

MALDIVES CIVIL AVIATION AUTHORITY Republic of Maldives

AIR SAFETY CIRCULAR ASC 00-3

Additional Requirements for Air Navigations Service Providers

Initial Issue, 05 June 2014

I. REGULATORY COMPLIANCE

Compliance with this Circular is mandatory for all Air Navigation Service Providers.

2. RELATED REGULATIONS

Related regulations include MCAR II (Air Traffic Services), MCAR 173 (Instrument Flight Procedure Design), MCAR I5 (Aeronautical Information Service) MCAR 4 (Aeronautical Charts), MCAR 3 (Metrological Services) and MCAR I3 (Search and Rescue).

3. PURPOSE

3.1 The purpose of this Circular is to establish additional minimum requirements that shall be met and satisfied by all Air Navigation Service Providers.

4. **DEFINITIONS**

For the purposes of this Circular the following definitions apply:

Aeronautical Information	Information resulting from the assembly, analysis and formatting of aeronautical data.
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 Telecommunication Service	A telecommunication service provided for any aeronautical purpose.
Air Navigation Services (ANS)	Services provided to air traffic during all phases of operations including Air Traffic Management (ATM), Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS); Communications, Navigation and Surveillance (CNS), Meteorological Services for air navigation (MET), Search and Rescue (SAR), Aeronautical Charts (Cartographic Service) and aeronautical information services (AIS).

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Air Navigation Service	The entities responsible for the provision of Air Navigation Services. i.e.
Provider (ANSP)	Air Traffic Management (ATM) / Air Traffic Services (ATS), Procedure
	Design Services i.e. Procedures for Air Navigation Services -Aircraft
	Operations (PANS-OPS); Communications, Navigation and Surveillance
	(CNS), Meteorological Services for air navigation (MET), Search and
	Rescue (SAR), Aeronautical Charts (Cartographic Service)and
	Aeronautical Information Services (AIS).
Air Traffic Management	The dynamic, integrated management of air traffic and airspace including
(ATM)	air traffic services, airspace management and air traffic flow
	management— safely, economically and efficiently — through the
	provision of facilities and seamless services in collaboration with all
	parties and involving airborne and ground-based functions.

5. BASIC REQUIREMENTS

GENERAL

- 5.1 ANSPs shall ensure that all the operational personnel are adequately trained, fully conversant and follow the relevant Rules, Regulations, Standards and procedures in its entirety to enable them to perform the assigned functions in order to ensure safety of aircraft operations.
- 5.2 ANSPs shall have:
 - o written job descriptions (JDs) for their operational and technical staff;
 - a procedure to develop a training programme, including refresher training for its operational/technical staff
 - o a procedure to maintain training records or files for all operational and technical staff
- 5.3 ANSPs shall ensure availability of current applicable regulatory documents in each ANS unit.
- 5.4 ANSPs shall have a procedure for the elimination of deficiencies:
 - o identified within the framework of Planning and Implementation Regional Groups (PIRGs) forwarded to it by the CAA
 - identified by the ANS Inspectors; and
 - o reported by safety managers, operators and any other person

AIR TRAFFIC SERVICES

- 5.5 The service provider responsible for the provision of Air Traffic Services shall:
 - o develop policy and procedures for determining the capacity of the ATS system including the number of ATS staff required to ensure the provision of an adequate ATS system in accordance with the guidelines prescribed in Para 3.1 of ICAO Doc 4444 PANS-ATM develop policy and procedures to enable recruitment and retention of appropriately qualified and experienced ATS staff to satisfy the relevant rules & regulations; and
 - o develop procedures to ensure the continued competency of Air Traffic Controllers on new equipment, procedures and updated communications to satisfy the provisions applicable for the licensing & rating of air traffic controllers
 - o formulate and adopt; policies and procedures in line with the guidelines provided on human factor principles (with regards to Human Centered Automation, Situational Awareness and Managing errors, etc.) in ICAO Doc 9758

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- o establish and implement monitoring mechanism for vertical and horizontal deviations in the airspace where reduced separation minimum is applicable; and
- establish ATC contingency procedures for:
 - radio communication contingencies
 - emergency separation
 - short-term conflict alert (STCA); and
 - minimum safe altitude warning (MSAW)

PROCEDURE DESIGN (PANS-OPS) SERVICES (CONSTRUCTION OF VISUAL AND INSTRUMENT FLIGHT PROCEDURES)

- 5.6 The ANSP responsible for the provision of PANS-OPS Services, shall:
 - o develop policy and procedures to enable recruitment and retention of appropriately qualified and experienced Procedure Design staff to meet the regulatory provisions contained in MCAR173.
 - develop procedures to ensure the continued competency of Procedure Designers on new equipment, procedures and updated communications regarding ICAO Doc 8168 – PANS-OPS;
 - o develop operations manual describing the establishment and functions of the procedure design organization and mechanism used to perform these functions.
 - o formulate and adopt; policies and procedures in line with the guidelines provided on human factor principles

6. DOCUMENTATION REQUIREMENTS

OPERATIONAL AND TECHNICAL MANUALS:

- 6.1 ANSPs shall ensure:
 - o development of operational manuals i.e. Manual of Air Traffic Services, Air Traffic Control Instructions, Technical Manual for the use of equipment and reporting of un-serviceabilities and Unit Operating Instructions, Standard Operating Procedures for other associated matters
 - o ensure provision and availability of copies of the relevant operational / technical manuals, and all other relevant documents, necessary for the provision of the services in each concerned unit
 - o ensure provision and availability of updated and current copies of the relevant operational and administrative manuals/documents for the provision of services; and
 - o establish a procedure to control/update all of the above documents acceptable to the CAA
- 6.2 ANSPs shall forward the Manual of Air Traffic Services and any changes to the CAA for the approval for implementation.

LOGBOOKS

- 6.3 ANSPs shall establish procedures and ensure that a logbook is kept and maintained at each operational/maintenance position. The logbook, as a minimum shall clearly indicate the following:
 - o Name of the unit
 - o Date
 - Sunrise and sunset time in UTC
 - o BMCT and EECT time
 - o Time of events/incidents/accidents/unserviceability/serviceability/action taken etc.
 - o Text/Summary of each event/incident/accident/unserviceability/serviceability etc.; and
 - Signature and name of the duty staff.

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7. OPERATIONAL REQUIREMENTS:

GENERAL:

7.1 ANSP shall establish systems and procedures to provide the air navigation services in accordance with the relevant Aviation Legislation, Maldivian Civil Aviation Regulations, Air Safety Circulars and guidelines provided in corresponding ICAO Documents.

AIR TRAFFIC MANAGEMENT

7.2 The service provider(s) responsible for the provision of Air Traffic services shall establish systems and procedures to provide those services in accordance with the airspace classification and associated requirements.

SURVEILLANCE SERVICES

7.3 The service provider(s) responsible for the provision of Air Traffic services shall establish procedures to ensure that, where surveillance systems are used to support the provision of Air Traffic Services, all such services shall be provided in accordance with procedures published ICAO Doc 4444 PANS-ATM, except for the difference published in AIP Maldives.

RADIO TELEPHONY PROCEDURES AND PHRASEOLOGY

- 7.4 The service provider(s) responsible for the provision of Air Traffic services shall establish systems and procedures to ensure that the radiotelephony procedures and communication procedures used are in accordance with the requirements specified in:
 - o MCAR 2 Rules of the Air:
 - MCAR-II Air Traffic Services;
 - PANS-ATM Doc 4444 Air Traffic Management except for the differences notified and published in AIP:
 - Doc 9432 Manual of Radio Telephony; and

FLIGHT PLANS

7.5 The service provider(s) responsible for the provision of Air Traffic services shall establish procedures for the acceptance and /dissemination of flight plans in accordance with the relevant Civil Aviation Rules, requirements specified in the ICAO Doc 4444 PANS-ATM.

SEPARATION CRITERIA AND MINIMA

7.6 The service provider(s) responsible for the provision of Air Traffic services shall establish procedures to ensure that separation between aircraft shall be applied in accordance with the ICAO Doc 4444 - PANS-ATM and Regional Supplementary Procedures, except for those where different minima has been prescribed by the CAA and published in AIP Maldives.

METEOROLOGICAL INFORMATION

- 7.7 The service provider(s) responsible for the provision of Air Traffic services shall make adequate arrangements with MMS for the receipt and provision of meteorological information to aircraft in accordance with applicable regulations pertaining to Air Traffic Services and Meteorological Services.
- 7.8 The service provider(s) responsible for the provision of Air Traffic services shall establish systems and procedures to ensure that relevant meteorological information is obtained and provided in

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accordance with the applicable rules and regulation pertaining to Meteorological Service for Air Navigation.

SAFETY MANAGEMENT SYSTEM

- 7.9 The service provider(s) responsible for the provision of Air Traffic Services shall:
 - Establish procedures to ensure that a Safety Management System (SMS) is established in accordance with the requirements specified in relevant Rules and applicable regulations pertaining to Air Traffic Services, Safety Oversight of Air Navigation Services and Aerodromes;
 - Establish safety performance indicators and safety performance targets acceptable to the CAA in respect of hazards identified in the system for the purpose of monitoring and improving safety performance in the ATS System;
 - o ensure that safety assessments have been carried out for any significant safety related change to the ATS system and shall establish a method for post implementation monitoring to verify that the defined level of safety continues to be met;
 - o ensure 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;
 - o implement a runway safety programme in accordance with ASC 139-3; and
 - o establish and implement a system for reporting of ATC incidents

ACTION AFTER SERIOUS INCIDENT OR ACCIDENT

7.10 The service provider(s) responsible for the provision of Air Traffic services, in order to comply with the relevant regulations shall establish procedures to follow, after a serious incident or accident acceptable to the CAA.

PROCEDURE DESIGN SERVICES (PANS-OPS)

- 7.11 The Procedure Design Organisation shall:
 - be responsible for the development of PANS-OPS Visual and Instrumental Flight Procedures in accordance with the MCAR173 and any other regulations pertaining to Design Criteria Instrument Flight Procedures, guidance provided in ICAO PANS-OPS Aircraft Operations Doc 8168 – Construction of Visual and Instrumental Flight Procedures.
 - o ensure that the deficiencies identified by the PANS-OPS Inspectors of MCAA are addressed in accordance with the applicable regulatory provisions.
 - o ensure that all PANS-OPS regulatory provisions are met in the development of procedures and while redressing the deficiencies pointed out by the PANS OPS inspectors.
 - o formulate and adopt; policies and procedures in line with the guidelines provided on human factor principles

COMMUNICATION, NAVIGATION AND SURVEILLANCE (CNS) RELATED EQUIPMENT AND SYSTEMS

7.12 The service provider(s), responsible for the provision ANS in general and ATS in particular, shall establish systems and procedures including CNS Equipment, to ensure that the these services are in

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conformity with the regulatory requirements specified in the relevant Rules, and Regulations pertaining to ATS & CNS.

AERONAUTICAL INFORMATION SERVICE / AERONAUTICAL CHARTS

- 7.13 Aeronautical Information Service and Cartographic Service (Aeronautical Charts) providers shall ensure its provision in accordance with the requirements specified in the relevant Rules and Regulations pertaining to AIS and AC.
- 7.14 The aerodrome operators in accordance with the requirements specified in the Rules, and any other regulations pertaining to AIS and AC shall be responsible for the provision of aeronautical data/charts pertaining to their aerodromes to the CAA, for its publication in AIP Maldives.

METEOROLOGICAL SERVICES

- 7.15 The Maldives Meteorological Services (MMS) shall be responsible for the provision of Meteorological Services to ATS Units and Aircraft operators in accordance with the requirements specified in the Rules and Regulations pertaining to Meteorological Services.
- 7.16 MMS shall formulate and adopt; policies and procedures in line with the guidelines provided on human factor principles.

SEARCH AND RESCUE

- 7.17 The service provider(s) responsible for the provision of Search and Rescue shall provide and arrange these services in accordance with the Rules and Regulations, pertaining to Search and Rescue.
- 7.18 The SAR providers shall put in place adequate procedures and plans of operation in each RCC and rescue unit in accordance with the provisions MCAR 13, IAMSAR Manual, in consultation with the agencies likely to be involved in the SAR operations and in the implementation of the National SAR Plan.
- 7.19 The SAR providers shall formulate and adopt; policies and procedures in line with the guidelines provided on human factor principles

8. EFFECTIVITY

This regulation will come in to force on 05 June 2014

For the Civil Aviation Authority

Hussain Jaleel

Chief Executive