipment calibration					
12.7	Records of preventive/routine Checks					
12.8	Records of corrective measures Taken					
12.9	Availability of the following updated documents for reference and use:					
12.9.	SOPs for CNS O & M/ Operational and Technical manuals as supplied by the manufacturer.					
12.9.	The CAAB approved maintenance schedules as prepared and proposed by CNS on the recommendations of the manufacturer.					
12.9.	Set of Civil Aviation Rules, ANOs, Circulars, CNS Manuals, SMM, ICAO documents Annex-10 and Doc 8071					

12.9.	Technical manual, drawings, trouble shooting charts					
12.9.	Does the list of equipment and systems maintained?					
12.9.	Does the list of tools and test equipment maintained?					
12.9.	Does calibration record of Navigation and surveillance facilities is available at the site?					
12.9.	Does the station maintain its own CNS safety management system (SMS)?					
13.	Process and procedures					
13.1	Availability and reliability procedure					
13.2	Maintenance procedure (including preventive maintenance)					
13.3	Flight inspection procedure					
13.4	Test equipment calibration Procedure					
13.5	Contingency plan procedure for the smooth operation of safety critical CNS facilities					
13.6	Is there any supervision process established? Who does the supervision of day to day operation /maintenance work?					
13.7	Is there any reporting procedure available at the time of breakdown of facility?					
13.8	Does the specialist support / made available to the operational duty team for corrective maintenance during breakdown of equipment/ system?					
13.9	Is there any lay - down procedures of duty handover and takeover?					
13.10	Is there any procedure for logging equipment abnormality?					
13.11	Is there any procedure of coordination with ATS operation about the logging of equipment abnormality?					
	Is there any documented procedure for taking out operational equipment from the service and returning back into operation?					
	Is there any lay - down procedure for declaring the status of equipment in operation?					
14.	Equipment room/shelter					
14.1	Room temperature					
14.2	Operation of Air Conditioners					
14.3	Ventilation					
	Additional Observations/comments:					

15. Signature of Inspector(s) with date:

APPENDIX-4B

CNS Inspection Checklist

Unit(s) Inspected :

Date of Inspection :

Time of Inspection (LT) :From..... To.....

Name of Inspector(s) : .....

Following abbreviations indicate observations as shown:

S = Satisfactory;

U = Unsatisfactory;

N = Not Checked.

(If extra space is required for putting comments, go to para 4paper to be used if required for putting comments. For putting comments in para 4with appropriate Ref. No. according to the Area of Inspection.)

Ref:	Area of Inspection	Observations			Comments
		S	U	N	
1.	PEOPLE / PERSONNEL / STAFFING				
1.1	Adequacy of staff in the CNS unit(s) to carry out the CNS maintenance and operational works				
1.2	Manning of all the maintenance / operational unit(s) with properly trained staff.				
1.3	Adequate training of the technical and operational personnel of the station on the relevant equipments.				
1.4	Work period for individual technical / operational employee.(Whether it is more than 12 Hrs. continuous)				
1.5	Bad practice among the technical / operational employees, if any, which may lead to safety hazards?				
	a. Using mobile phones while working.				
	b. Reading papers/books while working.				
	c. Listening to radios, watching TVs while working.				
2.	PROCEDURES				
2.1	Whether the station has any technical library where the following documents like National Rules, Regulations, and ICAO documents related to CNS maintenance and operations are available:				
	a. ICAO Doc;				
	b. ICAO Annex 10;				
	c. Relevant ICAO Manuals;				
	d. CAR 84, Part 10;				
	e. AIP;				
	f. Relevant ANOs & Manuals;				
	g. All maintenance manuals from the manufacturer of the CNS system;				
	h. Proper system maintenance schedule and forms conforming to manufacturer's manual.				
	i. maintenance record of CNS systems/ facilities/ equipment				
	j. Job descriptions of the technical staff(s) in each position in the				

	centre				
	k. Training policy and plans for its technical staff.				
	l. Training records of its technical staff.				
	m. Properly developed Standard Operational Procedures for maintenance of CNS systems / facilities for each unit engaged in CNS. (Example: SOP for ECR, Navigation Aids, Radar, Transmitting Station, AMSS, Communication Procedures etc.):				
	n. Properly developed Standard Operational Procedures for communication operations activities.				
	o. Staff Instructions issued.				
2.2	Whether the Technical/ Operational staffs have easy access to those documents.				
2.3	Availability of proper and updated procedures for the following:				
	a. Taking over/Handing over watches				
	b. Updating of documents in a timely manner				
2.4	Retention of the following recordings:				
	a. ATS voice communications recordings for at least 30 days.				
	b. Video recordings (Radar data) for at least 30 days.				
2.5	Whether the AFTN message priorities are maintained properly without misusing it;				
2.6	Whether the AFTN messages are delivered timely;				
2.7	Whether the station maintains proper communication records/logbooks as per ANO (COM) A.2 Para 3.5.				
2.8	Whether previous recommendations issued by the CNS Inspectors have been implemented;				
2.9	**Regular checks of CNS Equipments:**				
	a. Whether each CNS maintenance unit performs system maintenance checks as per schedule and forms conforming to the manufacturer's manual;				
	b. Whether every unmanned CNS system room/shelter is inspected by technical staff according to standard procedure;				
	c. Whether the station has all cable lay-out diagrams of its CNS facilities;				
	d. Whether the station has suitable secondary power supply system;				
	e. Whether each CNS system has proper battery backup;				
	f. Whether the station has flight calibration procedures;				
2.10	a. Whether the station has remote status information display of navigation aids in equipment control room and respective ATC centers;				
	b. If remote status information display is not available, what procedure is followed to inform ATS units of the navigation aids' operating status? Is the procedure satisfactory?				
	c. Whether correct Serviceability/ Unserviceability Reports are timely issued to ATC centers;				
	d. Whether the station analyzes performance of CNS systems and communication channels;				
	e. Whether the station reports information on system performance to the Headquarter;				
	f. Whether the station has any mechanism for assessing, monitoring and evaluating the time taken for responding to system failures that occurred;				
	g. Whether the station properly maintains the monitor thresholds in navigation equipments;				
	h. Whether the aerodrome markings for holding points meet the required criteria to safeguard the sensitive and critical areas of navigation aids;				
	i. Whether the station has redundant mast lighting system (obstruction indicators) over CNS system antennas;				
	j Whether the station has its own CNS safety management system;				
	k. Whether the top level technical and operational officials regularly inspect CNS facilities and sites to oversee the functionalities;				

	l. Whether the Records of such internal inspections are kept in the unit(s);				
	m. Whether proper corrective measures are taken on the basis of the internal inspections;				
3.	**WORK ENVIORMENT**				
3.1	Whether the working environment at CNS facilities of the station is satisfactory;				
3.1	Level of the following factors existing in the CNS unit(s) as per the judgment of the inspector (How much acceptable):				
	a. Ambient Lighting				
	b. Ambient Temperature				
	c. Noise Level				
	d. Exterior Glare				
3.2	Availability of rest facilities for CNS Staffs;				

4. Comments:

_____
_____
_____
_____

5. Signature of Inspector(s) with date:

APPENDIX-5

PANS-OPS Inspection Checklist

General information

Person(s) undertaking inspection	
Organization being audited	
Date of inspection	
Information Sources	
Documents Reviewed	
Individuals Interviewed	
Units Visited	

Abbreviations used for inspection whenever possible,

S = Satisfactory U = Unsatisfactory N = Not Applicable

1. Construction of visual and instrument flight procedures

1.1 Does the service provider ensure that construction of visual and instrument flight procedures are in accordance with PANS-OPS vol-2 Doc. 8168? If not, what is the alternate means of compliance to ensure at least the same standards as Doc. 8168? ☐

Comments:

1.2 Does the service provider has sufficient number of staff to carry out work in the field of PANS-OPS? ☐

Comments:

1.3 Does the service provider maintain training records or files for PANS-OPS technical staff? If not, which entity is responsible to maintaining such records? What is the status of such records, complete, incomplete etc? ☐

Comments:

1.4 Is there any regular training program for the PANS-OPS technical staff? If not, what is the means of ensuring that the technical remain updated with latest amendments or versions of the aforesaid documents? ☐

Comments:

1.5 Does the service provider ensure that flight inspections of instrument flight procedures, including obstacle checks, are carried out? If not, what is the alternate means of ensuring the compliance of the relevant provisions of Doc 8168? ☐

Comments:

1.6 Has the service provider published obstacle clearance altitude/height (OCA/H)? If yes, have they published the data in the appropriate format? If not, what is the alternate means of ensuring the compliance of the relevant provisions of Doc 8168? ☐

Comments

1.7 Has the service provider established and published operating minima for the concerned aerodrome (e.g. visibility, MDA, DH, DA, MDA/H, DA/H) for instrument approaches at that aerodrome? If yes, have they published the data in the appropriate format? If not, what is the ☐

alternate means of ensuring the compliance of the relevant provisions of Doc 8168 and Doc 9365?

Comments

1.8 Does the service provider retain all procedure design documentation so as to allow any data anomalies or errors found during the production, maintenance or Operational use of the procedures to be corrected? If yes, have they published and maintained the data in the appropriate format? If not, what is the alternate means of ensuring the compliance of the relevant provisions of Doc 8168?

☐

Comments

☐

1.9 Whether following updated documents relevant to the unit are available?

1.9.1 Doc 8168 vol II
1.9.2 Relevant CARs
1.9.3 AIP
1.9.4 Job description of the procedure designers
1.9.5 Training records of procedure designers
1.9.6 Updated charts relevant to the aerodrome
1.9.7 Relevant NOTAMS

Comments

_____
_____
_____

INSPECTORS (Name & Signature):

1) …….....

Date:

2) …….....

APPENDIX-6A

SAR Inspection Checklist

Station Inspected : Rescue Coordination Centre (RCC), HSIA
Inspection No :
Date(s) of Inspection :
Name of Inspector(S) (a).....
(b).....
Reference: Office Order :

The following abbreviations indicate observations as shown:
S = Satisfactory; U = Unsatisfactory; N = Not Checked/Not applicable

PERSONNEL:

SL No	References	Descriptions	Observations			Comments
			S	U	N	
SAR 001	STD A12 2.1.1	Has Arrangement been made for providing SAR service on a 24 hours basis to ensure that assistance is rendered to persons in distress?				
SAR 002	STD A12 4.4	Does the staff detailed for RCC possess requisite qualification?				
SAR 003	STD A12 4.4	Does the staff detailed for RCC is Skilled in coordination and operational functions?				
SAR 004	STD A12 2.2.1	Has the State delineated both Aeronautical and Maritime Search and Rescue Region within which Search and Rescue Services are provided?				
SAR 005	RP 2.2.1.1	Does the Dhaka SRR coincide with Dhaka FIR?				
SAR 006	GM Doc IAMSAR, Vol-1	Do the provisions exists to keep maritime authorities informed of aeronautical distress situations, and to coordinate SAR responsibility to them when an aircraft has an actual or potential ditching at sea?				
SAR 007	GM Doc IAMSAR, Vol-1	Do facilities that serve as alerting posts for receiving aeronautical and maritime distress information operate on a 24-hour basis?				
SAR 008	GM Doc IAMSAR, Vol-1	Does each RCC or RSC have full information about the capabilities (range, number of persons they could rescue, alert status, launch authority point of contact, etc) for all the primary rescue units in their area of				

		responsibility?				
SAR 009	GM Doc IAMSAR Vol-1	Do SAR units in the State have special equipment for medical evacuation?				
SAR 010	GM Doc IAMSAR Vol-1	Does State send delegates to participate directly in meetings of ICAO and IMO that deal with SAR issues?				
SAR 011	GM Doc IAMSAR Vol-1	How do the SAR Managers be informed on decisions, and outcomes of meetings conducted by ICAO and IMO?				
SAR 012	STD A12 2.3.1.	Has the State established a RCC in each Search and Rescue Region?				
SAR 013	ICAO SAAQ	Does the State have an integral working relationship with the Cospas-Sarsat satellite alert and location system?				
SAR 014	GM Doc IAMSAR Vol-1	Have ICAO and IMO been provided with up-to-date information on your RCCs, RSCs, SAR resources and area of responsibility?				
SAR 015	RP A12 2.1.6	Is there a joint RCC to coordinate aeronautical and maritime SAR operations available?				
SAR 016	GM Doc IAMSAR, Vol-1	Do ships and aircraft that are used for SAR have communications and electronic direction-finding capabilities covering all frequencies likely to be used?				
SAR 017	STD A12 2.1.1.2	Are the basic elements in SAR services like, legal framework, a responsible authority, organized available resources; Com. facilities and a workforce skilled in coordination and operational functions available?				
SAR 018	STD A12 2.5.1 & 2.6.1	Are SAR units, elements of public or private services suitably located and equipped for SAR operations designated?				
SAR 019	GM Doc IAMSAR, Vol-1	Is there a formal SAR Committee to coordinate the actions of the organizations?				
SAR 020	STD A12 3.1.3	Does the CAA permit, subject to such conditions as may be prescribed by its own authorities, entry into its territory of SAR units of other States for the purpose of searching the site of aircraft accidents and rescuing survivors of such accidents?				
SAR 021	RP A12 3.1.7	Has the CAA authorized its RCC to provide, when requested, assistance to other RCCs, including assistance in				

		the form of aircraft, vessels, persons or equipment?				
SAR 022	STD A12 3.2,1	Has arrangements been made for all aircraft, vessels and local services and facilities which do not form part of the SAR organization to cooperate fully with the latter in SAR and to extend any possible assistance to the survivors of aircraft accidents?				
SAR 023	GM Doc 9734 Part A 3.4 & 3.7	Are there any written job descriptions for each of technical staff of RCC available?				
SAR 024	GM Doc 9734 Part A	Has the job descriptions been duly approved by the authority?				
SAR 025	GM Doc 9734,Part A 3.4 &3.7	Are there any training Policy and programme for RCC technical staff available?				
SAR 026	GM Doc 9734 Part A 3.4 &3.7	Does the RCC maintain training records or files for RCC technical staff?				
SAR 027	RP A 12 2.3.4	Are the RCC personnel involved in conduct of radiotelephony communications proficient in English Language?				
SAR 028	STD A12 2.1.3,	Has arrangements or procedures been made for the use of SAR units and other available facilities to assist any aircraft or its occupants who are or appear to be in a state of emergency?				
SAR 029	RP A12 3.2.2	Has the CAA Ensured the availability of closest practicable coordination between the relevant Aeronautical and Maritime Authorities to provide for the most effective and efficient SAR services?				
SAR 030	STD A12 4.4 CAR84, Part XII, R232(13)	Has the CAA Ensured the SAR personnel regularly trained and that appropriate SAR exercises are arranged?				
SAR 031	STD A 12 4.4	Does the RCC Maintain records of SAR exercises and attended identified deficiencies?				

2. PROCEDURES:

SAR 032	STD A12 4.2.1	Are there any detailed plans of operation in RCC for the conduct of SAR operations within SRR available?				
SAR 033	GM Doc IAMSAR Vol-1	Does the State have a national SAR plan, which describes the roles of all government and non-government organizations which have resources				

		that can support SAR?				
SAR 034	STD A12 4.1.1	Does the RCC having readily available at all times up-to-date information concerning the following, in respect of its search and rescue region?				
		a) Search and Rescue units, alerting post.				
		b) Air Traffic Services units.				
		c) Means of communication that may be used in search and rescue operations.				
		d) Addresses and telephone numbers of all operators, or their designated representatives, engaged in operations in the region.				

3. WORKING ENVIROMENT:

SAR 035	STD A12 4.3.2	Has RCC been provided with required SAR facilities? like:				
		a)survival and rescue equipments;				
		b)signaling devices;				
		c)medical facilities/stores;				
SAR 036	GM Doc IAMSAR, Vol-1	Are the following factors existing in RCC at an acceptable level as per the judgment of the inspectors?				
		a)Ambient Lighting				
		b)Ambient Temperature				
		c)Noise Level				

4. EQUIPMENTS:

SAR 037	ICAO SAAQ	Has the State implemented its own Cospas-Sarsat local user terminal?				
SAR 038	STD A12. 3.2.5,	Has the CAA designated SAR point of contact for the receipt of COSPAS-SARSAT distress data?				
SAR 039	GM Doc IAMSAR, Vol-1	Does the records of distress alert of COSPAS-SARSAT are maintained by RCC?				
SAR 040	STD A12 2.4.1	Has RCC been provided with rapid and reliable means of communication? with:				
		i. Associate Air Traffic Services units;				
		ii. Search and Rescue units;				

		iii. Maritime RCC;				
		iv. Designated Met office;				
		v. Alerting Posts.(BAF, Navy, Police Coast Guard, etc).				
SAR 041	GM Doc IAMSAR, Vol-1	Whether the status on available communication link with the ATS units/SAR units checked and recorded at regular interval?				
SAR 042	STD A12 3.1.1,	Has arrangement been made for Coordination of SAR organization with those of neighboring states?				
SAR 043	GM Doc IAMSAR, Vol-1	Does the status on available communication link with adjacent RCC/SAR organization of neighboring states checked and recorded at regular interval?				
SAR 044	GM Doc IAMSAR, Vol-1	Does the status on available communication link with meteorological watch office is checked and recorded at regular interval?				
SAR 045		Has the RCC been provided with following equipment? i. Emergency Distress Frequency 121.5 MHz, 123.1 MHz for communication on scene; ii. Official Cell No; iii. Variable HF (Freq.2182KHz, & 2187.5KHz etc) for long range Communication; iv. Dedicated Telephone line; v. Internal telephone line; vi. Plotting Equipment; vii. Computer Facilities so as to retrieve the display of information previously stored; viii. Internet Facilities with E-mail address; ix. Drop facilities for AFTN Messages.				

5. DOCUMENTS

SAR 046		Is there any technical library where the following documents like National Rules, Regulations, and ICAO documents related to SAR and operations are available? i.e.,				
		a. ICAO Annex 12,13,				
		b. Relevant ICAO IAMSAR Manuals;				
		c. CAR 84 Part XII				
		d. AIP Bangladesh				

		e. SAR ANO/Relevant ANOs & ATS Manuals;				
		f.SAR Pamphlet				
		g. Search and Rescue Manual				
		h. Contact list/Action Flow Chart with telephone numbers.				
		i. Sunrise/Sunset Tables				
		j. Maps & Charts(Aeronautical, Topographical & Hydrographical) of different scale.				
		k. Maintain statistical data base on SAR events				
		l. Log Book pertaining to RCC				
		m. RCC and Rescue Units location map				
		n. Emergency procedure				

6. Comments:

7. Signature of the Inspectors with date:

APPENDIX-6B

SAR Inspection Checklist (Rescue Sub-Centre)

Station Inspected :
Inspection Reference No :
Date(s) of Inspection :
Time of Inspection (LT) :
Name of Inspector(S) :(1)

(2)

Reference: Office Order :
The following abbreviations indicate observations as shown:
S = Satisfactory; U = Unsatisfactory; N = Not Checked

1. PERSONNEL:

Sl No	References	Descriptions	Observations			Evidence/Notes /Comments
			S	U	N	
SAR 001	STD 12 Para 2.5.1	Has the CAA Established Rescue Sub-Centre in search and rescue region (SRR)?				
SAR 002	STD 12 Para 2.1.1	Has arrangement been made for manning Rescue Sub Centre properly round the clock (H24)?				
SAR 003	RP A 12 2.3.4	Has the Proficiency of Rescue Sub centre officers & staff in English language and radio telephony communications been checked?				
SAR 004	STD A12 4.4CAR84, Part XII, R232(13)	Are the duty officers/Staff of Rescue Sub Centre trained for conduct of SAR operations?				
SAR 005	STD A 12 4.2.1	Are detailed plans of operation in Rescue Sub Centre available for conduct of SAR within its SRR?				
SAR 006	STD A12 4.2.1,	Whether the Rescue Sub Centre personnel Having knowledge of all parts of the plans of operation?				
SAR 007	GM Doc 9734 Part A 3.7	Does the CAA Established training programme for their Rescue Sub Centre Officers/Staff?				
SAR 008	STD A 12 4.4	Are the Rescue Sub Centre personnel regularly trained and appropriate SAR exercises (Desktop) are arranged?				

SAR 009		Are the officials of the Rescue Sub Centre familiar with the area of the responsibility?				
SAR 010	GM Doc 9734Part A 3.4 & 3.7	Are written job descriptions available for each of the technical officials/staff in Rescue Sub Centre?				
SAR 011		Has job descriptions been duly approved by the Authority?				
SAR 012	GM Doc 9734Part A 3.4 &3.7	Are the Training records & files being maintained for Rescue Sub Centre officials/staff?				

2. EQUIPMENT

SAR 013	STD A12. 3.2.5,	Are means available to receive, COSOAS-SARSAT distress data?				
SAR 014	STD A12 2.4.1	Has the Rescue Sub Centre been provided with rapid and reliable communication link? with , 1. Associate ATS units. 2. SAR/Rescue units 3. Maritime RCC. 4. Designated Met. Office. 5. Alerting posts. 6. COSPAS-SARSAT MCC.				
SAR 015		Has the status on available communication link with the ATS units/SRU/Rescue Sub Centre been checked and recorded at regular interval?				

3. PROCEDURE

SAR 016		Does the Rescue Sub Centre keep its RCC informed of its preparedness for SAR operation?				
SAR 017		Is the coordination procedure between RCC and RSC available?				

4. **WORKING ENVIROMENT**

SAR 018		Has the Search and Rescue Sub Centre been provided with required SAR facilities/equipment and Check and list the equipment like? 1. Survival and rescue equipment 2. Signaling devices; 3. Medical stores;				

5. DOCUMENTS

SAR 019	Is there any technical library in existence, where the following documents like National Rules, Regulations, and ICAO Documents related to SAR operations are available? i.e.,				
	a. ICAO Annex 12,13,				
	b. Relevant ICAO Manuals, IAMSAR Manuals.				
	c. CAR 84 Part XII				
	d. AIP Bangladesh				
	e. SAR ANO/ Relevant ANOs &ATS Manuals;				
	f. SAR Plan				
	g. Search and Rescue Manual				
	h. Sunrise/sunset Tables				
	i Maps & Charts(Aeronautical, Topographical ,Hydrographical) of different scale.				
	j. Computer facilities so as to retrieve he display of information previously stored.				
	k. Log Book pertaining to Rescue unit.				
	l. RCC and Rescue Units location map				
	m. Distress frequencies				
	n. Plotting equipments				

Signature of the Inspectors with date.

APPENDIX- 7

MAPS/CHART Inspection Checklist

Unit(s) Inspected Date of Inspection Time of Inspection(LT) Name of Inspector(s)
Following abbreviations indicate observations as shown: S= Satisfactory; U=Unsatisfactory; N=Not Checked. (If extra space is required for putting comments, go to para 6. Put the relevant para No. for the comments. Extra paper to be used, if required.)

Section - 1

Ref No	Area of Inspection	Observations			Comments
1.	**PEOPLE/PERSONNEL/STAFFING.**				
1.1	How many Cartographic working personal in the airport?				
1.2	Are they all trained in Aviation Cartography?				
1.3	Is there any method of keeping training record of the Cartographic working personal?				
2.	**PROCEDURES.**				
2.1	Whether the station has any technical library to keep the documents like National Rules, Regulations, ICAO documents and ANO.				
2.2	How the cartographic related work is doing in this airport without any working cartographic personal.				
2.3	Whether there is proper system for retention of cartographic data in this airport.				
2.4	Whether the Cartographic Officials regularly inspect the cartographic related work of this airport to update the maps/charts and related others.				
2.5	What is the source of supplied raw data?				
2.6	Whether ATS section of the station maintain proper records of Cartographic data as per ANO (Aeronautical Chart) A.1.				
2.7	Whether the supplied raw data preserved properly in the station?				
3.	**OPERATIONAL/AVAILABILITY & DATA STANDARD.**				
3.1	Is all type of required chart of this airport available?				
3.2	How the available charts are update on regular basis?				

3.3	Is there any procedure of physical verification of data?				
3.4	If applicable charts and maps are not available or available charts are not updated then how the service ensure related to safety concern?				

SECTION-2

I	Check Item		S	U	N/A	Comments
A	Requirements For Availability Aeronautical Charts					
1	Mandatory Charts	Aerodrome Obstacle Chart — ICAO Type A;				
2		Precision Approach Terrain Chart — ICAO				
3		En-route Chart — ICAO				
4		Instrument Approach Chart — ICAO				
5		Aerodrome/Heliport Chart — ICAO				
6		World Aeronautical Chart — ICAO, 1:1 000 000				
7	Non Mandatory Charts	Aerodrome Obstacle Chart — ICAO Type B				
8		Aerodrome Ground Movement Chart — ICAO				
9		Aircraft Parking/Docking Chart — ICAO				
10		Aeronautical Chart — ICAO 1:500 000/ Aeronautical Navigation Chart — Small Scale				
11		Plotting Chart — ICAO				
12	Conditionally Required Charts	Area Chart — ICAO				
13		Standard Departure Chart — Instrument (SID)				
14		Standard Arrival Chart — Instrument (STAR) — ICAO				
15		Visual Approach Chart — ICAO				
16	Joint Civil/Military Charts					

17	Airport Grid Map 8 KM						
18	Airport Grid Map 2 KM						
19	Airport Location Map for Aerodrome Certification						
B	Maintenance Of Charts						
1	Methods						
C	Revision/ Frequency of Revisions						
1		Aerodrome Obstacle Chart (Types A, B)	When Accumulation Of Hand Amendments Justifies				
2		Precision Approach Terrain Chart	When any Significant Change In Terrain, Profile Occurs				
3		En-route Chart	28 Days (AIRAC Cycle-Congested Areas), Multiples Of 12 Weeks (AIRAC Cycle-Uncongested Areas)				
4		Standard Departure Chart —Instrument (SID) Standard Arrival Chart — Instrument (STAR)	When a Significant Change Occurs But Not More Often Than 4 Weeks				
5		Instrument Approach Chart	When a Significant Change in Procedure Occurs				
6		Visual Approach Chart	When Accumulation Of Hand Amendments Justifies				
7		Aerodrome/Heliport Chart Aerodrome Ground Movement Chart Aerodrome Parking/Docking Chart	When Accumulation Of Hand Amendments Justifies				
8		World Aeronautical Chart 1:1 000 000 Aeronautical Chart 1:500	Base — 4 Years Aeronautical Information —1				

		000 Aeronautical Navigation Small Scale	– 2 Years, In Congested Areas The Aeronautical Information May Be Revised More Frequently.				
9		Plotting Chart	Significant Change In Aeronautical Information				
D	Preparation Of Specific Charts						
1	Scale						
2	Marginal Note Layout						
3	North Alignment						
4	Projection						
5	Titles						
6	Symbol						
7	Dates of Aeronautical Information						
8	Units of Measurement						
9	Spelling of Geographical Names						
10	Abbreviation						
11	Political Boundary						
12	Colors						
13	Selection of Types						
14	Culture						
15	Topography						
16	Prohibited, Restricted and Danger Areas						
17	Air Traffic Service Airspaces						
18	Magnetic Variation						
19	Air Traffic Services Symbols						
20	Radio Navigation Aids Symbols						
21	Application of Radio Navigation Aids Symbols						
22	Profile views						
23	WGS-1984 Implementation						
24	Coordinate System						
25	Order of Accuracy (Horizontal/ Vertical) Annex 4,14,15						
F	Aerodrome Chart						
1	Coverage						
2	Scale						
3	Format						
4	Title						
5	Identification						
6	Marginal note layout						
7	Symbols						
8	Units of measurement						
9	Date of aeronautical information						

10	Spelling of geographical names				
11	Abbreviations				
12	Colours				
13	Typography				
14	Culture and topography				
15	Magnetic variation				
16	Aerodrome/heliport data				
G	Instrument Approach Chart (Doc 8697- 7.11 INSTRUMENT APPROACH CHART — ICAO)				
1	Coverage				
2	Scale				
3	Circle				
4	Distance Scale				
5	Format -210 × 148 Mm (8.27 × 5.82 In)				
6	Projection-Conformal Projection On Which A Straight Line Approximates A Great Circle Must Be Used. A Lambert Conic Conformal Projection				
7	Graduation Marks				
8	Title				
9	Identification				
10	Marginal Note Layout				
11	Symbols				
12	Units Of Measurement				
13	Date Of Validity Of Aeronautical Information				
14	Spelling Of Geographical Names				
15	Abbreviations				
16	Political Boundaries				
17	Colours				
18	Typography				
19	Cultural Information				
20	Relief				
21	Spot Elevations				
22	Magnetic Variation				
23	Bearings, Tracks And Radials				
24	Bearings, Tracks And Radials Note				
25	Aerodrome Elevation				
26	Threshold Elevation Or, The Highest Elevation Of The Touchdown Zone				
27	Topographic Information				
28	Obstacles				
29	Vertical Datum				
30	Prohibited, Restricted And Danger Areas				
31	Radio Communication Facilities And Navigation Aids				
32	IAF, IF, FAF, FAP, Map to Establish				

4. Comments

5. Signature of Inspectors with date:

APPENDIX-8

Appointment of Audit/Inspection Manager (Sample)

FILE NUMBER AND DATE

REFERENCE

FROM
Convening Authority

TO
NAME OF THE PERSON & DESIGNATION (Appointed as Audit/Inspection Manager)

SUBJECT: **Appointment as Audit/Inspection Manager to Inspect/Audit ANS Field of** Airport.

You have been appointed audit/Inspection manager for the routine conformance audit of **ANS Field of** Airport.

It is your responsibility to select TEAM LEADER AND/OR TEAM MEMBERS who shall report directly to you.

The scope of the audit/Inspection will include all activities that could affect the safe operation of

ANS field of Airport including, but not limited to:

a) Personnel;
b) Documentation;
c) Procedure;
d) Equipment and
e) Work Environment

The terms of reference for this audit/Inspection are as follows:

1. You will report directly to me until released from your audit/Inspection duties.
2. All audit/Inspection related matters will be conducted in accordance with policy and procedures specified in the ANS Inspectors Handbook.
3. You will immediately contact me with a recommendation for action in the event the team identifies an immediate threat to aviation safety.
4. Support from other Divisions of the Authority may be taken.

At the conclusion of the audit/Inspection, copies of all travel and (if applicable), overtime claims (including travel advances) and other audit/Inspection related expenses shall be forwarded to the appropriate Division (s).The audit/Inspection report shall be prepared for my approval and signature and forwarded to Director/APM within 30 (thirty) days of the completion of the audit.

Please contact me should you require further information or clarification.

SIGNATURE WITH DATE OF Convening Authority

APPENDIX-9

Appointment of TEAM LEADER (Sample)

FILE NUMBER AND DATE

REFERENCE

FROM
AUDIT/INSPECTION MANAGER

TO
NAME OF THE PERSON & DESIGNATION (Appointed as Audit/Inspection Team Leader)

SUBJECT: **Appointment as Audit/Inspection Team Leader to Inspect/Audit ANS Field of Airport.**

The scope of the audit/Inspection will include all activities that could affect the safe operation of

ANS field of Airport including, but not limited to:

a) Personnel;
b) Documentation;
c) Procedure;
d) Equipment and
e) Work Environment

The terms of reference for this audit/Inspection are as follows:

1. You will report directly to me until released from your audit/Inspection duties.
2. All audit/Inspection related matters will be conducted in accordance with policy and procedures specified in the ANS Inspectors Handbook.
3. You will immediately contact me with a recommendation for action in the event the team identifies an immediate threat to aviation safety.
4. Support from other Divisions of the Authority may be taken.

You are to develop an audit/Inspection plan proposal for your assigned area by date. This plan should include team composition, proposed travel and overtime expense estimates and a proposed schedule of your activities.

Please conduct a pre-audit/Inspection Team meeting with all members of the team.
Please contact me should you require further information or clarification.

At the conclusion of the audit/Inspection, copies of all travel and (if applicable), overtime claims (including travel advances) and other audit/Inspection related expenses shall be forwarded to the appropriate Division (s).The audit/Inspection report shall be prepared for my approval and signature and forwarded to Director/APM within 30 (thirty) days of the completion of the audit.

Please contact me should you require further information or clarification.

SIGNATURE WITH DATE OF Audit/Inspection Manager

APPENDIX-10

Appointment of Team Member(S) (Sample)

FILE NUMBER AND DATE

REFERENCE

FROM
AUDIT/INSPECTION MANAGER

TO
NAME OF THE PERSON(s) & DESIGNATION (Appointed as Audit/Inspection Team Member)

SUBJECT: **Appointment as Audit/Inspection Team Member to Inspect/Audit ANS Field of Airports.**
This will confirm your appointment as Team Member for the upcoming audit/Inspection of **ANS Field of Airport.** The audit/Inspection is scheduled for ANS field of Airport.

The scope of the audit/Inspection will include all activities that could affect the safe operation of ANS field of Airport, including, but not limited to:

a) Personnel;
b) Documentation;
c) Procedure;
d) Equipment and
e) Work Environment

The terms of reference for this audit/Inspection are as follows:

1. You will report to me until released from your audit/Inspection duties.
2. All audit/Inspection related matters will be conducted in accordance with policy and procedures specified in the ANS Inspectors Handbook.
3. You will immediately contact me, or the Team Leader, with a recommendation for action in the event that an immediate threat to aviation safety is identified.
4. Support from other Divisions of the Authority may be taken.

Please contact me should you require further information or clarification.

SIGNATURE WITH DATE
Audit/Inspection Manager

APPENDIX-11

AUDIT/INSPECTION NOTIFICATION LETTER TO AUDITEE (SAMPLE)

FILE NUMBER AND DATE

REFERENCE

FROM
Convening Authority
TO
DIRECTOR/APM

ATTENTION: DD/SATO/SCO, Airport

SUBJECT: **Audit/Inspection of ANS Field**

Dear SIR/MADAM:

A routine conformance audit/Inspection of **ANS Field** is scheduled for the period of DATE.

This audit/Inspection will focus on operations of **ANS Field.**

The objective of this regulatory audit/Inspection is to conduct an analysis of the operation of

ANS Field to ensure that regulatory requirements are met and an acceptable level of aviation safety is maintained.

Standard audit/Inspection procedures will be followed including interviews with personnel, observation of Document, Procedure, Equipment and Work Environment (s).

Prior to the audit/Inspection you will receive details of our audit/Inspection plan which will include a list of team members and specific areas to be covered during the audit/Inspection.
I have selected NAME AND DESIGNATION as the team manager for this audit/Inspection.

Team Manager will be in contact with your management staff in the next few days to obtain sufficient information to begin organizing and coordinating audit/Inspection activities. The co-operation of your management staff in this respect would be appreciated.

Should you require clarification or further information please contact NAME AND DESIGNATION, Audit/Inspection Manager at PHONE NUMBER.

SIGNATURE AND DATE
Convening Authority

APPENDIX-12

Audit Plan Letter to Auditee (Sample)

FILE NUMBER AND DATE

REFERENCE

FROM
Audit/Inspection Manager
TO
DIRECTOR/APM

ATTENTION: DD/SATO/SCO

SUBJECT: **Audit/Inspection of ANS Field**

ATTENTION: NAME & TITLE

Dear SIR/MADAM:

In his/her letter of DATE, NAME/DESIGNATION OF CONVENING AUTHORITY advised you of an upcoming regulatory audit/Inspection scheduled for the period of DATE(S). As the delegated Audit/inspection Manager, I am now in a position to provide Director/APM with further details of our audit/Inspection plan. The attached appendix outlines the units to be audited /inspected, the specific specialty area, a detailed audit/inspection plan, team composition and a copy of the checklists for their areas of responsibility.

An entry meeting is scheduled to be held at DD/SATO/SCO OFFICE at TIME on DATE. The purpose of this meeting is to introduce the audit/inspection team to management personnel of DD/SATO/SCO OFFICE review the audit/inspection process and ensure that your personnel are familiar with audit/inspection process and regulatory responsibilities.

After completion of the audit/inspection an exit meeting will be held at DD/SATO/SCO OFFICE at DATE on TIME. The exit meeting will summarize the audit/inspection results and identify specific post-audit/inspection responsibilities where applicable.

Should you require clarification or further information, please contact me at PHONE NUMBER.

SIGNATURE WITH DATE
Audit Manager

Encl.

Appendix-13

Audit Plan (Sample)

Objective and Scope

A routine conformance audit/inspection will be conducted on ANS field. This will be an audit/inspection of the ANS specialty area.
The scope of the audit/inspection will include all activities that could affect the safe operation of the ANS units, including, but not limited to:

(i) Standard of ANS at the station,
(ii) Availability of qualified personnel for providing the ANS at the station,
(iii) Availability of required procedures, documentations & equipments,
(iv) Working conditions at the ANS units, and
(v) ANS Provider's level of compliance with the SARPS.

The audit/inspection will cover the period from the last audit/inspection date to the present date.

Methodology

The audit/inspection will be conducted in accordance with standard audit procedures specified in the *ANS Inspectors Handbook.* Specialty guidance materials, including checklists, forms and other guidance documents will be used approved by CAAB.

Where ANS field is not performing in accordance with the *CAAB Regulations* and associated *Standards*, or an approved manual, it is considered to be in non-conformance.
The following steps will then be taken:
(a) Define the area of non-conformance;
(b) Retain any clearly defined evidence;
(c) Prepare a Confirmation Request Form (CRF) if necessary and present it to the team leader for vetting and discussion;
(d) Complete the finding form, including three examples where possible, and attach any evidence or supporting documentation collected;
(e) Complete the specialty area summary for the applicable area; and
(f) Forward all documentation, including the finding form, CRF, evidence/supporting documentation, and specialty area summary, to the appropriate team leader.

Communications

Discussions pertaining to the audit/inspection shall take place at a location that assures confidentiality. Do not discuss the audit/inspection matters with persons other than audit/inspection team members and refer any questions to the audit/inspection manager or team leader through the appropriate representative.

Discussions with CAAB personnel outside of the audit team may occur with the knowledge and approval of the team leader.

Parallel Findings/Observations

Detection of a CAAB non-conformance to a regulatory requirement, or a non-regulatory policy, procedure or guideline shall be identified using a parallel finding form. Where a team member identifies the possible need to revise a regulatory requirement or a non-regulatory policy, procedure, or guideline, this shall be identified using the parallel observation form.

Completed forms are to be submitted to the audit/inspection manager for review. The audit/inspection manager will forward all parallel findings and observations to the convening authority upon completion of the audit/inspection.

APPENDIX-14

Pre-Audit Team Meeting Agenda (Sample)

Location: ANS Inspectorate

Date:
Time:
Agenda

Item Subject

1 Introduction

2 Administrative Details:
- hotel room numbers and cell phone numbers (where applicable);
- Transports (including weekend use);
- start / finish times (pre-audit / audit/inspection);
- dress; and
- weekends

3 Tele-conference with Convening Authority where applicable

4 Audit Plan:
- specialty area assignments / specialty area summaries;
- work plan: schedule and scheduled points (satellite base and sub-base visits)

5 Budget:
- importance of accurate tracking;
- overtime/expenses; and
- claim procedures (electronic)

6 Conflict of Interest / Confidentiality:
- shred all working drafts of findings, summaries, etc.

7 Access to Information

8 Forms Administration:

electronic / written;
- audit findings;
- parallel audit findings; and
- confirmation requests

9 Checklists:
- use of and amendment to:

10 Communications:
- on-site / off-site;

- use of cell phones;
- within Airport; and
- outside Airport.

11 Pre-Audit/Inspection Reviews:

- previous audit/inspection / follow-up;
- compliance records;
- authorizations;
- manuals as applicable;
- respect those around you; and
- list any areas of concern:

12 Physical Audit/Inspection

- site familiarization;
- security passes;
- ANS in-charge role during the audit/inspection;
- daily team meetings, including members on the road;
- use of forms;
- immediate threat to aviation safety - action and communication;
- paperwork expected;
- drafting of audit/inspection/parallel findings;
- finding examples: three or more where possible;
- no draft findings left behind after exit meeting; and
- reminder of regulatory oversight responsibilities during the audit/inspection vs.
- consultation with ANS Unit.

13. Questions?

APPENDIX-15

Safety Regulatory Audit/Inspection Observation (SAMPLE)

OBN No.:

Date:

Audited/Inspected Party:

Name/Post of Responsible Officer:

Observations and Recommendations:

Auditor/Inspector(s):
Signature: _____
Name: _____
Date:

APPENDIX-16

Safety Regulatory Audit/Inspection Response to Observation (SAMPLE)

Response No:

Response to Observation No: **Date:**

Action(s) taken/planned:

Name/Post of the Responding Officer:

Signature: Date:

Verification (by Regulatory Authority):

Comment(s):

Name and Signature
of Auditor/Inspector: Date:

APPENDIX-17

Safety Regulatory Audit/Inspection

REQUEST FOR CORRECTIVE ACTION (RCA) (SAMPLE)

RCA No.: _____ Date: _____
Audited/Inspected Party: _____
Name/Post of Responsible Officer: _____
Non-Compliance Item: _____

Document Reference: _____

Details of Non-Compliance:

Auditor/Inspector: Signature: Name:	Date:

APPENDIX-18

Safety Regulatory Audit/Inspection

RESPONSE to REQUEST FOR CORRECTIVE ACTION (SAMPLE)

Response No.: _____

Responding to RCA No.: _____ Dated _____

Remedial Action(s): *(Short-term Fix)*

Corrective Action(s): *(Long-term Solution)*

Action Due Date(s):

Name/Post of Responding Officer: _____

Signature: _____ Date: _____

Verification *(For use by Regulatory Authority)*

Comment(s)

Name and signature of Auditor/Inspector with date:

APPENDIX-19

ANSP Safety Regulatory Audit/Inspection

SAFETY NOTIFICATION (SAN) (SAMPLE)

SAN No.: _____ Date: _____

Audited/Inspected Party: _____
Name/Post of Responsible Officer: _____
Non-Compliance Item: _____

Document Reference: _____

Detail of Non-Compliance:

Action Due Date: (Immediate action required):

Auditor/Inspector(s) name & signature:	Date:

APPENDIX-20

Safety Regulatory Audit/Inspection

RESPONSE to SAFETY NOTIFICATION (SAN) (SAMPLE)

Response No.: _____
Responding to SAN No.: _____ Dated _____

Remedial Action(s): (*Short-term fix)*

Corrective Action(s): *(Long-term Solution)*

Name/Post of Responding Officer: _____
Signature: _____Date: _____

Verification (*For use by Regulatory Office)*

Comments: Signature & Name of Auditor/Inspector with date:

APPENDIX-21

AUDIT/INSPECTION FINDING FORM (SAMPLE)

1. File No. CAAB/FSR/ANS/---------- Date:	
2. Airport/Station audited/inspected:	3.Date of audit/inspection:
	4.Audit/Inspection No:
5. Field of audit/inspection:	6.Area of audit/inspection:
7. Sub-area:	8.Finding No:
9. Doc Reference and detail of non-compliance:	
10. ANSP's Corrective Action Plan: ☐ Immediate ☐ Short term ☐ Long term Target date: Signature with official seal of ANSP & Date	
11. ANS Inspector(s) response: ☐ Corrective Action Plan Is approved as it is. ☐ Corrective action Plan to be completed by Date Comment(s): Signature of the Auditor/Inspector & Date----------	
12. Completion/Progress Report by the ANSP: Comment(s): Revised Target Date Signature with official seal of ANSP & Date	
13. Audit Follow-up: ☐ Finding is closed. ☐ Finding is not closed Comment(s) Actual date of completion Inspector's Sign. & Date	

If required, extra paper should be used.

APPENDIX-23

CAP Unacceptable Letter (Sample)

DATE
NAME/DRSIGNATION OF AUDITEE
ADDRESS

Reference:

ATTENTION: NAME & TITLE

Dear SIR/MADAM:

A review of your proposed corrective action plan to the findings generated during the regulatory Audit/inspection of NAME OF AUDITEE on DATE has been carried out by this office. Attached is a copy of the corrective action forms with our response.

Each/some corrective action determined to be unacceptable and requires a new response. Please submit your revised corrective action plan for these findings to the Audit/Inspection Manager address noted below no later than DATE.

Responses that require changes or development of new/additional policy and procedures will also require a completion date. This date can be discussed with the undersigned.
Should you require clarification or further information, please contact me on e-mail or telephone.

Yours truly,

Signature of Audit Manager with date
e-mail and telephone number.

Enclosure:

APPENDIX-24

Audit Close with Acceptable CAP Letter (Sample)

DATE
NAME/DRSIGNATION OF AUDITEE
ADDRESS

Reference:

ATTENTION: NAME & TITLE

Dear SIR/MADAM:

Further to the CAAB regulatory audit/inspection of NAME OF AUDITEE on DATE, all corrective action and follow-up in response to the findings is complete and the audit/inspection is now closed.

I would like to take this opportunity to thank you and your staff for your co-operation during this process.

Yours Sincerely,

SIGNATURE WITH DATE
Convening Authority

APPENDIX-25

CAP Acceptable Letter (Sample)

DATE
NAME/DRSIGNATION OF AUDITEE
ADDRESS

Reference:

ATTENTION: NAME & TITLE

Dear SIR/MADAM:

Further to the CAAB regulatory audit/inspection of NAME OF AUDITEE on DATE, your corrective action plan in response to the audit/inspection findings has been received and accepted.

CAAB regulatory authority will continue to monitor the progress of your corrective action plan by completing an ADMINISTRATIVE OR ON-SITE follow-up. The ADMINISTRATIVE OR ON-SITE follow-up will ensure that your proposed corrective action plan has addressed all audit/inspection findings. I will be in contact with you to discuss the follow-up in more detail. Should you require clarification or further information, please contact me on e-mail or telephone.

Yours truly,

Signature of Audit Manager with date
e-mail and telephone number.

Enclosure:

APPENDIX-26

Audit Close No Findings Letter (Sample)

DATE
NAME/DRSIGNATION OF AUDITEE
ADDRESS

Reference:

ATTENTION: NAME & TITLE

Dear SIR/MADAM:

Further to the CAAB regulatory audit/inspection of NAMEOF THE AUDITEE on DATE, all areas observed met CAAB regulatory audit/inspection requirements and the audit/inspection is now closed.

I would like to take this opportunity to thank you and your staff for your co-operation during this process.

Yours truly,
SIGNATURE WITH DATE
Convening Authority

APPENDIX-27

PARALLEL REPORT (SAMPLE)

<table>
<tr><td colspan="2">Parallel Report</td></tr>
<tr><td colspan="2">1. File No. CAAB/FSR/ANS/……., Date: ……</td></tr>
<tr><td rowspan="2">2. Airport/ Station audited/ inspected:</td><td>3. Date of Audit:</td></tr>
<tr><td>4. Audit/Inspection No.</td></tr>
<tr><td>5. Field of Audit/Inspection:</td><td>6. Area of Audit/Inspection:</td></tr>
<tr><td>7. Sub-area:</td><td>8. Finding No: Parallel 01</td></tr>
<tr><td colspan="2">9. Doc Ref. and Details of Deficiencies/Misapplication/Non-conformance:

_____
Signature & Name of the Auditor/Inspector & Date

10. Assignment of responsibility for response and follow-up (when applicable):
Person(s) detailed:
Task assigned:

Target date of completion:
_____
Signature with official seal of D/FSR/D-ANS & Date

11. Completion/Progress Report by the responsible officer: ☐ Completed
<u>Comments</u>: ☐ Partially completed

_____
Revised Target Date _____
Signature with official seal of the responsible officer</td></tr>
</table>

12. Audit Follow-up: ☐ Finding is closed. ☐ Finding is not closed	
Comments:	
Actual date of completion	Signature of the Auditor/Inspector &Date

Use overleaf of the Form or extra paper, if required.

APPENDIX-28

Function and Responsibilities of ANS Inspectorate

The ANS Inspectors shall carryout duties and responsibilities assigned in this Handbook, Chapter 3, Section 3.3. The function and responsibilities of ANS Inspectorate are described below.

1. ATM INSPECTOR

A. Function:

ATM Inspector is responsible for carrying out regulatory functions in the areas of ATM.

B. Duties and Responsibilities:

a. To develop and amend Inspector Handbook/Checklist necessary for inspection.
b. To formulate and implement ATM Safety Audit Surveillance Program
c. To prepare safety oversight inspection schedule to inspect ATM service provider.
d. To carry out safety oversight inspection and surveillance of ATM service provider as per the approved program to ensure the proper implementation of relevant ICAO Annexes, CAR, ATC Manual, related documents, manuals and directives issued by CAAB.
e. To prepare inspection report and highlight the deficiencies, if any.
f. To ensure flight safety, issue immediate directives to the service provider if there are any issues that need immediate attention.
g. To assist service provider in preparing the remedial/corrective action plan and follow up its progress
h. To coordinate with concerned units to amend CAR 84 Part II and ANO (ATS) A.1 and ATM related documents to incorporate changes in ICAO SARPs and advise the Head of the section.
i. To prepare documents, manuals related to ATM.
j. To participate in any in-house and abroad workshops and seminars related to ATM matters.
k. To develop training program for ATM inspectors.
l. To ensure that ATM service provider has developed policy and procedures for determining the capacity of ATM system, including the number of staff required to ensure the provision of an adequate ATM system.
m. To ensure service provider has developed training program including refresher training for ATS staff.
n. To ensure that training records or files for its ATM staff are maintained.

o. To ensure procedure developed by ATS service provider for continued competency of ATC in new equipment, procedures and updated communication.
p. To investigate/analyze ATM incidents and advise on aviation safety matters.
q. To assist in air safety accident investigation conducted by authorized personnel.
r. To perform any other duty assigned by the Authority from time to time.

2. AIS INSPECTOR

A. Function:

AIS Inspector is responsible for carrying out regulatory functions in the areas of AIS.

B. Duties and Responsibilities:

a. To develop and amend Inspector Handbook/Checklist necessary for inspection.
b. To formulate and implement AIS Safety Audit Surveillance Program
c. To prepare safety oversight inspection schedule to inspect AIS unit at CAAB HQ and AIS Units in all airports, International NOTAM Office and other Aerodromes concerning AIS matters.
d. To carry out safety oversight inspection and surveillance of AIS service provider to ensure the proper implementation of relevant ICAO Annexes, CARs, AIS Manual, related documents, manuals and directives issued by CAAB and report deficiencies noted for remedial action.
e. To prepare inspection report and highlight the deficiencies, if any.
f. To ensure flight safety, issue immediate directives to the service provider if there are any issues that need immediate attention.
g. To assist service provider in preparing the remedial/corrective action plan and follow up its progress
h. To coordinate with concerned units to amend ANO (AIS) A.1 and ANO (Aeronautical Charts) A.1, AIS related documents to incorporate changes in ICAO SARPs and advise the Head of the Section.

i. To prepare documents, manuals related to AIS.
j. To participate in any in-house and abroad workshops and seminars related to AIS matters.
k. To develop training program for inspectors.

3. PANS-OPS INSPECTOR

A. Function:

PANS-OPS Inspector is responsible for carrying out regulatory functions in the areas of PANS-OPS.

B. Duties and Responsibilities:

a. To develop and amend Inspector Handbook/Checklist for use.
b. To formulate and implement PANS-OPS Safety Audit Surveillance Program
c. To carry out safety oversight inspection and surveillance of PANSOPS service provider as per the approved program of the department and report deficiencies noted for remedial action.
d. To ensure flight safety, issue immediate directives to the service provider if there are any issues that need immediate attention.
e. To assist service provider in preparing the remedial/corrective action plan and follow up its progress.
f. To prepare documents, manuals related to Instrument Flight Procedure design and submit to the Head of Section for approval.
g. To participate in any in-house and abroad workshops and seminars related to PANS-OPS matters
h. To prepare inspection schedule to inspect PANS-OPS service provider.
i. To ensure if service provider has developed adequate training program including refresher training for PANS-OPS technical staff.
j. To initiate to amend CAR 84 Part II and ANO (ATS) A.1 from time to time for compliance with ICAO Annexes if required.

4. CNS INSPECTOR

A. Function:

CNS Inspector is responsible for carrying out regulatory functions in the areas of Communication Navigation & Surveillance Aids

B. Duties and Responsibilities:

a. To develop and amend Inspector Handbook/Checklist for use.
b. To formulate and implement CNS Safety Audit Surveillance Program.
c. To prepare inspection schedule to inspect CNS service provider.
d. To carry out safety oversight inspection and surveillance of CNS service provider as per the approved program to ensure the proper implementation of relevant ICAO Annexes, CAR, CNS Manual, related documents, manuals and directives issued by CAAB.

e. To repare inspection report and highlight the deficiencies, if any for remedial action.
f. To ensure flight safety, issue immediate directives to the CNS service provider if there are any issues that need immediate attention.
g. To assist service provider in preparing the remedial/corrective action plan and follow up its progress
h. To coordinate with concerned units to amend CAR 84 Part X and ANO (COM) A.1, ANO (COM) A.2, ANO (COM) A.3, ANO (COM) A.4 and ANO (COM) A.5 and CNS related documents to incorporate changes in ICAO SARPs and advise the Head of the section.

i. To ensure CNS service provider adopted policies and procedures on human factors principle experienced, qualified and having the capabilities to accomplish the wide range of safety oversight activities.
j. To ensure CNS service provider has developed policy and procedures for determining the capacity of CNS system, including the number of staff required to ensure the provision of an adequate CNS system.
k. To ensure if service provider has developed adequate training program including refresher training for CNS technical staff.
l. To ensure procedure developed by CNS service provider for continued competency of in new CNS equipment, procedures and updated communication.
m. To participate in the investigation of CNS related accident/incident and occurrences and submit the report, as and when required.
n. To participate in any in-house and abroad workshops and seminars related to CNS matters.
o. To perform any other duty assigned by the Chairman to enhance performance of the State.

5. SAR INSPECTOR

A. Function:

SAR Inspector is responsible for carrying out regulatory functions in the areas of SAR.

B. Duties and Responsibilities:

a. To develop and amend Inspector Handbook/Checklist necessary for inspection.
b. To formulate and implement SAR Safety Audit Surveillance Program
c. To prepare safety oversight inspection schedule to inspect SAR units & Rescue Coordination Centers (RCCs) of all international/domestic airports of Bangladesh and SAR section of ATM Division at CAAB Headquarters.
d. To carry out safety oversight inspection and surveillance of SAR service provider to ensure the proper implementation of relevant ICAO Annexes, CAR, SAR Manual,

related documents, manuals and directives issued by CAAB and report deficiencies noted for remedial action.

e. To prepare inspection report and highlight the deficiencies, if any.
f. To ensure flight safety, issue immediate directives to the service provider if there are any issues that need immediate attention.
g. To assist service provider in preparing the remedial/corrective action plan and follow up its progress
h. To coordinate with concerned units to amend CAR 84 Part XII and SAR related documents to incorporate changes in ICAO SARPs and advise the Head of the Section.
i. To prepare documents, manuals related to SAR.
j. To participate in any in-house and abroad workshops and seminars related to SAR matters.
k. To develop training program for inspectors.
l. To review SAR manual and other documents including amendments received from service provider and submit for approval.
m. To participate in the investigation of ANS related accident/incident and occurrences and submit the report, as and when required.

6. MAPS/CHARTS (Cartography) INSPECTOR

A. Function:

Maps/Charts Inspector is responsible for carrying out regulatory functions in the areas of Cartography/Maps/Charts.

B. Duties and Responsibilities:

a. To develop and amend Inspector Handbook/Checklist for use.
b. To formulate and implement Maps and Charts Safety Audit Surveillance Program
c. To carry out safety oversight inspection and surveillance at CARTOGRAPHY units in all airports and CAAB HQ as per the approved program of the department and report deficiencies noted for remedial action.
d. To ensure flight safety, issue immediate directives to the service provider if there are any issues that need immediate attention.
e. To assist service provider in preparing the remedial/corrective action plan and follow up its progress.
f. To prepare documents, manuals related to Maps/Charts and submit to the Head for approval.
g. To initiate to amends CAR 84 Part IV from time to time for compliance with ICAO Annexes if required.
h. To participate in any in-house and abroad workshops and seminars related to Maps and Charts matters.

i. To prepare inspection schedule to inspect Maps and charts service provider.
j. To ensure if service provider has developed adequate training program including refresher training for Maps and Charts technical staff.
k. To perform any other duty assigned by the Head to enhance performance of the Section.

7. MET INSPECTOR

A. Function:

MET Inspector is responsible for carrying out regulatory functions in the areas of MET.

B. Duties and Responsibilities:

a. To develop and amend Inspector Handbook/Checklist necessary for inspection.
b. To formulate and implement MET Safety Audit Surveillance Program.
c. To prepare safety oversight inspection schedule to inspect MET units and MET facilities in all airports of Bangladesh.
d. To carry out safety oversight inspection and surveillance of MET service provider to ensure the proper implementation of relevant ICAO Annexes, CAR 84 Part III, MET Manual, related documents, manuals and directives issued by CAAB and report deficiencies noted for remedial action.
e. To prepare inspection report and highlight the deficiencies, if any.
f. To ensure flight safety, issue immediate directives to the service provider if there are any issues that need immediate attention.
g. To assist service provider in preparing the remedial/corrective action plan and follow up its progress.

h. To coordinate with concerned units to amend MET related CAR 84 Part III and documents to incorporate changes in ICAO SARPs and advise the Head of the Section.
i. To prepare documents, manuals related to MET.
j. To participate in any in-house and abroad workshops and seminars related to MET matters.
k. To develop training program for inspectors.
l. To review MET manual and other documents including amendments received from service provider and submit for approval.
m. To participate in the investigation of MET related accident/incident and occurrences, as and when required and submit the report.