

# Civil Aviation Authority of Sri Lanka

# AIR NAVIGATION SERVICES (ANS) INSPECTORS' HANDBOOK

2<sup>nd</sup> Edition - 2018



# AIR NAVIGATION SERVICES (ANS) INSPECTORS' HANDBOOK

**Control Number: 001** 



#### **AIR NAVIGATION SERVICES SECTION**

# List of Guidance Material Issued by Air Navigation Services Section

SLCAP 2350 ANS Office Procedures Manual	SLCAP 2300 ANS Inspector Hand Book
SLCAP 2700 Search and Rescue Manual	

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Rev. Number	Date	Entered by	
00	06.03.2018	CAI – ATM TECH	
01	11.06.2018	CAI – AIS	
02	13.06.2018	CAI – AIS	
03	01.10.2019	CAI – ATM OPS	
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00	Improvement of the SLCAP 5300	Edition 01 has been amended	06.03.2018
01	Improvement of the SLCAP 5300	Chapter 03 has been amended	11.06.2018
02	Improvement of the SLCAP 5300	Chapter 07 has been amended	13.06.2018
03	Improvement of the SLCAP 5300	Chapter 04 - Inspection Checklists, Edition 02 - Header, Footer, and Margin Requirements have been amended.	01.10.2019

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#### **Foreword**

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

This Handbook contains guidance material intended to assist Air Navigation Services Inspector(s) in the Civil Aviation Authority of Sri Lanka in carrying out their regulatory responsibilities with regard to their Safety Oversight duties, functions and responsibilities. However, it is obvious that all matters pertaining to the inspector's duties, functions and responsibilities cannot be covered in this Handbook. As such inspectors are expected to use their good judgment in matters where specific guidance is not provided.

Users of this handbook are reminded that the provisions of the *Civil Aviation Act, Air Navigation Regulations, Implementing Standards/Aviation Safety Notices and other applicable regulatory documentation,* rather than this handbook, determine the requirements of, and the obligations imposed by or under, the Civil Aviation Legislation. Users should refer to the applicable provisions of the legal requirements, whenever any doubt arises.

This document is continually subject to revisions and amendments without any prior notice, if required. Suggestions for the improvement of the document are appreciated and should be addressed to the undersigned.

It is necessary that the Air Navigation Service Inspectors attached to CAASL shall be guided by the provisions contained in this Handbook to the greatest extent possible, when attending to their duties and functions.

H.M.C. Nimalsiri

Director General of Civil Aviation Civil Aviation Authority of Sri Lanka No.152/1, Minuwangoda Road, Katunayake.

01.10.2019

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### **Definitions & Abbreviations**

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

#### **Definitions**

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

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

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

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

Air Navigation Services – Services provided under following services;

- 1) Air Traffic services
- 2) Aeronautical Communication Services
- 3) Aeronautical Information Service

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

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

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

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

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

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

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

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

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#### **ABBREVIATIONS**

AIB - Accident Investigation Bureau

AIS - Aeronautical Information service

Annex - Annex to the Convention on International Civil Aviation

ANS - Air Navigation services

ATM - Air Traffic Management

ATS - Air Traffic Services

CAASL - Civil Aviation Authority of Sri Lanka

CAI - Civil Aviation Inspector

CAO - Civil Aviation Officer

COM - Communication

CNS - Communication, Navigation & Surveillance

D/ANS - Director/Air Navigation Services

DGCA - Director General of Civil Aviation

ICAO - International Civil Aviation Organization

MET - Meteorology

OA - Office Aid

PANS- ATM - Procedure for Air Navigation Services – Air Traffic Management

PANS-OPS - Procedure for Air Navigation Services – Aircraft Operations

SARPS - Standards & Recommended Practices

SAR - Search & Rescue

SCAI - Senior Civil Aviation Inspector

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## 1 Chapter 1 - Introduction & Organization Structure

#### 1.1 Introduction

Air Navigation services Section in the Civil Aviation Authority of Sri Lanka is responsible for carrying out Safety Oversight Functions with regard to provision of Air Navigation Services in Sri Lanka airspace".

Under Air Navigation Services this section carries out Safety Oversight functions on:

- a) Air Traffic Services
- b) Aeronautical Information Service
- c) Communication Navigation & Surveillance (CNS) Services
- d) Aeronautical Meteorology Service
- e) PANS-OPS Flight Procedure Design Service
- f) Aeronautical Maps & Charts
- g) Search & Rescue (SAR)

#### 1.2 Responsibilities of the Section

Responsibilities of the Air Navigation Services Section are listed below.

- 1. To provide necessary guidance to develop Primary Aviation Legislation which would be required to regulate Air Navigation Services in Sri Lanka in keeping with the global and national developments.
- 2. To develop required Operating Regulations and Implementing Standards where necessary, for the Basic Aviation Legislation and for amending the existing Regulations as may be necessary to maintain required safety, efficiency and regularity in Air Navigation Services in Sri Lanka.
- 3. To ensure relevant SARPS contained in ICAO Annexes, Annex 2, Annex 3, Annex 4, Annex 5, Annex 10, Annex 11, Annex 12, and Annex 15 are implemented in Sri Lanka and updated as necessary.
- 4. To Ensure Supplementary Guidance Materials and other necessary technical guidance materials issued by ICAO from time to time in respect of Air Navigation Services are given effect to locally in Sri Lanka and updated as necessary, in order to supply the Service Providers with necessary information for effective implementation of SARPS.
- 5. To maintain office discipline & Order in the ANS Section.
- 6. To make recommendations to the CAASL in regard to cadre requirement attached to the Section.
- 7. Maintain performance indicators, statistics relating to all important duties, functions or activities performed by the ANS Section.

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- 8. Submit annual reports to the Management concerning the work progress of the ANS Section.
- Provide the DGCA with necessary inputs in regard to the work that the Section is expected to perform in the next triennium so that the CAASL Business Plan could be updated accordingly.
- 10. To ensure that all inspectors attached to the Division are provided with necessary empowerments, credentials, authorizations, uniforms, inspector handbook and other amenities etc. in order to identify them as an "Authorized Person" and enable them perform the assigned tasks effectively.
- 11. To ensure that a complete training plan is prepared for each position coming under the Division so that the post holder will be able to discharge the assigned functions effectively.
- 12. To provide the DGCA with the Training requirements of the Section for the next three years on a sliding basis.
- 13. To prepare an annual training plan for each position in the division with due regard to the priorities and resources available and Ensure that all employees attached to the ANS Section are fully conversant and are adequately trained to perform their job functions entrusted to them, to the standards expected by CAASL and maintain their training records.
- 14. To ensure availability of written Office Procedures in respect of each activity being performed in the ANS Section.
- 15. To ensure the required toolkits for efficient and effective surveillance of ANS Services Providers such as Inspectors' Handbook, Checklists, Survey Forms, Audit Forms, job guides etc. and equipment if necessary are readily available at the Section. This should include toolkits for efficient inspections, surveying and Certification audits of ANS Services Providers.
- 16. To ensure all Manuals, Written Procedures and Handbooks issued by the ANS Section are reviewed and updated as and when required and prepare new guidance material when such is viewed necessary.
- 17. To ensure availability of relevant guidance and reference materials, documents, annexes and other useful publications relating to Air Navigation Services both in printed and electronic format.
- 18. To ensure that appropriate Air Navigation Service Providers are duly certified in accordance with applicable regulations written procedures and other relevant directives issued by the DGCA.
- 19. To ensure Issue, renew, amend, suspend or cancel ANS Service Provider Certificates as the case may be and in accordance with the delegation of authority by the DGCA.

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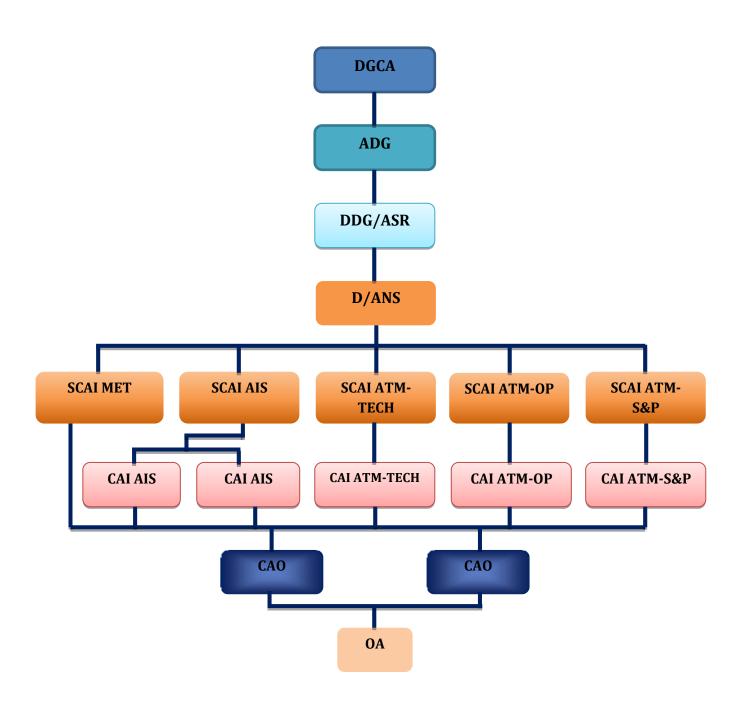


- 20. To maintain complete, accurate and updated records and database in respect of certified service providers.
- 21. To develop and implement a systematic Annual Surveillance Plan in respect of each ANS Provider certificated by the CAASL to be able to achieve the State's Acceptable Level of Safety.
- 22. To maintain a complete, accurate and updated database containing data and information gathered during the implementation of the surveillance plan.
- 23. To analyze the data gathered during the surveillance and adjust the surveillance plan and conduct additional awareness creating activities where necessary based on the trends and associated risks, identified.
- 24. To ensure necessary enforcement actions are taken in accordance with available regulations and the CAASL Enforcement Policy Manual in case of safety violations or deviations made by the Certified Air Navigation services Provider.
- 25. To ensure proper organization and management of air space of Sri Lanka for the effective use of civil air operators in close coordination with the Sri Lanka Air Force, ANS Providers and other defense establishments as appropriate.
- 26. To represent DGCA at forums pertinent to Air Navigation Services in Sri Lanka and abroad.
- 27. To ensure arrangements are made for the establishment and provision of SAR in Sri Lanka as per ICAO requirements.
- 28. To maintain a record of the state letters received from the ICAO RO and respond to them as appropriate.
- 29. To organize and update information in the CAASL website pertaining to ANS Section.

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# 1.3 Organization Structure of the Air Navigation Services Section



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## 2 Chapter 2 – Duties & Responsibilities of Inspectors

#### 2.1 Inspectors in the Section and their Responsibilities

#### 2.1.1 Director Air Navigation Services

Director Air Navigation Services, is the Head of the ANS Section. He / She is responsible to the Director General of Civil Aviation through Deputy Director General Air Space and security regulations for all Regulatory and Administrative functions carried out by the Section.

#### 2.1.2 Senior Civil Aviation inspector (ATM OPS)

Senior Civil Aviation inspector (ATM OPS) responsible for carrying out regulatory functions in following Subject Areas:

- 1) Air Traffic Services
- 2) Search & Rescue

#### 2.1.3 Senior Civil Aviation inspector (ATM S&P)

Senior Civil Aviation inspector (ATM S&P) is responsible for carrying out regulatory functions in following subject Areas:

- 1) Air Traffic Services
- 2) PANS OPS Procedures

#### 2.1.4 Senior Civil Aviation inspector (AIS)

Senior Civil Aviation inspector (AIS) is responsible for carrying out regulatory functions in following Subject Areas:

- 1) Aeronautical Information
- 2) Aeronautical Maps & Charts
- 3) Aeronautical Communication (Operations)

#### 2.1.5 Senior Civil Aviation Inspector (ATM-TECH)

Senior Civil Aviation Inspector (ATM TECH) is responsible for carrying out regulatory functions in the subject areas of Communication, Navigation & Surveillance Systems.

#### 2.1.6 Senior Civil Aviation Inspector (MET)

MET Inspector is responsible for carrying out regulatory functions related to aeronautical Meteorology.

#### 2.1.7 Civil Aviation Inspector (ATM OPS)

Civil Aviation inspector (ATM OPS) responsible for regulatory work through the assistance provide to Senior Civil Aviation Inspector (ATM OPS) in carrying out regulatory functions in following Subject Areas:

- 1) Air Traffic Services
- 2) Search & Rescue

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#### 2.1.8 Civil Aviation Inspector (ATM S&P)

Civil Aviation inspector (ATM S&P) is responsible for carrying out regulatory work through the assistance provided to Senior Civil Aviation Inspector (ATM S&P) for carrying out regulatory functions in following Subject Areas:

- 1) Air Traffic Services
- 2) PANS OPS Procedures

#### 2.1.9 Civil Aviation Inspector (AIS)

Civil Aviation Inspector (AIS) responsible for regulatory work through the assistance provided to Senior Civil Aviation Inspector (AIS) in carrying out regulatory functions in following Subject Areas:

- 1) Aeronautical Information Service
- 2) Aeronautical Maps & Charts

#### 2.1.10 Civil Aviation Inspector (ATM TECH)

Civil Aviation Inspector (ATM TECH) is responsible for carrying out regulatory work through the assistance provided to Senior Civil Aviation Inspector (ATM TECH) in the subject areas of Communication Navigation & Surveillance Systems.

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#### 2.2 Duties & Responsibilities of the Inspectors

This section further elaborates the nature and scope of the work to be performed by the Inspectors within the framework of their respective Job Descriptions.

#### 2.2.1 DIRECTOR AIR NAVIGATION SERVICES (DANS)

#### JOB DESCRIPTION

#### **Job Summary**

In addition to the specific job descriptions issued to the incumbent together with the letter of Appointment, the incumbent is required to perform duties and functions as required by DGCA to ensure that Air Navigation Services are provided by the Service Providers are in compliance with the requirements specified by the Director-General of Civil Aviation.

#### **Nature and Scope of Duties**

The DANS is required to assist the Director General of Civil Aviation to fulfil his responsibilities for continuous regulatory supervision of the Air Navigation Services providers who have been authorized to provide such services in Sri Lanka to ensure that the stipulated regulatory and operational requirements published by DGCA are complied. To ascertain the above, the DANS shall perform the duties and functions, which include, but not limited to the following;

#### PRIMARY LEGISTATION

1. Develop/Implement draft Primary Aviation Legislation required to regulate – Air Navigation Services in Sri Lanka in keeping with the global and national developments.

#### **OPERATING REGULATIONS**

- 2. Develop/Implement required Operating Regulations and Implementing Standards where necessary, in draft for the Basic Aviation Legislation and for amending the existing Regulations as may be necessary to maintain required safety, efficiency and regularity in Air Navigation Services in Sri Lanka.
- 3. Ensure relevant SARPS contained in ICAO Annexes, Annex 2, Annex 3, Annex 4, Annex 5, Annex 10, Annex 11, Annex 12, and Annex 15 are implemented in Sri Lanka and updated as necessary.
- 4. Ensure supplementary Guidance Materials and other necessary technical guidance materials issued by ICAO from time to time in respect of Air Navigation Services are given effect to locally in Sri Lanka and updated as necessary, in order to supply the Service Providers with necessary information for effective implementation of SARPS.

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#### **ORGANIZATION**

- 5. Maintain office discipline & Order in the ANS Section.
- 6. Make recommendations to the CAASL in regard to cadre requirement attached to the Section.
- 7. Through proper planning, design, organization, resource management and adequate training of the Section's personnel ensure establishment of an efficient and competent Section capable of performing all job functions required to be performed by the Section to the expected standards of the CAASL.
- 8. Ensure employees attached to the ANS Section in the CAASL carry out all job functions as laid down in the job descriptions of the Inspectors issued by CAASL, in conformity with the approved Annual Work Programme.
- 9. Conduct Performance Evaluations on all staff attached to the ANS Section and maintain records.
- 10. Issue / update the Job Descriptions of all staff attached to the Division with the approval of the DGCA/CEO.
- 11. Maintain performance indicators, statistics relating to all important duties, functions or activities performed by the ANS Section.
- 12. Submit annual reports to the Management concerning the work progress of the ANS Section.
- 13. Provide the DGCA with necessary inputs in regard to the work that the Division is expected to perform in the next triennium so that the CAASL Business Plan could be updated accordingly.
- 14. Prepare Annual Work Plan and Annual Work Programmes and Budget estimates for the ANS Section.
- 15. Ensure that all inspectors attached to the Section are provided with necessary empowerments, credentials, authorizations, uniforms, inspector handbooks and other amenities etc. in order to enable them perform the assigned tasks effectively.
- 16. Be accountable to the DGCA & CEO with regard to control of operational expenditures in the Section.

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#### PERSONNEL & TRAINING

- 17. Ensure that a complete training plan is prepared for each position coming under the section that the post holder will be able to discharge the assigned functions effectively.
- 18. Provide the DGCA with the Training requirements of the Section for the next three years on a sliding basis.
- 19. Prepare an annual training plan for each position in the section with due regard to the priorities and resources available and Ensure that all employees attached to the ANS Section are fully conversant and are adequately trained to perform their job functions entrusted to them, to the standards expected by CAASL and maintain their training records.

#### **GUIDANCE MATERIALS**

- 20. Ensure availability of written Office Procedures in respect of each activity being performed in the ANS Section.
- 21. Ensure the required toolkits for efficient and effective surveillance of ANS Services Providers such as Inspectors' Handbook, Checklists, Survey Forms, Audit Forms, job guides etc. and equipment if necessary are readily available at the Section. This should include toolkits for efficient inspections, surveying and Certification audits of ANS Services Providers and PANS OPS Procedure Design Service Providers.
- 22. Ensure all Manuals, Written Procedures and Handbook issued by the ANS Section are reviewed and updated as and when required and prepare new guidance material when such is viewed necessary.
- 23. Ensure availability of relevant guidance and reference materials, documents, annexes and other useful publications relating to Air Navigation Services both in printed and electronic format.

#### CERTIFICATION

24. Ensure that appropriate Air Navigation Service Providers are duly certified in accordance with applicable regulations, Standards, written procedures and other relevant directives issued by the DGCA.

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25. Ensure Issue, renew, amend, suspend or cancel ANS Service Provider Certificates as the case may be and in accordance with the delegation of authority by the DGCA.

#### **SURVEILLANCE**

- 26. Develop and implement a systematic Annual Surveillance Plan in respect of each ANS Provider authorized/certificated by the CAASL to be able to achieve the State's Acceptable Level of Safety.
- 27. Maintain a complete, accurate and updated database containing data and information gathered during the implementation of the surveillance plan.
- 28. Analyze the data gathered during the surveillance and adjust the surveillance plan and conduct additional awareness creating activities where necessary based on the trends and associated risks, identified.

#### **ENFORCEMENT**

29. Ensure necessary enforcement actions are taken in accordance with available regulations and the CAASL Enforcement Policy Manual in case of safety violations or deviations made by the Certified/Authorized Air Navigation services Providers.

#### OTHER

- 30. Ensure proper organization and management of air space of Sri Lanka for the effective use of civil air operators in close coordination with the Sri Lanka Air Force, ANS Providers and other defense establishments as appropriate.
- 31. As required and directed by DGCA (SL) represent DGCA at forums pertinent to Air Navigation Services in Sri Lanka and overseas.
- 32. As directed by DGCA assist CAASL AIB members and/or AIB authorities of other states to carry out formal investigations/enquires pertinent to aircraft accidents/incidents. Submit accurate reports to DGCA (SL) on same as required.
- 33. Ensure arrangements are made for the establishment and provision of SAR in Sri Lanka as per ICAO requirements.
- 34. Organize and update information in the CAASL website pertaining to ANS Section.
- 35. Perform any other duties and functions as may be assigned by the DGCA & CEO

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#### **KNOWLEDGE AND SKILL REQUIREMENTS**

- 1. A Bachelor's Degree of not less than three (03) years duration, in the field of Physical Science, Aerospace, Air Transport, Aeronautical Engineering or Civil Engineering which is recognized by the University Grants Commission of Sri Lanka;
- 2. A Postgraduate Degree qualification (Masters') in the field of Aviation or Associate Membership of a recognized Professional Chartered Institute relating to Aviation or successfully completed courses (Managerial Level) of not less than six (06) weeks conducted by the International Civil Aviation Organization or similar Organization of International repute or any similar qualification which is recognized by the International Civil Aviation Organization.
- 3. Minimum of ten (10) years' experience as an Air Traffic Controller with full privileges in Air Traffic Control at Managerial Level in a Corporation, Statutory Board/Institution/Government owned company or a reputed Private Institution
- 4. Minimum of thirteen (13) years' experience in the field of Air Navigation Services at Managerial Level in a Corporation, Statutory Board/Institution/Government owned Company or a reputed Private Institution.

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#### 2.2.2 SENIOR CIVIL AVIATION INSPECTOR – (ATM OPS)

#### JOB DESCRIPTION

#### **Job Summary**

In addition to the specific job descriptions issued to the incumbent together with the letter of Appointment, the incumbent is required to assist DANS to execute duties and functions as required by DGCA to ensure that Air Traffic Services are provided in Sri Lanka and within Colombo FIR in compliance with the requirements stipulated by the Director-General of Civil Aviation.

#### **Nature and Scope of Duties**

To ascertain the above, the Senior Civil Aviation Inspector ATM (OPS), subject to the scope of the delegation of authority shall perform the duties and functions, which include, but not limited to the following in consultation with the DANS;

#### PRIMARY LEGISLATION

1. Assist Director Air Navigation Services with Primary Aviation Legislation required to regulate Air Traffic Management and Search & Rescue (SAR) in Sri Lanka.

#### **OPERATING REGULATIONS**

- 2. Assist Director Air Navigation Services to develop/implement Required Operating Regulations for the Basic Aviation Legislation and amend as necessary to maintain required safety in the provision of Air Traffic Management and SAR in Sri Lanka.
- 3. Perform all activities necessary to assist the DANS for the Implementation of relevant SARPS contained in ICAO Annex 2, Annex 11 and Annex 12 in Sri Lanka and update as necessary.
- 4. Publish Guidance Materials and other necessary Documents issued by ICAO related to Air Traffic Management and SAR in Sri Lanka and update as necessary.

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#### ORGANIZATION

- 5. Maintain office discipline of the staff working under the incumbent.
- 6. Ensure employees working under the incumbent carry out all job functions as laid down in the job descriptions issued by CAASL.
- 7. Assist DANS to conduct Performance Evaluations of the employees working under the incumbent.
- 8. Maintain statistics relating to all important duties, functions or activities performed by the incumbent and the staff working under the incumbent.

#### **PERSONNEL & TRAINING**

- 9. Identify and advise the training needs of the incumbent and the staff working under the incumbent to the DANS.
- 10. Organize refresher and/or recurrent training as required and/or instructed by the DANS.
- 11. Maintain records of all individual training offered to employees under his/her supervision.
- 12. Provide "on the job training" for inspectors when required.

#### **GUIDANCE MATERIALS**

- 13. Prepare written Office Procedures in respect of each activity being performed in the ANS Section with regard to Air Traffic Management, and SAR.
- 14. Prepare required toolkits for efficient and effective surveillance of Air Traffic Services Providers, and SAR facilities such as Inspectors' Handbook, Checklists, Survey Forms, and Audit Forms etc. and make them readily available at the Section. This should include toolkits for efficient inspections, surveying and Certification Audits of Air Traffic Services Providers.
- 15. Review all Manuals, Written Procedures and Handbook issued by the ANS Section with regard to ATM and SAR and update when required.
- 16. Identify and advise DANS the relevant guidance and reference materials, documents, annexes and other useful publications relating to ATM and SAR, which should be available in the ANS Section.

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#### CERTIFICATION

- 17. Assist DANS in taking necessary actions to Authorize/certify Air Traffic Service Providers in Sri Lanka in accordance with applicable regulations Standards, written procedures and other relevant directives issued by the DGCA.
- 18. Assist DANS with necessary actions to issue, renew, amend, suspend or cancel Air Traffic Service Provider Certificates/Authorizations as the case may be.

#### SURVEILLANCE

19. Maintain continued surveillance/Safety Oversight on Certified/Authorized Air Traffic Service Providers and SAR facilities in Sri Lanka in order to ensure that they maintain required safety standards specified by the DGCA.

#### **ENFORCEMENT**

20. In consultation with DANS Follow proper procedures to enforce actions in accordance with available regulations in case of safety violations made by the Air Traffic Service Providers.

#### OTHER

- 21. As required and directed by DANS represent DANS at forums pertinent to Air Traffic Services and SAR in Sri Lanka and abroad.
- 22. As directed by DANS assist CAASL AIB members and/or AIB authorities of other states to carry out formal investigations/enquires pertinent to aircraft accidents/incidents. Submit accurate reports to DGCA (SL) on same as required.
- 23. Make necessary arrangements for the establishment and provision of SAR in Sri Lanka as per ICAO requirements.
- 24. Organize and update information in the CAASL website pertaining to ANS Section.
- 25. Perform any other duties and functions as may be assigned by the Head of the Section.

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#### **KNOWLEDGE AND SKILL REQUIREMENTS**

- 1. Bachelor's Degree of not less than three (03) years from an University recognized by the University Grant Commission of Sri Lanka in Physical Science, Transport, Aerospace, Information and Communication Technology or Engineering Stream, with not less than eight (08) years post qualifying experience as an Air Traffic Controller with full ratings in a Government Department /Public Enterprise or in a reputed Mercantile Establishment engaged in Aviation.
- 2. Having passed the Intermediate Examination of a recognized professional Chartered Institute, of which the subject area is relevant to the post with minimum eight (08) years post qualifying experience as an Air Traffic Controller with full ratings, in a public or private organization engaged in provision of Air Navigation Services.
- 3. Having obtained a certificate of proficiency in the relevant field which is not below than the National Vocational Qualification Level 7 determined by Technical /Vocational Training Institute accepted by Tertiary and Vocational Education Commission with minimum eight (08) years post qualifying experience as an Air Traffic Controller with full ratings, in a public or private organization engaged in provision of Air Navigation Services.
- 4. At minimum to have successfully completed the Search and Rescue officer course.
- 5. At minimum to have successfully completed ANS Inspector course or General Audit Technique Course and having completed 6 months On-The-Job Training under Senior ATM inspector.

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#### 2.2.3 SENIOR CIVIL AVIATION INSPECTOR – (ATM S&P)

#### JOB DESCRIPTION

#### Job Summary

In addition to the specific job descriptions issued to the incumbent together with the letter of Appointment, the incumbent is required to assist DANS to perform duties and functions as required by DGCA to ensure that Air Traffic Services and PANS OPS procedure designing services provided in Sri Lanka and within Colombo FIR in compliance with the requirements stipulated by the Director-General of Civil Aviation.

#### **Nature and Scope of Duties**

To ascertain the above, the Senior Civil Aviation Inspector ATM S&P, subject to the scope of the delegation of authority shall perform the duties and functions, which include, but not limited to the following in consultation with the DANS;

#### PRIMARY LEGISLATION

1. Assist Director Air Navigation Services with Primary Aviation Legislation required to regulate Air Traffic Management and PANS OPS procedures development in Sri Lanka

#### **OPERATING REGULATIONS**

- 2. Assist Director Air Navigation Services with Required Operating Regulations for the Basic Aviation Legislation and amend as necessary to maintain required safety in the provision of Air Traffic Management and PANS OPS Procedures in Sri Lanka.
- 3. Perform all activities necessary to assist the DANS for the Implementation of relevant SARPS contained in ICAO Annex 2, and Annex 11 in Sri Lanka and update as necessary.
- 4. Publish Guidance Materials and other necessary Documents issued by ICAO related to Air Traffic Management and PANS OPS procedure designing services and update as necessary.

#### **ORGANIZATION**

- 5. Maintain office discipline of the staff working under the incumbent.
- 6. Ensure employees working under the incumbent carry out all job functions as laid down in the job descriptions issued by CAASL.

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- 7. Assist DANS to conduct Performance Evaluations of the employees working under the incumbent.
- 8. Maintain statistics relating to all important duties, functions or activities performed by the incumbent and the staff working under the incumbent.

#### **PERSONNEL & TRAINING**

- 9. Identify and advise the training needs of the incumbent and the staff working under the incumbent to the DANS
- 10. Organize refresher and/or recurrent training as required and/or instructed by the DANS.
- 11. Maintain records of all individual training offered to employees under his/her supervision.
- 12. Provide "on the job training" for inspectors when required.

#### **GUIDANCE MATERIALS**

- 13. Prepare written Office Procedures in respect of each activity being performed in the ANS Section with regard to Air Traffic Management and in regulating PANS OPS Procedure designing.
- 14. Prepare required toolkits for efficient and effective surveillance of Air Traffic Services Providers and PANS OPS Procedure designing service providers such as Inspectors' Handbook, Checklists; Survey Forms, Audit Forms etc. and make them readily available at the Section. This should include toolkits for efficient inspections, surveying and Certification Audits of Air Traffic Services Providers and PANS OPS Procedure design service providers.
- 15. Review all Manuals, Written Procedures and Handbooks issued by the ANS Section with regard to ATM ANS and PANS OPS update when required.
- 16. Identify and advise DANS the relevant guidance and reference materials, documents, annexes and other useful publications relating to ATM and PANS OPS which should be available in the ANS Section.

#### CERTIFICATION

17. Assist DANS in taking necessary actions to authorize/certify Air Traffic Service Providers and PANS OPS Procedure Design Service Providers in Sri Lanka in accordance with applicable regulations Standards, written procedures and other relevant directives issued by the DGCA.

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18. Assist DANS with necessary actions to issue, renew, amend, suspend or cancel Air Traffic Service Provider Certificates/Authorizations as the case may be.

#### **SURVEILLANCE**

19. Maintain continued surveillance/Safety Oversight on Certified/Authorized Air Traffic Service Providers and PANS OPS procedure design facilities in Sri Lanka in order to ensure that they maintain required safety standards specified by the DGCA.

#### **ENFORCEMENT**

20. In consultation with DANS follow proper procedures to enforce actions in accordance with available regulations in case of safety violations made by the Air Traffic Service Providers and PANS OPS Procedure Design Service providers

#### OTHER

- 21. As required and directed by DANS represent DANS at forums pertinent to Air Traffic Services and PANS OPS in Sri Lanka and abroad.
- 22. As directed by DANS assist CAASL AIB members and/or AIB authorities of other states to carry out formal investigations/enquires pertinent to aircraft accidents/incidents. Submit accurate reports to DGCA (SL) on same as required.
- 23. Make necessary arrangements for the provision of PANS OPS design services in Sri Lanka as per ICAO requirements.
- 24. Organize and update information in the CAASL website pertaining to ANS Section.
- 25. Perform any other duties and functions as may be assigned by the Head of the Section.

#### **KNOWLEDGE AND SKILL REQUIREMENTS**

- Bachelor's Degree of not less than three (03) years from an University recognized by the University Grant Commission of Sri Lanka in Physical Science, Transport, Aerospace, Information and Communication Technology or Engineering Stream or with not less than eight (08) years post qualifying experience as an Air Traffic Controller with full ratings in a Government Department /Public Enterprise or in a reputed Mercantile Establishment engaged in Aviation.
- 2. Having passed the Intermediate Examination of a recognized professional Chartered Institute, of which the subject area is relevant to the post with minimum eight (08) years post qualifying experience as an Air Traffic Controller with full ratings, in a public or private organization engaged in provision of Air Navigation Services.

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- 3. Having obtained a certificate of proficiency in the relevant field which is not below than the National Vocational Qualification Level 7 determined by Technical /Vocational Training Institute accepted by Tertiary and Vocational Education Commission with minimum eight (08) years post qualifying experience as an Air Traffic Controller with full ratings, in a public or private organization engaged in provision of Air Navigation Services
- 4. At minimum to have successfully completed the PANS OPS procedure design basic course.
- 5. At minimum to have successfully completed ANS Inspector course or General Audit Technique Course and having completed 6 months On-The-Job Training under Senior ATM inspector.

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#### 2.2.4 Senior Civil Aviation Inspector – ATM TECH

#### JOB DESCRIPTION

#### **Job Summary**

In addition to the specific job descriptions issued to the incumbent together with the letter of Appointment, the incumbent is required to assist DANS to execute duties and functions as required by DGCA to ensure that Aeronautical Communication, Navigation & Surveillance Service Providers in Sri Lanka are operated in compliance with the requirements specified by the Director-General of Civil Aviation.

#### **Nature and Scope of Duties**

To ascertain the above, the Senior Civil Aviation Inspector (ATM TECH), subject to the scope of the delegation of authority shall perform the duties and functions, which include, but not limited to the following.

#### PRIMARY LEGISLATION

1. Assist Director Air Navigation Services with Primary Aviation Legislation to regulate Communication, Navigation & Surveillance (CNS) Service in Sri Lanka.

#### **OPERATING REGULATIONS**

- 2. Assist Director Navigation Services to develop/implement Required Operating Regulations for the Basic Aviation Legislation and amend as necessary, to maintain required safety in the provision of CNS in Sri Lanka.
- 3. Implement relevant SARPS contained in ICAO Annex 10 Volume I, III, IV and V in Sri Lanka and update as necessary.
- 4. Publish Guidance Materials and other necessary Documents issued by ICAO related to CNS in Sri Lanka and update as necessary.

#### **ORGANIZATION**

- 5. Maintain office discipline of the staff working under the incumbent.
- 6. Ensure employees working under the incumbent carry out all job functions as laid down in the job descriptions issued by CAASL.
- 7. Assist DANS to conduct Performance Evaluations of the employees working under the incumbent.

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8. Maintain statistics relating to all important duties, functions or activities performed by the incumbent and the staff working under the incumbent.

#### **PERSONNEL & TRAINING**

- 9. Identify and advise the training needs of the incumbent and the staff working under the incumbent to the DANS.
- 10. Organize refresher and/or recurrent training as required.
- 11. Maintain records of all individual training offered to employees.
- 12. Provide "on the job training" for inspectors working under the incumbent when required.

#### **GUIDANCE MATERIALS**

- 13. Prepare written Office Procedures in respect of each activity being performed in the ANS Section with regard to CNS.
- 14. Prepare required toolkits for efficient and effective surveillance of CNS Service Providers such as Inspectors' Handbook, Checklists; Survey Forms, Audit Forms etc. and make them readily available at the Section. This should include toolkits for efficient inspections, surveying and Certification audits of CNS Service Providers.
- 15. Review all Manuals, Written Procedures and Handbooks issued by the ANS Section with regard to CNS and update when required.
- 16. Identify and advise DANS of relevant guidance and reference materials, documents, annexes and other useful publications relating to CNS, which should be made available in the ANS Section.

#### **CERTIFICATION**

- 17. Assist DANS to take necessary actions to Authorize/certify CNS Service Providers in Sri Lanka in accordance with applicable regulations, Standards, written procedures and other relevant directives issued by the DGCA.
- 18. Assist DANS with necessary actions to to issue, renew, amend, suspend or cancel CNS Service Provider Certificates/Authorizations as the case may be.

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#### SURVEILLANCE

19. Maintain continued surveillance on Authorized/Certified CNS Service Providers in Sri Lanka in order to ensure that they maintain required safety standards specified by the DGCA.

#### **ENFORCEMENT**

20. In consultation with DANS follow available procedures to enforce actions in accordance with available regulations in case of safety violations made by the CNS Service Providers.

#### OTHER

- 21. As required and directed by DANS represent DANS at forums pertinent to CNS in Sri Lanka and abroad.
- 22. As directed by DANS assist CAASL AIB members and/or AIB authorities of other states to carry out formal investigations/enquires pertinent to aircraft accidents/incidents. Submit accurate reports to DGCA (SL) on same as required.
- 23. Organize and update information in the CAASL website pertaining to CNS.
- 24. Perform any other duties and functions as may be assigned by the Head of the Section.

#### **KNOWLEDGE AND SKILL REQUIREMENTS**

- 1. Bachelor's Degree in Engineering of not less than four (04) years from an University recognized by the University Grant Commission of Sri Lanka in the field of Telecommunication / Avionics, with not less than eight (08) years post qualifying experience as an Electronics/Telecommunication/Avionics Engineer in a Government Department /Public Enterprise or in a reputed Mercantile Establishment engaged in provision of Air Navigation Services and Ground Aides.
- 2. Having passed the Intermediate Examination of a recognized professional Chartered Institute, of which the subject area is relevant to the post with minimum eight (08) years post qualifying experience as an Electronics/Telecommunication/Avionics Engineer in a public or private organization engaged in the provision of Air Navigation Services and Ground Aides.
- 3. Having obtained a certificate of proficiency in the relevant field which is not below than the National Vocational Qualification Level 7 determined by Technical /Vocational Training Institute accepted by Tertiary and Vocational Education Commission with minimum eight (08) years post qualifying experience as an Electronic/Telecommunication/Avionics Engineer in a public or private organization engaged in provision of Air Navigation Services and Ground Aids.

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- 4. At minimum to have successfully completed the basic course related to Navigational Aids.
- 5. At minimum to have successfully completed ANS Inspector course or General Audit Technique Course and having completed 6 months On-The-Job Training under Senior CNS inspector.

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# 2.2.5 SENIOR CIVIL AVIATION INSPECTOR (MET)

# **JOB DESCRIPTION**

# **Job Summary**

In addition to the specific job descriptions issued to the incumbent together with the letter of Appointment, the incumbent is required to assist DANS to execute duties and functions as required by DGCA to ensure that Aeronautical Meteorology Service Providers in Sri Lanka are operated in compliance with the requirements specified by the Director-General of Civil Aviation.

# **Nature and Scope of Duties**

To ascertain the above, the Senior Civil Aviation Inspector (MET), subject to the scope of the delegation of authority shall perform the duties and functions, which include, but not limited to the following.

#### PRIMARY LEGISLATION

1. Assist DANS with Primary Aviation Legislation required to regulate Aeronautical Meteorology Services in Sri Lanka.

#### **OPERATING REGULATIONS**

- 2. Assist DANS to develop/implement Required Operating Regulations for the Basic Aviation Legislation and amend as necessary, to maintain required safety in the provision of Aeronautical Meteorology Services in Sri Lanka.
- 3. Implement relevant SARPS contained in ICAO Annex 3 in Sri Lanka and update as necessary.
- 4. Publish Guidance Materials and other necessary Documents issued by ICAO related to Aeronautical Meteorology Services, in Sri Lanka and update as necessary.

#### **ORGANIZATION**

5. Maintain statistics relating to all important duties, functions or activities performed by the incumbent and the staff working under the incumbent.

#### PERSONNEL & TRAINING

- 6. Identify and advise the training needs of the incumbent to the DANS.
- 7. Organize refresher and/or recurrent training as required.

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- 8. Maintain records of all individual training offered to employees.
- 9. Provide "on the job training" for inspectors when required.

#### **GUIDANCE MATERIALS**

- 10. Prepare written Office Procedures in respect of each activity being performed in the ANS Section with regard to Aeronautical Meteorology Services.
- 11. Prepare required toolkits for efficient and effective surveillance of Aeronautical Meteorology Services Providers such as Inspectors' Handbook, Checklists; Survey Forms, Audit Forms etc. and make readily available at the Section. This should include toolkits for efficient inspections, surveying and Certification audits of Aeronautical Meteorology Services Providers.
- 12. Review all Manuals, Written Procedures and Handbooks issued by the ANS Section with regard to Aeronautical Meteorology Services and update when required.
- 13. Identify and advice DANS the relevant guidance and reference materials, documents, annexes and other useful publications relating to Aeronautical Meteorology Services, which should be made available in the ANS Section.

# SURVEILLANCE

14. Maintain continued surveillance on Aeronautical Meteorology Services in Sri Lanka in order to ensure that they maintain required safety standards specified by the DGCA.

#### **ENFORCEMENT**

15. In consultation with DANS follow available procedures to enforce actions in accordance with available regulations in case of safety violations made by the Aeronautical Meteorology Services Providers.

#### **OTHER**

- 16. As required and directed by DANS represent DANS at forums pertinent to Aeronautical Meteorology Services in Sri Lanka and abroad.
- 17. As directed by DANS assist CAASL AIB members and/or AIB authorities of other states to carry out formal investigations/enquires pertinent to aircraft accidents/incidents. Submit accurate reports to DGCA (SL) on same as required.

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- 18. Organize and update information in the CAASL website pertaining to Aeronautical Meteorology Services.
- 19. Perform any other duties and functions as may be assigned by the Head of the Section

# **KNOWLEDGE AND SKILL REQUIREMENTS**

- 1. A Bachelor of Science degree of not less than three (03) years from a recognized university by the University Grants Commission of Sri Lanka having studied in Atmospheric Physics, Physical Science, Transport, Aerospace, Information and Communication Technology or Engineering Stream with not less than eight (08) years post qualifying experience as a Forecaster or Meteorologist in a Government Department /Public Enterprise or in a reputed Mercantile Establishment engaged in Meteorology.
- 2. At minimum to have successfully completed the basic Meteorology Course.
- 3. At minimum to have successfully completed ANS Inspector course or General Audit Technique Course and having completed 6 months On-The-Job Training under Senior MET inspector.

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# 2.2.6 SENIOR CIVIL AVIATION INSPECTOR - AIS

# **JOB DESCRIPTION**

# **Job Summary**

In addition to the specific job descriptions issued to the incumbent together with the letter of Appointment, the incumbent is required to assist DANS to execute duties and functions as required by DGCA to ensure that Aeronautical Information, Aeronautical Communication and Aeronautical Charts/Cartography Service Providers are operated in compliance with the requirements specified by the Director-General of Civil Aviation.

# **Nature & Scope of Duties**

To ascertain the above, the Senior Civil Aviation Inspector -AIS, subject to the scope of the delegation of authority shall perform the duties and functions, which include, but not limited to the following.

#### PRIMARY LEGISLATION

1. Assist DANS with Primary Aviation Legislation to regulate Aeronautical Information, Aeronautical Communication and Aeronautical Maps & Charts/Cartography Services in Sri Lanka.

# **OPERATING REGULATIONS**

- 2. Assist DANS to develop/implement Required Operating Regulations for the Basic Aviation Legislation and amend as necessary, to maintain required safety in the provision of Aeronautical Information, Aeronautical Communication and Aeronautical Maps & Charts/Cartography Services and units of measurement in Sri Lanka.
- 3. Implement relevant SARPS contained in ICAO Annex 4, Annex 5, Annex 10 Volume II and Annex 15 in Sri Lanka and update as necessary.
- 4. Publish Guidance Materials and other necessary Documents issued by ICAO related to Aeronautical Information, Aeronautical Communication, Aeronautical Charts Services, and the units of measurement locally and update as necessary.

# **ORGANIZATION**

- 5. Maintain office discipline of the staff working under the incumbent.
- 6. Ensure employees working under the incumbent carry out all job functions as laid down in the job descriptions issued by CAASL.

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- 7. Assist DANS to conduct Performance Evaluations of the employees working under the incumbent.
- 8. Maintain statistics relating to all important duties, functions or activities performed by the incumbent and the staff working under the incumbent.

# **PERSONNEL & TRAINING**

- 9. Identify and advise the training needs of the incumbent and the staff working under the incumbent to the DANS.
- 10. Organize refresher and/or recurrent training as required.
- 11. Maintain records of all individual training offered to the incumbent.
- 12. Provide "on the job training" for inspectors when required.

#### GUIDANCE MATERIALS

- 13. Prepare written Office Procedures in respect of each activity being performed in the ANS Section with regard to Aeronautical Information, Aeronautical Communication and Aeronautical Maps & Charts/Cartography Services and Units of measurement.
- 14. Prepare required toolkits for efficient and effective surveillance of Aeronautical Information, Aeronautical Communication and Aeronautical Maps & Charts/Cartography Services Providers such as Inspectors' Handbook, Checklists; Survey Forms, Audit Forms etc. and make readily available at the Section. This should include toolkits for efficient inspections, surveying and Certification audits of Aeronautical Information, Aeronautical Communication and Aeronautical Maps & Charts/Cartography Service Providers.
- 15. Review all Manuals, Written Procedures and Handbooks issued by the ANS Section with regard to Aeronautical Information, Aeronautical Communication and Aeronautical Maps & Charts/Cartography Services and Units of measurement update when required.
- 16. Identify and advice DANS the relevant guidance and reference materials, documents, annexes and other useful publications relating to Aeronautical Information, Aeronautical Communication and Aeronautical Maps & Charts/Cartography Services, Units of measurement which should be available in the ANS Section.

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#### CERTIFICATION

- 17. Assist DANS to take necessary action to authorize/certify Aeronautical Information and Aeronautical Communication Services Providers in Sri Lanka in accordance with applicable regulations, Standards, written procedures and other relevant directives issued by the DGCA.
- 18. Take necessary action to issue, renew, amend, suspend or cancel Aeronautical Information and Aeronautical Communication Services Provider Certificates as the case may be.

#### SURVEILLANCE

19. Maintain continued surveillance on Aeronautical Information, Aeronautical Communication and Aeronautical Charts/Cartography Services Providers in Sri Lanka in order to ensure that they maintain required safety standards specified by the DGCA.

# **ENFORCEMENT**

20. In Consultation with DANS follow available procedures to enforce actions in accordance with available regulations in case of safety violations made by the Aeronautical Information, Aeronautical Communication and Aeronautical Charts/Cartography Service Providers.

#### OTHER

- 21. As required and directed by DANS represent DANS at forums pertinent to Aeronautical Information, Aeronautical Communication and Aeronautical Charts/Cartography Services in Sri Lanka and abroad.
- 22. As directed by DANS assist CAASL AIB members and/or AIB authorities of other states to carry out formal investigations/enquires pertinent to aircraft accidents/incidents. Submit accurate reports to DGCA (SL) on same as required.
- 23. Organize and update information in the CAASL website pertaining to Aeronautical Information, Aeronautical Communication and Aeronautical Charts/Cartography Services.
- 24. Ensure approvals are granted for air operators for non-scheduled traffic landing in Sri Lanka and overflying traffic Sri Lanka and maintain statistics thereof.

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- 25. If and when required, process, verify or grant approval or authorization for the authorized/certified AIS units to promulgate aeronautical information among users, in the form of AIP, AIRAC, AIC, NOTAM.
- 26. Review Aviation Implementing Standards prepared by the section for the correctness of their format and the order.
- 27. Perform Aeronautical Communication any other duties and functions as may be assigned by the Head of the Section.

# **KNOWLEDGE AND SKILL REQUIREMENTS**

- 1. Bachelor's Degree of not less than three (03) years from an University recognized by the University Grants Commission of Sri Lanka in Physical Science, Transport, Aerospace, Information and Communication Technology or Engineering Streams, with not less than eight (08) years post qualifying experience in Executive Capacity in the relevant field in a Government Department /Public Enterprise or in a reputed Mercantile Establishment engaged in Aviation.
- 2. Having passed the Intermediate Examination of a recognized professional Chartered Institute, of which the subject area is relevant to the post with minimum eight (08) years post qualifying experience in Executive Capacity in the relevant field in a Government Department /Public Enterprise or in a reputed Mercantile Establishment engaged in Aviation.
- 3. Having obtained a certificate of proficiency in the relevant field which is not below than the National Vocational Qualification Level 7 determined by Technical /Vocational Training Institute accepted by Tertiary and Vocational Education Commission with minimum eight (08) years post qualifying experience in Executive Capacity in the relevant field in a Government Department /Public Enterprise or in a reputed Mercantile Establishment engaged in Aviation.
- 4. At minimum to have successfully completed Basic AIS course.
- 5. At minimum to have successfully completed and ANS Inspector course or General Audit Technique Course and having completed 6 months On-The-Job Training under Senior AIS inspector.

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# 2.2.7 CIVIL AVIATION INSPECTOR (ATM OPS)

# **JOB DESCRIPTION**

# **Job Summary**

In addition to the specific job descriptions issued to the incumbent together with the letter of Appointment, the incumbent is required to assist DANS to execute duties and functions as required by DGCA to ensure that Air Traffic Services are provided in Sri Lanka and within Colombo FIR in compliance with the requirements stipulated by the Director-General of Civil Aviation.

# **Nature and Scope of Duties**

To ascertain the above, the Civil Aviation Inspector ATM (OPS), subject to the scope of the delegation of authority shall perform the duties and functions, which include, but not limited to the following in consultation with Senior Civil Aviation Inspector ATM OPS and DANS;

#### PRIMARY LEGISLATION

1. Assist Director Air Navigation Services with Primary Aviation Legislation to regulate Air Traffic Management Search & Rescue (SAR) in Sri Lanka

#### **OPERATING REGULATIONS**

- 2. Assist Senior Civil Aviation Inspector (ATM OPS) to implement required Operating Regulations for the Basic Aviation Legislation and amend as necessary to maintain required safety in the provision of Air Traffic Management and SAR in Sri Lanka.
- 3. Perform all activities necessary to assist Senior Civil Aviation Inspector (ATM OPS) for the Implementation of relevant SARPS contained in ICAO Annex 2, Annex 11 and Annex 12 in Sri Lanka and update as necessary.
- 4. Assist Senior Civil Aviation Inspector (ATM OPS) to publish Guidance Materials and other necessary Documents issued by ICAO related to Air Traffic Management and SAR in Sri Lanka and update as necessary.

#### **ORGANIZATION**

- 5. Maintain office discipline of the staff working under the incumbent.
- 6. Ensure employees working under the incumbent carry out all job functions as laid down in the job descriptions issued by CAASL.
- 7. Maintain statistics relating to all important duties, functions or activities performed by the incumbent and the staff working under the incumbent.

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#### PERSONNEL & TRAINING

- 8. Identify and advise the training needs of the incumbent and the staff working under the incumbent to the DANS.
- 9. Assist Senior Civil Aviation inspector (ATM OPS) to organize refresher and/or recurrent training as required and/or instructed by the DANS.
- 10. Maintain records of all individual training offered to employees under his/her supervision.

# **GUIDANCE MATERIALS**

- 11. Assist Senior Civil Aviation inspector (ATM OPS) in developing written Office Procedures in respect of each activity being performed in the ANS Section with regard to Air Traffic Management and SAR.
- 12. Assist Senior Civil Aviation inspector (ATM OPS) in developing required toolkits for efficient and effective surveillance of Air Traffic Services Providers, and SAR facilities such as Inspectors' Handbook, Checklists; Survey Forms, Audit Forms etc. and make them readily available at the Section. This should include toolkits for efficient inspections, surveying and Certification Audits of Air Traffic Services Providers.
- 13. Assist Senior Civil Aviation inspector (ATM OPS) in reviewing all Manuals, Written Procedures and Handbooks issued by the ANS Section with regard to ATM & SAR and update when required.
- 14. Identify and advise Senior Civil Aviation Inspector (ATM OPS) the relevant guidance and reference materials, documents, annexes and other useful publications relating to ATM, and SAR, which should be available in the ANS Section.

#### CERTIFICATION

- 15. Assist DANS in taking necessary actions to Authorize/certify Air Traffic Service Providers in Sri Lanka in accordance with applicable regulations Standards, written procedures and other relevant directives issued by the DGCA.
- 16. Assist DANS in taking necessary actions to issue, renew, amend, suspend or cancel Air Traffic Service Provider Certificates as the case may be.

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#### **SURVEILLANCE**

17. Assist Senior Civil Aviation Inspector (ATM OPS) in maintaining continued surveillance/Safety Oversight on Certified/Authorized Air Traffic Service Providers and SAR facilities in Sri Lanka in order to ensure that they maintain required safety standards specified by the DGCA.

#### **ENFORCEMENT**

18. Assist DANS to enforce actions in accordance with available regulations in case of safety violations made by the Air Traffic Service Providers.

#### OTHER

- 19. As required and directed by DANS represent Senior Civil Aviation Inspector (ATM OPS) at forums pertinent to Air Traffic Services and SAR in Sri Lanka and abroad.
- 20. As directed by DANS assist CAASL AIB members and/or AIB authorities of other states to carry out formal investigations/enquires pertinent to aircraft accidents/incidents. Submit accurate reports to DGCA (SL) on same as required.
- 21. Assist Senior Civil Aviation Inspector (ATM OPS) in establishing and provision of SAR in Sri Lanka as per ICAO requirements.
- 22. Organize and update information in the CAASL website pertaining to ANS Section.
- 23. Perform any other duties and functions as may be assigned by the Head of the Section.

# **KNOWLEDGE AND SKILL REQUIREMENTS**

- 1. A Bachelor of Science Degree of not less than three (03) years from a university recognized by University Grants Commission of Sri Lanka having studied in Physical Science, Transport, Aerospace, Information Technology or Engineering Stream with one (01) year Executive Experience or a Post Graduate Diploma in the fields above from an institution recognized by the University Grants Commission of Sri Lanka.
- 2. Air Traffic Controller holding Radar Rating with not less than ten (10) years working experience as Radar Air Traffic Controller.
- 3. At minimum to have successfully completed ANS Inspector course or General Audit Technique Course and having completed 6 months On-The-Job Training under Senior ATM inspector.

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# 2.2.8 CIVIL AVIATION INSPECTOR – (ATM S&P)

# **JOB DESCRIPTION**

# **Job Summary**

In addition to the specific job descriptions issued to the incumbent together with the letter of Appointment, the incumbent is required to assist DANS to execute duties and functions as required by DGCA to ensure that Air Traffic Services and PANS OPS procedure designing services provided in Sri Lanka and within Colombo FIR in compliance with the requirements stipulated by the Director-General of Civil Aviation.

#### **Nature and Scope of Duties**

To ascertain the above, the Senior Civil Aviation Inspector (ATM S&P), subject to the scope of the delegation of authority shall perform the duties and functions, which include, but not limited to the following in consultation with Senior Civil Aviation Inspector (ATM S&P) and DANS;

#### PRIMARY LEGISLATION

1. Assist Director Air Navigation Services with Primary Aviation Legislation to regulate Air Traffic Management and PANS OPS procedures development in Sri Lanka.

# **OPERATING REGULATIONS**

- 2. Assist Senior Civil Aviation Inspector (ATM S&P) to implement Required Operating Regulations for the Basic Aviation Legislation and amend as necessary to maintain required safety in the provision of Air Traffic Management and PANS OPS Procedures in Sri Lanka.
- 3. Perform all activities necessary to assist the Senior Civil Aviation Inspector (ATM S&P) for the Implementation of relevant SARPS contained in ICAO Annex 2, and Annex 11 in Sri Lanka and update as necessary.
- 4. Assist the Senior Civil Aviation Inspector (ATM S&P) to publish Guidance Materials and other necessary Documents issued by ICAO related to Air Traffic Management and PANS OPS procedure designing services and update as necessary.

#### **ORGANIZATION**

- 5. Maintain office discipline of the staff working under the incumbent.
- 6. Ensure employees working under the incumbent carry out all job functions as laid down in the job descriptions issued by CAASL.

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- 7. Assist DANS to conduct Performance Evaluations of the employees working under the incumbent.
- 8. Maintain statistics relating to all important duties, functions or activities performed by the incumbent and the staff working under the incumbent.

#### PERSONNEL & TRAINING

- 9. Identify and advise the training needs of the incumbent and the staff working under the incumbent to the DANS.
- 10. Assist the Senior Civil Aviation Inspector (ATM S&P) to organize refresher and/or recurrent training as required and/or instructed by the DANS.
- 11. Maintain records of all individual training offered to employees under his/her supervision.

#### **GUIDANCE MATERIALS**

- 12. Assist the Senior Civil Aviation Inspector (ATM S&P) to develop written Office Procedures in respect of each activity being performed in the ANS Section with regard to Air Traffic Management and in regulating PANS OPS Procedure designing.
- 13. Assist the Senior Civil Aviation Inspector (ATM S&P) to develop required toolkits for efficient and effective surveillance of Air Traffic Services Providers and PANS OPS Procedure designing service providers such as Inspectors' Handbook, Checklists; Survey Forms, Audit Forms etc. and make them readily available at the Section. This should include toolkits for efficient inspections, surveying and Certification Audits of Air Traffic Services Providers and PANS OPS Procedure design service providers.
- 14. Assist the Senior Civil Aviation Inspector (ATM S&P) Review all Manuals, Written Procedures and Handbooks issued by the ANS Section with regard to ATM ANS and PANS OPS update when required.
- 15. Identify and advise Senior Civil Aviation Inspector (ATM S&P) the relevant guidance and reference materials, documents, annexes and other useful publications relating to ATM and PANS OPS which should be available in the ANS Section.

#### CERTIFICATION

16. Assist DANS in taking necessary actions to authorize/certify Air Traffic Service Providers and PANS OPS Procedure Design Service Providers in Sri Lanka in accordance with applicable regulations Standards, written procedures and other relevant directives issued by the DGCA.

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17. Assist DANS in taking necessary actions to issue, renew, amend, suspend or cancel Air Traffic Service Provider Certificates as the case may be.

#### SURVEILLANCE

18. Assist the Senior Civil Aviation Inspector (ATM S&P) to maintain continued surveillance/Safety Oversight on Certified/Authorized Air Traffic Service Providers and PANS OPS procedure design facilities in Sri Lanka in order to ensure that they maintain required safety standards specified by the DGCA.

#### **ENFORCEMENT**

19. Assist the DANS to follow proper procedures to take enforcement actions in accordance with available regulations in case of safety violations made by the Air Traffic Service Providers and PANS OPS Procedure Design Service providers.

#### OTHER

- 20. As required and directed by DANS represent Senior Civil Aviation Inspector (ATM S&P) at forums pertinent to Air Traffic Services and PANS OPS in Sri Lanka and abroad.
- 21. As directed by DANS assist CAASL AIB members and/or AIB authorities of other states to carry out formal investigations/enquires pertinent to aircraft accidents/incidents. Submit accurate reports to DGCA (SL) on same as required.
- 22. Assist the Senior Civil Aviation Inspector (ATM S&P) necessary arrangements for the provision of regulatory Services for PANS OPS design services in Sri Lanka as per ICAO requirements.
- 23. Organize and update information in the CAASL website pertaining to ANS Section.
- 24. Perform any other duties and functions as may be assigned by the Head of the Section.

# **KNOWLEDGE AND SKILL REQUIREMENTS**

1. A Bachelor of Science Degree of not less than three (03) years from a university recognized by University Grants Commission of Sri Lanka having studied in Physical Science, Transport, Aerospace, Information Technology or Engineering Stream with one (01) year Executive Experience or a Post Graduate Diploma in the fields above from an institution recognized by the University Grants Commission of Sri Lanka.

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# CIVIL AVIATION AUTHORITY OF SRI LANKA



- 2. Air Traffic Controller holding Radar Rating with not less than ten (10) years working experience as Radar Air Traffic Controller.
- 3. At minimum to have successfully completed the PANS OPS procedure design basic course.
- 4. At minimum to have successfully completed ANS Inspector course or General Audit Technique Course and having completed 6 months On-The-Job Training under Senior ATM inspector.

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# 2.2.9 CIVIL AVIATION INSPECTOR (ATM TECH)

#### JOB DESCRIPTION

## **Job Summary**

In addition to the specific job descriptions issued to the incumbent together with the letter of Appointment, the incumbent is required to assist DANS to execute duties and functions as required by DGCA to ensure that Aeronautical Communication, Navigation & Surveillance Service Providers in Sri Lanka are operated in compliance with the requirements specified by the Director-General of Civil Aviation.

# **Nature and Scope of Duties**

To ascertain the above, the Civil Aviation Inspector (ATM TECH) subject to the scope of the delegation of authority shall perform the duties and functions, which include, but not limited to the following.

#### PRIMARY LEGISLATION

1. Assist Director Air Navigation Services with Primary Aviation Legislation to regulate Communication, Navigation & Surveillance (CNS) Service in Sri Lanka.

# **OPERATING REGULATIONS**

- 2. Assist Senior Civil Aviation Inspector (ATM TECH) to implement Required Operating Regulations for the Basic Aviation Legislation and amend as necessary, to maintain required safety in the provision of CNS in Sri Lanka.
- 3. Assist Senior Civil Aviation Inspector (ATM TECH) to implement relevant SARPS contained in ICAO Annex 10 Volume I, III, IV and V in Sri Lanka and update as necessary.
- 4. Assist Senior Civil Aviation Inspector (ATM TECH) to publish Guidance Materials and other necessary Documents issued by ICAO related to CNS in Sri Lanka and update as necessary.

# **ORGANIZATION**

- 5. Maintain office discipline of the staff working under the incumbent.
- 6. Ensure employees working under the incumbent carry out all job functions as laid down in the job descriptions issued by CAASL.

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- 7. Assist DANS to conduct Performance Evaluations of the employees working under the incumbent.
- 8. Maintain statistics relating to all important duties, functions or activities performed by the incumbent and the staff working under the incumbent.

#### **PERSONNEL & TRAINING**

- 9. Identify and advise the training needs of the incumbent and the staff working under the incumbent to the DANS.
- 10. Assist Senior Civil Aviation Inspector (ATM TECH) to organize refresher and/or recurrent training as required.
- 11. Maintain records of all individual training offered to employees.

#### **GUIDANCE MATERIALS**

- 12. Assist Senior Civil Aviation Inspector (ATM TECH) to develop written Office Procedures in respect of each activity being performed in the ANS Section with regard to CNS.
- 13. Assist Senior Civil Aviation Inspector (ATM TECH) to develop required toolkits for efficient and effective surveillance of CNS Service Providers such as Inspectors' Handbook, Checklists; Survey Forms, Audit Forms etc. and make them readily available at the Section. This should include toolkits for efficient inspections, surveying and Certification audits of CNS Service Providers.
- 14. Assist Senior Civil Aviation Inspector (ATM TECH) to review all Manuals, Written Procedures and Handbooks issued by the ANS Section with regard to CNS and update when required.
- 15. Identify and advise Senior Civil Aviation Inspector (ATM TECH) the relevant guidance and reference materials, documents, annexes and other useful publications relating to CNS, which should be made available in the ANS Section.

#### CERTIFICATION

- 16. Assist DANS to take necessary actions to Authorize/certify CNS Service Providers in Sri Lanka in accordance with applicable regulations, Standards, written procedures and other relevant directives issued by the DGCA.
- 17. Assist DANS to take necessary action to issue, renew, amend, suspend or cancel CNS Service Provider Certificates as the case may be.

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#### **SURVEILLANCE**

18. Assist Senior Civil Aviation Inspector (ATM TECH) to maintain continued surveillance on Authorized/Certified CNS Service Providers in Sri Lanka in order to ensure that they maintain required safety standards specified by the DGCA.

# **ENFORCEMENT**

19. Assist Senior Civil Aviation Inspector (ATM TECH) to follow available procedures to enforce actions in accordance with available regulations in case of safety violations made by the CNS Service Providers.

# **OTHER**

- 20. As required and directed by DANS represent Senior Civil Inspector (ATM TECH) at forums pertinent to CNS in Sri Lanka and abroad.
- 21. As directed by DANS assist CAASL AIB members and/or AIB authorities of other states to carry out formal investigations/enquires pertinent to aircraft accidents/incidents. Submit accurate reports to DGCA (SL) on same as required.
- 22. Organize and update information in the CAASL website pertaining to CNS.
- 23. Perform any other duties and functions as may be assigned by the Head of the Section.

# **KNOWLEDGE AND SKILL REQUIREMENTS**

- A Bachelor of Engineering Degree of not less than four (04) years from a university recognized by University Grants Commission of Sri Lanka having studied in Telecommunications Stream with one (01) year Executive Experience or a Post Graduate Diploma in the field of Telecommunication from an institution recognized by the University Grants Commission of Sri Lanka.
- 2. At minimum to have successfully completed basic course related to Navigational Aids.
- 3. At minimum to have successfully completed ANS Inspector course or General Audit Technique Course and having completed 6 months On-The-Job Training under Senior CNS/ATM-TECH inspector.

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# 2.2.10 CIVIL AVIATION INSPECTOR -AIS

#### JOB DESCRIPTION

# **Job Summary**

In addition to the specific job descriptions issued to the incumbent together with the letter of Appointment, the incumbent is required to assist DANS to perform duties and functions as required by DGCA to ensure that Aeronautical Information, Aeronautical Communication and Aeronautical Charts/Cartography Service Providers are operated in compliance with the requirements specified by the Director-General of Civil Aviation.

# **Nature & Scope of Duties**

To ascertain the above, the Senior Civil Aviation Inspector- AIS, subject to the scope of the delegation of authority shall perform the duties and functions, which include, but not limited to the following.

# **PRIMARY LEGISLATION**

1. Assist DANS with Primary Aviation Legislation to regulate Aeronautical Information, Aeronautical Communication and Aeronautical Charts/Cartography Services in Sri Lanka.

# **OPERATING REGULATIONS**

- Assist Senior Civil Aviation Inspector- AIS to implement Required Operating Regulations for the Basic Aviation Legislation and amend as necessary, to maintain required safety in the provision of Aeronautical Information, Aeronautical Communication and Aeronautical Maps & Charts/Cartography Services and units of measurement in Sri Lanka.
- 3. Assist Senior Civil Aviation Inspector- AIS to implement relevant SARPS contained in ICAO Annex 4, Annex 5, Annex 10 Volume II and Annex 15 in Sri Lanka and update as necessary.
- 4. Assist Senior Civil Aviation Inspector- AIS to publish Guidance Materials and other necessary Documents issued by ICAO related to Aeronautical Information, Aeronautical Communication, Aeronautical Charts Services, and the units of measurement locally and update as necessary.

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#### **ORGANIZATION**

- 5. Maintain office discipline of the staff working under the incumbent.
- 6. Ensure employees working under the incumbent carry out all job functions as laid down in the job descriptions issued by CAASL.
- 7. Assist DANS to conduct Performance Evaluations of the employees working under the incumbent.
- 8. Maintain statistics relating to all important duties, functions or activities performed by the incumbent and the staff working under the incumbent.

#### PERSONNEL & TRAINING

- 9. Identify and advise the training needs of the incumbent and the staff working under the incumbent to the DANS.
- 10. Assist Senior Civil Aviation Inspector- AIS to organize refresher and/or recurrent training as required.
- 11. Maintain records of all individual training offered to employees.

# **GUIDANCE MATERIALS**

- 12. Assist Senior Civil Aviation Inspector- AIS to develop written Office Procedures in respect of each activity being performed in the ANS Section with regard to Aeronautical Information, Aeronautical Communication and Aeronautical Maps & Charts/Cartography Services and Units of measurement.
- 13. Assist Senior Civil Aviation Inspector- AIS to develop required toolkits for efficient and effective surveillance of Aeronautical Information, Aeronautical Communication and Aeronautical Charts/Cartography Services Providers such as Inspectors' Handbook, Checklists; Survey Forms, Audit Forms etc. and make readily available at the Section. This should include toolkits for efficient inspections, surveying and Certification audits of Aeronautical Information, Aeronautical Communication and Aeronautical Maps & Charts/Cartography Service Providers.
- 14. Assist Senior Civil Aviation Inspector- AIS to review all Manuals, Written Procedures and Handbooks issued by the ANS Section with regard to Aeronautical Information, Aeronautical Communication and Aeronautical Charts/Cartography Services and Units of measurement update when required.

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15. Identify and advise Senior Civil Aviation Inspector- AIS the relevant guidance and reference materials, documents, annexes and other useful publications relating to Aeronautical Information, Aeronautical Communication and Aeronautical Charts/Cartography Services, Units of measurement which should be available in the ANS Section.

#### CERTIFICATION

- 16. Assist DANS to take necessary action to authorize/certify Aeronautical Information and Aeronautical Communication Services Providers in Sri Lanka in accordance with applicable regulations, Standards, written procedures and other relevant directives issued by the DGCA.
- 17. Assist DANS to take necessary action to issue, renew, amend, suspend or cancel Aeronautical Information and Aeronautical Communication Services Provider Certificates as the case may be.

#### **SURVEILLANCE**

18. Assist Senior Civil Aviation Inspector-AIS to maintain continued surveillance on Aeronautical Information, Aeronautical Communication and Aeronautical Charts/Cartography Services Providers in Sri Lanka in order to ensure that they maintain required safety standards specified by the DGCA.

# **ENFORCEMENT**

19. Assist Senior Civil Aviation Inspector-AIS to follow available procedures to enforce actions in accordance with available regulations in case of safety violations made by the Aeronautical Information, Aeronautical Communication and Aeronautical Maps & Charts/Cartography Service Providers.

#### **OTHER**

- 20. As required and directed by DANS represent Senior Civil Aviation Inspector- AIS at forums pertinent to Aeronautical Information, Aeronautical Communication and Aeronautical Maps & Charts/Cartography Services in Sri Lanka and abroad.
- 21. As directed by DANS assist CAASL AIB members and/or AIB authorities of other states to carry out formal investigations/enquires pertinent to aircraft accidents/incidents. Submit accurate reports to DGCA (SL) on same as required.
- 22. Organize and update information in the CAASL website pertaining to Aeronautical Information, Aeronautical Communication and Aeronautical Maps & Charts/Cartography Services.

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- 23. Assist Senior Civil Aviation Inspector- AIS to ensure approvals are granted for air operators for non-scheduled traffic landing in Sri Lanka and overflying traffic Sri Lanka and maintain statistics thereof.
- 24. Assist Senior Civil Aviation Inspector- AIS to process, verify or grant approval or authorization for the authorized/certified AIS units to promulgate aeronautical information among users, in the form of AIP, AIRAC, AIC, NOTAM, if and when required
- 25. Assist Senior Civil Aviation Inspector- AIS to review Implementing Standards prepared by the section for the correctness of their format and the order.
- 26. Perform Aeronautical Communication any other duties and functions as may be assigned by the Head of the Section.

#### **KNOWLEDGE AND SKILL REQUIREMENTS**

- A Bachelor of Science Degree of not less than three (03) years, from a university recognized by the University Grants Commission of Sri Lanka having studied in Physical Science, Transport, Aerospace, Information and Communication Technology or Engineering Stream with one (01) year Executive Experience or a Post Graduate Diploma in the fields above from an institution recognized by the University Grants Commission of Sri Lanka.
- 2. At minimum to have successfully completed Basic AIS Course.
- 3. At minimum to have successfully completed ANS Inspector course or General Audit Technique Course and having completed 6 months On-The-Job Training under Senior AIS inspector.

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# 2.2.11 INSPECTOR TRAINING

# 2.2.11.1 Policy

01 The Civil Aviation authority functions as a Regulator and understands its obligation to provide for the development of a highly skilled and qualified work force for its aviation oversight programme to conduct audits, surveillance and inspections to oversee the service providers and the operators.

#### 2.2.11.2 Qualified Work Force

02 Properly trained aviation safety inspectors, investigators, technical, operational and support staff are the core personnel for effective implementation of safety oversight programmes and ensure that the service providers and operators functions effectively.

#### 2.2.11.3 CAASL Commitment

- 03 The CAASL is committed to the development of a highly skilled and qualified work force through a comprehensive training program in a timely manner. It is the intent that all employees will be fully trained in the essential Job Descriptions, knowledge, and skills that are required to accomplish the CAASL mission, fulfill national and ICAO requirements, obtain industry compliance, and safeguard the traveling public.
- 04 Also, the CAASL is committed to provide adequate funding for this purpose.
- 05 Each section of CAASL shall ensure development of detailed training programme for all inspectors, staff specifying the initial, recurrent and specialized training needs for each position.
- 06 In addition, each section will develop detailed an On the Job Training (OJT) programme for inspectors.
- 07 No inspector will be granted with the delegation of authority until all due training needs including the OJT have been successfully completed.
- 08 OJT should be provided by experienced, senior technical staff in the subject area or task, and should follow a structured process, such as observing, working under supervision, competence assessment and authorization, etc.

# 2.2.11.4 Human Resource Development

09 This training policy is intended to address the development of aviation safety inspectors, from the time they are newly recruited into the CAASL and their development and elevation towards Senior Civil Aviation Inspector and further development as appropriate throughout their careers.

# 2.2.11.5 Training Programme

10 The ANS Safety Oversight activities include surveillance, inspections, audits, analysis to find the root cause of the deficiencies/findings, corrective actions, follow-up and enforcement actions. Effective implementation of these tasks requires the intervention of highly qualified personnel during the various stages of the process.

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11 The continuing development of ANS Inspectors knowledge and skills related to their respective responsibilities through formal training followed by On-the-Job Training (OJT), periodic training and refresher courses.

# 2.2.11.6 Basic Training

- 12 The following types of training categories shall be applicable for Inspectors having adequate previous experience in the relevant fields i.e. ATM, AIS, PANS-OPS, Maps & Charts, SAR, CNS and MET:
  - a) ANS Inspectors Basic Course;
  - b) Audit Techniques
  - c) On the Job Training (OJT)
  - d) Recurrent/Refresher Training Course; and
  - e) Specialized/ Advanced Training Courses

# 2.2.11.7 Training Records

- 13 A system has been established for the maintenance of training records of the ANS inspectorate personnel. Nevertheless it becomes the responsibility of individual inspectors to keep records of the trainings received. This includes records of the OJT received, reflecting the various phases of the OJT completed (i.e. observation, performance of tasks under supervision and final assessments) as well as the assessment of competence of the personnel.
- 14 The training records are retained and maintained in the ANS section in respect of ANS inspectors of the section.

# 2.2.11.8 On The Job Training (OJT)

- 15 All ANS Inspectors, within a period of six months after completion of formal training, shall undergo OJT under the supervision of a qualified ANS Inspector authorized in the relevant fields. The objective of OJT is to provide new ANS Inspectors with the basic knowledge which will enable these inspectors to perform ANS regulatory functions.
- 16 Newly appointed inspectors with required training completed in their respective subject fields are assigned with an experienced Senior Inspector who will be responsible for completion of OJT requirements. The senior inspector will address the following three levels of OJT:
  - a) Level-I: Level-I training is familiarization with Authority guidance relevant to a particular job task. Level-I training typically involves a review of all reference materials applicable to the Job Descriptions for which training has been identified. After covering the following criteria, the OJT trainee is issued with a certificate to announce the successful completion of OJT Level-I.
    - 1. Civil Aviation Authority Act; No. 34 of 2002
    - 2. Civil Aviation Act; No. 14 of 2010

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- 3. Air Navigation Regulations, Implementing Standards, Directives, Notices and Management Circulars
- 4. Manual of Staff and Administrative Rules (SLCAP 5000)
- 5. ANS Inspectors' Handbook (SLCAP 2300)
- 6. Enforcement Policy and Procedures
- 7. ANS Surveillance Plan
- 8. CAASL Record Management, File Management and Office Manual
- 9. CAASL Disciplinary Procedures and General Conduct
- b) Level-II: During the level-II the new inspector observes a qualified inspector performing the task. Level II training involves observation of the performance of specific Job Descriptions. This training typically involves the trainee observing and/or assisting the OJT instructor in the performance of those specific Job Descriptions for which the trainee will be held accountable. Level-II training may be satisfied by providing opportunities for the trainee to observe and/or assist the instructor performing the task.
- c) Level-III: In level-III, a qualified inspector observes the new inspector perform the task. Level III training involves the application of knowledge and skills to the performance of specific Job Descriptions. Typically, the trainee performs the job task under the observation of a qualified OJT instructor. The instructor assesses the performance of the task and indicates on the trainee's OJT training plan when Level III performance is achieved.

# 2.2.11.9 Newly appointed Inspectors shall:

- a) Participate as an observer, in at least 2 (two) inspections, conducted by a qualified ANS Inspector during the On the Job Training period; and
- b) Conduct at least 2 (two) inspections under supervision of a qualified ANS Inspector during the On the Job Training period.
- c) Qualified Senior ANS inspector shall recommend the subjected inspector for the successful completion of the training.
- d) Conditions specified in a) and b) may differ and will be at the discretion of the DANS in respect of new inspectors who possesses more than 20 years of experience in their respective specialized fields.
- e) Shall receive an On-the-Job training certificate at the successful completion of the OJT.

# 2.2.11.10 Recurrent/ Refresher training

- 17 Periodic recurrent/ refresher training courses in all relevant disciplines are required for the continuing development of the knowledge and skills of the Inspectors related to their respective responsibilities.
- 18 All ANS Inspectors are required to undertake recurrent training at least once every 3 Years.

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# 2.2.11.11 Advance Training

- 19 Periodic practical and theoretical specialized (technical) training, will enable the ANS Inspectors to maintain a high level of knowledge and expertise and thus undertake their duties and responsibilities in a more effective and efficient manner.
- 20 The advance training shall be dependent on the different ANS fields of inspection. Training courses that ANS inspectors in their respective fields and in their respective organizational positions shall undergo have been identified and prioritized in the ANS training manual published by the ANS section.

# 2.2.11.12 Re-Qualification Training

21 An Inspector who has not been part of the programme for more than 1 (one) year shall conduct at least 2 (two) inspections under supervision.

# 2.2.11.13 Newly Recruited Inspectors

- 01. Newly recruited ANS Inspectors, without previous experience in the relevant fields, shall be required to complete the Basic Training Courses in their respective fields i.e. ATM, AIS, PANS-OPS, Maps & Charts, SAR, CNS and MET before taking up inspectional functions. Those trainings will be prerequisites for the advanced training courses that they may be exposed to.
- 02. The Course Contents and Syllabus of the courses shall be as per ICAO Standards.
- 03. Newly recruited Inspectors are required to undergo minimum 6 month's On-Job-training with a qualified Senior Inspector prior to taking up inspectional assignments. On- the-Job training period may be extended subject to the performance of the inspector in the relevant field of work. Senior Inspector shall recommend the trainee for the successful completion of On- the-Job Training.
- 04. A qualified senior Inspector will complete the Inspector's OJT Form as referred in the Appendix 1 of this ANS Inspectors' Handbook. After successful completion of 3 levels of OJT, an inspector shall receive an on-the Job Training Certificate.

# 2.2.11.14 Inspector Credentials

01 Inspector credentials are issued at minimum, when the individual inspector completes required basic training associated to the position held. ANS training plan is expected to identify and meet the individual training requirements of inspectors. Inspector credentials is a mandatory prerequisite an inspector shall earn in order to carryout inspections in their respective subject fields.

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# 3 Chapter 3 – Inspection/Audit – Procedures

# 3.1 Surveillance Programme

The ANS Surveillance Programme includes ANS inspections, surveys and audits. The surveillance programme of the ANS Section for the calendar year is prepared by the DANS, in consultation with the inspectors of the section at the beginning of the year taking into account the nature and scope of activities taking place in the industry. The yardsticks that will be considered in planning the Surveillance Plan is given in the Appendix C hereto. The main objective of the surveillance plan is to ensure through performance-based surveillance, that the State's Acceptable Level of Safety will be maintained. Once the Surveillance Plan is developed it will be forwarded to the DGCA and approval is obtained from the DGCA. Under normal circumstances, the surveillance programme includes at least;

- a) One AIS Centre inspection per month
- b) One ATC Centre inspection at Ratmalana Airport (RMA Tower or ACC) per month
- c) One ATC Centre Inspection at BIA (BIA Tower or Approach Control Centre) per month
- d) Once in two months an inspection to the Mattala Rajapakse International Airport (MRIA) Control TWR/APP
- e) Once in three months an inspection to six CNS facilities located at BIA, RMA, MRIA, Attidiya, Piduruthalagala and Kandapola.
- f) One inspection per quarter at Aviation Meteorology facilities at BIA for Meteorological stations RMA and MRIA inspections will be carried out in once in 04 months
- g) One ANS audit or survey per year which includes ATS, AIS, CNS, PANS-OPS Procedure Design, Maps & Charts and SAR
- h) Maps & Charts Inspection once every three months

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

# 3.2 Inspections

# 3.2.1 Responsibilities of the Inspectors with Regard to Carrying out Inspections

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

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# 3.2.2 Planning and Preparation for Inspections

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

- 1) Refer previous inspection reports and corrective action plans (Feed Back Reports) received from the service provider.
- 2) Identify deficiencies observed in previous inspections and corrective actions taken by the service provider to correct those deficiencies.
- 3) Identify special areas to be inspected which need special attention.
- 4) Inspectors should refresh themselves with the previous recommendations, of the CAASL to check whether those recommendations are implemented.
- 5) Inspectors should be familiar with all ASNs/ Implementing Standards issued by the CAASL relevant to the operations carried out by the centre.
- 6) Inspector should be familiar with the staff requirements, licensing/rating & training requirements, operational & technical requirements and other relevant regulatory requirements applicable to the centre.
- 7) Inspectors should be thorough with the documents need to be kept at the centre.
- 8) If the Inspector intends meeting the Senior Manager/Managers to clarify certain issues, he /she should inform Head of the Section/In charge of the Centre of the Service Provider concerned, the date/time of the inspection and the officers needs to be present at the inspection at least three days before the inspection.

#### 3.2.3 Conducting the Inspection

- 1) Meet Head of the Section, Relevant Senior Official in charge of the section and identify the Inspector with credentials, before the inspection is conducted and make necessary arrangements for the inspection.
- 2) Always be polite and respect the duties being performed and the person being inspected.
- 3) The principal way in which inspectors obtain information about the functioning of the systems are by asking questions.
- 4) Do not disturb the performance of the duties of the person being inspected or get involved with unnecessary arguments outside official scope during the inspection process.
- 5) The persons to be interviewed should be drawn appropriately from management/ supervisory operational positions.
- 6) When inspection interviews are carried out inspectors should adhere to following guidelines
  - 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.
- 7) Use appropriate check list for the inspection (See Appendix A) and use the CAASL "Inspector Note Book" to record the salient features observed during the inspection.

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8) At the end of the inspection brief the Head of the Section, Relevant Senior Officer or in charge of the section of the findings (deficiencies and appreciations).

# 3.2.4 Inspection Report

- 1) Use the softcopy of the Inspection Report as appropriate (Chapter 04)
- 2) Each & every inspection to be filled with unique Inspection Report Reference number which is included in ANS Annual Surveillance Plan
- 3) Use only the Abbreviations given in the check list to complete the form.
- 4) Indicate comments in the space provided in clear language.
- 5) If observation is "Unsatisfactory (U)" or "Improvements Needed (I), it is essential to provide comments to explain why it is unsatisfactory and what improvements needed.
- 6) The inspectors shall categorize their findings/observations as follows:
  - **U**-shall denote Non-compliance or Non- adherence to CAASL implementing Standards, where applicable ICAO SARPs or applicable Manual provisions approved by the DGCA
  - I Improvements needed or some more efforts are required to bring into satisfactory level
- 7) Prepare the inspection report within five working days from the date of the inspection and forward same to the DANS with the soft copy for review.
- 8) Send the report to the Service Provider within seven working days.
- 9) Update the Inspection Result Database.

#### 3.2.5 Elimination of Deficiencies

- 1) Air Navigation Service provider should submit corrective action plans within 14 days of the receipt of the Inspection Report.
- 2) Air Navigation Service Provider should submit corrective action plans as described below:

<u>Immediate Corrective Actions</u>- This action corrects immediately the non-adherence and non-compliance of the inspectional finding to remove an immediate threat to aviation safety.

<u>Short term Corrective Actions</u>- This action would correct the Non-compliance or Non-adherence that does not pose an immediate threat to aviation safety within 42 days.

<u>Long term corrective Actions</u> - Identifying the root cause of the deficiencies. The service provider should forward corrective action plans with specific timeframe for the resolution of deficiencies. CAASL inspectors should assess the CAP before its acceptance.

In cases where corrective actions involve purchasing of equipment or systems to eliminate deficiencies, appropriately practical and agreeable time frame is acceptable whilst the short term corrective action covers the deficiency.

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- 3) In an event that proposed corrective action plan time frame is not acceptable to the inspector concerned, he/she shall coordinate with Air Navigation Service Provider for an amendment for the same.
- 4) Inspectors shall coordinate the non-adherence to the corrective actions with the respective divisional heads of the Air Navigation Service provider.
- 5) Director Air Navigation shall point out and discuss any non- adherence to corrective actions proposed by ANSP at the Coordination Meetings with the appropriate hierarchy of officials of the Air Navigation Service provider to rectify the deficiency.
- 6) Failing the above actions Director Air Navigation shall inform Deputy Director General (Air Space& Security Regulations) for appropriate higher level coordination to eliminate the deficiencies.
- 7) Deputy Director General (Air Space& Security Regulations) will bring deficiency that has not been rectified to the notice of the Director General of Civil Aviation for appropriate higher level coordination for the rectification.
- 8) Failing above all actions Director General of Civil Aviation will take enforcement actions on the service provider as per the Enforcement policy of CAASL. .

# 3.2.6 Follow up of the findings/observations

- 1) To ensure Continuous Monitoring Approach (CMA) the ANS Section shall maintain a data base for effective follow up of findings/ observations.
- 2) "Database on Findings/observations of the inspections" is designed to include findings/observations made during inspections.
- 3) Finding is remained valid until fully addressed and it will be reflected as "open" in the data base.
- 4) Finding will be stand closed when the concern is fully addressed.

# 3.3 Air Navigation Services Audits

#### 3.3.1 Introduction

Air navigation services (ANS) is the term applied to the bundle of services provided to aircraft to enable safe and efficient flight from one destination to another which include Air Traffic Control Service, Aeronautical information service, Communication Navigation Surveillance (CNS) and Meteorological Services.

Safety reviews of Air Navigation Services units are required to be carried out on a regular and systematic basis by personnel qualified through training, experience and expertise and having a full understanding of relevant Standards and Recommended Practices (SARPs), safe operating practices and Human Factors principles.

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Safety auditing of Air Navigation Services entails a systematic and independent examination conducted by the CAASL to determine whether the arrangements, procedures and processes leading to discharging of services under ANS are compliant with relevant safety standards.

#### 3.3.2 ANS Audit Plan

An ANS Audit plan is a specific set of guidelines to be followed when conducting an audit of a particular Air navigation service component. This plan ensures that the audit will be conducted in an organized manner and in accordance with predetermined criteria. Audit planning includes deciding on the overall audit strategy. It helps the auditor to obtain sufficient, appropriate evidence for the circumstances at hand and also helps avoiding confusions/ misinterpretations that audited party may face in the process of an audit. It is considered as an action plan that documents what procedures an auditor follows to validate whether the service discharged is in conformance with and compliance regulations. Following are the key elements that are required to be included in an ANS audit plan.

# 3.3.3 Objectives of an ANS Audit

The objectives of an ANS Audit should be:

- ❖ To ascertain compliance with Implementing Standards and ICAO Standards and Recommended Practices as appropriate.
- ❖ To ensure adherence with prescribed standards and procedures where appropriate respective operating Manuals Approved by CAASL in the provision of Air Navigation Services.
- ❖ Whether the implementation such processes and procedures available in manuals have yielded the expected safety performances.
- ❖ To determine the effectiveness of safety planning in ANS operations.
- To assess the capability of a system to assume the responsibility of an additional authority.
- To highlight commendable findings (where appropriate)

# 3.3.4 Audit Convening Authority

The Director General, Civil Aviation (DGCA) Sri Lanka is responsible for the development of audit policies and procedures in respect of each component of Air Navigation Services.

# 3.3.5 Types of Audits

#### **Pre- Certification audit**

Pre-certification audit will be conducted prior to the issuance of a certificate.

#### **Routine conformance Audit**

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A routine conformance audit will be conducted for the purpose of determining an organization's overall level of conformance to regulatory requirements. All applicable characteristics of the organization will be subject to review.

# **Additional authority Audit**

An additional authority audit may be conducted prior to the granting of an additional authority.

# **Special-purpose Audit**

A special-purpose audit is a one that will be conducted to respond to safety concerns or circumstances.

# 3.3.6 Scope and depth of an ANS Audit

The scope and depth of an audit is influenced by the following

- a) Type of the audit
- b) The period back in time that systems are subject to review (typically from the last audit to the present)
- c) The enforcement records
- d) The confidence in corrective actions taken in respect of previous audit

While the scope of an audit may cover the following areas, the depth that it would investigate would depend on the time allocated or the duration of the audit.

- e) Licensing and Training Issues
- f) Regulatory Issues
- g) Operational and Technical Issues, criteria & requirements as specified in Implementing standards, ISO06, ISO16, ISO25, ISO26, ISO25, ISO28, ISO29, ISO31, ISO34 ISO39, ISO40, ISO42, and relevant Annexes
- h) PANS ATM Doc 4444
- i) Approved manuals published on processes/services under ANS
- i) Instructions/ Circulars

#### 3.3.7 The methodology

Audit plan should describe and elaborate the methodology that the audit will be conducted which includes procedures followed during the audit, checklists, forms and guidance materials and also collection of evidences and keeping records.

The plan should identify the communication protocols that the audit team will have to follow both internally, i.e. audit team and the organizational hierarchy within the CAASL and the external communication with Air navigation service provider.

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# 3.3.8 Observations and Findings

The audit plan should indicate the process team members will follow when parallel findings or observations are identified.

#### 3.3.9 Audit team

The audit plan should include a list of the audit team members. Team members must be able to focus on audit activities and must therefore be released from other responsibilities during the term of the audit.

The audit team should consist the lead auditor and at least two safety auditors. This number may depend on the size and complexity of the unit/area to be audited. The lead auditor should have successfully completed an approved Safety Audit Training related to Air Navigation Services and other members shall be selected from the staff of senior Civil Aviation Inspectors in their respective subject areas of ANS.

#### 3.3.10 Audit Schedule

An audit schedule should be included in the audit plan indicating dates and times of audit activities including the pre-audit and physical audit activities.

# 3.3.11 DGCA Approval for the audit plan

The audit team leader should develop the audit plan and require DGCA approval prior to proceeding ahead with the audit preparation. The lead auditor, after obtaining approval DGCA, should distribute appropriate sections of the audit plan to each member of the audit team. This plan will provide guidance and direction throughout the audit.

#### 3.3.12 Audit Phases

The audit process consists of the following four distinct phases:

# 1) Pre-audit;

Planning and preparation during the pre-audit phase will ensure that the objectives of the audit are achieved effectively, efficiently and economically. The time schedule and the personnel and financial resources required will be determined by the scope of the proposed audit. This will be addressed and justified within the audit plan.

Pre-audit activities may involve following among other things:

- 1. Notifying the Air Navigation Service Provider
- 2. Selecting the audit team
- 3. Developing the audit plan
- 4. Reviewing files and related documentation
- 5. Opening an audit file

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# 6. Convening audit team meeting.

Information gathered during the pre-audit phase will assist the audit team in; Identifying the specific areas, systems and activities to be inspected, selecting the appropriate inspection checklists, determining if the scope of the audit is adequate and finalizing the audit plan.

# 2) Physical audit;

The physical audit phase is required to be implemented in accordance with the audit plan. The purpose of this phase is to verify compliance with regulatory requirements and to assign findings where compliance has not been confirmed. Audit results are to be communicated to the Air Navigation Services provider at daily meetings and/or at the exit meeting.

# 3) Post-audit

Post-audit activities include completion of administrative details and production of the audit report

# 4) Audit follow-up.

Audit follow-up includes the development and approval of the Air Navigation Service Provider's Corrective action plans. Ensure that the corrective action plans are fully implemented and leads to the closure of findings.

# 3.3.13 Importance of proper planning and Preparation for ANS Audits

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

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

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

- Devote 40% of the total hours estimated for the audit in preparation activities
- devote another 40% on conducting the audit
- devote remaining 20% for the preparation of the reports and follow-up actions

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# 3.3.14 Notifying the Air Navigation Service Provider

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

## 3.3.15 Pre-Audit, File and Documentation Review

- a) Review of all files and documentation that are relevant to the particular service of the Air Navigation Service Provider that will be audited.
- b) Ensure that all reference manuals and documents to be used during the audit are readily available and include the latest approved amendments
- c) Review the auditee's approved manuals for compliance with the appropriate standard.
- d) Review the surveillance reports
- e) Review previous audit reports including corrective actions and follow-up where applicable
- f) Review accident or incident data, including Mandatory Occurrence and previous enforcement actions
- g) Identify areas that require further review during the physical audit;

# 3.3.16 Opening up an audit file

An audit file is required to track audit history and help determine audit frequency. It is also valuable in assessing the effectiveness of audit follow-up.

The audit file should contain a complete chronological record of all correspondence and documentation dealing with audits including a complete record of audit follow-up action.

Items that appear inconsistent or incomplete during a review of the audit file must be flagged for verification during the physical audit.

# 3.3.17 Audit Checklists

Once the concurrence of the ANSP to the proposed audit schedule is reached, the Lead Auditor along with his/her team should prepare the Audit Check List based on four elements below.

- Personnel & Training
- Documentation
- Procedures & Environment

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# Equipment

Questions in Appendix B and the questions in the Check Lists given in Appendix A can be used for this purpose. Usage of these checklists contained in these appendices are mandatory as they will assist the auditors in many ways including following

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

However, all inspectors should clearly be mindful that confining on to the contents of a checklist is never expected in the process of auditing, the inclusion and exclusion new items to the checklists can be made as required before or during the audit.

There may be times during an audit it is not possible to check the entire check list. Certain elements may be left out due to various constraints. This shall be documented in the audit report and where applicable, an observation finding submitted.

In case of routine, pre- planned audits checklist can be made available to the auditee 30 days in advance.

# 3.3.18 Physical audit

3.3.18.1 Activities conducted during the physical audit include the entry meeting, evaluation and Verification, daily briefings and the exit meeting. Preserving confidentiality of audit related information is important due to the sensitive nature of an audit.

# Following are some important basics that auditors shall be mindful and adhered to during an audit

- Audit should be conducted in accordance with the approved audit plan.
- Interview auditee to gather information to determine effectiveness of safety planning and practices.
- Use question checklists prepared for the purpose but do not be restricted or limit you self within the framework of the check lists.
- Deficiencies when identified, should be recorded as observations or findings.
- All audit findings for non-compliance or non-adherence must be verified.
- Ensure that findings are supported by evidence and documented in a clear and concise manner.

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# 3.3.18.2 Entry Meeting

The entry meeting should set the tone for the physical audit and should be attended by the auditee's senior management and members of the audit team. It will outline the audit process and confirm any administrative requirements so that the physical audit may be conducted both effectively and efficiently, while minimizing disruptions to the auditee.

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

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

#### 3.3.18.3 On audit Documentation review

During the documentation review the audit team should;

- Check whether the required documents are available, updated and accessible.
- Examine Logbooks and Records on reports on equipment unserviceability and abnormal reports depending on the requirements of the audit plan.

#### 3.3.18.4 Evaluation and Verification

During this phase, the audit team should be focusing on the following:

- a) Confirm whether the auditee's operation is in compliance with applicable regulatory requirements;
- b) Confirm whether services are operating effectively and as intended and specified in the appropriate procedure manual
- c) Where non-compliance with a regulatory requirement is identified, gather evidence or supporting documentation (with the assistance of the enforcement point-of-contact if required) and prepare an audit finding.

# 3.3.18.5 Gathering information through interviews

Interviewing ANSP's Personnel is important to the auditors in that they permit the auditor to:

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- a) determine whether the procedures documented in procedural manuals is that in use;
- b) determine the accuracy of information provided in operational manuals;
- c) assess the knowledge of supervisory personnel pertaining to their duties and responsibilities;
- d) where applicable, confirm the validity of findings identified during an audit.

Interviews may range from informal discussions during the audit process as well as prearranged interviews with identified key personnel.

Following guide lines will be useful for the auditors when preparing for an interview to gather information:

- a) Prepare carefully prior to the interview by defining the areas to be explored and setting specific objectives
- b) Explain why the interview is taking place;
- c) Use open questions and avoid complex questions or phrases;
- d) Ensure that questions are understood;
- e) Listen carefully to answers and allow interviewee to do most of the talking;
- f) Avoid being side-tracked from your original objectives;
- g) Terminate the interview if the atmosphere becomes highly negative;
- h) Thank the interviewee at the conclusion of the interview; and
- i) Document responses during, or as soon as possible following the interview.

#### 3.3.18.6 Evidence Gathering

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

#### 3.3.18.7 Confirmation Request Form (CRF)

Confirmation Request Form is used when auditor requires information that a company official is not readily able to supply (e.g., supporting documentation or evidence). By issuing a CRF the company is requested to provide those information within a specified time period. When documentation is not readily available to the Auditor, the confirmation request form places the responsibility on the auditee to provide the information.

#### The Confirmation Request Form;

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- Provide Auditee with the opportunity to locate and provide supporting documentation or other evidence
- May establish compliance and avoid a finding
- Alternately, the Auditee may concur that the information not available
- Permits open discussion of emerging issues during the audit
- The confirmation request form becomes part of the audit evidence package

#### 3.3.18.8 Audit Findings

#### 3.3.18.8.1 General

- 1) Audit findings must be prepared accurately as they form the basis of the audit report and a successful audit.
- 2) When a number of team members will be completing finding forms, it is important that a standardized approach to inputting data on the form be taken.
- 3) All evidence and supporting documentation will be included with the completed finding form for review by the lead auditor. Although this documentation will not be included in the audit report, it has to be retained in the audit file.

#### 3.3.18.8.2 Audit Finding Form

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

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

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

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

#### 3.3.18.8.3 Definitions of Audit Findings

Non-Compliance: An audit finding that identifies areas where ICAO SARPs and related clauses of Implementing Standards are not complied with.

Non-Adherence: An audit finding that identifies areas where standards and procedures as specified in in the respective operations Manuals are not applied or not applied correctly.

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

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#### 3.3.18.9 Daily Briefings

- 1) Team briefings should be held at the end of each day during the audit to
  - a) Ensure adherence to the audit plan;
  - b) Validate confirmation requests and audit findings;
  - c) Resolve issues or problems arising from the day's activities; and
  - d) Provide the team leader with the information necessary to update the audit manager, where applicable.
- 2) Daily briefings should be held at a time convenient to the auditee. These briefings are conducted to update the auditee's management on audit progress and to discuss any audit findings that have been identified.

#### 3.3.18.10 Exit Meeting

The exit meeting should be convened by the lead auditor and it has to be participated by the auditee (Head of the Section of the ANSP). During the exit meeting the Lead auditor should:

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

#### 3.3.18.11 Post Audit – Audit Report

The audit report is a document that summarizes the results of an audit and includes the audit findings and where applicable, corrective actions taken to findings issued during the audit. The audit report is an objective reflection of the results of safety the audit. It provides information on the status of implementation of ICAO SARPs, standards, procedures and practices contained in the respective Manuals.

The Lead Auditor should prepare the Final Audit report in consultation with audit team members and the report should be sent to the auditee within 30 working days after the end of safety audit after endorsement by the DGCA. Time lines to forward corrective action plans have to be declared in the audit report.

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#### 3.3.18.12 Post audit follow-up

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

Where the corrective action plan is acceptable, the ANSP will be so advised and the appropriate information (administrative/on-site follow-up, proposed completion date) will be entered on the corrective action form or where applicable.

If the ANSP's corrective action plan is not acceptable, the DGCA will indicate the reasons, propose changes and negotiate a revised corrective action plan. Where the auditee is unresponsive to this action, an alternative course of action may be pursued.

The post Audit Follow-up will have to achieve the following

- a) Monitor the auditee to ensure that the 30 day response time for corrective action plan submission is observed
- b) Actions required by a specific date (indicated on the corrective action section of the finding form) have been completed
- c) Ensure that the corrective action plan addresses the most important findings first
- d) Ensure that each proposed corrective action will rectify the non-compliance and prevent its recurrence;
- e) Determine for each corrective action plan item whether the follow-up is to be administrative or on-site and indicate so on the corrective action form
- f) Monitor the progress of the corrective action plan by maintaining the follow-up section of the corrective action form
- g) Ensure that all completed corrective action forms together with any supporting documentation, are placed on the audit file;

During audit follow-up, surveillance on ANSP Is the most reliable means to ensure non-compliances and audit findings are being addressed by the ANSP. Post-audit surveillance can be conducted as informal visits (inspections) or as a more structured follow-up audit.

#### 3.3.18.13 Closing of safety audit

The safety audit would be completed when;

- the final report has been published and accepted
- an action plan to address deficiencies and/or non-standard practices has been completed
- the deficiencies and non-standard practices have been closed by Lead Auditor

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## 4 Chapter 4 – Inspection Checklists

## 4.1 ATS Inspection Check List for Aerodrome Tower

# ATS INSPECTION CHECKLIST/REPORT FOR AERODROME TOWER

ATC Centre:	Date:	Time:	Name of Inspector(s):
<b>Inspection Report Ref:</b>			File Ref:

Use the following abbreviations to indicate your observations and if the space is inadequate for comments use additional page with the reference number of the Area of Inspection. Recommendations are to be raised with the appropriate Ref. No according to the Area of Inspection

 $S = Satisfactory; \quad U = Unsatisfactory; \quad N = Not \ Checked; \qquad I = Improvements \ Needed$   $N/A = Not \ Applicable$ 

## (1) PERSONNEL

Ref:	Area of Inspection	Observation	Comments
No.			
1.1	Are minimum staff available to provide adequate ATC service according to determined staff requirement/ capacity of the centre?		
1.2	Are the ATCO's properly licensed with valid ratings?		
1.3	Are the ATCO's possess minimum competency level in English language in relation to the provision of ATC services?		
1.4	Have JD's been developed and issued for ATCO's?  Are they appropriate and adequate to meet the requirements of functions assigned?		
1.5	Has appropriate qualification & experience requirements and duties & responsibilities been established for each control position?		

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	D 4 ATCO2 14 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Do the ATCO's detailed in each control Position meet
1.6	the established minimum qualification and experience
	requirements as specified? (refer log book, roster and
	position logs)
	Have the assigned ATCO's for each control position
1.7	been given relevant training for the equipment,
	procedures & communication systems?
1.8	Has a Training program including refresher training
1.0	where specified being developed for ATCO's
1.9	If Yes, is the training program appropriately
1.9	implemented during the specified period?
	Are Training records available to determine completed
1.10	training of each ATCO according to the implemented
1.10	training program including refresher and equipment
	training?
1.11	Are the controllers working for more than 24 hours
1.11	continuously?
	Have the bad practices been developed among the
	controllers which may lead to threatening safety?
	Such as
1.12	a) using mobile phones
	b) reading papers/books
	c) listening/watching radio/TV
	d) any other action, while working
	Are the monthly random checks conducted to evaluate
	controllers' performances with regards to,
	a) Correct strip marking,
	b) Use of standard RT/ Phraseology,
	c) Read back of safety related parts of ATC clearance
1.13	d) Standard coordinating practices
	e) Use of standard separation
	f) follow of standard procedures/instructions
	and identified deviations/ corrections clearly marked
	(if any)?
	(II ally):

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Ref.			
No	Area of Inspection	Observation	Comments
2.1	Are required facilities/Links available for		
	coordination with other relevant entities		
2.2	Are ATS messages, NOTAM's and other relevant		
	AFTN messages promptly supplied to ATC center		
	Are up to date information on existing Meteorological		
2.3	conditions and forecast of specific Met conditions		
	being provided to ATC units promptly?		
	Have runway inspections been carried out as specified		
2.4	in SLMATS/ Aerodrome Manual and recorded		
	properly?		
	Are Runway safety Data recorded properly, retained,		
	submitted to safety Mgr. to review and preventive		
	actions initiated in respect of,		
2.5	a) Bird strikes,		
	b) RWY incursions/excursions,		
	c) Presence of animals, and		
	d) any other significant observations?		
	Are contingency plans relevant to the centre been		
2.6	developed and published to follow in an event of		
2.6	disruption or potential disruption of ATS or related		
	supporting services?		
	Is there any mechanism established to keep ATC units		
2.7	aware of the operational status of Navigation and		
	visual aids essential for aircraft movements?		
	a) Have serviceability/ unserviceability reports of		
	equipment, facilities and systems been raised		
2.8	correctly and regularly?		
	b) Have follow up actions been taken promptly and		
	Properly on reported unserviceability's?		
<u> </u>		<u> </u>	

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	(a) Are surveillance data from Radar and ATC	
	communications recorded automatically?	
2.9	(b) Are those data recordings (audio, video) and	
2.9	other ATS data such as ATC log entries,	
	flight progress strips etc. retained for at least	
	30 days?	
2.10	Have safety reviews of ATS unit been conducted on a	
2.10	regular, systematic basis and documented?	
2.11	Any findings on previous safety reviews carried out	
2.11	and follow up action taken? Are the records available?	
2.12	Are those Safety reviews conducted by an adequately	
2.12	qualified/trained personnel?	
	Any new ATS/ PANS OPS procedures, equipment,	
2.13	systems or facilities introduced to the ATS system?	
	If yes, have safety assessments been carried out?	
2.14	Have the previous recommendations issued by the	
2.14	CAA inspectorate been implemented?	
	·	

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## (3) PROCEDURES

Ref:	A	rea of Inspection	Observation	Comments
No.				
		a. Log Keeping		
		b. Watch briefing		
		c. Taking/handing over duties		
	Are updated	d. Strip Marking		
	procedures	e. Coordination		
3.1	available with	f. Standard R/T & Phraseology		
	regard to the	g. Separation standards and		
	following?	Methods		
		h. updating documents		
		i. Carrying out Runway		
		Inspections		
		k. Reporting unserviceability's		
	Are Contingency p	procedures available for following		
	a) Air-ground R	adio communication failures?		
3.2	b) To assist and	safeguard strayed or unidentified		
	aircraft?			
	c) Emergency se	eparation		
	Are Emergency pro	ocedures available to use in the		
	event of following	emergencies?		
3.3	a) Unlawful int	terference		
	b) Aircraft bon	nb threat		
	c) Emergency	descent		

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## (4) **DOCUMENTATION**

Ref: No.	Area of	Inspection	Observation	Comments
Are the	e relevant ICAO documen	nts and other technical and		
regulate referen		available at the centre for		
		Doc 4444		
		Doc 7910		
4.1	ICAO Docs	Doc 8643		
7.1	ICAO DOCS	Doc 8400		
		Doc 8585		
		Annex 02		
		Annex 10 Volume II		
4.2	ICAO Annexes	Annex 11		
4.2	TCAO AIIICACS	Annex 12		
		Annex 19		
		IS 006		
		IS 025		
		IS 026		
		IS 030		
		IS 035		
4.3	Relevant CAASL ISs	IS 036		
		IS 038		
		IS 050		
		IS 052		
		IS 087		
		ASN 092		
4.4	Updated SL MATS	1		

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## CIVIL AVIATION AUTHORITY OF SRI LANKA

4.5	Updated AIP Sri Lanka	
4.6	Aerodrome Manual of the relevant Aerodrome	
4.7	Emergency Plan, displayed short listed action list and information check list with all contact numbers	
4.8	Safety Management Manual relevant to the ATC Centre	
4.9	Valid NOTAMs	
4.10	Relevant LATCI/Staff instructions	
4.11	Updated charts relevant to the centre	
4.12	Incident, Accident and occurrence reporting forms	
4.13	Properly maintained Log book, current duty roaster and position logs relevant to the centre	
4.14	Records of Inspection reports of CAASL & subsequent CAPs sent	

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## (5) WORK ENVIORMENT

Ref: No.	Area of Inspection	Observation	Comments
5.1	Are there adequate rest facilities available for Controllers at the premises?		
	Are the following factors existing at an acceptable		
	level at the center as per the judgment of the inspector?		
5.2	a) Ambient Lighting		
	b) Ambient Temperature		
	c) Noise Level		
	d) Exterior Glare		

## (6) EQUIPMENT

Ref: No.	Area of Inspection	Observation	Comments
	Serviceability status of the following equipment		
	a) Communication equipment		
	b) Navigation equipment		
6.1	ILS, VOR/DME, NDB, Aldis lamp, Beacon		
	etc.		
	c) Surveillance equipment		
	d) Visual/ non visual aids and Alarms		
	Are the following important systems being tested for		
	normal operations on a routine basis?		
6.2	a) Crash Alarms		
	b) Aldis Lamp		
	c) Standby equipment/sets		
	d) Hot links		

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## CIVIL AVIATION AUTHORITY OF SRI LANKA

	a) Has operational staff taken timely actions	
	to notify appropriate personnel regarding	
6.3	Unserviceability's	
	b) Are there records of such notifications and	
	corrective actions taken?	

## (7) OBSERVATIONS

Ref: No.	Significant Observations

## (8) RECOMMENDATIONS

Ref:		
No.	Recommendations	<b>Action Office</b>

Inspectors (Name & Signature): Date:-

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## 4.2 ATS Inspection Check List for Approach/Area Control Centre

## ATS INSPECTION CHECKLIST/REPORT FOR APPROACH/AREA CONTROL CENTRE

ATC Centre:	Date:	Time:	Name of Inspector(s):
<b>Inspection Report Ref:</b>			File Ref:

Use the following abbreviations to indicate your observations and if the space is inadequate for comments use additional page with the reference number of the Area of Inspection. Recommendations are to be raised with the appropriate Ref. No according to the Area of Inspection

 $S = Satisfactory; \quad U = Unsatisfactory; \quad N = Not \ Checked; \qquad I = Improvements \ Needed$   $N/A = Not \ Applicable$ 

## (1) PERSONNEL

Ref:			
No.	Area of Inspection	Observation	Comments
1.1	Are minimum staff available to provide adequate ATC service according to determined staff requirement/ capacity of the centre?		
1.2	Are the ATCO's properly licensed with valid ratings?		
1.3	Are the ATCO's possess minimum competency level in English language in relation to the provision of ATC services?		
1.4	Have JD's been developed and issued for ATCO's?  Are they appropriate and adequate to meet the requirements of functions assigned?		
1.5	Has appropriate qualification & experience requirements and duties & responsibilities been established for each control position		

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	The Automotive Automot
	Do the ATCO's detailed in each control Position meet
1.6	the established minimum qualification and experience
1.0	requirements as specified? (refer log book, roster and
	position logs)
	Have the assigned ATCO's for each control position
1.7	been given relevant training for the equipment,
1.7	procedures (including ADS-B operations) &
	communication systems?
1.8	Has a Training program including refresher training
1.0	where specified being developed for ATCO's
1.9	If Yes, is the training program appropriately
1.7	implemented during the specified period?
	Are Training records available to determine completed
1.10	training of each ATCO according to the implemented
1.10	training program including refresher and equipment
	training?
1.11	Are the controllers working for more than 24 hours
1.11	continuously?
	Have the bad practices been developed among the
	controllers which may lead to threatening safety? Such
	as
1.12	e) using mobile phones
	f) reading papers/books
	g) listening/watching radio/TV
	h) any other action, while working
	Are the monthly random checks conducted to evaluate
	controllers' performances with regards to,
	g) Correct strip marking,
	h) Use of standard RT/ Phraseology,
1.13	i) Read back of safety related parts of ATC
	clearance
	j) Standard coordinating practices
	k) Use of standard separation
	follow of standard procedures/instructions

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and identified deviations/ corrections clearly marked	
(if any)?	

## (2) OPERATIONAL

Ref:			
No.	Area of Inspection	Observation	Comments
	Has a Capacity assessment been done to determine the		
2.1	maximum number of aircraft that can be safely		
	accommodated in a given period of time for each		
	sector within the ATC center?		
	Any recorded instances that the capacity values has		
2.2	been exceeded during the previous months and what		
	are the actions taken thereof?		
2.3	Are ATS messages, NOTAM's and other relevant		
2.3	AFTN messages promptly supplied to ATC center		
	Does ATC receive position reports on aircraft not		
2.4	equipped with CPDLC, operating in the oceanic		
2.4	airspace outside VHF coverage through Aero mobile		
	centre?		
2.5	Are required facilities/Links available for		
2.5	coordination with other relevant entities		
	(a) Are up to date information on existing		
	Meteorological conditions and forecast of specific		
	Met conditions being provided to ATC units		
2.6	promptly?		
2.0	(b) Does ATC report to the MET office, information		
	on meteorological phenomena of operational		
	significance communicated by aircraft which are		
	not included in the Met report		

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	Is the ATS surveillance system being used, capable of	
	displaying following safety related alerts and	
	warnings	
2.7	a) Short Term Conflict Alerts (STCA)	
	b) Minimum Safe Altitude Warnings (MSAW)	
	c) Conflict prediction (ACAS/TCAS alerts)	
	d) Unintentionally duplicated SSR codes and aircraft	
	identifications?	
	Has any procedure established and implemented for	
2.8	verifying that aircraft are approved for operation in	
	RVSM airspace?	
2.9	Has any procedure established for monitoring Large	
2.9	Height Deviations (LHD) for RVSM operations?	
	Has any mechanism established for the collection of	
2.10	LHD's and coordination failures of RVSM equipped	
	aircraft and subsequent reporting to the RMA	
	Has necessary follow up action been taken with	
2.11	regards to the comments given by RMA in relation to	
	LHD/LLD reports?	
2.12	Has TSD collected during the month of December and	
2.12	the report sent to RMA	
	a) Do the ADS-B (out) operations meet the	
	requirements published in IS 064?	
	b) Any detected ADS-B avionics related problems	
2.13	and actions taken? Are records available?	
	c) If yes, are those problems being recorded in	
	ADS-B Avionics Problem Report Database	
	(APRD) in ICAO APAC website and submitted	
	to CAASL as well?	
	Are contingency plans relevant to the centre been	
2 1 4	developed and published to follow in an event of	
2.14	disruption or potential disruption of ATS or related	
	supporting services?	
		<u>I</u>

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	The state of the s	 
	Is there any mechanism established to keep ATC units	
2.15	aware of the operational status of Navigation and	
	visual aids essential for aircraft movements?	
	a) Have serviceability/ unserviceability reports of	
	equipment, facilities and systems been raised	
2.16	correctly and regularly?	
	b) Have follow up actions been taken promptly and	
	Properly on reported unserviceability's?	
	a) Are surveillance data from SSR, ADS-B,	
	ADS-C and ATC communications recorded	
	automatically?	
2.17	b) Are those data recordings (audio, video) and	
	other ATS data such as ATC log entries,	
	flight progress strips etc. retained for at least	
	30 days?	
2.18	Have safety reviews of ATS units been conducted on	
2.18	a regular, systematic basis and documented?	
2.19	Any findings on previous safety reviews carried out	
2.19	and follow up action taken? Are the records available?	
2.20	Are those Safety reviews conducted by an adequately	
2.20	qualified/trained personnel?	
	Any new ATS/PANS OPS procedures, equipment,	
2.21	systems or facilities and airspace reorganizations	
2.21	introduced to the ATS system?	
	If yes, have safety assessments been carried out?	
2 22	Have the previous recommendations issued by the	
2.22	CAA inspectorate been implemented?	

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Ref:				
No.		Area of Inspection	Observation	Comments
		j. Log Keeping		
		k. Watch briefing		
		1. Taking/handing over duties		
	Are updated	m. Strip Marking		
3.1	procedures available with	n. Coordination (local/Int.)		
3.1	regard to the	o. Standard R/T & Phraseology		
	following?	p. Separation standards and Methods		
		q. updating documents		
		i. Reporting unserviceability's		
	Are there ATC C	Contingency procedures available		
	for:			
	a) Air-ground	Radio communication failures		
	b) Aircraft trai	nsponder failures		
3.2	b) To assist an	d safeguard strayed or unidentified		
	aircraft?			
	c) Emergency	•		
		Conflict Alert (STCA)		
	,	afe Altitude Warning (MSAW)		
		ollision Avoidance System (ACAS)		
		procedures available to use in the		
3.3	event of following a) Unlawful i			
3.3	b) Aircraft bo			
	c) Emergency			
	c) Emergenc	y descent		

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## (4) **DOCUMENTATION**

Comments

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4.4	Updated SL MATS	
4.5	Updated AIP Sri Lanka	
4.6	Emergency Plan and displayed short listed action list and information check list with all contact numbers	
4.7	Safety Management Manual relevant to the ATC Centre	
4.8	Valid NOTAMs	
4.9	Relevant LATCI/Staff instructions	
4.10	Updated charts relevant to the centre	
4.11	Operational Coordination Agreements (OCA's) between ATC units in adjacent FIR's	
4.12	Incident, Accident and occurrence reporting forms	
4.13	Properly maintained Log book, current duty roaster and position logs relevant to the centre	
4.14	Records of Inspection reports of CAASL & subsequent CAPs sent	

## (5) WORK ENVIORMENT

Ref: No.	Area of Inspection	Observation	Comments
5.1	Are there adequate rest facilities available for		
3.1	Controllers at the premises?		
	Are the following factors existing at an acceptable		
	level at the center as per the judgment of the		
	inspector?		
5.2	e) Ambient Lighting		
	f) Ambient Temperature		
	g) Noise Level		
	h) Exterior Glare		

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## (6) EQUIPMENT

Ref: No.	Area of Inspection	Observation	Comments
	Serviceability status of the following equipment		
	a) Communication equipment		
6.1	b) Navigation equipment		
0.1	ILS, VOR/DME etc.		
	c) Surveillance equipment SSR, ADS-B, ADS-C		
	d) Visual/ non visual aids and Alarms		
	Are the following important systems being tested for		
	normal operations on a routine basis?		
6.2	e) Standby equipment/sets		
	f) Hot links		
	a) Has operational staff taken timely actions		
	to notify appropriate personnel regarding		
6.3	Unserviceability's		
	b) Are there records of such notifications and		
	corrective actions taken?		

## (7) OBSERVATIONS

Ref: No.	Significant Observations

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## (8) RECOMMENDATIONS

Ref:	Recommendations	Action Office

Ingnestana (Non	ma P- Cianatura).	Data
Inspectors (Nar	ne & Signature):	Date:-

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### 4.3 AIS Inspection Check List for BIA

1. TECHNICAL PERSONNEL

#### AIS INSPECTION CHECKLIST/REPORT

Centre:	Date and Time:	Inspector(s)
		_
Inspection Report Referei	nce :	File Reference:

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in the page 2 with the reference number of the Area of Inspection.

S = Satisfactory; U = Unsatisfactory; N = Not Checked; I = To be improved

Ref: Area of Inspection Observations Comments Number Is minimum number of staff available in the 1.1 Centre? 1.2 Are all positions manned properly? 1.3 Have the assigned officers for the positions been given relevant training and all training records are maintained? 1.4 Have the officers worked more than 24hrs continuously? 2. PROCEDURES 2.1 Are procedures 2.1.1 Issuing NOTAM s available/updated 2.1.2 Taking over/ timely for; Handing over watches

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Child Relations Authority Set Lambo		
	2.1.3 Verification of raw data	
	2.1.4 Updating documents (ICAO Docs, AIPs, Annexes)	
	2.1.5 Issuing AICs, AIP Amendments & Supplements	
	2.1.6 Issuing NOTAM Check Lists & Summaries	
	2.1.7 System/ method to inform National Airlines & all Schedule airlines when significant NOTAM is issued	
	2.1.8 Receiving & dissemination of post flight information	
	2.1.9 Accepting and Dissemination of FPLs	
	2.1.10.Availability to check for records acceptance of FPL	
	2.1.11.Availability of records of verbal briefing	
2.2	Are raw data retained and easily traced –	
	Static data  Dynamic data	
2.3	Availability of the updated the AIS Raw data folder/database	
	Whether Nil AIRAC is issued with the concurrence of CAASL for the non-publication of AIRAC	
	Timeliness/Compliance with AIRAC procedures.	
	Check whether authenticated signature is Available in the NOTAM request form.	
	Check whether authenticated signature is	

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Ref Lanks	T		
	_	lity management office has	
	checked the	Draft AIS Publications before	
	sending for D	GCA approval	
		certified Quality Management	
	system in plac		
	AIS Informa	ntion Distribution Process is	
	acceptable		
2.4	Have previou	is recommendations issued by	
2.1	=	implemented?	
	life CAA been	i implemented?	
		T = 0.10	
2.5	Are	Doc.7910	
	following		
	updated	Doc 8126	
	documents		
	relevant to	Doc 8585	
	the centre		
		Doc.7383	
	available?		
		Doc.8400	
		D0C.0400	
		Doc 7030	
		DOC 7030	
		D 0607	
		Doc 8697	
		Doc 8168	
		Doc 4444	
		Doc 8643	
		Doc 10066	
		Doc 9881	
		200 7001	
		Implementing standards no 3	
		implementing standards no 3	
		Lead amonting standards as 6	
		Implementing standards no 6	
		7 1 2 2 2	
		Implementing standards no 25	
		Implementing standards no 26	
		Implementing standards no 28	
		_	
		Implementing standards no 31	
<u> </u>	1	1	

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		Implementing standards no 38	
		Implementing standards no 87	
		AIP - SL	
		Other Relevant AIPs	
		Availability of the procedure for getting current e- AIP CDs	
		Availability of the procedure to discard the obsolete docs/AIPs in the Library.	
		Job descriptions of the officers in each position in the centre	
		Staff instructions issued (separate file)	
		Procedures/Local instructions (separate file)	
		Updated Charts required for briefing	
		Relevant NOTAM s	
		Are adequate briefing material available	
		Whether self-briefing board is updated	
		Whether accident/Incident reporting forms are easily accessible	
3. WOI	RK ENVIORM	MENT	
3.1	Are adequate re	est facilities available	
3.2	Are the following factors existing		
	an acceptal level as per t	ble 3.2.2 Ambient	

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## CIVIL AVIATION AUTHORITY OF SRI LANKA

	judgment of the inspector?	3.2.3 Noise Level	
4. EQU	IPMENTS		
4.1	Whether any defect	s observed in equipment?	
4.2	Has the staff taken appropriate officers unserviceability /de	regarding	

**Comments: -**

Inspectors (Name & Signature) :

Date :

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## 4.4 AIS Inspection Check List for RMA

### AIS INSPECTION CHECKLIST/REPORT

Centre:	Date and Time:	Inspector(s):
Inspection Report Reference :		File Reference:

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in the page 2 with the reference number of the Area of Inspection.

S = Satisfactory; U = Unsatisfactory; N = Not Checked; I = To be improved

1. TECH	HNICAL PERSO	NNEL		
Ref: Number	Area of Inspection		Observations	Comments
1.1	Is minimum number Centre?	er of staff available in the		
1.2	Are all positions ma	anned properly?		
1.3	Have the assigned been given relevant	officers for the positions training?		
2.PROC	CEDURES			
2.1	Are procedures available/updated	2.1.1 Issuing NOTAM s		
	timely for;  2.1.2 Taking over/ Handing over watches			
		2.1.3 Verification of raw		

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		data	
		uata	
		2.1.4 Updating	
		documents (ICAO Docs,	
		AIPs, Annexes)	
		2.1.5 Issuing NOTAM	
		Check Lists &	
		Summaries	
		2.1.6 Receiving &	
		dissemination of post	
		flight information	
		2.1.7 Accepting &	
		disseminating of Flight	
		Plans	
2.2	Are raw data r	etained and easily traced –	
	Static data		
	Dynamic data		
2.3	Have previou	s recommendations issued by	
the CAA been im		implemented?	
2.4	Are following	Doc.7910	
	updated	Doc.8126	
	documents relevant to	Doc.8585	
	the centre	Doc.7383	
	available?	DOC.1303	
		Doc.8400	
		Doc.7030	
		Doc.4444	
		Doc.8643	
		Annex 15	
		Doc 10066	
		Implementing standards no 3	

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## CIVIL AVIATION AUTHORITY OF SRI LANKA



	Implementing standards no 6	
	Implementing standards no 25	
	Implementing standards no 26	
	Implementing standards no 28	
	Implementing standards no 31	
	Implementing standards no 38	
	Implementing standards no 87	
	AIP - SL	
	Other Relevant AIPs	
	Job descriptions of the officers in each position in the centre	
	Staff instructions issued (separate file)	
	Procedures/Local instructions (separate file)	
	Updated Charts required for briefing	
	Relevant NOTAM s	
	Are adequate briefing material available	
	Whether self-briefing board is updated	
:	Whether accident/Incident reporting forms are easily accessible	
	Accepting and Dissemination of FPLs	
	Availability to check for records acceptance of FPL	
3.WORK ENVIORME	ENT	

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.1	Are adequate rest faci	llities available	Not Applicable
2.2	factors existing at an acceptable level as per the judgment of the	3.2.1 Ambient Lighting 3.2.2 Ambient Temperature 3.2.3 Noise Level	
U	IPMENTS		
	Whether any defects	observed in equipment?	
2		en actions to notify fficers regarding cts?	

$\sim$				4
	nm	m	Δn	ts:

Inspectors (Name & Signature):

Date :

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## 4.5 Aeronautical Meteorological Station Inspection Checklist

## AERONAUTICAL METEOROLOGY INSPECTION CHECKLIST/REPORT

Centre :-	Date :-	Time :-	Inspector(s) :-
Inspection Report Reference :			File Reference:

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in the page 3 with the reference number of the Area of Inspection.

**S** = Satisfactory; **U** = Unsatisfactory; **N** = Not Checked; **I** = Improvements Needed

Ref No	Area of Inspection	Observations	Comments
1.	PROCEDURES		
1.1.	Is there a letter of Agreement with ANSP?		
1.2.	Are operating procedures clearly documented and readily available to operating personnel?		
1.3.	Is there a documented organizational chart?		
1.4.	Is there a current list of operating staff of the location?		
1.5.	Does the unit hold contingency plans for implementation in the event of disruption or potential disruption of MET services in its area of jurisdiction?		
1.6.	Is a system of files (personal) containing all relevant information on operating personnel at its unit?		
1.7.	Is there an established system of communication within the organization?		
1.8.	Are periodical inspections conducted?		
1.9.	Is the operating complex properly maintained?		
		•	•

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Pri Lands	DOCUM	INTO				
2.	DOCUMENTS					
2.1.		at least one complete and current copy of erence document?				
	2.1.1	ICAO Annex 3, IS 042				
	2.1.2	IAIP (AIP, AIP Supplement, AIC and NOTAM)				
	2.1.3	Station Operational Procedure				
2.2.	circulars	operating practices; directives, orders, and instructions properly documented and e to operating personnel?				
2.3.		Are the Training records of the technical staff maintained in the unit concerned?				
2.4.	Have the	Have the training plan for the operating staff?				
3.	RECORDS					
3.1.	Is there log book, neatly completed and duly signed by the personnel on duty?					
3.2.	Is there a system in place to manage impounded records especially following aircraft accidents/incident?					
4.	AVAILABILITY AND SERVICEABILITY STATUS OF EQUIPMENT AND FACILITIES					
4.1.	Observat	tory				
	4.1.1	Barometers (Fortin, Aneroid or Digital)				
	4.1.2	Stevenson screen				
	4.1.3	Rain gauge				
	4.1.4	Wind vane and anemometer				
	4.1.5	Observation points				
	4.1.6	The location of the wind sensors (Are they sited to give best practicable indication of conditions along the runway/touch downzone?				
4.2.	Data trar	nsfer				

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4.2.1	Computer				
4.2.2	Telephor	ne			
4.2.3	AWOS				
4.2.4	Internet				
4.3.	Data analysis				
	4.3.1.	Meteogram			
	4.3.2.	Weather models			
	4.3.3.	Satellite pictures			
5.	METEOR	OLOGICAL SERVICES			
5.1.	Is the routine meteorological information provided at specified intervals;				
5.2.	•	ecial weather observations provided r specified changes occur in respect of			
		wind, visibility, runway visual range,			
	present v	veather, cloud and air temperature?;			
5.3.		ficant weather forecast information			
	1	and communication with Regional ed meteorological centres maintained for			
	·	ange of information on volcanic ash and			
	tropical c	yclones activities?;			
5.4.		riefing, consultation and flight			
	documentation services provided to flight crew members and other flight operations personnel?				
5.5.		other watch and monitoring activities ed, including the ability to detect and			
	forecast	hazards relevant to the aviation			
	commun	ity, as prescribed by the Authority?			
5.6.		cast and warning products derived to the			
		ents prescribed by the Authority for the traffic service and air operators; (TAF,			
	•	AIRMET, Wind shear warning/Aerodrome			
	warning	(if applicable)?			
5.7.		ecord of aeronautical climatological			
	informat	ion maintained for supply to pilot, air			
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Chill Assasson Authority Sri Lupha							
	traffic s						
5.8.	Is the aeronautical meteorological information exchanged with other aeronautical meteorological offices?						
5.9.	acciden the atn supplie	Is the information received concerning the accidental release of radioactive materials into the atmosphere within its area of responsibility supplied to the air traffic service providers for dissemination?					
	Observ	Observations					
<b>6</b> 6.1	Routine	e observations & reports:					
	6.1.1	Are observations made throughout the operational hrs of the aerodrome?					
	6.1.2	Are local routine reports provided at intervals of 30min?					
	6.1.3	Are the local routine reports transmitted to local air traffic services unit?					
	6.1.4	Is METAR provided hourly?					
	6.1.5	Is METAR disseminated to other aerodromes?					
6.2	SPECI	SPECI					
	6.2.1	Are criteria for SPECI established and listed?					
	6.2.2	Are they issued as local special reports for dissemination at the aerodrome of origin?					
	6.2.3	Are they issued/dissemination to other aerodromes?					
6.3	Observi	Observing of meteorological elements					
	6.3.1	Surface wind					

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		6.3.1.1 Are the wind sensors sited close to the touchdown zones of the runway?	
		6.3.1.2 Does the surface wind display in the met station have a corresponding display at the control tower?	
		6.3.1.3 Do the surface wind displays in the met Station and those in the ATS unit relate to the same sensors?	
	6.3.2	Visibility	
		6.3.2.1 Are visibility observations made when conditions warrant?	
		6.3.2.2 Are the observations made by human observers?	
		6.3.2.3 Does the met. Station use Automated Observing equipment for visibility measurement?	
		6.3.2.4 Do the visibility observations give the best indications along the runway and touchdown zone?	
		6.3.2.5 Is there a provision for the manual insertion of visibility values where automated equipment is used?	
	6.3.3	RVR	
		6.3.3.1 Is RVR assessed when the visibility is less than 1500m?	
		6.3.3.2 By what means is RVR assessed?	
		Human observer OR Automated equipment?	
		1	

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6.4	Aircraft	Observations and Reports	
	6.4.1	Is there a provision or arrangement to receive routine and special air-reports from the ATS unit as soon as they are received from Pilots?	
7	FORECA	STS	
7.1	Aerodro	ome forecasts	
	7.1.1	Is TAF issued by the Meteorological Service Provider?	
	7.1.2	Are the forecasts and amendments issued in the standard formats and codes, and include all the elements?	
	7.1.3	Are forecasts kept under continuous review and amendments issued promptly?	
	7.1.4	Is TAF issued every 6hrs with a period of validity of 30hrs?	
7.2	Trend la	anding forecasts	
	7.2.1	Are trend forecasts appended to MET reports?	
	7.2.2	Do they meet the requirements of local users and of aircraft within about one hour flying time from the aerodrome?	
7.3	Forecas	st for take –off	
	7.3.1	Are forecasts for take-off prepared?	
	7.3.2	Are they supplied to operators/flight crew (on request) within the specified 3hrs before ETD?	
	7.3.3	Do they contain information on expected conditions (surface wind direction and speed, temp, pressure/QNH) over the runway	

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Ted Laylon	1		
		complex?	
	7.3.4	Do they contain information on expected conditions over the runway complex in regard to surface wind and wind variations, temperature, pressure (QNH) and other elements an agreed locally?	
7.4	Area an	d Route Forecasts	
	7.4.1	Are forecasts available for low level flights?	
7.5	SIGMET	Information	
	7.5.1	Are SIGMET information issued?	
	7.5.2	Are the messages prepared in abbreviated plain language based on ICAO standard abbreviations?	
	7.5.3	Do the messages give a concise description of en-route aviation hazardous weather?	
	7.5.4	Are the messages cancelled when the phenomena are no longer occurring or are expected to occur?	
	7.5.5	Is the validity period of the message less than 6hrs?	
	7.5.6	Are SIGMET messages disseminated to other MET Offices, watch offices and WAFCs?	
7.6	Aerodro	ome warnings	
	7.6.1	Are aerodrome warnings issued?	
	7.6.2	Are they cancelled when the conditions are no longer occurring or are expected to occur in the area?	
	7.6.3	Do the warnings relate to thunderstorm, hail, fog, sandstorm,	

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Sri Lashe			
		dust storm, /or dust?	
7.7	Wind sh	ear warnings	
	7.7.1	Are WS warnings issued?	
	7.7.2	What device or method is used to detect wind shear phenomenon?	
		<ul> <li>Doppler radar</li> <li>A system of surface wind and/or pressure sensors.</li> <li>Aircraft observations</li> </ul>	
	7.7.3	Is there any provision to cancel the warnings when aircraft reports indicate that wind shear no longer exists?	
8	AERONA	AUTICAL CLIMATOLOGICAL INFORMATION	
8.1	Are there arrangements for collecting and retaining the necessary observational data at the aerodrome?		
8.2	Climatol	logical Tables	
	8.2.1	Does the table include information required for the preparation of aerodrome climatological summaries?	
8.3	Climatol	logical Summaries	
	8.3.1	Do the summaries follow the procedures prescribed by WMO?	
	8.3.2	Are there computer facilities to store, process and retrieve the information?	
	8.3.3	If there is no computer, are the summaries prepared using the models specified by WMO?	
8.4	Copies	of Data:	
	8.4.1	Is there a provision to make met.  Observational data (required for research, investigation or operational analysis) available to other MSPs,	

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		operators and those concerned with the		
		application of Met to international air		
		navigation?		
9	MET SER	VICE FOR OPERATORS & FLIGHT CREW MEN	IBERS	
9.1	Is inforn	nation supplied to operators and crew		
	members	5?		
9.2	Are the	available information on upper wind and		
		r temperature and significant en-route		
		supplied not later than 3hrs before		
	departur	e?		
9.3	Briefing,	consultation & flight documentation		
	9.3.1	Is the briefing room easily accessible to		
		the pilots, flight crew members?		
	9.3.2	Is the crew briefing room adequately		
		equipped?		
	9.3.3	Is the following information made		
	9.5.5	Is the following information made available during briefing and		
		consultation?		
		consultation.		
		- METAR and SPECI;		
		- TAF and Trend forecasts		
		- Aerodrome warnings relating to the		
		local aerodrome;		
		- Forecasts for take-off.		
		- SIGMET information and special air		
		reports not covered by a SIGMET;		
		,		
	9.3.4	Current and prognostic charts;		
	3.3.4	Is flight documentation made available to		
	flight crew members with all the relevant information?			
		information:		
	9.3.5 Does the MSP retain information supplied			
		to flight crew members (printed or		
		computer files) for a period of at least 30		
		days?		
9.4	Are MET	Information readily made available in case		
	•		· 	

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	of inquiri	es or investigation?			
9.5	Informat	ion for aircraft in flight:			
	9.5.1	Is MET Information to aircraft in flight supplied through the ATS units?			
9.6	Informat	ion for ATS units			
	9.6.1	Is met information supplied to the ATS units?			
	9.6.2	Is there a provision to supply, as rapidly as possible, information requested by ATS unit in connection with an aircraft emergency?			
10	TELECON	IMUNICATION FACILITIES			
10.1	Are there suitable telecomm facilities for the supply of required information to control towers, approach control offices and aero telecomm stations serving the aerodrome?				
10.2	Are there suitable telecomm facilities for the supply of required information to flight information centre, control area and rescue co-ordination centre and the associated aero telecoms stations?				
10.3	O.3 Are there suitable telecomm facilities to permit world area forecast centres to supply the required world area forecast system products to MET Offices, MSPs and other users?				
11	QUALITY	MANAGEMENT SYSTEM			
11.1	Has quali	ty system been established?			
11.2	Is the system implemented?				
11.3	11.3 Is the system maintained?				
Observati	ons/ Com	ments:-			
Inspectors (Name & Signature) Date			Date		

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# 4.6 Search and Rescue Inspection Checklist

### SAR INSPECTION CHECKLIST/REPORT

Aeronautical Rescue Coordinating Centre:	Date:	Time:	Inspector(s):
Inspection Report Ref:	File Ref:		

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 4 with the reference number of the Area of Inspection.

S = Satisfactory; U = Unsatisfactory; N = Not Checked; I = Improvements Needed

# 1) TECHNICAL PERSONNEL

Ref:	Area of Inspection	Observation	Comments
No.			
1.1	Has Arrangements been made for providing SAR service on 24 hour basis.		
1.2	Does the staff detailed for ARCC possess required qualifications and training?		
1.3	Is the ARCC employed with sufficient work force skilled in SAR coordination and operational functions?		
1.4	Are there any written job descriptions for each of the technical staff available for ARCC?		
1.5	Has a Training Program been established for ARCC technical staff?		
1.6	Does the ARCC maintain training records or files for ARCC technical staff?		
1.7	Are the ARCC personnel involved in conduct of radiotelephony communications proficient in English Language?		

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1.8	Does the ARCC conduct joint SAR exercises with	
	other agencies involved with SAR functions to	
	achieve efficiency among personnel involve?	
1.9	Does the ARCC Maintain records of SAR exercises	
	and attended to identify deficiencies?	

# 2) PROCEDURES

Ref:	Area of Inspection	Observation	Comments
No.			
2.1	Are there any coordination agreement between ARCC and the MRCC?		
2.2	Are there any detailed plans of operation available for the conduct of SAR operations within the SRR?		
	Does the ARCC readily have at all time's up-to-date information concerning the following, in respect of its search and rescue region?  a) Search and Rescue units, alerting posts		
	b) Air Traffic Services units/DMC		
	c) Means of communication that may be used in search and rescue operations.		
2.3	d) Addresses and telephone numbers of all operators, or their designated representatives,		
	engaged in operations in the region.		
2.4	Has the ARCC access to COSPAS/SARSAT distress data?		
2.5	Does the records of distress alerts of COSPAS-SARSAT maintained by ARCC?		
2.6	Is action on distress alert upon receipt through COSPAS-SARSAT arrangement is carried out expeditiously?		
2.7	Does the status on available communication link with the MRCC checked and recorded at regular intervals?		

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2.8	Does the status on available communication link with meteorological watch office is checked and recorded at regular intervals?	
2.9	Does the status on available communication links with the ATS units checked and recorded at regular intervals?	
2.10	Does the status on available communication link with the SLAF checked and recorded at regular intervals?	
2.11	Does the status on available communication link with adjacent RCC's of neighboring states checked and recorded at regular intervals?	
2.12	Does ARCC maintain records of all operations and prepare appraisals of actual SAR operations?	

# 3) WORK ENVIORMENT

Ref:	Area of Inspection	Observation	Comments
No.			
3.1	Is adequate space/layout & facilities available for personnel involved in SAR operations?		
	Are the following factors existing at the centre to an acceptable level as per the judgment of the		
3.2	inspector?		
	a) Ambient Lighting		
	b) Ambient Temperature		
	c) Noise Level		
	d) Exterior Glare		

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# 4) EQUIPMENT

Ref:	Area of Inspection	Observation	Comments
No.			
4.1	Are necessary Plotting equipment available in		
	ARCC?		
	Has the ARCC been provided with rapid and reliable		
	means of two way communication with:		
	a) Associated ATS units?		
	b) Associated rescue sub centers?		
	c) Headquarters of SAR units in the region?		
	d) MRCC and Coast guard stations?		
	e) JRCC's in adjacent regions?		
	f) Designated Met. Office?		
	g) Other SAR units?		
4.2	h) Alerting posts? (Police/Navy/Coast Guard etc.)		
	i) COSPAS-SARSAT MCC servicing the SAR region?		
	Has the ARCC been provided with following		
	equipment?		
	a) Emergency Distress Frequency 121.5 MHz,		
	a) Emergency Disuess Frequency 121.5 Wifiz,		
	123.1 MHz for on scene communication;		
	b) Dedicated Telephone/FAX line;		
4.3	c) AMHS terminal;		
	d) Computer Facilities;		
	e) Internet Facilities with E-mail address;		

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# 5) DOCUMENTS AND MANUALS

Ref: No.	Area of Inspection	Observation	Comments
5.1	Are the updated Airport Emergency Plans of BIA/RMA/MRIA available in the ARCC?		
5.2	Does ARCC possess up to date information on following, in its SAR region		
	a) SAR units and Alerting posts		
	b) ATS units		
	c) Means of communication that may be used in		
	SAR operations		
	d) Addresses and telephone numbers of all		
	operators/representatives engaged in		
	operations in the region		
	e) Any other public/private resources that are		
	likely to be useful in SAR		
	Are following updated documents available with ARCC?		
	a) ICAO Annex 12,13,		
	b) Relevant ICAO IAMSAR Manuals;		
	c) IS 029		
	d) SAR Agreements with neighboring States		
	e) AIP Sri Lanka		
	f) Search and Rescue Ops. Manual		
	g) Action Flow Chart		
	h) Sunrise/Sunset Tables		
	i) SAR Manual- SLCAP2700		

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5.3	j) Maps & Charts (aeronautical, Topographical	
	& Hydrographical) of different scale	
	k) statistical data base on SAR events	
	l) Log Book pertaining to ARCC	
	m) White Board /Wall Charts	
5.4	Is there any data retention mechanism to record the corrective actions that have been taken for the findings by the CAASL SAR Inspectors?	

# **6) OBSERVATIONS**:

Ref:	Significant Observations
No.	

# 7) RECOMMENDATIONS

Recommendations	Action Office
	Recommendations

Inspectors (Name & Signature): Date:

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### 4.7 Communication Navigation Surveillance (CNS) Inspection Checklists

### 4.7.1 GENERAL HUMAN RESOURCE (DIVISIONAL)

### CNS INSPECTION CHECKLIST / REPORT

Division: Electronics & Air	Date:	Time:		Inspector:
Navigation Engineering.				
Inspection Reference - ANS / YY / MMM / CNS-SSS-DME			File	Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

S = Satisfactory; I = to be Improved; U = Unsatisfactory;

NC = Not Checked; NA = Not Applicable.

### 1) GENERAL HUMAN RESOURCE (DIVISIONAL)

Ref:	Area of Inspection	Obs	Comments
Number	Area of hispection		Comments
1.1	Has the CNS Provider's main job functions		
1.1	clearly defined?		
1.2	Does the CNS provider has a documented		
1.2	organizational structure?		
	Has the CNS Provider got a clearly defined		
1.3	training plan and program for each technical		
	position in the organizational Structure?		
	Does the organizational structure clearly define,		
1.4	lines of communication & accountability of		
	personnel in respect of the provision of services?		
	Does the organizational structure show the		
1.5	relationship between operational units within the		
	organization?		
1.6	Does the organizational structure show names of		
1.0	individuals manning appropriate management		

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the favoritor activity of Labor.	positions?	
	positions:	
	Does the organization has defined set of	
1.7	qualifications for the recruitment of technical	
	manpower?	
	Is there a mechanism established to enhance	
1.8	Divisional Activity Awareness among the	
1.0	Managers / Engineers of all Technical Stations /	
	Units?	
	Is there a mechanism established to enhance	
1.0	Sectional Activity Awareness among the	
1.9	Technical manpower of each Technical Stations	
	/ Unit?	
	Does each Station / Unit conduct periodic	
1.10	meetings to discuss matters pertaining to duties,	
	responsibilities & issues of tech. personnel?	
1.11	Does the CNS technical manpower available as	
1.11	per the organization structure?	
	Is there a mechanism to review pending issues	
1.12	pertaining to Daily Serviceability Reports from	
	the operational divisions regularly?	
1.13	Have the stations / units developed job	
1.13	descriptions for its technical staff?	
1.14	Is there a mechanism to determine the minimum	
1.14	staff requirement to fulfil the assigned duties?	
1 15	Are technical personnel properly qualified,	
1.15	trained, equipped & authorized to perform the	
	Has the CNS provider employed trained	
1.16	personnel, dedicated to all relevant equipment,	
	during each duty shift?	
	Does each station / unit has a call up list of	
1.17	technical expert assistance regarding all critical	
	Equipment during an emergency situation?	
1 10	Does the call up lists carry the name, contact	
1.18	information, alternate person & his contact	
	1	<u> </u>

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	information and displayed in technical	
	supervision area of each station / unit?	
1.19	Is there an established training policy and	
1.17	Training programs for technical staff?	
	Is there a mechanism for the release of a trained	
1.20	person to perform assigned duties independently,	
	after completion of the training?	
1.21	Does the technical officers get periodic refresher	
1.21	training relevant to the station / unit?	
1.22	Is the training programs are adequate and fully	
1.22	implemented?	
1.23	Does the CNS provider maintain training files /	
1.23	records for its Technical personnel?	
	Does the officers on shift duty, at all Stations /	
1.24	Units are provided with Transport facilities	
	during an Urgency / Emergency?	

Comments:
Comments.

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### 4.7.2 INSRUMENT LANDING SYSTEM MARKER BEACON

# CNS INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:	Inspector:
Service: ILS Markers			
Site – / F	Runway - / ILS Ca	ategory - Cat 1 / Free	<sub>l</sub> . 75 MHz
Inspection Reference - ANS /	YY / MMM / CNS-SS	SS-IMB / QQ Fil	e Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

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NC = Not Checked; NA = Not Applicable

# 1) INSTRUMENT LANDING SYSTEM MARKER BEACON

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Availability of Main & Standby equipment.		
1.2	Availability of Monitoring and Control equipment.		
1.3	Whether the Equipment is Flight Calibrated.		
1.4	System Availability (>97%).		
1.5	Availability figure of system 1		
1.6	Availability figure of system 2		
1.7	Availability of a copy of the current Flight Calibration Report on site.		
1.8	Availability of system parameters immediately after the flight calibration, on site.		
1.9	Availability of Status indicating system at relevant ATC center.		
1.10	Availability of Status monitoring, control & alarm system at Technical Supervision center.		

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1.11	Availability of remote Temperature monitoring and alarm system at Technical Supervision center.	
1.12	Availability of Documented routine maintenance procedure.	
1.13	Availability of maintenance manuals on site.	
1.14	Availability of required tools and test equipment to perform routine Maintenance.	
1.15	Availability of maintenance records.	
1.16	Availability of lightning protection system.	
1.17	Availability of Surge protection system for the Mains Power Supply.	
1.18	Regular inspection of antenna system for physical damages.	
1.19	Availability of First-aid kit on site.	
1.20	Availability of adequate ventilation / Airconditioning.	
1.21	Cleanliness of Equipment & Room / Shelter	
1.22	Availability of Fire extinguisher within the validity period on site.	
1.23	If UPS available, the autonomy with regular load.	
1.24	If battery backup is available, backup time with regular load.	
1.25	If backup generator is available, power restoration time.	

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#### 4.7.3 POINT TO POINT LINKS

# CNS INSPECTION CHECKLIST / REPORT

Station:	Date:	Time:		Inspector:
Service: Point to Point Link				
Freq.	/ Point A -		/ P	oint B -
Inspection Reference - ANS / Y	Y / MMM / CNS-SSS	-PPL / QQ	File	Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

 $S = Satisfactory; \hspace{1cm} I = to \ be \ Improved; \hspace{1cm} U = Unsatisfactory;$ 

NC = Not Checked; NA = Not Applicable

#### 1) POINT TO POINT LINKS

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Availability of Main & Standby Transceivers		
1.2	Availability of Main & Standby Antenna Systems		
1.3	Bit Error Rate / Fade Margin of Main System		
1.4	Bit Error Rate / Fade Margin of Standby System		
1.5	Link Availability figure		
1.6	Availability figure of Main Channel		
1.7	Availability figure of St/By Channel		
1.8	Availability of Path Protection on link		
1.9	If P.P. is available, Availability of a procedure for continuous monitoring of the availability of		

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	alternate path	
1.10	If the link is remotely located, whether Remote Temp. Monitoring is available	
1.11	Availability of Traffic allocation table (Channel / Tributary)	
1.12	Availability of maintenance manuals on site	
1.13	Availability of Routine Maintenance procedure	
1.14	Availability of Routine Maintenance Records	
1.15	Availability of required tools and test equipment to perform routine Maintenance	
1.16	Availability of adequate air-conditioning for the equipment	
1.17	Power Supply to the Main System	
1.18	Power Supply to the Standby System	
1.19	If UPS available, the autonomy with regular load	
1.20	IF battery backup is available, backup time with regular load	
1.21	Power Restoration time of Backup Generator (If Available)	

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#### 4.7.4 AUTOMATIC WEATHER OBSERVING SYSTEMS

# CNS INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:		Inspector:
Service: AWOS				
Inspection Reference - ANS /	YY / MMM / CNS-SS	S-AWO / QQ	Fil	e Ref – AS / 14 / XX

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### 1) AUTOMATIC WEATHER OBSERVING SYSTEMS

Ref: Number	Area of Inspection	Obs.	Comments
1.1a	Serviceability of Temperature Sensor.		
1.1b	Serviceability of Temperature Sensor.		
1.2a	Serviceability of Humidity Sensor.		
1.2b	Serviceability of Humidity Sensor.		
1.3a	Serviceability of Wind Speed / Dir. Sensor.		
1.3b	Serviceability of Wind Speed / Dir. Sensor.		
1.4a	Serviceability of Temperature Sensor.		
1.4b	Serviceability of Temperature Sensor.		
1.5a	Serviceability of Visibility Sensors (RVR).		
1.5b	Serviceability of Visibility Sensors (RVR).		
1.6a	Serviceability of Cloud base Sensor.		
1.6b	Serviceability of Cloud base Sensor.		
1.7a	System availability figure		
1.17b	Availability figure of System "A"		

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1.8	Availability figure of System "B"	
1.9	Date of last system calibration.	
1.10	Manufacturer recommended calibration interval / Periodicity.	
1.11	Availability of periodic sensor calibration records.	
1.12	Availability of lightning protection on all sensors.	
1.13	Availability of lightning and surge protection on all Data lines connecting system & sensors.	
1.14	Availability of Duplicated data processing system.	
1.15	Availability of monitoring and alarming system for sensor failures at Technical supervision position.	
1.16	Availability of data presentation system at the relevant Technical supervision area.	
1.17	Availability of Service / Maintenance manuals on site.	
1.18	Availability of well-defined procedure to calibrate each and every sensor.	
1.19	Availability of well-defined routine maintenance procedure.	
1.20	Availability of required tools and test equipment to perform routine Maintenance.	
1.21	Availability of a portable computer for maintenance (if required).	
1.22	Availability of routine maintenance records on all sensors and central data processing system.	
1.23	Regular physical inspection of all sensors and maintaining records.	
1.24	Availability of lightning and surge protection on power lines to all sensors.	
	<u> </u>	

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1 25	Autonomy of UPS with regular load	
1.25	(If available).	
1.26	Backup time of battery banks, with regular load (If available).	
	Toda (II available).	
1.27	Power restoration time of backup generator.	

Comments:
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#### 4.7.5 HIGH FREQUENCY RECEIVING EQUIPMENT

### CNS INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:		Inspector:
Service: H.F. Reception				
Site – /	Service - H.F. Recep	otion / Frequer	ncy 2 M	Hz to 22 MHz
Inspection Reference - ANS /	YY / MMM / CNS-SS	S-HRX / QQ	File	e Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

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NC = Not Checked; NA = Not Applicable

### 1) HIGH FREQUENCY RECEIVING EQUIPMENT

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Operating frequency shall be adjustable from 2.8MHz to 22MHz in 1KHz Steps		
1.2	Availability of adequate number of H.F. Receivers.		
1.3	Availability of adequate number of Spare Receivers.		
1.4	Availability of adequate number of Antenna systems.		
1.5	Availability of Service / Maintenance manuals of all types of Communication related equipment on site.		
1.6	Availability of adequate stock of running spare parts on site.		

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1.7	Availability of Redundancy on Receiving Station to control center Traffic Link.	
1.8	Availability of Voice Communication system between Control Center and Receiving Station Technical Staff.	
1.9	Remote control, monitoring and alarm facility to Duty Technical Officer's location.	
1.10	Availability of routine Maintenance procedures on all Communication related equipment and power supply systems on site.	
1.11	Availability of required tools and test equipment to perform routine Maintenance.	
1.12	Availability of routine maintenance records of all Communication related equipment and power supply systems.	
1.13	Regular physical inspection of antenna systems and maintaining records.	
1.14	Availability of Fire Extinguisher within its validity period, on site.	
1.15	Availability of a first-aid kit on site.	
1.16	UPS Autonomy with regular load (if available)	
1.17	Backup time of battery banks, with regular load (if available).	
1.18	Power Restoration time of Backup Generator.	

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#### 4.7.6 HIGH FREQUENCY TRANSMITTING EQUIPMENT

# CNS INSPECTION CHECKLIST/REPORT

Station : Attidiya	Date:	Time:		Inspector:
Service: H.F. Transmission				
Site - Attidiya /	Service - Aero mobi	le / Frequen	cy - 2.	8 to 22 MHz
Inspection Reference - ANS /	YY / MMM / CNS-SS	S-HTX / QQ	Fil	e Ref – AS / 14 / <b>XX</b>

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

S = Satisfactory; I = to be Improved; U = Unsatisfactory;

NC = Not Checked; NA = Not Applicable

# 1) H.F. TRANSMITTING EQUIPMENT

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Operating frequency shall be adjustable from 2.8MHz to 22MHz in 1KHz Steps		
1.2	The Peak Envelop Power shall not exceed 6KW		
1.3	Transmitters shall operate on J3E for Voice and H2B for SELCAL		
1.4	Availability of adequate number of HF transmitters		
1.5	Availability of adequate number of Spare transmitters		
1.6	Availability of Service / Maintenance manuals of all types of Transmitters, on site		
1.7	Availability of adequate number of Antenna Systems		
1.8	Redundancy of control center to Transmitting Station Traffic Link		
1.9	Remote control, monitoring and alarm facility		

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	from Duty Technical Officer's location	
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1.10	Voice Communication system between Control Center and Transmitting Station Technical Staff	
1.11	Availability of routine Maintenance procedures for all types of Communication related equipment	
1.12	Availability of required tools and test equipment to perform routine Maintenance	
1.13	Availability of routine maintenance records on all Communication related equipment	
1.14	Regular physical inspection of antenna systems and maintaining records	
1.15	Availability of functional Aircraft Warning Lamp on the highest antenna tower in the antenna field	
1.16	Availability of lightning and surge protection system	
1.17	Availability of First-aid kit on site	
1.18	Availability of Fire extinguisher within the validity period on site	
1.19	Autonomy of UPS with regular load (if available)	
1.20	Backup time of battery banks, with regular load (if available)	
1.21	Power Restoration time of Backup Generator	
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Comments:
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### 4.7.7 INSTRUMENT LANDING SYSTEM GLIDE PATH

# CNS INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:		Inspector:
Service: ILS GP				
Site – /	Runway - / ILS	Category - Cat	- 1 /	GP Freq. –
Inspection Reference - ANS /	YY / MMM / CNS-SS	S-IGP / QQ	File	Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

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NC = Not Checked; NA = Not Applicable

# 1) INSTRUMENT LANDING SYSTEM GLIDE PATH.

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Availability of Main & Standby equipment.		
1.2	Availability of Monitoring and Control equipment		
1.3	Whether the Equipment is Flight Calibrated.		
1.4	Availability of a copy of the current Flight Calibration Report on site.		
1.5	Glide path angle error of Transmitter 1 on Monitor.		
1.6	Glide path angle error of Transmitter 2 on Monitor.		
1.7	Availability of system parameters immediately after the flight calibration, on site.		
1.8	System Availability (>97%).		
1.9	Availability figure of system 1		
1.10	Availability figure of system 2		
1.11	Availability of Documented routine maintenance and Ground Check procedure.		

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1.13 t	Availability of maintenance manuals on site.  Availability of required tools and test equipment to perform routine Maintenance and Ground
1.13 t	
'	Checks.
1 14	Availability of maintenance records and Ground Check records.
1 15 1	Availability of Status indication system at the relevant ATC Tower.
116	Availability of Status monitoring and control system at Technical Supervision center.
1.17	Availability of remote Temperature monitoring and alarm system at Technical Supervision center.
1.18	Availability of lightning protection system
1 19 1	Availability of Surge protection system for the  Mains Power Supply
1.70	Availability of air-conditioning systems and periodical inspection
1 / 1	Regular inspection of antenna system for physical damages and free from obstruction
1 //	Availability of Fire extinguisher within the validity period on site
1.23	Availability of a First-aid kit on site
1.24	If UPS available, the autonomy with regular load
175	IF battery backup is available, backup time with regular load
1.26 I	Power Restoration time of Backup Generator

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### 4.7.8 INSTRUMENT LANDING SYSTEM LOCALIZER

# CNS INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:		Inspector:
Service: ILS Localizer				
Site – / R	unway - / l	LS Category - C	Cat. 1 /	ILS Freq. –
Inspection Reference - ANS	/ YY / MMM / CNS-SS	S-LOC / QQ	File	Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

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NC = Not Checked; NA = Not Applicable

### 1) INSTRUMENT LANDING SYSTEM LOCALIZER.

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Availability of Main & Standby equipment.		
1.2	Availability of Monitoring and Control equipment.		
1.3	Whether the Equipment is Flight Calibrated.		
1.4	Localizer course error of Transmitter 1 on Monitor.		
1.5	Localizer course error of Transmitter 2 on Monitor.		
1.6	System Availability (>97%).		
1.7	Availability figure of system 1		
1.8	Availability figure of system 2		
1.9	Availability of a copy of the current Flight Calibration Report on site.		
1.10	Availability of the parameters immediately after the flight calibration, on site.		

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1.11	Availability of Documented routine maintenance procedure.	
1.12	Availability of maintenance manuals on site.	
1.13	Availability of required tools and test equipment to perform routine Maintenance.	
1.14	Availability of maintenance records.	
1.15	Availability of Status indication system at the relevant ATC Tower.	
1.16	Availability of Status monitoring and control system at Technical Supervision center.	
1.17	Availability of remote Temperature monitoring and alarm system at Technical Supervision center.	
1.18	Availability of lightning protection system.	
1.19	Availability of Surge protection system for the Mains Power Supply.	
1.20	Availability of air-conditioning systems and periodical inspection.	
1.21	Regular inspection of antenna system for physical damages and free from obstruction.	
1.22	Availability of Fire extinguisher within the validity period on site.	
1.23	Availability of a First-aid kit on site.	
1.24	If UPS available, the autonomy with regular load.	
1.25	IF battery backup is available, backup time with regular load.	
1.26	Power Restoration time of Backup Generator.	

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#### 4.7.9 VHF RECEIVING EQUIPMENT

### CNS INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:	Inspector:
Service: VHF Communication			
Site –	/ Service - VHF	Receiving	/ Frequency
Inspection Reference - ANS /	YY / MMM / CNS-SS	SS-VRX / QQ	File Ref – AS / 14 / <b>XX</b>

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

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NC = Not Checked; NA = Not Applicable

# 1) VHF RECEIVING EQUIPMENT

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Availability of Main & Standby Receivers		
1.2	Availability of Separate antenna systems for Main & standby receivers		
1.3	S+N to N Ratio of Main Receiver		
1.4	S+N to N Ratio of St/By Receiver		
1.5	Main / standby Change-over methodology		
1.6	If Remotely located, redundancy of traffic carrying link		
1.7	If Remotely located, availability of a reliable voice communication facility with the relevant control center		

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1.8	Availability of maintenance manuals on site	
1.9	Availability of routine Maintenance procedure	
1.10	Availability of required tools and test equipment to perform routine Maintenance	
1.11	Availability of routine maintenance records	
1.12	Power Supply to the Main Receiver	
1.13	Power Supply to the Standby Receiver	
1.14	Physical Obstruction free Antenna System	

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#### 4.7.10 VHF TRANSMITTING EQUIPMENT

### CNS INSPECTION CHECKLIST/REPORT

Station	Date:	Time:		Inspector:
Service: VHF Communication				
Site –	/ Service – VH	IF Transmission	n / F1	requency
Inspection Reference - ANS / Y	YY / MMM / CNS-SSS	S-VTX / QQ	File	e Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

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$$NC = Not \hspace{0.1cm} Checked \hspace{0.5cm} / \hspace{0.5cm} NA = Not \hspace{0.1cm} Applicable$$

### 1) VHF TRANSMITTING EQUIPMENT

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Availability of Main & Standby Transmitters		
1.2	Availability of Separate antenna systems for Main & standby Transmitters		
1.3	RF Output power of Main Transmitter		
1.4	RF Output power of Standby Transmitter		
1.5	If Remotely located, redundancy of traffic carrying link		
1.6	If Remotely located, availability of a reliable voice communication facility with the relevant control center		
1.7	Main / standby Change-over methodology		
1.8	Availability of maintenance manuals on site		

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1.9	Availability of routine Maintenance procedure	
1.10	Availability of required tools and test equipment to perform routine Maintenance	
1.11	Availability of routine maintenance records	
1.12	Power Supply to the Main System	
1.13	Power Supply to the Standby System	
1.14	Physical Obstruction free Antenna System	

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#### 4.7.11 VOICE RECORDING EQUIPMENT

# INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:	Inspector:
Service: Voice Recording			
Inspection Reference - ANS	/ YY / MMM / CNS-S	SS-DVR / QQ	File Ref – AS / 14 / <b>XX</b>

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

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NC = Not Checked; NA = Not Applicable.

# 1) VOICE RECORDING EQUIPMENT

Ref: Number	Area of Inspection	Obs.	Comments
1.1	System shall comprise of fully independent parallel running Main & Standby Voice Recorders.		
1.2	System Availability (> 99%)		
1.3	Availability figure of Recorder No. 1		
1.4	Availability figure of Recorder No. 2		
1.5	Restricted access <u>shall</u> be assured to the recorders and archives.		
1.6	Archived Voice Recordings Shall be preserved for a minimum period of 30 days.		
1.7	Availability of a methodology to synchronize the time with UTC.		
1.8	Availability of spare channels for future requirements.		

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1.9	Availability of independent Re-producing System.	
1.10	Availability of Replay area with high degree privacy (for the purpose of investigations).	
1.11	Availability of provision to save the recorded voice in common format as "WAV" or "MP3"	
1.12	Installation of main and standby recorders physically apart, for disaster management.	
1.13	Availability of adequate archiving media to retain recordings of both systems independently for a minimum period of 30 days, with provision for retention of recordings for investigations.	
1.14	Availability of secured storage space for archives.	
1.15	Availability of documented procedure for routine maintenance at regular intervals	
1.16	Availability of required tools and test equipment to perform routine Maintenance.	
1.17	Availability of routine maintenance records.	
1.18	Power Supply to the Recorder No.01	
1.19	Power Supply to the Recorder No.02	
1.20	If UPS available, the autonomy with regular load	
1.21	IF Battery backup available, backup time with regular load	
1.22	Power restoration time of standby Generator	
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#### 4.7.12 NON DIRECTIONAL BEACON

### CNS INSPECTION CHECKLIST/REPORT

Station : Attidiya	Date:	Time:	Inspector:
Service: NDB			
Site – Attidiya /	NDB type - Terminal /	Ident - RM / Free	quency – 350 KHz
Inspection Reference - AN	IS / YY / MMM / CNS-SS	S-NDB / QQ Fil	le Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

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NC = Not Checked; NA = Not Applicable

#### 1) NON DIRECTIONAL BECON

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Availability of Main & Standby equipment		
1.2	Availability of Monitoring and Control equipment		
1.3	The monitoring and control system shall Changeover the transmitters & produce indication to Tech. Sup. in the event of a decrease in radiated power more than 50% of nominal power		
1.4	The monitoring and control system should Changeover the transmitters & produce indication to Tech. Sup. in the event of a failure to transmit the identification signal		
1.5	Control system should produce indication to Tech. Sup. on malfunctioning or failure of the monitoring system itself.		
1.6	System availability (>97%)		
1.7	Availability Figure of Sys. A		
1.8	Availability Figure of Sys. B		
1.9	Availability of Status indicating system at relevant ATC center		

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1.10	Availability of Status monitoring, control & alarm system at Technical Supervision center	
1.11	Availability of remote Temperature monitoring and alarm system at Technical Supervision center	
1.12	Availability of Documented routine maintenance procedure	
1.13	Availability of maintenance manuals on site	
1.14	Availability of required tools and test equipment to perform routine Maintenance	
1.15	Availability of maintenance records	
1.16	Availability of lightning protection system	
1.17	Availability of Surge protection system for the Mains Power Supply	
1.18	Regular inspection of antenna system for physical damages	
1.19	Availability of First-aid kit on site	
1.20	Availability of adequate ventilation / Airconditioning	
1.21	Availability of Fire extinguisher within the validity period on site	
1.22	If UPS available, the autonomy with regular load	
1.23	IF battery backup is available, backup time with regular load	
1.24	Power Restoration time of Backup Generator (If Available)	
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#### 4.7.13 DISTANCE MEASURING EQUIPMENT

### CNS INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:		Inspector:
Service: DME				
Site –	/ DME type	e -	/ D	ME –
Inspection Reference - ANS	S / YY / MMM / CNS-SS	S-DME / QQ	File	e Ref – AS / 14 / XX

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NC = Not Checked; NA = Not Applicable

### 1) DISTANCE MEASURING EQUIPMENT

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Availability of Main & Standby Transponders		
1.2	Availability of Monitoring and Control equipment		
1.3	The monitoring and control system shall Changeover or shutdown the system if the transponder delay differs from the assigned value by 1 microsecond (150 m (500 ft.) or more		
1.4	The monitoring and control system shall Changeover or shutdown the system if the transponder delay differs from the assigned value by 0.5 microsecond (75 m (250 ft.)) or more, in the case of a DME/N associated with a landing aid		
1.5	The Transponder shall be shut down in the event of a failure of the monitor itself		
1.6	System Availability (>97%)		

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1.7	Availability Figure of Transponder A	
1.8	Availability Figure of Transponder B	
1.9	Whether the DME is Flight Calibrated	
1.10	Availability of a copy of the current Flight Calibration Report on site	
1.11	Availability of the ground check results immediately after the flight calibration, on site	
1.12	Availability of Documented routine maintenance and Ground Check procedure	
1.13	Availability of maintenance manuals on site	
1.14	Availability of required tools and test equipment to perform routine Maintenance and Ground Checks	
1.15	Availability of maintenance records and Ground Check records	
1.16	Availability of Status indication system to the relevant ATC Tower	
1.17	Availability of Status monitoring and control system at Technical Supervision center	
1.18	Availability of remote Temperature monitoring and alarm system at Technical Supervision center	
1.19	Availability of lightning protection system	
1.20	Availability of Surge protection system for the Mains Power Supply	
1.21	Availability of air-conditioning systems and periodical inspection	
1.22	Regular inspection of antenna system for physical damages and free from obstruction	
1.23	Availability of Fire extinguisher within the validity period on site	
1.24	Availability of a First-aid kit on site	
1.25	If UPS available, the autonomy with regular	

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	load	
1.26	IF battery backup is available, backup time with regular load	
1.27	Power Restoration time of Backup Generator (if available)	

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#### 4.7.14 DOPPLER VHF OMNIDIRECTIONAL RADIO RANGE

### CNS INSPECTION CHECKLIST/REPORT

Station:	Date:		Time:			Inspector:
Service: VOR						
Site	/	VOR Type		/	V	OR Freq.
Inspection Reference - ANS	/ YY / M	MM / CNS-SS	S-VOR / QQ		Fil	e Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

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NC = Not Checked; NA = Not Applicable

#### 1) DOPPLER VHF OMNIDIRECTIONAL RADIO RANGE

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Availability of Main & Standby equipment.		
1.2	Availability of Monitoring and Control equipment.		
1.3	Whether the Equipment is Flight Calibrated.		
1.4	Availability of a copy of the current Flight Calibration Report on site.		
1.5	Availability of the ground check results and meter readings immediately after the flight calibration, on site. (Reference)		
1.6	Bearing Error of Transmitter 1 indicated on near field Monitor.		
1.7	Bearing Error of Transmitter 2 indicated on near field Monitor.		
1.8	System Availability (>97%).		
1.9	Availability figure of system 1		
1.10	Availability figure of system 2		
1.11	Availability of Documented routine maintenance and Ground Check procedure.		
1.12	Availability of maintenance manuals on site.		

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1 12	Availability of required tools and test	
1.13	equipment to perform routine Maintenance and Ground Checks.	
1.14	Availability of maintenance records and	
	Ground Check records.	
1.15	Availability of Status indication system to the	
1.13	relevant ATC Tower.	
1.16	Availability of Status monitoring and control	
1.10	system at Technical Supervision center.	
	Availability of remote Temperature monitoring	
1.17	and alarm system at Technical Supervision	
	center.	
1.18	Availability of lightning protection system.	
1.10	Availability of Surge protection system for the	
1.19	Mains Power Supply.	
1.20	Availability of air-conditioning systems and	
1.20	periodical inspection.	
1.21	Regular inspection of antenna system for	
1.21	physical damages and free from obstruction.	
1 22	Availability of Fire extinguisher within the	
1.22	validity period on site.	
1.23	Availability of a First-aid kit on site.	
1.24	If UPS available, the autonomy with regular	
1.24	load.	
1.05	IF battery backup is available, backup time	
1.25	with regular load.	
1 26	Power Restoration time of Backup Generator	
1.26	(if available).	
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### 4.7.15 HUMAN RESOURCE (STATION)

### CNS INSPECTION CHECKLIST/REPORT

Station / Unit:	Date:	Time:		Inspector(s):
Inspection Reference - ANS / YY / MMM / CNS-SSS-HRS / QQ		File	e Ref – AS / 14 / XX	

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

S = Satisfactory;

I = to be Improved

U = Unsatisfactory;

NC = Not Checked;

NA = Not Applicable

### 1) HUMAN RESOURCE (STATION)

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Does the Station / Unit have a documented organizational structure?		
1.2	Does the organization structure clearly indicate technical manpower requirement of the Station / Unit?		
1.3	Is minimum required number of staff available in station / unit?		
1.4	Does the station has developed a mechanism and defined a responsible officer to review the <u>Daily Serviceability Reports?</u>		
1.5	Does the station maintain a record of outages appeared on D. S. R. and the Corrective Action taken (plan) for each deficiency?		
1.6	Have the station / unit developed job descriptions for its technical staff?		
1.7	Are technical personnel properly qualified, trained, equipped & authorized to perform the duty?		
1.8	Does the Station / Unit has employed trained technical personnel, relevant to all critical equipment, during each duty shift?		

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Does each station / unit has a call up list of echnical expert assistance during an emergency situation?
Does the call up lists carry the name, contact information, alternate person & his contact information and displayed in technical supervision area?
Supervision responsibility of day to day operation / maintenance work?
is there any procedure or mechanism for ogging of equipment abnormality reporting ime, and equipment restoration time?
s there any procedure or mechanism for reviewing of equipment abnormality logs?
s there a mechanism developed to update, the duty taking-over officers, by the duty handing over officers?
Does the technical officers get periodic refresher training?
satisfactory? (lighting & Air-conditioning)
Does the Workshops area of relevant stations / units properly ventilated?
Does the Workshops provided with all necessary safety gear relevant to station / unit?
Does the Workshops provided with first aid kits and are replenished periodically?
Does the officers on shift duty, are provided with acceptable resting facilities?
Does the officers on shift duty, are provided with Transport facilities during an emergency?

### Comments:

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#### 4.7.16 VHF TRANSCEIVER EQUIPMENT

### CNS INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:		Inspector:
Service: VHF Communication				-
Site –	/ Service -	/	Fre	quency -
Inspection Reference - ANS / \	YY / MMM / CNS-SSS-	·VTR / QQ	Fi	le Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

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NC = Not Checked / NA = Not Applicable

1) VHF TRANSCEIVER EQUIPMENT

Ref: Number	Area of Inspection	ction Obs. Comments				
1.1	Availability of Independent Antenna					
1.2	Availability of a connected and operational Microphone and loud speaker / Headset					
1.3	RF Output power of Transmitter					
1.4	Sensitivity of the Receiver					
1.5	Recording of communication					
1.6	Availability of maintenance manuals at Technical Sup					
1.7	Availability of routine Maintenance procedure					
1 .8	Availability of required tools and test equipment to perform routine Maintenance					
1.9	Availability of routine maintenance records					
1.10	Power Supply to the System					
1.11	Battery backup duration with 50% Duty cycle					
1.12	Physical Obstruction free Antenna System					

Comments:

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#### 4.7.17 SECONDARY SURVEILLANCE RADAR

### CNS INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:		Inspector:
Service: Secondary S. Radar				
Site –	/ Radar type	/	Frequer	ncy –
Inspection Reference - ANS /	YY / MMM / CNS-SS	S-SSR / QQ	File	Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

S = Satisfactory; I = to be Improved; U = Unsatisfactory;

NC = Not Checked; NA = Not Applicable

### 1) SECONDARY SURVEILLANCE RADAR

Ref: Number	Area of Inspection	Obs.	Comments.
1.1	Serviceability of Channel A.		
1.2	Serviceability of Channel B.		
1.3	Changeover Mechanism between Channels.		
1.4	Is the system Flight Calibrated / Validated.		
1.5	Availability of a copy of the current flight calibration report on site.		
1.6	System availability figure		
1.7	Availability figure of System "A"		
1.8	Availability figure of System "B"		
1.9	Availability of functional Monitoring Display at Radar equipment site.		
1.10	Availability of Service / Maintenance manuals pertaining to all units related radar equipment,		

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	at radar site.	
1.11	Availability of documented Routine Maintenance Procedure on Electronic & Electrical Equipment.	
1.12	Availability of necessary tools and test equipment to perform Routine Maintenance on Electronic & Electrical Equipment.	
1.13	Availability of maintenance records on Electronic & Electrical Equipment.	
1.14	Availability of documented Routine Maintenance Procedure on Mechanical Equipment.	
1.15	Availability of necessary tools and test gear to perform Routine Maintenance on Mechanical Equipment.	
1.16	Availability of maintenance records on Mechanical Equipment.	
1.17	Availability of redundancy on data link carrying data to the relevant Technical area of the ATS facility.	
1.18	Availability of Remote monitoring and control facility from responsible technical supervision center.	
1.19	Availability of remote Temperature monitoring and alarm system at Technical Supervision center.	
1.20	Availability of lightning protection system and periodic inspection for conductor damages.	
1.21	Availability of Surge protection system for the Mains Power Supply.	
1.22	Power Supply to the Main Equipment	
1.23	Power Supply to the Standby Equipment	
1.24	Availability of air-conditioning systems and periodical inspection.	
1.25	Regular inspection & Recording of antenna	

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	system for Mechanical Noises and Vibrations.	
1.26	Regular inspection of antenna system for physical damages and free from obstruction.	
1.27	Availability and full functionality of safety interlock at the entrance to antenna platform.	
1.28	Availability of Fire extinguisher within its validity period, on site.	
1.29	Availability of a First-aid kit on site.	
1.30	If UPS available, the autonomy with regular load.	
1.31	If UPS is remotely located, control and alarm extension to the Technical Supervision area?	
1.32	IF battery backup is available, backup time with regular load.	
1.33	Power Restoration time of Backup Generator.	

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#### 4.7.18 AIR TRAFFIC MANAGEMENT SYSTEM

### CNS INSPECTION CHECKLIST/REPORT

Station : Ratmalana	Date:	Time:		Inspector:
Service: Air Traffic Management				
Site – Ratmalana CES / Service – Air Traffic Management		nent		
Inspection Reference - ANS / YY	/ / MMM / CNS-SSS-A	ATM / QQ	Fil	e Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

$$S = Satisfactory \hspace{0.5cm} / \hspace{0.5cm} I = to \hspace{0.1cm} be \hspace{0.1cm} Improved \hspace{0.5cm} / \hspace{0.5cm} U = Unsatisfactory$$
 
$$NC = Not \hspace{0.1cm} Checked \hspace{0.5cm} / \hspace{0.5cm} NA = Not \hspace{0.1cm} Applicable$$

### 1) AIR TRAFFIC MANAGEMENT SYSTEM (Ref. Chapter 3 of ICAO Doc 9426)

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Availability of parallel running Main & Standby equipment		
1.2	Availability of Monitoring and Control Functionality		
1.3	The control and monitoring system should Changeover the operational system to standby system in the event of a malfunction of the main system, and generate alarms to the Technical Supervision position.		
1.4	System availability figure		
1.5	Availability figure of System "A"		
1.6	Availability figure of System "B"		
1.7	Availability of backup position/s for operational & Technical supervisory positions.		

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The system shall record and preserve all Surveillance data from SSR, ADS-C & ADS-B used as an aid to air traffic services, for minimum of 30 days.  The system should record and preserve all information displayed on all active control positions for minimum of 30 days.  System shall record background communication and the aural environment at air traffic controller work stations, for at least twenty-four hours of operation.  Availability of redundancy on all lines connecting sensor inputs to the ATM system.  Availability of redundancy on all lines connecting positions and central ATM processing system.  Availability of redundancy on all lines connecting ATM terminals at remotely located ATC Centers.  Availability of Lightning and surge protection on all incoming and outgoing lines of the ATM system.  Availability of adequate archiving media to accommodate 30 days traffic  1.16 Availability of safe and protected storage area for archives  1.17 Availability of Documented routine maintenance procedure  1.18 Availability of maintenance manuals on site  1.19 Availability of required tools and test equipment to perform routine Maintenance  1.20 Availability of remote Temperature monitoring and alarm system at Technical Supervision center  1.22 Availability of air-conditioning systems and	Tel Lyshe		
1.19 information displayed on all active control positions for minimum of 30 days  System shall record background communication and the aural environment at air traffic controller work stations, for at least twenty-four hours of operation.  Availability of redundancy on all lines connecting sensor inputs to the ATM system  Availability of redundancy on lines connecting controller positions and central ATM processing system  Availability of redundancy on all lines connecting ATM terminals at remotely located ATC Centers.  Availability of Lightning and surge protection on all incoming and outgoing lines of the ATM system.  1.15 Availability of adequate archiving media to accommodate 30 days traffic  1.16 Availability of safe and protected storage area for archives  1.17 Availability of Documented routine maintenance procedure  1.18 Availability of required tools and test equipment to perform routine Maintenance  1.20 Availability of routine maintenance records  Availability of remote Temperature monitoring and alarm system at Technical Supervision center	1.8	Surveillance data from SSR, ADS-C & ADS-B used as an aid to air traffic services, for	
1.10 communication and the aural environment at air traffic controller work stations, for at least twenty-four hours of operation.  1.11 Availability of redundancy on all lines connecting sensor inputs to the ATM system  1.12 Availability of redundancy on lines connecting controller positions and central ATM processing system  1.13 Availability of redundancy on all lines connecting ATM terminals at remotely located ATC Centers.  1.14 Availability of Lightning and surge protection on all incoming and outgoing lines of the ATM system.  1.15 Availability of adequate archiving media to accommodate 30 days traffic  1.16 Availability of safe and protected storage area for archives  1.17 Availability of Documented routine maintenance procedure  1.18 Availability of maintenance manuals on site  1.19 Availability of required tools and test equipment to perform routine Maintenance  1.20 Availability of remote Temperature monitoring and alarm system at Technical Supervision center	1.9	information displayed on all active control	
Availability of redundancy on all lines connecting sensor inputs to the ATM system  Availability of redundancy on lines connecting controller positions and central ATM processing system  Availability of redundancy on all lines connecting ATM terminals at remotely located ATC Centers.  Availability of Lightning and surge protection on all incoming and outgoing lines of the ATM system.  Availability of adequate archiving media to accommodate 30 days traffic  Availability of safe and protected storage area for archives  Availability of Documented routine maintenance procedure  Availability of maintenance manuals on site  Availability of required tools and test equipment to perform routine Maintenance  Availability of routine maintenance records  Availability of routine maintenance records  Availability of routine maintenance records  Availability of remote Temperature monitoring and alarm system at Technical Supervision center	1.10	communication and the aural environment at air traffic controller work stations, for at least	
1.12 controller positions and central ATM processing system  1.13 Availability of redundancy on all lines connecting ATM terminals at remotely located ATC Centers.  1.14 Availability of Lightning and surge protection on all incoming and outgoing lines of the ATM system.  1.15 Availability of adequate archiving media to accommodate 30 days traffic  1.16 Availability of safe and protected storage area for archives  1.17 Availability of Documented routine maintenance procedure  1.18 Availability of maintenance manuals on site  1.19 Availability of required tools and test equipment to perform routine Maintenance  1.20 Availability of routine maintenance records  1.21 Availability of remote Temperature monitoring and alarm system at Technical Supervision center	1.11	Availability of redundancy on all lines	
1.13 connecting ATM terminals at remotely located ATC Centers.  1.14 Availability of Lightning and surge protection on all incoming and outgoing lines of the ATM system.  1.15 Availability of adequate archiving media to accommodate 30 days traffic  1.16 Availability of safe and protected storage area for archives  1.17 Availability of Documented routine maintenance procedure  1.18 Availability of maintenance manuals on site  1.19 Availability of required tools and test equipment to perform routine Maintenance  1.20 Availability of remote Temperature monitoring and alarm system at Technical Supervision center	1.12	controller positions and central ATM	
1.14 on all incoming and outgoing lines of the ATM system.  1.15 Availability of adequate archiving media to accommodate 30 days traffic  1.16 Availability of safe and protected storage area for archives  1.17 Availability of Documented routine maintenance procedure  1.18 Availability of maintenance manuals on site  1.19 Availability of required tools and test equipment to perform routine Maintenance  1.20 Availability of routine maintenance records  Availability of remote Temperature monitoring and alarm system at Technical Supervision center	1.13	connecting ATM terminals at remotely located	
1.16 Availability of safe and protected storage area for archives  1.17 Availability of Documented routine maintenance procedure  1.18 Availability of maintenance manuals on site  1.19 Availability of required tools and test equipment to perform routine Maintenance  1.20 Availability of routine maintenance records  Availability of remote Temperature monitoring and alarm system at Technical Supervision center	1.14	on all incoming and outgoing lines of the ATM	
1.16 for archives  1.17 Availability of Documented routine maintenance procedure  1.18 Availability of maintenance manuals on site  1.19 Availability of required tools and test equipment to perform routine Maintenance  1.20 Availability of routine maintenance records  Availability of remote Temperature monitoring and alarm system at Technical Supervision center	1.15	-	
1.17 maintenance procedure  1.18 Availability of maintenance manuals on site  1.19 Availability of required tools and test equipment to perform routine Maintenance  1.20 Availability of routine maintenance records  Availability of remote Temperature monitoring and alarm system at Technical Supervision center	1.16		
1.19 Availability of required tools and test equipment to perform routine Maintenance  1.20 Availability of routine maintenance records  Availability of remote Temperature monitoring and alarm system at Technical Supervision center	1.17	1	
1.19 equipment to perform routine Maintenance  1.20 Availability of routine maintenance records  Availability of remote Temperature monitoring and alarm system at Technical Supervision center	1.18	Availability of maintenance manuals on site	
Availability of remote Temperature monitoring and alarm system at Technical Supervision center	1.19	_	
1.21 and alarm system at Technical Supervision center	1.20	Availability of routine maintenance records	
1.22 Availability of air-conditioning systems and	1.21	and alarm system at Technical Supervision	
	1.22	Availability of air-conditioning systems and	

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	periodical inspection		
1.23	Availability of lightning protection system		
1.24	Availability of Surge protection system for the Mains Power Supply		
1.25	Power Supply to the Main Equipment		
1.26	Power Supply to the Standby Equipment		
1.27	Availability of Fire extinguisher within its validity period, on site		
1.28	Availability of a First-aid kit on site		
1.29	If UPS available, the autonomy with regular load		
1.30	IF battery backup is available, backup time with regular load		
1.31	Power Restoration time of Backup Generator (if available)		

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#### 4.7.19 ATS MESSAGE HANDLING SYSTEM

### CNS INSPECTION CHECKLIST/REPORT

Station : Ratmalana Date:		Time:		Inspector:
Service: ATS Message				
Site – Ratmalana CES / Service – ATS Message Handling System				System
Inspection Reference - ANS / YY / MMM / CNS-SSS-A		-AMH / QQ	Fil	e Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

$$S = Satisfactory \hspace{0.5cm} / \hspace{0.5cm} I = to \hspace{0.1cm} be \hspace{0.1cm} Improved \hspace{0.5cm} / \hspace{0.5cm} U = Unsatisfactory$$
 
$$NC = Not \hspace{0.1cm} Checked \hspace{0.5cm} / \hspace{0.5cm} NA = Not \hspace{0.1cm} Applicable$$

#### 1) ATS MESSAGE HANDLING SYSTEM

Ref: Number	Area of Inspection	Comments
1.1	Availability of parallel running Main & Standby equipment.	
1.2	Availability of Monitoring and Control Functionality.	
1.3	The control and monitoring system should Changeover the operational system to standby system in the event of a malfunction of the main system and generate alarms to the Technical Supervision position.	
1.4	System availability figure	
1.5	Availability figure of System "A"	
1.6	Availability figure of System "B"	
1.7	The monitoring and control system should	

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	monitor the updating of databases of the standby system and generate alarms if any discrepancy detected.	
1.8	Both systems should produce archives and the archived data shall be retained for minimum of 30 days	
1.9	Availability of adequate archiving media to archive 30 days of traffic and reserving selected archives for long term preservation for investigations.	
1.10	Availability of safe and protected storage area for archives	
1.11	Availability of a procedure to retain recordings for longer periods for investigation purposes.	
1.12	Availability of backup position/s for operational &Technical supervisory positions.	
1.13	Availability of redundancy on all international connectivity.	
1.14	Availability of redundancy on all lines connecting remotely located ATC Centers.	
1.15	Availability of Surge protection system for all incoming and outgoing lines.	
1.16	Availability of Documented routine maintenance procedure.	
1.17	Availability of maintenance manuals on site.	
1.18	Availability of required tools and test equipment to perform routine Maintenance.	
1.19	Availability of routine maintenance records.	
1.20	Availability of remote Temperature monitoring and alarm system at Technical Supervision center.	
1.21	Availability of air-conditioning systems and periodical inspection.	
1.22	Availability of lightning protection system.	

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1.23	Availability of Surge protection system for the Mains Power Supply.	
1.24		
1.24	Power Supply arrangement to the Main System	
1.25	Power Supply arrangement to the Standby	
1.20	System	
1.26	Availability of Fire extinguisher within its	
1.20	validity period, on site.	
1.27	Availability of a First-aid kit on site.	
1.28	If UPS available, the autonomy with regular	
1.20	load.	
1.29	IF battery backup is available, backup time	
1.27	with regular load	
1.30	Power Restoration time of Backup Generator	
1.50	(if available)	

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### 4.7.20 GENERAL TECHNICAL (DIVISIONAL)

### CNS INSPECTION CHECKLIST/REPORT

Division: Electronics & Air	Date:	Time:		Inspector:
Navigation Engineering.				
Inspection Reference - ANS / YY / MMM / CNS-SSS-		-GDT / QQ	File l	Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

S = Satisfactory; I = to be Improved; U = Unsatisfactory;

NC = Not Checked; NA = Not Applicable.

### 1) GENERAL TECHNICAL (DIVISIONAL)

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Availability of Complete list of operational Test and Measuring Equipment along with their custodians and Contact details.		
1.2	Availability of a document carrying  Pass-Words of All Equipment / Systems,  which shall be updated periodically.		
1.3	Availability of <u>Calibrated</u> Voltage and Current Measuring Instruments.		
1.4	Availability of <u>Calibrated</u> Frequency Standard / Frequency measuring instruments.		
1.5	Availability of <u>Calibrated</u> Radio Frequency Spectrum Analyzing instruments.		
1.6	Availability of Radio Frequency signal generator with required bandwidth and Modulation schemes.		
1.7	Availability of Oscilloscopes with required		

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	Bandwidth.	
1.8	Availability of R. F. Power Measuring Equipment.	
1.9	Availability of VSWR Measuring Instrument or any other methodology to perform VSWR Measurements.	
1.10	Availability of Bit Error Rate Measuring Equipment.	
1.11	Availability of Audio Level Generator / Meter.	
1.12	Availability of Portable P. C. s for maintenance work at relevant stations.	
1.13	Availability of a Clock distribution systems to synchronize all CNS related systems to UTC.	

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#### 4.7.21 FLIGHT CALIBRATION

## CNS INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:		Inspector(s):
Inspection Reference - ANS / YY / MMM / CNS-SSS-FCL / QQ			File	Ref – AS / 14 / XX

## 1) FLIGHT CALIBRATION

Ref: Number	Activity	Comments
1	Flight Inspection service Provider.	
2	Flight Inspection Aircraft.	
3	Position Determining System.	
4	Equipment to be Calibrated.	
5	Issued NOTAM Reference.	
6	Eng. In Charge of Calibration.	
7	Warning signboard at relevant ATC Towers.	
8	Current Status of Equipment.	
9	Last Calibration Date.	
10	Any limitations / Restrictions imposed on Equipment.	
11	Whether the calibration process follow the approved calibration procedure.	
12	Monitors adjusted to Null "0"	
13	Terminating of Calibration session.	
14	Cancellation of the NOTAM and returning the Equipment to service.	

Comments:

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### 4.7.22 VOICE COMMUNICATION CONTROL SYSTEM (VCCS)

### INSPECTION CHECKLIST/REPORT

Station : Service: Voice Communication	Date:	Time:		Inspector:
Inspection Reference - ANS /	YY / MMM / CNS-SS	S-VCS / QQ	Fil	e Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

S = Satisfactory; I = to be Improved; U = Unsatisfactory;

NC = Not Checked; NA = Not Applicable.

### 1) VOICE COMMUNICATION CONTROL SYSTEM (VCCS)

Ref: Number	Area of Inspection	Obs.	Comments
1.1	System shall comprise of Fail-safe architecture with redundant voice switching mechanism		
1.2	System shall have redundant control and monitoring system		
1.3	System availability shall be greater than 99%		
1.4	Availability of at least 20% extra system capacity for expansion		
1.5	Availability of adequate spare parts for maintenance		
1.6	Availability of documented routine maintenance procedure		
1.7	Availability of routine maintenance records		
1.8	Availability of Surge and lightning protection on lines connecting central system and controller positions		
1.9	Availability of Surge and lightning protection on all incoming and outgoing lines		

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1.10	Availability of Temperature monitoring and alarm system at Technical supervision area		
1.11	Availability of Redundant Power Supply units for all system components		
1.12	Power supply arrangement to System / Power unit A		
1.13	Power supply arrangement to System / Power unit B		
1.14	If UPS available, the autonomy with regular load		
1.15	IF Battery backup available, backup time with regular load		
1.16	Power restoration time of standby Generator		

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### 4.7.23 DISTANCE MEASURING EQUIPMENT (ILS)

### CNS INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:		Inspector:
Service: ILS DME				
Site –	/ DME type – Lov	v Power ILS	/ DN	ME – Ch.
Inspection Reference - ANS /	YY / MMM / CNS-SS	S-IDM / QQ	File	Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

S = Satisfactory; I = to be Improved; U = Unsatisfactory;

NC = Not Checked; NA = Not Applicable

### 1) DISTANCE MEASURING EQUIPMENT (ILS)

Ref: Number	Area of Inspection	Obs.	Comments
1.1	Availability of Main & Standby equipment.		
1.2	Availability of Monitoring and Control equipment.		
1.3	Whether the system is Flight Calibrated.		
1.4	Availability of the Flight Calibration report on site.		
1.5	Reply Delay of Transmitter 1.		
1.6	Reply Delay of Transmitter 2.		
1.7	Alarm Limit of the Monitor.		
1.8	System availability figure		
1.9	Availability figure of System "A"		
1.10	Availability figure of System "B"		
1.11	Availability of Documented routine maintenance procedure.		
1.12	Availability of maintenance manuals on site.		
1.13	Availability of required tools and test equipment to perform routine Maintenance and Ground Checks.		

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1 1 /	Availability of maintenance records and	
1.14	Ground Check records.	
1.15	Availability of Status indication system to the	
1.13	relevant ATC Tower.	
1.16	Availability of Status monitoring and control	
1.10	system at Technical Supervision center.	
	Availability of remote Temperature monitoring	
1.17	and alarm system at Technical Supervision	
	center.	
1.18	Availability of lightning protection system.	
1.19	Availability of Surge protection system for the	
1.17	Mains Power Supply.	
1.20	Power Supply to the Main Equipment	
1.21	Power Supply to the Standby Equipment	
1.22	Availability of air-conditioning systems and	
	periodical inspection.  Regular inspection of antenna system for	
1.23	physical damages and free from obstruction.	
	Availability of Fire extinguisher within its	
1.24	validity period, on site.	
1.25	Availability of a First-aid kit on site.	
1.26	If UPS available, the autonomy with regular	
1.20	load.	
1.28	IF battery backup is available, backup time	
1.20	with regular load.	
1.29	Power Restoration time of Backup Generator	
1,47	(if available).	

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#### 4.7.24 AUTOMATIC DEPENDENT SURVELLANCE – BROADCAST

### CNS INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:		Inspector:
Service: ADS – B System				
Site –	Ratmalana	/ ADS $-$ B S	System	
Inspection Reference - ANS /	YY / MMM / CNS-SS	S-ADS / QQ	File	e Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

S = Satisfactory; I = to be Improved; U = Unsatisfactory;

NC = Not Checked; NA = Not Applicable

#### 1) AUTOMATIC DEPENDENT SURVELLANCE – BROADCAST

Ref: Number	Area of Inspection	Obs.	Comments.
1.1	Serviceability of Receiver 1 at Pidurutalagala		
1.2	Serviceability of Receiver 2 at Pidurutalagala		
1.3	Serviceability of Receiver 1 at Sooriyakanda		
1.4	Serviceability of Receiver 2 at Sooriyakanda		
1.5	Serviceability of Receiver 1 at Hambanthota		
1.6	Serviceability of Receiver 2 at Hambanthota		
1.7	Serviceability of Receiver 1 at Katunayake		
1.8	Serviceability of Receiver 2 at Katunayake		
1.9	Serviceability of Receiver 1 at Kilinotchi		
1.10	Serviceability of Receiver 2 at Kilinotchi		
1.11	Availability of lightning protection system and		

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	periodic inspection for conductor damages.	
1.12	Availability of redundancy on data links carrying data from remote receiving stations	
1.13	Availability of Remote monitoring and control facility from responsible technical supervision center.	
1.14	Availability of maintenance records on Remote Receiving Stations	
1.15	Availability of remote Temperature monitoring and alarm system at responsible Technical Supervision center.	
1.16	Availability of documented Routine Maintenance Procedure	
1.17	Availability of necessary tools and test gear to perform Routine Maintenance.	
1.18	Availability of maintenance records on Central Equipment	
1.19	System availability figure	
1.20	Availability figure of System "A"	
1.21	Availability figure of System "B"	
1.22	Availability of Surge protection system for the Mains Power Supply.	
1.23	Power Supply to the Main Equipment	
1.24	Power Supply to the Standby Equipment	
1.25	Availability of air-conditioning systems and periodical inspection.	
1.26	Availability of Fire extinguisher within its validity period, on site.	
1.27	Availability of a First-aid kit on site.	
1.28	If UPS available, the autonomy with regular load.	
1.29	IF battery backup is available, backup time with	
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	regular load.	
1.30	Power Restoration time of Backup Generator.	

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#### 4.7.25 MISCELLANEOUS ITEMS

### CNS INSPECTION CHECKLIST/REPORT

Station:	Date:	Time:		Inspector:
Service: Miscellaneous Items				
	Site –	/		
Inspection Reference - ANS	YY / MMM / CNS-S	SS-MIS / QQ	Fi	le Ref – AS / 14 / XX

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in page 2 with the reference number of the Area of Inspection.

S = Satisfactory; I = to be Improved; U = Unsatisfactory;

NC = Not Checked; NA = Not Applicable

#### 1) MISCELLANEOUS ITEMS

Ref: Number	Area of Inspection	Obs.	Comments.
1.1			
1.2			
1.3			
1.4			
1.5			
1.6			
1.7			
1.8			
1.9			
1.10			

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Inspector:

# 4.7.26 STATION LAYOUTS AND WIRING DIAGRAMS (TECHNICAL)

# CNS INSPECTION CHECKLIST/REPORT

Station:		Date:	Time:		Inspector:
Inspection	on Reference - ANS / Y	YY / MMM / CNS-SSS	S-SWD / QQ	File	Ref – AS / 14 / XX
	ollowing abbreviations dequate use the space g				vided for comments is e Area of Inspection.
	S = Satisfactor	y; $I = \text{to be Imp}$	proved	$\mathbf{U} = \mathbf{U}_1$	nsatisfactory;
	NC	C = Not Checked;	NA = Not	Applicabl	e
1)	STATION LAYOU	TS AND WIRING D	IAGRAMS (I	ΓECHNI(	CAL)
Ref: Number	Area of I	nspection	Obs.		Comments
1.1	Station / Shelter Layo	out Diagrams			
1.2	A/C Power Distributi	on Diagrams			
1.3	D/C Power Distributi	on Diagrams			
1.4	Baseband Distribution	n Diagrams			
1.5	Audio Distribution D	iagrams			
1.6	Data Distribution Dia	grams			
Comment	s:		1		

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### 4.8 PANS-OPS INSPECTION CHECK LIST/REPORT

### PANS-OPS INSPECTION CHECK LIST/REPORT

Centre:	Date and Time:	Inspector(s)
Inspection Report Reference	:	File Ref

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in the page 2 with the reference number of the Area of Inspection.

S=Satisfactory; U=Unsatisfactory; N = Not Checked; I = To be improved; N/A= Not applicable

1) M	ANAGEMENT OF TECHNICAL PERSONNEL		
Ref: Number	Area of Inspection	Observations	Comments
	Management Organization		
1.1	Is sufficient number of staff available in the Centre to carry out work in the field of PANS-OPS?		
1.2	Have the assigned officers for the positions been given relevant training?		
1.3	Does the PANS OPS unit have a procedure for maintaining the competence of its personnel (OJT programme, proficiency and refresher)?		
1.4	Does the PANS OPS unit maintain a system of Training records or files containing all relevant information for PANS-OPS technical staff?		
	Job Description for its PANS-OPS techni-	cal staff	
1.5	Has the PANS OPS unit developed job descriptions for its technical staff?		
1.6	Do the job descriptions cover all aspects of procedures required to be developed or reviewed?		
	Training Programme for PANS-OPS tech	nical staff	
1.7	Has the PANS OPS unit developed training programmes for its technical staff?		
1.8	Do the training programmes cover all aspects of procedures required to be developed or reviewed?		
1.8	Does the programmes include initial, recurrent or specialized training?		

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	Training records for PANS-OPS technica	l staff	
1.9	Does the unit keep training records		
_	for its PANS-OPS technical staff?		
1.10	Are the training records up-to-date?		
2) PR	OCEDURES		
2.1	2.1.1 Construction of visual and		
	instrument flight procedures are in accordance with PANS-OPS Doc.8168		
	vol-2?		
	2.1.1.1 If not, what is the alternate		
	means of compliance to ensure at least the same standards as Doc.		
	8168?		
3) PA	NS OPS CRITERIA		
3.1	Is the PANS OPS criteria applied in deve	loping the follow	wing procedures?
	3.1.1 SID/STARs		
	3.1.2. Approach procedures		
	3.1.3. Circling procedures		
	3.1.4. En-route procedures		
	3.1.5. Holding procedures		
	3.1.6. Noise abatement procedures		
	3.1.7. Altimeter setting procedures		
4) OB	SSTACLE CHECKS		
4.1	4.1.1 Does the PANS OPS unit conduct obstacle evaluation?		
	4.1.2 Is the method used consistent with PANS OPS criteria?		
	4.1.3 Does the unit maintain a data		
	bank of all obstacles within the areas		
	concerned?		
	4.1.4 Does the unit ensure the		
	obstacles data is analyzed to		
	determine infringements if any?		
5) OE	BSTACLE CLEARANCE ALTITUDE/HEIGHT (	OCA/H)	
5.1	5.1.1 Are the OCH (A) for all		
	instrument approach procedures published?		
	5.1.2 Are there requirements to		
	review the entire procedures in case		
	of changes in the OCA (H) due to		
	infringement?		

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	5.1.3 Is there a procedure for publishing OCA (H)?	
6) TR	RAINING	<u>'</u>
6.1	Does the PANS OPS unit have trained personnel dedicated to OJT activities?	
6.2	Is the PANS OPS unit implementing the training programme?	
6.3	Is the training programme adequate?	
6.4	Does the PANS OPS unit maintain training files for each operating/training personnel?	
7) PF	ROFICIENCY CHECKS	
7.1	Is there an established programme for conducting proficiency checks?	
7.2	Is the schedule for conducting proficiency checks available to PANS-OPS and implemented?	
7.3	Does the PANS OPS unit have a designated person to administer proficiency checks?	
7.4	Are records on proficiency checks properly kept and readily available?	
8) DO	OCUMENTS	
8.1	Is there at least one complete and currer	nt copy of each reference document?
	8.1.1 PANSOPS - Doc 8168 Vol I (Flight Procedures)	
	8.1.2 PANSOPS - Doc 8168 Vol II (Construction of Visual and Instrument Flight Procedures)	
	8.1.3 Instrument Flight Procedures Construction Manual, Doc 9368	
	8.1.4 Template Manual for Holding, Reversal and Racetrack Procedures, Doc 9371	
	8.1.5 Quality Assurance Manual for Flight Procedure Design, Doc 9906	
	8.1.6 PBN Manual, Doc 9613	
	8.1.7 Other Applicable ICAO documents either in hard copy/soft copy? Doc-10068	
	8.1.8 AIP - SL	
8.2	Job descriptions of the officers in each position in the Centre?	

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8.3	Staff instructio	ns issued (separate file)		
8.4	Procedures/Lo (separate file)	cal instructions		
8.5	Updated Chart	S		
8.6	Relevant NOTA	AM s		
8.7	documentation	ll procedure design า		
9) RE	CORDS			
9.1	Does the PANS	OPS unit maintain recor	ds on designed	procedures including
	9.1.1 Maps and	d drawings		
	9.1.2 Obstacle	surveys		
	9.1.3 Obstacle	data		
	9.1.4. Computa	ation of applicable		
	9.1.5. Flight ch	ecks		
	anomalies or e production, ma operational us	ed by flight operator(s), rrors found during the		
10) W	ORK ENVIORME	NT		<u> </u>
10.1	Are adequate i	rest facilities available		
10.2	Are the following	10.2.1 Ambient Lighting		
	factors existing at an	10.2.2 Ambient Temperature		
	acceptable level as per the judgment of the inspector?	10.2.3 Noise Level		
11) EQ	UIPMENTS			,
11.1	instrument flig	s for designing ht procedures (e.g. n, computers, charts		

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11.2	Whether any defects observed in equipment?	
11.3	Has the staff taken actions to notify appropriate officers regarding unserviceability /defects?	
12) PR	REVIOUS RECOMMENDATIONS BY CAASL	
12.1	Have previous recommendations issued by the CAASL been implemented?	

implemented?		
Comments	:	
Inspectors (Name & Signature)	:	
Date	:	
Signature of Team Member(s): (1)		

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# 4.9 MAPS & CHARTS INSPECTION CHECK LIST/REPORT

# MAPS & CHARTS INSPECTION CHECK LIST/REPORT

Centre:	Date and Time:	Inspector(s)
Inspection Report Reference :		File Reference:

Use following abbreviations to indicate your observations. If the space provided for comments is not adequate use the space given in the page 2 with the reference number of the Area of Inspection.

S=Satisfactory; U=Unsatisfactory; N = Not Checked; I = To be improved; N/A= Not applicable

1) M	1) MANAGEMENT OF TECHNICAL PERSONNEL					
Ref: Number	Area of Inspection	Observations	Comments			
	Management Organization					
1.1	Is sufficient number of staff available in the Centre to carry out work in the field of Cartography?					
1.2	Have the assigned officers for the positions been given relevant training?					
1.3	Does the Cartography unit have a procedure for maintaining the competence of its personnel (OJT programme, proficiency and refresher)?					
	Job Description for its Cartography tech	nical staff				
1.4	Has the AIS unit developed job descriptions for its cartographic technical staff?					
	Training Programme for Cartography te	chnical staff				
1.5	Has the AIS unit developed training programmes for its cartographic technical staff?					
1.6	Does the programmes include initial, recurrent or specialized training?					
	Training records for Cartography techni	cal staff				
1.7	Does the AIS unit keep training records for its Cartography technical staff?					
1.8	Are the training records up-to-date?					

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2) P	ROCEDURES	
2.1	2.1.1 Whether section maintain	
	proper records of cartographic data?	
	2.1.2 Updating schedule of each chart	
	produced is available?	
	2.1.3 Are Aeronautical Charts being	
	updated on regular basis as per the	
	procedure prescribed in AIS OPS	
	Manual?	
	2.1.4 Is there an established	
	procedure for accumulation of hand	
	amendments of the charts?	
	2.1.5 Is there a proper procedure to	
	obtain raw data to AIS unit for	
	preparation on applicable charts	
	2.1.6 Availability of records that the	
	latest published charts evaluated	
	against the requirements prescribed	
	in IS031	
	2.1.7 Availability of records that the	
	latest published charts evaluated	
	against the requirements prescribed	
	in IS 028 APP 5	
3) C	PERATIONAL/AVAILABILITY & DATA STANI	DARAD
	3.1.1 Are all type of required charts	
	available?	
	3.1.2 Whether the Cartographic unit	
	check by the Quality Management	
	unit for accuracy of the cartographic	
	related work?	
	3.1.3. Is there any procedure of	
	physical verification of data?	
	3.1.4 Availability & Maintenance of	
	Database in respect of aeronautical	
	charts?	
4) P	REPARATION OF CHARTS	
	4.1.1 Check item	
	4.1.1.1 Resolution	
	4.1.1.2 Title	
	4.1.1.3 Miscellaneous Information	
	4.1.1.4 Symbols	
	4.1.1.5 Unit of measurement	
	4.1.1.6 Scale & Projection	
	4.1.1.7 Date of validity of aeronautical	
	information	

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City & Autorition Authorities Tel Lauther			
	4.1.1.8 Spelling		
	4.1.1.9 Magneti	c variation	
	4.1.1.10 Topogra	aphy	
	4.1.1.11 Distanc	es	
	4.1.1.12 Waypo	int Designator	
	4.1.1.13 Climb/[	Decent Gradients	
	4.1.1.14 TAA/M	SA	
	4.1.1.15 Loca	tion of Obstacles	
	(Coordinates)		
	4.1.1.16 Rest	rictions (Procedure)	
	correctly shown		
	4.1.1.17 Air	space Restrictions	
	correctly shown		
	4.1.1.18 Textua	l Description Correctly	
	shown		
5) W	ORK ENVIORMEN	Т	
5.1	Are adequate re	est facilities available	
5.2	·	5.2.1 Ambient Lighting	
	l ⊢	5.2.2 Ambient	
	c .	Temperature	
	–	5.2.3 Noise Level	
	acceptable		
	level as per		
	the		
	judgment of		
	the		
	inspector?		
6) EC	UIPMENTS		
6.1	Whether any	defects observed in	
	equipment?		
6.2	Has the staff to	aken actions to notify	
	appropriate	officers regarding	
	unserviceability	/defects?	
7) PR	REVIOUS RECOMM	MENDATIONS BY CAASL	
7.1	Have previou	s recommendations	
	issued by	the CAASL been	
	implemented?		

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# CIVIL AVIATION AUTHORITY OF SRI LANKA

Chill Antarion Authority

Comments	
COMMENIC	

Inspectors (Name & Signature) :

Date :

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# 5 Chapter 5 – Audits/Surveys – Check Lists

# 5.1 General Requirements

## 5.1.1 Air Traffic Services

- 5.1.1.1 Has the service provider responsible for the provision of Air Traffic Services developed Policy and procedure for determining the capability of the ATS system including the number of staff required to ensure the provision of an adequate system?
- 5.1.1.2 Has the service provider responsible for the provision of Air Traffic Services developed written terms of reference/job descriptions for their technical staff in;
  - 1. Air Traffic services?
  - 2. PANS-OPS (Construction of visual and instrument flight procedures) Service?
- 5.1.1.3 Has the service provider responsible for the provision of Air Traffic Services developed a training programme, including refresher training where necessary for its technical staff in:
  - 1. Air Traffic services?
  - 2. PANS-OPS (Construction of visual and instrument flight procedures) Service?
- 5.1.1.4 Has the service provider responsible for the provision of Air Traffic Services maintained training records or files for its technical staff in;
  - 1. Air Traffic services?
  - 2. PANS-OPS (Construction of visual and instrument flight procedures) Service?
- 5.1.1.5 Has the service provider responsible for the provision of Air Traffic services developed procedures to ensure the continued competency of Air Traffic Controllers on new equipment, procedures and updated communications?
- 5.1.1.6 Has the service provider responsible for the provision of Air Traffic services developed policies and procedures to enable recruitment and retention of adequately qualified and experience ATS staff?
- 5.1.1.7 Has the service provider responsible for the provision of Air Traffic Services adopted policies and procedures on human factors principles with regard to Human Centreed Automation, Situational Awareness and Managing errors, etc as per the guidelines provided on human factors principles in Doc 9758?
- 5.1.1.8 Has the service provider responsible for the provision of Air Traffic Services established and implemented monitoring mechanisms for RVSM?

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- 5.1.1.9 Has the service provider responsible for the provision of Air Traffic Services ensured that ATC contingency procedures are established for?
  - 1. Radio communication contingencies?
  - 2. Emergency separation?
  - Short-term conflict alert (STCA)?
  - 4. Minimum safe altitude warning (MSAW)?

#### 5.1.2 Aeronautical Telecommunication Service

- 5.1.2.1 Has the service provider responsible for the provision of Aeronautical Telecommunication Services developed written terms of reference/job descriptions for their technical staff?
- 5.1.2.2 Has the service provider responsible for the provision of Aeronautical Telecommunication Service developed a training programme, including refresher training where necessary for its technical staff?
- 5.1.2.3 Has the service provider responsible for the provision of Aeronautical Telecommunication Services maintained training records or files for its technical staff?

#### 5.1.3 Aeronautical Information Service

- 5.1.3.1 Has the service provider responsible for the provision of Aeronautical Information Service including Cartography Service developed written terms of reference/job descriptions for their technical staff?
- 5.1.3.2 Has the service provider responsible for the provision of Aeronautical Information Service including Cartography Service developed a training programme, including refresher training where necessary for its technical staff?
- 5.1.3.3 Has the service provider/providers responsible for the provision of Aeronautical Information Service including Cartography Service developed a procedure to maintain training records or files for its technical staff?

## 5.2 Documentation Requirements

#### 5.2.1 Air Traffic Services

5.2.1.1 Has the service provider responsible for the provision of Air Traffic Services hold copies of the relevant technical manuals, and all other documents, necessary for the provision of the services in each operational centres?

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- 5.2.1.2 Has the service provider/providers responsible for the provision of Air Traffic Services has operational and administrative manuals for compliance by its personnel?
- 5.2.1.3 Has the service provider/providers responsible for the provision of Air Traffic Services has established a procedure to control/update all above documents acceptable to the DGCA?
- 5.2.1.4 Has the service provider/providers responsible for the provision of Air Traffic Services have established procedures to ensure that a logbook is kept and maintained at each ATS unit?

#### 5.2.2 Aeronautical Communication Services

- 5.2.2.1 Has the service provider/providers responsible for the provision of Aeronautical Communication Service hold copies of the relevant technical manuals, and all other documents, necessary for the provision of the services?
- 5.2.2.2 Has the service provider/providers responsible for the provision of Aeronautical Communication Service established a procedure to control/update all above documents acceptable to the DGCA?

#### 5.2.3 Aeronautical Information Services

- 5.2.3.1 Has the service provider/providers responsible for the provision of Aeronautical Information Service including cartography service hold copies of the relevant technical manuals, and all other documents, necessary for the provision of the services?
- 5.2.3.2 Has the service provider/providers responsible for the provision of Aeronautical Information Service have operational/administrative manual(s) for compliance by its personnel?
- 5.2.3.3 Has the service provider/providers responsible for the provision of Aeronautical Information Service established a procedures to control/update all above documents acceptable to the DGCA?

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## 5.3 Operational Requirements

#### 5.3.1 Air Traffic Services

5.3.1.1 Has the service provider/providers responsible for the provision of Air Traffic services established systems and procedures to provide those services in accordance with the requirements specified by the DGCA?

#### 5.3.1.2 Radar Services

Has the service provider/providers responsible for the provision of Air Traffic services established procedures to ensure that, where radar is used to support the provision of an Air Traffic Services, all radar services are provided in accordance with procedures published in ICAO PANS-ATM (Doc.4444) and procedures issued by Director General of Civil Aviation time to time?

## 5.3.1.3 Radio and Telephony Procedures

Has the service provider/providers responsible for the provision of Air Traffic services established systems and procedures to ensure that the standard radio telephony procedures and Communication procedures used are in accordance with the requirements specified in ICAO Annex 10 to the convention on International Civil Aviation?

## 5.3.1.4 Flight plans

Has the service provider/providers responsible for the provision of Air Traffic services established procedures for the acceptance and actioning of flight plans in accordance with the requirements specified in the ICAO PANS-ATM (Doc.4444) and any other requirements issued by Director General of Civil Aviation time to time?

## 5.3.1.5 Separation Criteria and Minima

Has the service provider/providers responsible for the provision of Air Traffic services established procedures to ensure that separation between aircraft shall be applied in accordance with ICAO PANS-ATM (Doc.4444) and Regional Supplementary Procedures?

## 5.3.1.6 Standard Phraseology

Are the Standard Phraseology used in the provision of Air Traffic Services in accordance with the requirements given in ICAO PANS-ATM (Doc.4444) and ICAO Document 9432?

## 5.3.1.7 Meteorological Services

Has the service provider/providers responsible for the provision of Air Traffic services established systems and procedures to ensure that all meteorological information is obtained in accordance with the requirements specified by the Director General of Civil Aviation, when providing as part of any flight information service?

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## 5.3.1.8 Has the entity responsible for the provision of Aviation Meteorology Services;

- a. Ensured that a properly organized quality system is established.
- b. Developed job descriptions for its technical staff.
- c. Established a training programme for its technical staff.
- d. Maintained training records for its technical staff.
- e. Site the wind sensors used for local routine reports appropriately to give the best practicable indication of conditions along the runway/touchdown zone.
- f. Made arrangements for MET watch offices to issue SIGMET messages, including those for volcanic ash and tropical cyclones.
- g. Ensured that provisions related to special air-reports, including those for volcanic ash, are being adhered to concerning their relay to the relevant MET offices.
- h. Ensure that MET offices issue wind shear warnings for aerodromes where wind shear is considered as a safety factor.
- i. Established criteria in coordination with the Air Traffic service Provider for special observations.
- j. Ensured that the MET offices issue local routine and special reports.
- k. Ensured that MET offices are readily accessible to provide briefing, consultation and flight documentation to flight crew members and/or other flight operations personnel.
- I. Ensured that the MET offices issue METAR, SPECI and TAF?
- m. Issued following reports in accordance with the format in ASN 105.
  - 1) Local routine and local special reports
  - 2) METAR and SPECI
  - 3) TAF
  - 4) SIGMET and AIRMET
  - 5) Aerodrome warning and wind shear warning

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## 5.3.1.9 Safety Management System

- 5.3.1.9.1 Has the service provider/providers responsible for the provision of Air Traffic services established procedures to ensure that a Safety Management System (SMS) is established in accordance with the requirements specified in the SMS Regulations and the other requirements issued by the Director General of Civil Aviation time to time?
- 5.3.1.9.2 Has the service provider/providers responsible for the provision of Air Traffic Services established safety performance indicators and safety performance targets acceptable to DGCA in respect of hazards identified in the system for the purpose of monitoring and improving safety performance in the ATS System?
- 5.3.1.9.3 Has the service provider/providers responsible for the provision of Air Traffic Services established a method for post implementation monitoring to verify that the defined level of safety continues to be met?
- 5.3.1.9.4 Has the service provider/providers responsible for the provision of Air Traffic Services ensured that the appointed Safety Manager who is responsible for the implementation and maintenance of SMS is adequately qualified to fulfill his responsibilities and adequate qualified personnel are available at the level of the service provider to conduct safety reviews?
- 5.3.1.9.5 Has the service provider/providers responsible for the provision of Air Traffic Services established and implemented a runway safety programme?
- 5.3.1.9.6 Has the service provider/providers responsible for the provision of Air Traffic Services established and implement a system for reporting ATC incidents?

## 5.3.1.10 Action after serious incident or accident

5.3.1.10.1 Has the service provider/providers responsible for the provision of Air Traffic services established procedures to follow after a serious incident or accident acceptable to the Director General of Civil Aviation?

## 5.3.1.11 PANS-OPS Procedure Design

5.3.1.11.1 Has the service provider responsible for the provision of Air Traffic Services be responsible for the development of PANS-OPS Visual and Instrumental Flight Procedures in accordance with the guidance provided in ICAO PANS-OPS Aircraft Operations, (Construction of Visual and Instrumental Flight Procedures Manual) Doc 8168?

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- 5.3.1.11.2 Has the service provider responsible for the provision of Air Traffic Services ensured that flight inspections of instrument flight procedures, including obstacle checks, are carried out?
- 5.3.1.11.3 Has the service provider responsible for the provision of Air Traffic Services published obstacle clearance altitude/height (OCA/H)?
- 5.3.1.11.4 Has the service provider responsible for the provision of Air Traffic Services established and published operating minima (e.g. visibility, MDA, DH, DA, MDA/H, and DA/H) for instrument approaches at aerodromes?
- 5.3.1.11.5 Has the service provider responsible for the provision of Air Traffic Services retained all procedure design documentation so as to allow any data anomalies or errors found during the production, maintenance or operational use of the procedure to be corrected?

## 5.3.2 Aeronautical Telecommunication Service

5.3.2.1 Has the service provider/providers responsible for the provision of Aeronautical Telecommunication Services established systems and procedures to ensure that the provision of Aeronautical Telecommunication Service is in accordance with the requirements specified in the ICAO Annex 10 to the convention on International Civil aviation?

## 5.3.3 Aeronautical Information Service

5.3.3.1 Has the service provider responsible for the provision of Aeronautical Information Service established systems and procedures to ensure that the provision of Aeronautical Information Service is in accordance with the requirements specified by the DGCA?

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# 6 Chapter 6 –

# 6.1 Factors Considered When Planning the Surveillance Plan

	Risk Factor	TWR/RMA	TWR/KAT	ACC	АРР	AIS	CNS	SAR	MET	PANS-OPS	MAPS & CHARTS
Staff	Working with less than Minimum Required staff										
	OJT										
	Unserviceability of Equipment										
	Introduction of New Equipment										
	Withdrawal of Existing										
Equipment	Equipment										
	Unserviceability of Nav. Aids										
	Withdrawal of Existing Nav. Aids										
	Introduction of New Nav. Aids										
	Introduction of New Procedures										
	Withdrawal of Existing										
	Procedures										
Procedures	Introduction of New Routes										
rroccaares	Withdrawal of Existing Routes										
	Introduction of New STARS/SIDS										
	Withdrawal of Existing										
	STARS/SIDS										
Number of ATC	2017										
incidents	2016										
Number of	Overflying										
Traffic	,0										
Movement	BIA										
s Per Day	RMA										

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# **INSPECTORS' ON THE JOB TRAINING**

1. Inspector i	information					
Name			Division			
Position			Section			
Experience						
2. On the Jol	o Training					
Description of the skills to	be achieved	Inspection Facility	Obser	rvations on Accomplish	ment	Name(s)/Signature of the OJT Trainer
			Level 1* (Understanding)	Level 2* (Demonstration)	Level 3* ( Performance)	
Personnel						
Procedures						
Documentation						
Work Environment						
Equipment						
		trainee has completed th	ne specified OJT docur		e is competent to perform	rm the task without supervision.
	e OJT Trainer(s)		Date			
b) I hereby confirm that the	trainee has complete	ed the specified OJT doo	cumented above with the	ne qualified OJT trainer	r(s).	
Signature of the head of the section Date						
NOTE; Level 1*: Familiarization and rel Level 2*: New inspector observe Level 3*: Qualified inspector obs	s a qualified inspecto	or performing the task.				

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# **CALCULATION OF STAFF PRODUCTIVITY IN CAASL INSPECTORATE**

1	Staff Working hours	0830 - 1615	7Hr 45 m
2	Break time	30 min	
3	Holidays on Average per Year	20 days	
4	Vacation	14 days	
5 Casual leave		7 days	
6	Medical Leave	21 days	
7	No. of Working Days after 3,4,5,6 above	(52x5-20-14-7-21)	198 days
8	Productive Hours per Day	(7.75-0.5) x0.6 (ie 60% efficiency)	4.4
9	Short Leave per year	1.5x2x12	36
10	No. of Productive Hours per year (7x8-9) per		
	Inspector	(198x 4.4)-36	835
		THEREFORE EFFECTIVE NO.OF MAN HOURS PER INSPECTOR	835

Table 1

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# CALCULATION OF STAFF REQUIREMENT IN SAR INSPECTORATE -2019/20

	rice work rining of Junior Inspectors riducting of Surveillance Inspections at ARCC risons with DMC for coordination agreement reparatory work for SAREX activity rticipation at SAREX DD & CC updates reparation of Inspection Reports SAR					Hours per Activity	Quantity	Hours per Annu m	
1	Reviewing documents								40
	Office work						1	198	198
2	Training of Junior Inspectors								48
3	Conducting of Surveillance Inspections at ARCC						4	4	16
4	Liaisons with DMC for coordination agreement						24	1	24
5	Preparatory work for SAREX activity						40	1	40
6	Participation at SAREX						8	1	8
7	eFOD & CC updates						1	12	12
8	Preparation of Inspection Reports SAR						4	7	14
9	USOAP CMA Activities						8	4	32
10	Review of CAPs of Feedback Reports for Resolution of identified safety concerns						2	7	14
11	Maintenance of Deficiencies Database						1	7	7
12	Actioning & Filing of MORs						6	12	72
13	Monitoring of NOTAMs						5	12	60
14	Monitoring of Daily Surveillance Reports						10	12	120
15	Preparation of Guidance Material						8	12	96
16	Regulatory tasks such as attending to ICAO State Letters & APANPIRG Complementing Standards and its reviews, National Regulations and guidances						8	4	32
17	Analysing Annexes , Updating & Reviewing of Annexes and Implementin coordination with Service Providers	ıg Sta	andaro	ls (IS)s 8	l .	_	8	6	48
18	Scrutiny of OJT Reports						0.5	32	16

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-								CIVIL AVIATION	AUTHORITY OF S	RI LANKA
ĺ	Total Relation Authority Fri Lands 19	Meetings & Conferences								80
	20	Training & Overseas Meeting								80
							TOTA	L NO. OF MAN HO	URS REQUIRED	957
				(Ref T	able-		EFFEC	CTIVE NO.OF MAN	HOURS PER	
				1)			INSPE	CTOR		835
							REQU	IRED NO.OF		
						$\rightarrow$	INSPE	CTORS	957/835	≈ 1.14

The required No. Man hours are achieved through the deployment of DSCAI-SAR

# CALCULATION OF STAFF REQUIREMENT IN ATM OPS INSPECTORATE -2019/20

	ATM-OPS Inspector Activity Description					Hours per Activity	Quantity	Hours per Annum
1	Reviewing documents							40
	Office work					1	198	198
2	Training of Junior Inspectors							48
3	Conducting of Surveillance Inspections at ARCC					4	4	16
4	Liaisons with DMC for coordination agreement					24	1	24
5	Preparatory work for SAREX activity					40	1	40
6	Participation at SAREX					8	1	8
7	eFOD & CC updates					1	12	12
8	Preparation of Inspection Reports SAR					4	7	14
9	USOAP CMA Activities					8	4	32
10	Review of CAPs of Feedback Reports for Resolution of identified safety concerns					2	7	14

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# CIVIL AVIATION AUTHORITY OF SRI LANKA

No.	7									
Con Relation Authority De Layer	Maintenance of Deficiencies Database							1	7	7
12	Actioning & Filing of MORs							6	12	72
13	Monitoring of NOTAMs							5	12	60
14	Monitoring of Daily Surveillance Reports							10	12	120
15	Preparation of Guidance Material							8	12	96
16	Regulatory tasks such as attending to ICAO State Letters & APANPIRG Complementing Standards and its reviews, National Regulations and guidances				-			8	4	32
17	Analysing Annexes , Updating & Reviewing of Annexes and Implementin coordination with Service Providers	ng Sta	and	dards	(IS)s &			8	6	48
18	Scrutiny of OJT Reports							0.5	32	16
19	Meetings & Conferences									80
20	Training & Overseas Meeting									80
							TOTAL	NO. OF MAN HOURS	REQUIRED	957
				(Ref T	able-		EFFEC	TIVE NO.OF MAN HOU	RS PER	
				1)			INSPE	CTOR		835
						$\rightarrow$	1	RED NO.OF		
						,	INSPE	CTORS	957/835	<b>≈ 1.14</b>

The required No. Man hours are achieved through the deployment of DSCAI-ATM-OPS

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# CALCULATION OF STAFF REQUIREMENT IN **MET** INSPECTORATE -2019/20

	MET Inspector Activity Description	Hours per Activit y	Quantity	Hours per Annum		
1	Studying of WMO, ICAO & DoM documents			24	6	144
2	Office work			1	198	198
3	Inspection of Aeronautical MET Stations			12	12	144
4	Studying guidance material			40		40
5	Development of new Guidance Material			20		20
6	Monitoring the performance of Aero MET			8	6	48
7	USOAP CMA Activities			8	6	48
8	Development of annual Surveillance Plan			8	1	8
9	Preparation of Inspection Reports			8	12	96
10	Review of CAPs of Feedback Reports for Resolution of identified issues			8	4	32
11	Maintenance of Deficiencies Database			8	2	16
12	Scrutiny of OJT Reports			8	1	8
13	Regulatory Tasks such as Attending to ICAO State Letters, Proposals for Amended matters	dments, Implementing Standards on MET		6	12	72
14	Meetings & Conferences			40		40
15	Training, Local & Overseas Meeting			80	1	80
	ТО	TAL NO. OF MAN HOURS REQUIRED				994

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Contaction and the Lands	CIVIL A	AVIAT	ΓIOI	N A	UTHORIT	ΓY OF SRI	LANKA
Tel Laules	(Ref Table- 1) EFFECTIVE NO.OF MAN HOURS PER INSPECTOR						835
	REQUIRED NO.OF INSPECTORS				994/835	≈ 1.17	1

The required No. Man hours are achieved through the deployment of DSCAI-MET

# CALCULATION OF STAFF REQUIREMENT IN CARTO INSPECTORATE -2019/20

	AIS / Cartography Inspector Activity Description	No of units on (Per Year)	Time per Activity (Minutes)
1	Issuance of Regulations/Notices/Rules	2	320
	Office Work	1	198
2	AIS Inspections	12	240
3	Maps & Charts Inspections	4	240
4	Review of Maps and Charts	4	120
5	Audits (ANS)	1	400
6	USOAP CMA Activites	4	240
7	Preparation of Guidance Material	4	240
8	Attending to ICAO State Letters	5	40
9	Training & Overseas Meeting	2	2400
10	Aerial Works Approvals	120	60
11	Exemption Landing & Parking Charges	12	60
12	AFTN Received	3,500	10

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13	AFTN Dispatched	1,400	30				
14	No Objection notes for Diplomatic Flight (Landing)	120	30				
15	No Objection notes for Diplomatic Flight (Overflying)	140	30				
16	Landing Clearances	800	30				
17	Over flying Clearances	900	30				
18	Evaluation of Manuals (Initial/Revision)	1	200				
19	Actioning State Letters	5	50				
20	Sectional Administration	52	60				
	TOTAL NO. OF MAN HOURS REQUIRED						
	(Ref Table-1) EFFECTIVE NO.OF MAN HOURS PER INSPECTOR						

**REQUIRED NO.OF INSPECTORS** 

The required No. Man hours are achieved through the deployment of SCAI/AIS & two CAI/AIS. (For AIS and Cartography activity)

2671/835

3.199

≈ 3

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# CALCULATION OF STAFF REQUIREMENT IN PANS OPS INSPECTORATE -2019/20

	ANS / PANS-OPS Inspector Activity Description	Hours per Activity	Quantit y	Hou rs per Ann um
1	Reviewing documents on	18	1	18
2	Up keeping Currency of PANS / OPS documents	8	4	32
3	Conducting of Surveillance Inspections	8	4	32
4	Preparation of reports and reviewing feedback	8	4	32
4	Development of guidance material,	40	1	40
5	Preparatory work for USOAP Audits		6	24
6	Review of PBN procedures		6	24
7	Review of existing procedures (SIDs & STRs)	8	2	16
8	Conduction of PANS / OPS Inspections	5	4	20
9	Conducting safety assessments		6	24
10	Publishing of guidance material	8	6	48
11	Maintenance of statistics related to important duties	7	6	42
12	Providing training to junior inspectors	15	6	90
13	Prepare office procedures for PANS-OPS procedure designing	18	6	108
14	eFOD & CC updates	1	. 12	12
15	reviewing manuals, written procedures and hand books	2	. 7	14
16	Conducting safety oversight on PANS-OPS procedure design facilities	2	. 7	14
17	Updating information in CAASL pertaining to ANS section	1	. 7	7

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# CIVIL AVIATION AUTHORITY OF SRI LANKA

Cara acastica de							
18	Actioning & Filing of MORs				6	12	72
19	Monitoring of NOTAMs				20	12	240
21	Monitoring of Daily Serviceability Reports				1	365	365
22	Simulator Assessments				16	4	64
23	Rating Assessments				32	4	128
24	Making arrangements for the provision of PANS-OPS design services of Sri Lanka				0.5	120	60
25	Scrutiny of OJT Reports				0.5	32	16
26	Regulatory tasks such as attending to ICAO State Letters & APANPIRG Conclusions on ANS / PANS-OPS related areas				4	12	48
27	Analysing Annexes , Updating & Reviewing of Annexes and Implementing Standards (IS)s & coordination with Service Providers				4	4	16
28	Meetings & Conferences				4	12	48
29	Training & Overseas Meeting				30	2	60
				TOTA	L NO. OF MAN HOURS		171
				REQU	JIRED		4
		(Ref	Table-	EFFE	CTIVE NO.OF MAN HOURS PE	R	
		1)		INSPI	ECTOR		835
			$\rightarrow$			1714/83	≈
			,	REQU	JIRED NO.OF INSPECTORS	5	2.05

The required No. Man hours are achieved through the deployment of SCAI & CAI. (PANS-OPS)

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