CIVIL AVIATION AUTHORITY OF FIJI

STANDARDS DOCUMENT

Aeronautical Telecommunication

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June 2022
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PREFACE

General

Fiji's National Aviation Law consists of a three tier regulatory system, comprising Acts, Regulations and Standards Documents; the purpose of which is to ensure, where deemed appropriate, compliance and conformance with ICAO Standards and Recommended Practices (SARPS).

The three tier regulatory system represents Fiji's Primary Legislation System and Specific Operating Regulations to meet Critical Elements CE1 and CE2 of ICAO's Eight Critical Elements of a safety oversight system.

Standards Documents (SD) are issued by the Civil Aviation Authority of Fiji under the provision of Section 14 (3) (b) of the Civil Aviation Authority Act 1979 (CAP 174A).

Where appropriate, the SD also contains guidance information (Critical Element CE5) on standards, practices, and procedures that are acceptable to the Authority.

Notwithstanding the above, and where specifically indicated in this Standards Document that such a provision is available, consideration may be given to other methods of compliance that may be presented to the Authority provided they have compensating factors that can demonstrate a level of safety equivalent to or better than those prescribed herein. Accordingly, the Authority will consider each case based on its own merits holistically in the context of and relevancy of the alternative methods to the individual applicant.

When new standards, practices, or procedures are determined to be acceptable, they will be added to this document.

Purpose

This Standards Document – Aeronautical Telecommunications is issued by the Civil Aviation Authority of Fiji pursuant to Regulation 145C of the Air Navigation Regulations 1981 (as amended). The Document is intended for use by CAAF, applicants for, and holders of, an Approved Maintenance Organisation Certificate and for their staff.

Change Notice

This Standard Document has been developed pursuant to the Authority's obligation to provide oversight on Aeronautical Telecommunications Service providers and their personnel, as well as their obligation to comply with standards notified by the Authority and is the means by which such notification is given.

THERESA LEVESTAM
CHIEF EXECUTIVE

AMENDMENT RECORD

The following space is provided to keep a record of all amendments.

Amendment No.	Effective Date	Entered By	Date Entered
1	03/06/22	ANSI-CNS	06/06/22
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From time to time the Authority will issue amendments to the requirements stipulated in this publication. These amendments will be accessible through the CAAF website.

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Historical Summary of Amendment

In pursuance to the requirements of the Civil Aviation Reform Act, draft Minimum Requirements Document (MRD-15) - Air Navigation Services was released in 2003.

With enactment of Regulation 145C on certification of maintenance organization for the provision of air navigation effective 1st July 2004, draft MRD-15 was renamed draft Standards Document-Aeronautical Telecommunications (SD-ATELCOM) and revised to include the certification requirements. It was circulated to stakeholders for comments.

With the expansion of the ICAO Universal Safety Oversight Audit Program to include all safety-related Annexes, Contracting States were required to response to Compliance Checklist Questionnaires on the Annexes to the ICAO Safety Oversight Audit Unit.

SD-ATELCOM (1st Edition) was developed taking into consideration input from the stakeholders and analysis of the ICAO Compliance Checklist Questionnaires that are considered relevant to aeronautical telecommunication in Fiji.

Amendment	Source(s)	Subject(s)	Effective Date
1st Edition	CAAF Annex 10	In pursuance of the requirements of the Civil Aviation Reform Act	*2003*
1st Edition	CAAF	Standards Document – Aeronautical Telecommunications (SD-ATELCOM) includes Approved Maintenance Organization Certification for the provision of air navigation.	*7th July 2005*
2nd Edition	CAAF	*Reformatting*	*14th Dec 2007*
3rd Edition	CAAF	*Reformatting and revision of the preface.*	*16th Aug 2012*
4th Edition	CAAF Annex 10	*Revised to include the ANNEX 10 amendments, flight inspection requirements, guidelines on CNS/ATM facility procurement and commissioning and checklist.*	*1st Aug 2019*
5th Edition	CAAF	Revised to include the training programme requirements	3rd June 2022

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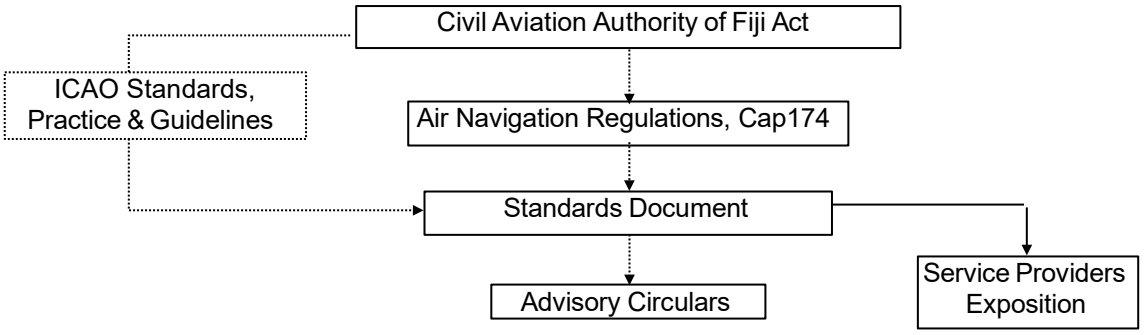
1. Introduction

1.1 Overview

The document hierarchy below, pertinent to the provision of services for air navigation, illustrates the relationship between Fiji aviation safety regulatory system and an approved maintenance organization certificate holder. The provision of aeronautical telecommunications services for air navigation is under the ambit of an approved maintenance organization.



(1) Air Navigation Regulations - *Establish the regulatory framework (Regulations) within which the Authority's standards must be contained and the service provider must operate.*

(2) Standards - *Comprise of standards and requirements prescribed by the Authority, of uniform application, determined to be the minimum necessary for the safety of air navigation and air traffic services. Service providers shall document internal standards and practices in their own manuals, to ensure the maintenance of and compliance with standards.*

(3) Advisory Circulars (AC) – *Where applicable, provides guidelines for complying with the regulations and standards. The guidelines represent one method of compliance. Other methods of compliance to that in the AC may be adopted, however the organization will need to demonstrate that the alternate methods comply*.

1.2 Aeronautical Telecommunications - Services and Facilities

An organization requires an approval certificate for the operations of the services and facilities as listed below: -

(a) <u>Communications</u>

(1) **Aeronautical Mobile Services**
- (i) High Frequency (HF) air-ground voice communication facilities including SELCAL;
- (ii) Very High Frequency (VHF) air ground voice communication facilities;
- (iii) UHF air ground voice communication facilities;
- (iv) Controller Pilot Data Link Communications (CPDLC)
- (v) Aeronautical Telecommunications Network (ATN), Air-Ground

(2) **Aeronautical Fixed Services**
- (i) ATS point-to-point communications systems
- (ii) Aeronautical Fixed Telecommunication Network (AFTN);
- (iii) Ground to Ground Data Interchange Networks.
- (iv) Aeronautical Telecommunications Network (ATN), Ground to Ground

(3) **Aeronautical Broadcast Services**
- (i) ATIS
- (ii) VOLMET

(4) **<u>Other Aeronautical Facilities</u>**

(i) Automatic dependent surveillance systems **(**ADS);
(ii) Flight data processing systems;
(iii) Flight information systems;
(iv) Voice switching and control facilities;
(v) Human Machine Interface systems, including Tower Consoles, ATS Work Stations and Display systems;
(vi) Aeronautical databases used in or by a facility;
(vii) Voice and data Recording Systems;

(b) Radio Navigation Service

(1) Precision radio navigation aids-
(i) Instrument Landing System (ILS) (ii)Microwave Landing System (MLS)
(iii) Global Navigation Satellite System ground based augmentation systems;
(iv) Very High Frequency Omni-range (VOR);
(v) Distance Measuring Equipment (DME).

(2) Non-precision radio navigation aids-
(i) Non-Directional Beacons/Locators (NDB)

(c) Power Supplies

(1) Uninterruptible and emergency power supplies (UPS);
(2) Essential services in buildings and in equipment shelters housing facilities (electrical power supplies, air-conditioning and security systems.

(d) Any other telecommunication service provided specifically to support the air navigation system for Fiji and the Nadi Flight Information Region.

2. General

1.3 Purpose

SD-ATELCOM prescribes the standards and requirements governing approval certification for the provision of aeronautical telecommunications services supporting air navigation.

1.4 Definitions

(a) The technical-specific definitions provided in ICAO Annex 10 Volumes I to V are also applicable.

(b) Notwithstanding paragraph (a) above, the following terminologies are defined as follows—

Aeronautical Broadcasting Service means a broadcasting service intended for the transmission of information relating to air navigation;

Aeronautical Fixed Service (AFS) means a telecommunication service between fixed points provided primarily for the safety of air navigation and for the regular, efficient and economical operation of air services;

Aeronautical Fixed Telecommunications Network (AFTN) means a worldwide system of aeronautical fixed circuits provided, as part of aeronautical fixed service, for the exchange of messages and/or digital data between aeronautical fixed stations having the same compatible communication characteristics;

Aeronautical Mobile Service means a mobile service between aeronautical ground stations and aircraft stations, in which survival craft stations may participate; emergency position-indicating radio beacon stations may also participate in this service on distress and emergency frequencies.

Aeronautical services and facilities means those services and facilities at an airport that are necessary for the operation and maintenance of civil aviation at the airport.

Aeronautical Telecommunication System means processes or displays air traffic services data.

Aeronautical Radio Navigation Service means services intended for the benefit and the safe operation of aircraft;

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

Air Navigation means installation means any building, works, apparatus, or equipment used wholly or mainly for the purpose of assisting air traffic control or as an aid to air navigation, together with any land contiguous or adjacent to any such building, works, apparatus or equipment and used wholly for the purposes connect therein.

Air-Ground (A/G) Communications means two-way communications between aircraft and stations on the surface of the earth;

Air Navigation Services means air traffic services (ATS); aeronautical telecommunications services (COM); meteorological services for air navigation (MET); search and rescue (SAR) and aeronautical information service (AIS). These services are provided to air traffic during all phases of operation (approach, aerodrome control and en route).

Air Traffic Services (ATS) includes flight information service; an alerting service; an air traffic advisory service; an air traffic control service (comprising area control service, approach control service and airport control service.

ATS message handling system (AMHS). The set of computing and communication resources implemented by ATS organizations to provide the ATS message handling service.

Automatic Terminal Information Service (ATIS) means the provision of current, routine information to arriving and departing aircraft by means of continuous and repetitive broadcasts during the hours when the unit responsible for the service is in operation

Authority means the Civil Aviation Authority of Fiji.

Availability means the ratio of percentage of the time that a system is operating correctly to the total time in that period.

CAAF means the Civil Aviation Authority of Fiji

Critical Performance Parameter means a performance parameter that has a direct effect on the operational integrity of a facility.

***Distance Measuring Equipment (DME*)** means equipment, which measures in nautical miles, the slant range of an aircraft, from the selected DME station.

Facility - means a total electronic system, including any associated aerials, power distribution system, communications cables and housing used to support the system

Glide Path means a descent profile determined for vertical guidance during the final approach.

Global Positioning System (GPS) means a satellite-based radio navigation system, which utilises precise range measurements from GPS satellites to determine precise position and time.

Ground to Air Communication means one-way communication from stations or locations on the surface of the earth to aircraft.

ICAO means the International Civil Aviation Organization;

Localizer means the component of an ILS, which provides azimuth guidance to a runway;

Location means a specific point fixed by its longitude and latitude position;

Locator means a Low /Medium frequency NDB, used as an aid to final approach;

Marker Beacon means a type of radio beacon, the emission of which radiate in a vertical pattern, to indicate predetermined distance from the threshold along the ILS glide path;

***Non-Directional Beacon (NDB*)** means a radio station, the emissions of which are intended to enable aircraft to determine its radio bearing or direction, with reference to that radio station;

NOTAM - (Notice to Airman) means a notice distributed by means of telecommunications containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations;

Operations *includes*: the design, installation testing and maintenance

Regulations - Air Navigation Regulations (as amended);

Recovery time - the period during which the service is malfunctioning;

Reliability means the probability that a device or system will function without failure over a specified time period or amount of usage;

Specialized equipment course- means a course on specified telecommunications equipment conducted by an approved instructor, at which technicians are taught and examined on equipment principals, theory of operation and practical applications;

Surveillance means the display of aircraft identification, position, speed and altitude information on air traffic control screens, which is derived from primary, and secondary radar systems and ADS;

Technician means an aeronautical facility technician licensed for the maintenance and/or operations of aeronautical telecommunications facilities;

VHF Omni-Directional Radio Range (VOR) means a very high frequency radio navigational aid which provides a continuous indication of bearing from the selected VOR ground station with respect to magnetic north.

1.5 Requirement for certificate (Pursuant to regulation 145C)

Interpretation: Person includes Organizations

(a) No person shall exercise the functions of an approved maintenance organization, unless such person holds an Approved Maintenance Organization Certificate granted by the Authority. The Authority, may grant an approval, if it is satisfied that such a person is-

(1) Competent, having regard to any of the following: -

(i) Previous conduct and experience; and

(ii) equipment; facilities; organization; staffing; training; quality assurance system; safety management system; maintenance; and

(iii) Other arrangements to conduct services specified in the certificate and for the services so specified; and

(2) In compliance with approved maintenance standards published by the Authority and where applicable, in accordance with the requirements of the International Civil Aviation Organization (ICAO).

(b) Except as provided for in paragraph (c) below, an approved maintenance organization certificate is required for the operations of the services and associated facilities listed in section 1.2

(c) An approved maintenance organization certificate is <u>not required</u>-

(1) Where an aeronautical facility within an aeronautical radio frequency band is—

(i) A radio communication transmitter that does not support an air traffic service;

(ii) A radio navigation aid that does not support aircraft in flight or air traffic service and is operated and maintained in accordance with the applicable—

- System characteristics prescribed in ICAO Annex 10, Volume III, Part II, Chapter 2 or Annex 10, Volume I, Chapter 3; and
- Communication procedures prescribed in ICAO Annex 10, Volume II; and

(2) A ground mobile radio not used to support air navigation or air traffic service.

(d) Notwithstanding the above, a person who operates and maintains an aeronautical facility within an aeronautical radio frequency band shall -

(1) Have the necessary approval for that aeronautical facility, granted by the Telecommunication Regulatory Unit; and

(2) Operate and maintain such aeronautical facility in accordance with the applicable—

(i) System characteristics prescribed in ICAO Annex 10, Volume III, Part II, Chapter 2 or Annex 10, Volume I, Chapter 3; and

(ii) Communication procedures prescribed in ICAO Annex 10, Volume II.

(3) Ensure that such transmission does not interfere with any other aeronautical telecommunication service or aeronautical facility used for air navigation and air traffic service.

1.6 Application for certificate

(a) An applicant for an approved maintenance organization certificate shall complete the application form (see chapter 8.1) and submit it to the Authority accompanied by—

(1) The applicant's exposition prepared as if the applicant were an approved provider; and

(2) The company's financial report of the past three consecutive years;

(3) A statement prepared by referring to the list of services listed under 1.2 showing each kind of service for which the application is being made; and

(4) A statement of the intended coverage of each service.

(b) Where interdependent services are granted to organizations, other than the applicant's own organization, evidence of contractual agreements between the parties shall be made available upon application and be acceptable to the Authority.

Example: The organization granted authorization to provide air traffic services may not be the same organization granted approved maintenance organization status. In this case a contractual agreement between the two parties must exist.

1.7 Issue of certificate

(a) An applicant may be granted an Approved Maintenance Organization Certificate if the Authority is satisfied that—

(1) The applicant meets the requirements of these standards; and

(2) The applicant and the senior person or senior persons required under 3.1(a) (1) and (2) are fit and proper persons; and

(3) The persons identified under 3.1 (a) (1) and (2) sign a Declaration of Accountability (see Chapter 8.2.1); and

(4) The applicant exposition is approved by the Authority; the Authority having satisfied itself that the intended method of operating, is in conformance with all the requirements of these standards; and

(5) The granting of the certificate is not contrary to the interests of aviation safety.

1.8 Privileges

(a) An Approved Maintenance Organization Certificate specifies the services and aeronautical facility types that the certificate holder is authorized to maintain and operate in the provision of aeronautical telecommunications services for air navigation.

(b) Subject to 2.7, the holder of an Approved Maintenance Organization Certificate may operate any of the aeronautical facility types specified on the holder's certificate so long as—

(1) Each aeronautical facility operated, is listed in the certificate holder's exposition; or

(2) If the aeronautical facility is not listed in the exposition, its operation is for site test purposes controlled by the procedures required under 2.3(d).

1.9 Duration of certificate

(a) Subject to 2.9 an approved maintenance organization certificate granted or renewed shall remain in force for the period not exceeding 12 months.

(b) The holder of an Approved Maintenance Organization Certificate that expires or is revoked shall immediately surrender the certificate to the Authority.

(c) The holder of an Approved Maintenance Organization Certificate that is suspended shall produce the certificate to the Authority immediately for appropriate endorsement.

1.10 Renewal of certificate

(a) An application for the renewal of an approved maintenance organization certificate for telecommunication service shall be made on the application form prescribed in Chapter 8.

(b) The application for the renewal shall be made before the application renewal date specified on the certificate or, if no such date is specified, not less than 30 days before the certificate expires.

1.11 Certificate Suspensions, Revocation or Surrender

(a) Suspension of a Maintenance Organization Approval Certificate, may be considered if—

(1) The safety management system is found to be inadequate;

(2) It is in the interest of aviation safety;

(3) All other means for timely correction of the unsafe condition or ensuring safe operations have not yielded the required result;

(4) The technical proficiency of the Approved Certificate holder to perform the duties to meet critical safety requirements in accordance with the regulations and these Standards are found inadequate;

(5) The Approved Certificate holder resists or is unwilling to take action to correct or mitigate the conditions affecting aviation safety; or

(6) The Approved Certificate holder willfully fails to perform an already agreed upon corrective action and suspension of the certificate is the last resort to avoid unsafe operations in the service for which approval was granted.

(b) Revocation of a Approval Certificate, may be warranted if the maintenance organization—

(1) Is incapable or unwilling to carry out corrective action or has committed repeated serious violations;

(2) Has demonstrated a lack of responsibility, such as deliberate and flagrant acts of non- compliance or falsification of records jeopardizing aviation safety; or

(3) Has made it convincingly clear that the continued operations will be detrimental to the public interest.

(c) Should the current holder of an Approval Certificate wish to surrender their certificate, the Authority shall—

(1) Be notified in writing no less than 180 days in advance of the day on which the certificate is to be surrendered, in order that suitable promulgation action can be taken;

(2) Cancel the certificate on the date specified on the notice.

1.12 Amendments to Certificate

(a) The Authority may, provided that requirements under 2.5 is met, amend an organizations approval certificate when there is a change in the—

(1) Ownership or management of the organization

(2) Use of or service requirement at the location for which the certificate was granted;

(3) Coverage of service; or if the

(4) Holder of the certificate requests an amendment.

1.13 Frequency allocation and Radio Apparatus License

(a) No person shall operate —

(1) a radio navigation aid, unless it has been licensed by and allocated a specific frequency by the Telecommunication Regulatory Unit and operated with a unique identification code ; or

(2) a radio communication transmitter on an aeronautical radio frequency unless it has been licensed by and allocated a specific frequency and call sign by the Telecommunication Regulatory Unit;

(b) Except in the case of emergency involving the safety of life no person shall transmit on a radio communication transmitter unless the person holds of a valid Aeronautical Station Operators license issued by the Authority.

(c) The requirement to hold a valid Aeronautical Station Operators license includes the operation of a radio communication transmitter for the purpose of on air tests or experiments.

(d) Prior to lodging an application for a radio apparatus licence or specific frequency with the Telecommunications Regulatory Unit, the applicant shall consult with the Authority on any intended operational use of frequencies in the aviation bands.

Note: 1: *The licensing of radio apparatus, allocation of frequencies and call signs, control of harmful interference etc are contained CAP 173 Section 9 Part IV of the Telecommunication Regulations, the management of which rests with the Telecommunication Regulatory Unit*

Note 2: *The Telecommunication Unit is that of the Ministry of Communications. Enquires should be addressed to the Deputy Secretary, Telecommunication Regulatory Unit.*

Note 3: *Prior consultation to ICAO Asia-Pacific Regional Office by the Authority is also required to safeguard against frequency interference with neighbouring users.*

1.14 Notification of aeronautical facility information

A person operating an aeronautical facility for air navigation and/or air traffic service shall, —

(1) Forward to the provider of the AIS —

(i) Information on the operational details of the aeronautical facility, for publication in the AIP; and

(ii) Information, concerning any change in the operational status of the aeronautical facility, for the issue of a NOTAM; and

(2) Check, if applicable, that the information forwarded under paragraph (1) has been accurately published.

1.15 Integrity of Information provided by an aeronautical facility

A person operating an aeronautical facility shall not permit the facility to continue in operational service if that person suspects or has any cause to suspect that the information being provided by that facility is erroneous.

2.1 Certification Requirements

1.16 Personnel requirements

(a) An applicant for a Maintenance Organization Approval Certificate for the provision of aeronautical telecommunication services, shall employ, contract, or otherwise engage—

(1) A senior person identified as the "chief executive" or accountable manager who—

(i) Has the authority within the applicant's organization to ensure that all activities undertaken by the organization can be financed and carried out to meet applicable operational requirements; and

(ii) Is responsible for ensuring that the organization complies with the requirements of this Standard;

(2) A senior person or persons responsible to the senior person identified in (a) 1, for ensuring that the applicant's organization complies with its exposition; and

(3) Sufficient personnel to inspect, supervise, operate and maintain the facilities listed in the applicant's exposition.

Example: *The senior person or persons referred to in (a) 2 may include the person or persons who manages maintenance; installations; Safety Management Systems, Quality Assurance.*

(b) An applicant for a Maintenance Organization Approval Certificate shall develop a training programme for its CNS personnel that includes, when applicable, the initial, On-The-Job Training(OJT), recurrent and specialized training, to ensure that authorized technical personnel hold appropriate current Aeronautical Facility Technician Licences and ratings issued under Regulation 53 for the facilities they operate and/or maintain after having been trained and assessed to be competent in the operation and maintenance of the facility from the established preset competency levels requirements, and procedures to —

(1) Regularly assess the personnel competence; and

(2) Maintain the competence of personnel

(3) Provide technical personnel with written evidence of the scope of their authorization; and

(4) Ensure compliance to the personnel licensing requirements under SD-PEL

Note: The standards for personnel required to hold an Aeronautical Facility Technicians License are stipulate in the SD – PEL).

1.17 Aeronautical Facility Requirements

(a) An applicant for a Maintenance Organization Approval Certificate shall establish procedures to ensure that—

(1) Each aeronautical facility listed in the applicant's exposition—

(i) Is designed, installed, and commissioned, to meet the applicable operational specification for that facility; and

(ii) Conforms to the applicable system characteristics and specification standards prescribed in ICAO Annexes, and in particular Annexes 10. (The applicable Annex 10 standards are identified in Chapter 5); and

(iii) Operated and maintained to specification standards.

(2) Aerodrome control towers and units providing approach control service shall be provided without delay with information on the operational status of radio navigation aids essential for approach, landing and take-off at the aerodrome(s) with which they are concerned; and

(3) Each aeronautical facility listed in the applicant's exposition is installed with suitable power supplies and means to ensure continuity of operation appropriate to the needs of the air traffic service or radio navigation service being supported; and

(4) Each aeronautical facility listed in the applicant's exposition is installed in accordance with the security program required under 3.5- Security Program - to minimize any risk of destruction, damage, or interference with the operation of the facility; and

(5) Any critical site area of any aeronautical facility listed in the applicant's exposition is—

(i) Clearly identified on the site drawings for the aeronautical facility; and

(ii) Physically protected by suitable signposts on the site; and

(iii) Protected by written agreements with the site owner, aerodrome operator, and air traffic control unit, as appropriate, to ensure that site restrictions are not infringed by buildings, fences, vehicles, machinery, or aircraft.

(b) An applicant for a Maintenance Organization Approval Certificate who intends to operate a temporary aeronautical facility to carry out site tests shall establish a procedure for conducting those tests.

(c) The procedure required under paragraph (b) shall require that—

(1) The operation of the temporary facility does not cause any interference with any other operating aeronautical facility; and

(2) Appropriate information regarding the operation of the temporary facility is forwarded to the provider of the AIS for the issue of a NOTAM, and if appropriate the publication of a Supplement to the AIP; and

(3) An appropriate NOTAM has been published.

(d) Should harmful interference be detected or reported during testing of a facility, the test shall be halted immediately and not resumed again until all necessary checks have been carried to minimize the risk of interference.

3.3 Safety Management (See also Chapter 6 for specific details and examples)

(a) Each applicant for the grant of a maintenance organization approval certificate shall establish safety management programs prescribed in paragraph (c) below to ensure that safety is maintained, within the airspace and at aerodromes.

(b) The safety management programs shall provide for an internal system of oversight to ensure the safe provision of services for air navigation.

(c) The system shall —

(1) Comprise of safety policies, principles; and

(2) Include the requirements prescribed in Chapter 6; and.

(3) Provide for an acceptable level of safety and safety objectives prescribed in paragraph (d) below applicable to services in the provision of air navigation within airspaces and at aerodromes; and

(4) Ensure any significant safety-related change or safety-related changes to services or facilities including, enhancements to systems, temporary tests, re-siting of a facility, change of frequency, change of identification, or the temporary suspension of a service, is only effected after a safety assessment has demonstrated that an acceptable level of safety will be met and users have been consulted; and that

(5) Adequate provision is made for post-implementation monitoring to verify the defined level of safety continues to be me.

(d) An acceptable level of safety and safety objectives applicable to the provision of air navigation within airspaces and at aerodromes shall be established on the basis of regional air navigation agreements where applicable.

(e) The service provider shall ensure that the accuracy and integrity of aeronautical data is based upon the requirements stipulated in Annex 11 2.18.1 to 2.18.3

Table below provides guidance values of performance parameters for a number of service types.

Service / Facility	Availability	MTBF (Hours)	Accuracy	Integrity	Continuity (Changeover to Standby Power)
Aeronautical broadcasting service	> 0.99	> 1000	N/A	N/A	15 seconds
Aeronautical mobile service (ATS A/G communication)	> 0.9999	> 10000	N/A	Direct, rapid, continuous, static free	Immediate
Radar like Data Display for ATS (ADS)	> 0.9999	> 10000	TBA	TBA	Immediate
ILS Localiser and Glide Path	> 0.999	> 1000	ICAO Annex 10 Vol I Ch 3 and Table C2 Attachment C	ICAO Annex 10 Vol I Ch 3 and Table C2 Attachment C	Immediate
DME	> 0.99	> 1000	ICAO Annex 10 Vol I Ch 3 section 3.5.3.13	Not specified	Immediate
VOR	> 0.99	> 1000			Immediate
NDB	> 0.99	> 1000	N/A	ICAO Annex 10 Vol I Ch 3 section 3.4.8.1	Immediate
Time- Datalink Communications	100	> 10000	Annex 11 2.24.3 UTC ± 1 sec		Immediate
Time- ATN	100	> 10000	Annex 10 Vol III 3.4.27 UTC + 1 sec		Immediate

(f) Each applicant for the grant of a maintenance organization approval certificate shall-

(1) Establish and maintain a database of statistical information; and

(2) Submit to the Authority a half-year and an annual summary of the safety management statistical information prescribed by paragraph (d) above no later than 15 days following the end of the periods respectively.

(g) The senior person appointed to manage the program shall -

(1) Have direct access to the Accountable Manager identified in 3.1 (a) (1) on operational system safety matters;

(2) Ensure that the safety policy and the safety policy procedures are understood, implemented, and maintained at all levels of the organization;

(2) Conduct risk assessments of current and proposed operational policies, plans and procedures; and

(3) Coordinate the collection and analysis of risk-related data

3.4 Internal quality assurance

(a) An applicant for an approved maintenance organization certificate shall establish an internal quality assurance system to ensure compliance with, and the adequacy of, the procedures required under this Standard.

(b) The internal quality assurance system shall include—

(1) A procedure to ensure quality indicators, including equipment integrity, availability, reliability, malfunctions, faults, and personnel and customer feedback, are monitored to identify existing problems or potential causes of problems within the internal quality assurance system; and

(2) A procedure for corrective action to ensure existing problems that have been identified within the internal quality assurance system are corrected; and

(3) A procedure for preventive action to ensure that potential causes of problems that have been identified within the internal quality assurance system are remedied; and

(4) An internal audit program for the applicant's organization to ensure conformity with the procedures in the applicant's exposition and to achieve the goals set in the safety policy under 3.3; and

(5) Management review procedures, that should include the use of statistical analysis if appropriate, to ensure the continuing suitability and effectiveness of the internal quality assurance system.

(c) The procedure required under paragraph (b)(2) for corrective action must specify how—

(1) To correct an existing quality problem; and

(2) To follow up a corrective action to ensure the action is effective; and

(3) To amend any procedure required under this Standard as a result of a corrective action; and

(4) Management measurement of the effectiveness of any corrective action taken.

(d) The procedure required under paragraph (b)(3) for preventive action must specify how—

(1) To correct a potential quality problem; and

(2) To follow-up a preventive action to ensure the action is effective; and

(3) To amend any procedure required under this Standard as a result of a preventive action; and

(4) Management will measure the effectiveness of any preventive action taken.

(e) The internal audit program required under paragraph (b)(4) shall—

(1) Specify the frequency and location of the audits taking into account the nature of the activity to be audited; and

(2) Measure the effectiveness of any preventative or corrective action taken by the personnel responsible for the activity being audited since the last audit; and

(3) Require preventative or corrective action to be taken by the personnel responsible for the activity being audited if problems are found by the audit.

(f) The procedure for management review required under paragraph (b)(5) shall—

(1) specify the frequency of management reviews of the internal quality assurance system taking into account the need for the continuing effectiveness of the system; and

(2) identify the senior person responsible for the management reviews referred to in paragraph (f)(1); and

(g) The senior person responsible for the internal quality assurance system shall—

(1) Ensure that the audits are performed by trained auditing personnel who are independent of those having direct responsibility for the activity being audited; and

(2) Ensure that the results of the audits are reported to the personnel responsible for the activity being audited; and

(3) Ensure that all corrective and preventative actions are followed up to review the effectiveness of those actions; and

(4) Ensure that the results of the management review are evaluated and recorded; and

(5) Have direct access to the accountable manager on matters affecting the integrity of the aeronautical facilities operated under the approved maintenance organization certificate.

(h) The audits are to be signed by the person who prepared and carried out the audit

(i) The Authority may request a copy of the reports (s) for its review and reference.

3.5 Security program

(a) An applicant for the grant of a Maintenance Organization Approval Certificate shall establish security programs for the facilities listed in the applicant's exposition.

(b) The program required under (a), shall meet with applicable requirements as stipulated in the National Civil Aviation Security Program and shall specify the physical security requirements, practices, and procedures to be followed for the purposes of minimizing the risk of destruction of, damage to, or interference with the operation of any aeronautical facility operated under the authority of the maintenance approval certificate, if such destruction, damage, or interference could endanger the safety of aircraft.

(c) The security programme required under paragraph (a) shall include such physical security requirements, practices, and procedures as may be necessary—

(1) To ensure that each aeronautical facility is subject to positive access control at all times to prevent unauthorized entry; and

(2) For personnel to follow in the event of a bomb threat or other threat of damage to an aeronautical facility; and

(3) To monitor an unattended aeronautical facility building to ensure that any intrusion or interference is immediately detected.

3.6 Documentation and data control

(a) An applicant for a Maintenance Organization Approval Certificate shall hold copies of relevant equipment manuals, technical standards, practices, instructions, forms, any document of the kind listed in chapter 7 and any other documentation that are necessary for, or created for, the provision and operation of the facilities listed in the applicant's exposition.

(b) An applicant for an Approved Maintenance Organization Certificate shall establish a procedure for the control of the documentation required under paragraph (a) and any other applicable part of this standard.

(c) The procedure required under paragraph (b) shall require that—

(1) All documentation is reviewed and authorized by an appropriate senior person referred to in 3.1 before issue; and

(2) Current issues of all relevant documentation are accessible to staff at all locations if required for the provision and operation of aeronautical facilities; and

(3) All obsolete documentation is promptly removed from all points of issue or use; and

(4) Changes to documentation are reviewed and authorized by an appropriate senior person referred to in 3.1; and

(5) The current version of each item of documentation can be identified; and

(6) A master copy of the current version of each item of documentation is uniquely identifiable and securely store.

3.7 Periodic inspection and testing

(a) An applicant for a Maintenance Organization Approval Certificate shall establish a procedure for the periodic inspection and testing of the aeronautical facilities listed in the applicant's exposition to verify that each aeronautical facility meets the applicable operational requirements and performance specifications for that facility.

(b) The procedure required under paragraph (a) shall—

(1) Include ground inspections and tests, and if necessary, flight tests; and

(2) Include the criteria for establishing or changing the interval between the periodic tests for each aeronautical facility listed in the exposition, having regard to—

(i) Any applicable information published by ICAO; and

(ii) Any applicable reliability data for the aeronautical facility; and

(iii) Information on the proven reliability performance of the aeronautical facility, and of other similar aeronautical facilities, and the stability of the aeronautical facility's operating environment; and

(3) Ensure that the grounds for establishing or changing the interval between the periodic tests for each aeronautical facility listed in the exposition are documented.

(c) An applicant for a Maintenance Organization Approval Certificate shall establish—

(1) A programme of periodic ground inspections for each aeronautical facility listed in the applicant's exposition; and

(2) A programme of periodic ground tests for each aeronautical facility listed in the applicant's exposition; and

(3) A programme of periodic flight tests for each radio navigation aid listed in the applicant's exposition. The following facilities shall be flight tested at the interval prescribed below

Facility	Interval
VOR	12 monthly
DME	12 monthly
ILS	6 monthly
NDB	12 monthly

(d) The programs required by paragraphs (c) (2) and (c) (3) shall be based on the criteria required under paragraph (b) (2) and shall specify the maximum interval between the tests for each aeronautical facility.

(e) An applicant for an approved maintenance organization certificate shall notify and seek authorization from the Authority for the extension of flight inspection interval.

(f) An applicant for an approved maintenance organisation shall notify and seek authorization from the Authority of any radio navigation aid that is not subjected to periodic flight tests.

(g) An applicant for an approved maintenance organization certificate shall ensure that the Flight Inspection Services Provider (FISP) and personnel conducting flight inspection are internationally recognised and acceptable to the Authority. The FISP should provide evidence of operating to a Flight Inspection Procedure Manual that provides assurance that the necessary checks are being carried out in compliance to ICAO Doc 8071.

3.8 Ensuring aeronautical facility performance

(a) An applicant for a Maintenance Organization Approval Certificate shall establish a procedure to ensure that no aeronautical facility listed in the applicant's exposition is released or placed into operational service unless—

(1) The person releasing from or placing the aeronautical facility into operational service is assessed as competent according to the procedures required under 3.1 (b), being a holder of a valid license with current endorsements for that facility, as issued by the Authority; and

(2) For placing the aeronautical facility into operational service, the appropriate checks detailed in the operating and maintenance instructions required by 4.2 have been carried out to verify the performance of the aeronautical facility; and that

(3) The aeronautical facility record has been completed according to the procedures required under 3.13-Records.

3.9 Inspection measuring and test equipment

(a) An applicant for a Maintenance Organization Approval Certificate shall ensure that appropriate inspection, measuring, and test equipment is available for personnel to maintain the operation of each aeronautical facility listed in the applicant's exposition.

(b) An applicant for a Maintenance Organization Approval Certificate shall establish a procedure to control, calibrate, and maintain all the inspection, measuring, and test equipment required under paragraph (a) to ensure that each item of equipment has the precision and accuracy that is necessary for the measurements and tests to be performed.

(c) The procedure required under paragraph (b) shall require that each item of test equipment required for the measurement of critical performance parameters is—

(1) Calibrated before use or at prescribed intervals with the calibration traceable to an appropriate national standard; and

(2) Identified with a suitable indicator to show its calibration status; and

(3) Controlled to—

(i) Safeguard against adjustments that would invalidate the calibration setting; and

(ii) Ensure that the handling, preservation, and storage of the test equipment are such that its accuracy and fitness for use is maintained.

(d) If hardware and software systems are used for the performance testing of any aeronautical facility, the procedures under paragraph (b) shall require the functions of those testing systems to be checked—

(1) Before being released for use; and

(2) At prescribed intervals— to establish that those testing systems are capable of verifying the true performance of the aeronautical facility.

3.10 Notification of aeronautical facility information

(a) An applicant for a Maintenance Organization Approval Certificate shall establish a procedure to ensure that the requirements of 2.12 are met for each applicable aeronautical facility listed in the applicant’s exposition.

(b) The procedure required under paragraph (a) shall include a means to confirm that—

(1) The operational details of the aeronautical facility as notified to AIS have been accurately published in the AIP; and

(2) Any change to the operational status of the aeronautical facility has been published by NOTAM.

3.11 Post accident or incident aeronautical facility check

(a) An applicant for a Maintenance Organization Approval Certificate shall establish a procedure to check and accurately record the operating condition of any aeronautical facility operated under the authority of the certificate that may have been used by an aircraft, or an air traffic service, that is involved in an accident or incident.

(b) The procedure required under paragraph (a) shall require that—

(1) The check of the aeronautical facility's operating condition is carried out as soon as practicable after notification to the holder of the Maintenance Organization Approval Certificate of the accident or incident; and

(2) The record of that check, and the recorded history of the aeronautical facility, is kept in a secure place for possible use by any subsequent accident or incident investigation; and

(3) The records secured under paragraph (b)(2) are retained for 7 years from the date of the last entry made on that record.

3.12 Facility malfunctions

(a) An applicant for an approved maintenance organization certificate shall establish procedures -

(1) To notify, investigate, and report instances of aeronautical facility malfunctions pursuant to Air Navigation Regulations No. 71 – Mandatory reporting of accidents, incidents and occurrences;

(2) To implement corrective actions to eliminate the cause of a facility malfunction incident and prevent its recurrence;

(3) To report, repair and return to service aeronautical facility malfunctions according to the fault categorisation; and

(4) For the release of aeronautical facility for maintenance; and

(5) That categorise the level of importance on the restoration of facility to service; and

(6) For the issuance of notice to airmen (NOTAM) on facility malfunctions and/or maintenance.

3.13 Records

(a) An applicant for a Maintenance Organization Approval Certificate shall establish procedures to identify, collect, index, store, maintain, and dispose of the records that are necessary to record—

(1) The safe provision of the services for which the certificate has been granted for; and

(2) The safe operation of each aeronautical facility listed in the applicant's exposition.

(b) The procedures required under paragraph (a) shall require that accurate records of the following be maintained:

(1) For each aeronautical facility, a record—

(i) Documenting the operating performance of the aeronautical facility; and

(ii) Providing a history of the maintenance, and the periodic inspections and tests of the aeronautical facility, that are traceable to the person or persons responsible for each of the recorded activities; and

(2) For each aeronautical facility, a record of the establishment of, or a change in, the periodic tests required by 3.7 (a); and

(3) For each item of test equipment required under 3.9 (a) that is used for the measurement of an aeronautical facility's critical performance parameters, a record that includes a traceable history of the location, maintenance, and the calibration checks for the item of test equipment; and

(4) For each facility malfunction incident reported under 3.12, a record that includes—

(i) Details of the nature of the malfunction; and

(ii) The findings of the investigation; and

(iii) The follow up corrective actions; and

(iv) Where applicable, a copy of the report submitted to the Authority; and

(5) A record of each internal audit required under 3.4 (b)(4), and of each management review required under 3.4(b)(5); and

(6) For each person who is licensed in accordance with 3.1(b), a record that includes details of the person's experience, qualifications, training, competence assessments, and current authorizations.

(c) The procedures required under paragraph (a) shall require—

(1) All records to be legible and of a permanent nature; and

(2) All aeronautical facility records required under paragraph (b)(1) to be retained for a period of at least seven years unless a longer period is required—

(i) By the Authority;

(ii) To establish a performance history for the aeronautical facility.

3.14 Communication procedures

(a) An applicant for a Maintenance Organization Approval Certificate shall ensure that-

(1) The procedures for operating the facilities listed in the applicant's exposition are in accordance with the applicable communication procedures prescribed in ICAO Annex 10, Volume II; and

(2) For tests broadcasts or airside ground movement operations, only those personnel holding a valid Aeronautical Station Operators Licence, *(pursuant to ANR 61)* shall carry out Radio Telephone broadcasts.

(b) An applicant for an Approved Maintenance Organization Certificate shall establish procedures to—

(1) Assess the competence of those personnel referred to in paragraph (a) 1and 2; and

(2) Maintain the competence of those personnel; and

(c) The required procedures referred to in (b) for (1) and (2) shall meet the requirements of the Authority as prescribed for the issue of an Aeronautical Station Operator's Licence.

3.15 Exposition

(a) An applicant for an Approved Maintenance Organization Certificate shall provide the Authority with an exposition, prepared as if the applicant were an approved maintenance organization.

(b) The exposition shall detail how the standards contained in this SD-ATELCOM are met. This applies to each telecommunication or radio navigation service and facility for which the approved maintenance organization has approval to operate.

(c) For the purpose of paragraph 3.15 (b) —

(1) Except as prescribed in paragraph (2) below, the following shall apply to the service:

(i) ICAO Annex 10

(ii) Applicable standards specified in Annex 11, 14 and other ICAO Annexes; and

(iii) Standards prescribed herein SD-ATELCOM.

(2) Where there is a variation between the Annexes and SD-ATELCOM, the standards prescribed by SD-ATELCOM shall be applied.

(3) A requirement under this chapter to include particular information in the exposition may be satisfied by referring in the exposition, to that information in another document held by the approved maintenance organization.

Example: *An equipment manufacturers instruction manual*

(d) The exposition shall contain—

(1) A table of contents based on the items in the exposition indicating the page number on which each item begins.

(2) The effective date, displayed on each page.

(3) A statement signed by the Chief Executive/Accountable Manager, on behalf of the organization confirming that—

(i) The exposition defines the organization and demonstrates its means and methods for ensuring ongoing compliance with the standards contained in this Standards Document; and that the

(ii) Exposition, and all associated manuals, operating, and maintenance instructions, shall be complied with by the organization's personnel at all times.

(4) A description of the applicant's organizational structure including a description of the chain of command established, within the organization, or proposed to be established; and

(5) The titles and names of the senior person or persons required under 3.1 (a)(1) and (2) and a statement of their duties and responsibilities, including matters for which they have responsibility to deal directly with the Authority, on behalf of the organization; and

(6) A statement of the duties and responsibilities of all other positions within the organization including supervisory positions; and

(7) A list of services and each type of aeronautical facilities the applicant provides or proposes to provide.

(8) A summary of the scope of activities at each location where personnel are based for the purpose of providing or maintaining the types of facilities listed under paragraph (d) (7); and

(9) A summary of the operational and technical details of each aeronautical facility at each location.

(10) The detailed procedures required by these standards under: -

(i) 3.1 (b) regarding the competence of personnel; and

(ii) 3.2 (a) regarding the design, installation, and commissioning of facilities; and

(iii) 3.2 (b) regarding the operation of temporary facilities for site tests; and

(iv) 3.3 regarding the safety management system; and

(v) 3.4 regarding internal quality assurance; and

(vi) 3.5 the security program; and

(vii) 3.6 (b) regarding the control of documentation; and

(viii) 3.7 (a) regarding periodic inspections and testing of facilities; and

(ix) 3.8 regarding ensuring aeronautical facility performance; and

(x) 3.9 regarding the control, calibration, and maintenance of inspection, measuring, and test equipment; and

(xi) 3.10 (a) regarding the notification of facility information; and

(xii) 3.11 (a) regarding facility checks after notification of an accident or incident; and

(xiii) 3.12 regarding failure of service; and

(xiv) 3.13 (a) regarding the identification, collection, indexing, storage, maintenance, and disposal of records; and

(xv) 3.14 regarding communication procedures.

(11) The detailed procedures to control, amend, and distribute the exposition, as required by 4.6.

APPENDIX 3 Manpower Planning

Reserved

2. Operating Requirements

1.18 Continued compliance

(a) The holder of an Approved Maintenance Organization Certificate shall—

(1) Continue to meet the standards and comply with the requirements of Chapter 2 and Chapter 3 prescribed for certification under this Standard and

(2) Comply with all procedures referred to in its exposition; and

(3) Hold at least one complete and current copy of its exposition at each location listed in its exposition where a senior person is based; and

(4) Make each applicable part of its exposition available to personnel who require those parts to carry out their duties; and

(5) Notify the Authority of any change of address, telephone number, or facsimile number within 28 days of the change.

1.19 Operating and maintenance instructions

(a) The holder of a Maintenance Organization Approval Certificate shall—

(1) Have operating and maintenance instructions that set out the requirements for operating and maintaining each aeronautical facility listed in its exposition; and

(2) Provide the operating and maintenance instructions required under paragraph (1) for the use and guidance of its personnel.

(b) The operating and maintenance instructions required under paragraph (a)(1) shall include—

(1) Details of the critical performance parameters for each aeronautical facility; and

(2) The associated minimum performance levels for those critical performance parameters referred to in paragraph (b)(1); and

(3) Details of the test equipment required for the measurement of those critical performance parameters referred to in paragraph (b)(1); and

(4) Details of the mandatory inspections and test procedures for the operational service; and

(5) Details of the mandatory inspection and test procedures for the operation and maintenance of each aeronautical facility.

(c) The source of the maintenance procedures is to be made known

Example: Manufacturers recommendations.

1.20 Deviations

(a) If an emergency necessitates immediate action for the protection of life or property, and the action involves an aircraft operation, the holder of an approved maintenance organization certificate for the provision of aeronautical telecommunication services may, subject to (b) below and 4.5 (a) and, deviate from the requirement of SD-ATELCOM.

(b) The holder of an approved maintenance organization certificate on aeronautical telecommunication service who deviates from a requirement of SD-ATELCOM under paragraph (a) shall—

(1) Provide a written report to the Authority as soon as practicable, but in any event not later than 14 days, after the emergency; and

(2) Include in the report required under paragraph (b)(1) the nature, extent, and duration of the deviation.

1.21 Temporary aeronautical facility testing

(a) If a temporary aeronautical facility is operated for the purpose of a site test, the holder of an certificate is required to comply with 3.3 (b) and (c).

(b) Prior to commencement of operational transmission, the applicant shall provide to the Authority of its intentions accompanied by evidence that the aeronautical facility will not interfere with any other aeronautical telecommunication service or aeronautical facility used for air navigation.

1.22 Limitations on certificate holder

(a) Except for the operation of a temporary aeronautical facility for site tests according to the procedures required under 3.2 (b), the holder of an Approved Maintenance Organization Certificate shall not permit an aeronautical facility to continue in operational service under the authority of the certificate if the holder has any cause to suspect the integrity of the information being provided by the facility.

(b) The holder of a Approved Maintenance Organization Certificate shall not operate a radio transmitting aeronautical facility on an aeronautical radio frequency except under a radio apparatus licence, for the facility, granted by the Deputy Secretary of Communication of the Telecommunication Regulatory Unit.

(c) Except if a deviation is required under 4.3 (a) or a site test is carried out according to the procedures required under 3.2 (b), the holder of approved maintenance certificate may not operate an aeronautical facility under the authority of that certificate unless—

(1) The aeronautical facility is listed in the certificate holder's exposition; and

(2) The performance of the aeronautical facility meets the applicable information published for that facility under 2.12; and

(3) The performance of the aeronautical facility meets the applicable requirements in 3.2 (a); and

(4) Any integrity monitoring system for the aeronautical facility is fully functional; and

(5) All the periodic tests for the aeronautical facility are completed according to the programs established under 3.7 (c) (2) and (3); and

(6) The aeronautical facility is included in the certificate holder's security program required under 3.5
(a) if the destruction, damage, or interference with the aeronautical facility is likely to endanger the safety of an aircraft in flight; and

(7) If paragraph (c)(6) applies, the requirements of the security program for the aeronautical facility are being complied with.

1.23 Change management

(a) The holder of an Approved Maintenance Organization Certificate shall—

(1) Ensure that its exposition is amended as required, to remain the current description of the certificate holder’s organization, services, and facilities; and

(2) Ensure that any amendments made to its exposition meet the applicable requirements of this Standard; and

(3) Comply with the exposition amendment procedure contained in its exposition; and

(4) Provide the Authority with a copy of each amendment to its exposition, immediately after the amendment is incorporated into the exposition; and

(5) Make such amendments to its exposition as the Authority may consider necessary in the interests of aviation safety.

(b) The holder of an Approved Maintenance Organization Certificate shall apply and obtain prior acceptance by the Authority if the certificate holder proposes to change any of the following—

(1) Chief Executive/Accountable Manager required by 3.1 (a) (1); or

(2) The listed senior persons required by 3.1 (a) (2); or

(3) The security program; or

(4) The types of aeronautical facility operated under the authority of the certificate if the effect of the change is that the service will no longer provided in accordance with the approved exposition.

(c) An application to make any of the changes under paragraph (b) shall be made to the Authority 14 days in advance of the date of implementation.

(d) The Authority may impose any conditions that the Authority considers necessary in the interests of aviation safety, on the holder of a Maintenance Organization Approval Certificate during the period any changes under paragraph (b) are occurring or as a consequence of those changes.

(e) The holder of an approval certificate shall comply with any conditions imposed by the Authority under paragraph (e).

(f) If any of the changes under paragraph (b) requires an amendment to the Approval Certificate, the certificate holder shall forward the certificate to the Authority as soon as practicable.

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1.24 General

(a) The Tables in the paragraphs 5.2 to 5.6 below are the content pages from the five volumes of ICAO Annex 10. They provide guidance information relating to those aeronautical facilities installed and commissioned for operations in Fiji. Unless otherwise notified herein in SD-ATELCOM, the holder of an Approved Maintenance Organisation Certificate shall comply with the standards contained in Annex 10 on the respective subject, as may be applicable.

(b) ICAO Annex 10-Volume I standards are applicable except for those facilities as indicated in paragraph 2.2 Table below.

(c) Annex 10-Volume II (except Chapter 5), Volume III (except Part 2) and Volume IV contain specifications that are relevant to those Contracting States that manufacture aircraft avionics and aeronautical equipment. Whilst Fiji does manufacture such equipment, its legislation provides for approval of equipment manufacturers in Contracting States acceptable to CAAF.

(d) On aeronautical equipment, design specifications must meet ICAO and local operational requirements. The equipment commissioning process shall include factory and site acceptance as well as addressing matters related to technical/operational readiness. These includes and is not limited to adequate competent staff, spares, tools and test equipments, and the Original Engineering Manufacturer (OEM) manuals, adequate backup power supplies and contingencies, and all means to ensure continuity of operation appropriate to the needs of the air traffic service or radio navigation service being supported ..

The OEM manuals include technical manuals, installation manual and maintenance procedures.

For a detailed guideline for the procurement and commissioning of CNS/ATM facilities, refer to Appendix 5A.

Note: The following appendices in Chapter 5 relates to the procurement and commissioning of CNS/ATM procedures.

Appendix 5A- Guidance Material for the procurement and commissioning of CNS/ATM Facilities **Appendix 5B-** CAAF Form GS409 -CNS/ATM Facility Procurement and Commissioning Checklist **Appendix 5C-** ICAO ANNEX 10 Facility Specifications & Requirements Checklist
Appendix 5D- FAT/SAT Operational Requirements Checklist

5. 2 Annex 10, Volume I

(a) Reference the below Table of Contents, the “Yes” column indicates aeronautical facilities required, installed/ commissioned and pertinent for operations in Fiji. The “No” column indicates otherwise and not available in Fiji

ICAO ANNEX 10 – VOLUME I	**Applicability**	
Contents	**Yes**	**No**
CHAPTER 1. Definitions	√	
CHAPTER 2. General provisions for radio navigation aids		
2.1 Aids to approach, landing and departure	√	
2.2 Short-distance aids	√	
2.3 Radio beacons	√	
2.4 Global navigation satellite system (GNSS) *Ground based component (GBAS) is not installed in Fiji*	√	
2.5 [Reserved]		
2.6 Distance measuring aids	√	

2.7 Ground and flight testing	√	
2.8 Provision of information on the operational status of radio navigation aids	√	
2.9 Secondary power supply for radio navigation aids and communication systems	√	
2.10 Human Factors considerations This ICAO recommendation shall be mandatory.	√	
CHAPTER 3. Specifications for radio navigation aids		
3.1 Specification for ILS	√	
3.2 Specification for precision approach radar system		√
3.3 Specification for VHF omnidirectional radio range (VOR)	√	
3.4 Specification for non-directional radio beacon (NDB)	√	
3.5 Specification for UHF distance measuring equipment (DME) As there are no DME/W installations in Fiji and ICAO recommends that there should be no DME/W installation after 1 January 1987, all reference to DME/W in section 3.5 is to be ignorned Differences	√	
3.6 Specification for en-route VHF marker beacons (75 MHz)		√
3.7 Requirements for the global navigation satellite system (GNSS)		√
3.8 [Reserved]		
3.9 System characteristics of airborne ADF receiving systems		√
3.10 [Reserved]		
3.11 Microwave landing system (MLS) characteristics		√
APPENDIX A. Microwave landing system (MLS) characteristics		√
APPENDIX B. Detailed technical specifications for the global navigation satellite system (GNSS)		√
1. Definitions		
2. General		
3. GNSS elements		
Figures for Appendix B		
ATTACHMENTS		
ATTACHMENT A. Determination of integrity and continuity of service objectives using the risk tree method.	√	
ATTACHMENT B. Strategy for introduction and application of non-visual aids to approach and landing	√	
1. Introduction	√	
2. Objectives of strategy	√	
3. Considerations	√	
4. Strategy	√	

ATTACHMENT C. Information and material for guidance in the application of the Standards and Recommended Practices for ILS, VOR, PAR, 75 MHz marker beacons (en-route), NDB and DME		
1. Introduction	√	
2. Material concerning ILS installations	√	
3. Material concerning VOR	√	
4. Precision approach radar system		√
5. Specification for 75 MHz marker beacons (en-route)		√
6. Material concerning NDB	√	
7. Material concerning DME	√	
8. Material concerning power supply switch-over times	√	
ATTACHMENT D. Information and material for guidance in the application of the GNSS Standards and Recommended Practices		
1. Definitions		
2. General	√	
3. Navigation system performance requirements	√	√
4. GNSS core elements	√	
5. Aircraft-based augmentation system (ABAS)		√
6. Satellite-based augmentation system (SBAS)		√
7. Ground-based augmentation system (GBAS)		√
8. Signal quality monitor (SQM) design		√
9. Status monitoring and NOTAM	√	
10. Interference	√*	
11. Recording of GNSS parameters		√
12. GNSS performance assessment		√
13. GNSS and database	√*	√*
14. Modeling of residual errors		√
Figures for Attachment D	√*	
ATTACHMENT E. Guidance material on the pre-flight checking of VOR airborne equipment.		
1. Specification for a VOR airborne equipment test facility (VOT)		√
2. Selection and use of VOR aerodrome check-points	√	
ATTACHMENT F. Guidance material concerning reliability and availability of radio communications and navigation aids		
1. Introduction and fundamental concepts.	√	
2. Practical aspects of reliability and availability	√	
ATTACHMENT G. **Information and material for guidance in the application of the MLS SARPS**		√
1. Definitions		
2. Signal-in-space characteristics-angle and data functions		
3. Ground Equipment		

4. Siting considerations		
5. Operational considerations on siting of DME ground equipment		
6. Interrelationship of ground equipment monitor and control actions		
7. Airborne equipment		
8. Operations at the limits of and outside the promulgated MLS coverage sector		
9. Separation criteria in terms of signal ratios and propagation losses		
10. Material concerning MLS installations at special locations		
11. Integrity and continuity of service – MLS installations at special locations		
12. Classification of MLS approach azimuth, elevation and DME ground facilities		
13. Computed center line approaches		
14. Application of Table G-15 service level objectives for MLS/RNAV operations		
15. Application of simplified MLS configurations.		
Tables for Attachment G		
Figures for Attachment G		
ATTACHMENT H. Strategy for rationalization of conventional radio navigation aids and evolution toward supporting performance-based navigation		
1. Introduction	√	
2. Objectives	√	
3. Considerations	√	
4. Strategy	√	

1.25 Annex 10, Volume II

(a) Reference the below Table of Contents, the "Yes" column indicates aeronautical facilities required, installed/ commissioned and pertinent for operations in Fiji. The "No" column indicates otherwise, and not available in Fiji.

(b) Items with a tick and asterisk (√*) indicate that the service provider is expected to have an appreciation of the subject matters.

ICAO ANNEX 10 – VOLUME II	**Applicability**	
	No	**Yes**
CONTENTS	√	
Chapter 1. Definitions.	√	
1.1Services	√	
1.2 Stations	√	
1.3 Communication methods	√	
1.4 Direction finding	√	
1.5 Teletypewriter systems	√	
1.6 Agencies	√	
1.7 Frequencies	√	
1.8 Data link communications	√	

1.9 Miscellaneous	√	
Chapter 2. Administrative Provisions Relating to the International Aeronautical Telecommunication Service		
2.1 Division of service	√	
2.2 Telecommunication — Access	√	
2.3 Hours of service	√	
2.4 Supervision	√	
2.5 Superfluous transmissions	√	
2.6 Interference	√	
Chapter 3. General Procedures for the International		
Aeronautical Telecommunication Service	√	
3.1 General	√	
3.2 Extensions of service and closing down of stations	√	
3.3 Acceptance, transmission and delivery	√	
of messages	√	
3.4 Time system. Difference UTC ± 5 secs and not ± 30 sec as stated in Annex 11 2.24.3. This value prescribed by the Authority in “Standards for the Certification of Air Traffic Services”	√	
3.5 Record of communications Only 3.5.1.3; 3.5.1.4; 3.5.1.5 applicable	√*	
3.6 Establishment of radio communication Only 3.6.2 applicable	√*	
3.7 Use of abbreviations and codes	√*	
3.8 Cancellation of messages	√	
Chapter 4. Aeronautical Fixed Service (AFS)		
4.1 General 4.1.2.2; 4.1.2.5 ITA –2 not applicable	√	
4.2 ATS direct speech circuits For standards refer Chapter 6 of ANNEX 11	√	
4.3 Meteorological operational channels and meteorological operational telecommunication networks	√	
4.4 Aeronautical fixed telecommunication network (AFTN)		
4.4.1 General	√	
4.4.2 Message format — ITA-2 ITA-2 not applicable as Telecom Fiji have decommissioned telegraphic links	√	
4.4.3 Address (ITA-2)	√	
4.4.4 Origin (ITA –2)	√	
4.4.5 Text (ITA-2)	√	
4.4.6 Ending (ITA-2)	√	
4.4.7 Tape feed (Torn Tape/Semi Automatic Installations)	√	

4.4.8 Stripped address	√	
4.4.9 Teletypewriter operating procedure	√	
— General	√	
— End-of-line functions	√	
— Duration of transmissions	√	
— Channel-check transmissions.	√	
4.4.10 Normal teletypewriter transmission procedures	√*	
4.4.10.1.2 — Form of transmission	√	
4.4.10.1.2.1 — Teletypewriter operation	√	
4.4.10.1.3 — Message format	√	
4.4.10.1.4 — Reprocessing procedures	√	
4.4.10.1.5 — Acknowledgement of receipt of messages	√	
4.4.11 Action on mutilated or improperly formatted messages detected in teletypewriter relay stations	√	
4.4.12 Correction of errors during tape preparation	√	
4.4.13 Correction of errors during message origination in cases where the message is flowing into the AFTN during preparation	√	
4.4.14 Predetermined distribution system for AFTN messages	√	
4.4.15 Message format — IA-5	√	
4.4.15.1.1 — Heading	√	
4.4.15.2.1 — Address	√	
4.4.15.2.2 — Origin	√	
4.4.15.3.1 — Text	√	
4.4.15.4 — see comment 4.4.16	√	
4.4.16 Action taken on mutilated messages in IA-5 detected in computerized AFTN relay stations 4.4.15.4 states “Except as provided in 4.4.15.5 to 4.4.15.6 and 4.4.16, the procedures of 4.4.8 and 4.4.9 to 4.4.13 shall be used for messages using IA-5 code”.		√
4.4.17 Transfer of AFTN messages over code and byte independent circuits and networks	√	
4.5 Common ICAO Data Interchange Network (CIDIN) - Information		
4.6 ATS message handling services (ATSMHS) – Refer ATSMHS over ATN - planned	√	
4.7 Inter-centre communications (ICC) – refers exchange of messages over ATN - planned	√	
Chapter 5. Aeronautical Mobile Service — Voice Communications Except for 5.2.1.8compliance with chapter 5 is the responsibility of the Approved Air Traffic Service Provider. The Approved Maintenance Organization – Telecommunications should note the contents for an understanding of operational requirement		√*

5.1 General 5.1.3 only applicable	√*	
5.1.8 — Categories of messages	√*	
5.1.9— Cancellation of messages.	√*	
5.2 Radiotelephony procedures	√	
5.2.1 General		
— Language to be used	√	
— Word spelling in radiotelephony.	√*	
— Transmission of numbers in radiotelephony.	√*	
— Transmitting technique 5.2.1.5.2; 5.2.1.5.4 applicable	√*	
— Composition of messages	√*	
— Calling	√*	
— Test procedures 5.2.1.8 applicable	√*	√*
— Exchange of communications.	√*	
5.2.2 Establishment and assurance of communications	√*	
— Communications watch/Hours of service	√*	
— Principles of network operation (HF communications)	√*	
— Frequencies to be used	√*	
— Establishment of communications	√*	
— Transfer of HF communications.	√*	
— Transfer of VHF communications	√*	
— Voice Communications failure	√*	
5.2.3 HF message handling	√*	
— General	√*	
—Transmission of ATS messages to aircraft	√*	
— Recording of air-ground communications on teletypewriter	√*	
5.2.4 SELCAL procedures	√*	
— General	√*	
— Notification to aeronautical stations of aircraft SELCAL codes .	√*	
— Pre-flight check.	√*	
— Establishment of communications	√*	
— En-route procedures	√*	
— SELCAL code assignment to aircraft.	√*	
5.3 Distress and urgency radiotelephony communication procedures.	√*	
5.3.1 General	√*	
5.3.2 Radiotelephony distress communications	√*	
— Action by the aircraft in distress	√*	

— Action by the station addressed or first station acknowledging the distress message	√*	
— Imposition of silence	√*	
— Action by all other stations	√*	
— Termination of distress communications and of silence	√*	
5.3.3 Radiotelephony urgency communications.	√*	
— Action by the aircraft reporting an urgency condition except as indicated in 5.3.3.4	√*	
— Action by the station addressed or first station acknowledging the urgency message	√*	
— Action by all other stations.	√*	
— Action by an aircraft used for medical transports.	√*	
— Action by the station addressed or by other stations receiving a medical transports message.	√*	
5.4 Communications related to acts of unlawful interference	√*	
Chapter 6. Aeronautical Radio Navigation Service		
6.1 General	√	
6.2 Direction finding		√
Chapter 7. Aeronautical Broadcasting Service – see chapter 5 above for comments. This is under the responsibility of SD-ATS		
7.1 General	√*	
7.1.1 Broadcast material.	√*	
7.1.2 Frequencies and schedules	√*	
7.1.3 Interruption of service.	√*	
7.2 Radiotelephone broadcast procedures	√*	
7.2.1 Broadcast technique	√*	
7.2.2 Preamble of the general call	√*	
Chapter 8. Aeronautical Mobile Service — Data Link Communications. Approved Maintenance Organization Service Provider will need to comply or ensure system capable of meeting the following.		
8.1 General		√
8.1.1 Composition of data link messages		√
8.1.2 Display of data link messages		√
8.2 CPDLC procedures PANS-ATM (under the responsibility of SD-ATS)	√*	
— Establishment of CPDLC	√*	
— Exchange of operational CPDLC messages	√*	
— Display of CPDLC messages	√*	
— Free text messages	√*	

— Emergencies, hazards and equipment failure procedures	√*	
Attachment A to Volume II — List of specialized COM terms and their definitions related to aeronautical telecommunications planning	√	
1. For general use		
2. For use in aeronautical fixed service planning		
3. For use in aeronautical mobile service planning		
Attachment B to Volume II – Guidance material for the transmission of long messages on the AFTN	√*	

1.26 Annex 10, Volume III

(a) Reference the below Table of Contents, the "Yes" column indicates aeronautical facilities required, installed/ commissioned and pertinent for operations in Fiji. The "No" column indicates otherwise.

(b) Annex 10 Volume III that comprises of Parts I and II. Part II on voice communication facility specification is applicable.

(c) Unless the approved service provider intends to design and manufacture equipment, the specifications contained in Part I are applicable to the design of facilities that a purchaser/user would require the manufacturers to adhere to. Failure to do so may result in a product that is non-compliant to the aviation safety standards. The letter "D" denotes design specifications pertaining to the manufacturers

ICAO ANNEX 10 VOLUME III	Applicability	
	Yes	No
PART I — DIGITAL DATA	D	
COMMUNICATION SYSTEMS	D	
CHAPTER 1. Definitions.	√	
CHAPTER 2. General.(to be developed)	D	
CHAPTER 3. Aeronautical Telecommunication Network.	√	
3.1 Definitions.	√	
3.2 Introduction.	√	
3.3 General	√	
3.4 System level requirements.	√	
3.5 ATN applications requirements	√	
3.6 ATN communication service requirements	√	
3.7 ATN naming and addressing requirements	√	
3.8 ATN systems management requirements	√	
3.9 ATN security requirements.	√	
Tables for Chapter 3	√	
Figure for Chapter 3	√	
CHAPTER 4. Aeronautical Mobile-Satellite(Route) Service(AMS(R)S)	D	
4.1 Definitions and; descriptions of channel types; general; system capabilities.	D	

4..2 General	D	
4.3 RF characteristics.	D	
4.4 Priority and pre-emptive access	D	
4.5 Signal acquisition and tracking	D	
	D	
4.6 Performance Requirements	D	
4.7 System Interfaces	D	
CHAPTER 5. SSR Mode S Air-ground Data Link	D	
5.1 Definitions relating to the Mode S sub network	D	
5.2 Mode S characteristics	D	
5.3 DCE and XDCE state tables	D	
5.4 Mode S packet formats	D	
Tables for Chapter 5	D	
Figures for Chapter 5	D	
CHAPTER 6. VHF Air-ground Digital Link (VDL)	D	
6.1 Definitions and system capabilities	D	
6.2 System characteristics of the ground installation	D	
6.3 System characteristics of the aircraft installation	D	
6.4 Physical layer protocols and services	D	
6.5 Link layer protocols and services	D	
6.6 Sub network layer protocols and services	D	
6.7 The VDL mobile sub network dependent convergence function (SNDCF)	D	
6.8 Voice unit for Mode 3	D	
6.9 VDL Mode 4	D	
Tables for Chapter 6	D	
Figures for Chapter 6	D	
Appendix to Chapter 6 References		
CHAPTER 7. Aeronautical Mobile Airport Communications System (AeroMACS)		√
7.1 Definitions		
7.2 Introduction		
7.3 General		
7.4 Radio Frequency (RF) characteristics		
7.5 Performance requirements		
7.6 system interfaces		
7.7 Application requirements		
CHAPTER 8. AFTN Network	D	
8.1 Definitions	D	
8.2 Technical provisions relating to teletypewriter apparatus and circuits	D	

used in the AFTN	D	
8.3 Terminal equipment associated with aeronautical radio teletypewriter channels operating in the band 2.5 – 30 MHz	D	
8.4 Characteristics of interregional AFS circuits	D	
8.5 Technical provisions relating to ATS message transmission	D	
8.6 Technical provisions relating to international ground-ground data interchange at medium and higher signaling rates	D	
Tables for Chapter 8		
Figures for Chapter 8		
CHAPTER 9. Aircraft Addressing System *This is under the responsibility of Airworthiness, Air Safety Department (SD-Airworthiness of Aircrafts).*	√	
Appendix to Chapter 9 A worldwide Scheme for the Allocation, Assignment and Application of Aircraft Addresses		
1 General		
2 Description of the scheme		
3 Management of the Scheme		
4. Allocation of aircraft addresses		
5. Assignment of aircraft addresses		
6. Application of aircraft addresses		
7. Administration of the temporary aircraft address assignments		
Table 9-1 Allocation of aircraft addresses to States		
CHAPTER 10. Point-to-Multipoint Communications	D	
10.1 Service via satellite for the dissemination of aeronautical information	D	
10.2 Service via satellite for the dissemination of WAFS products	D	
CHAPTER 11 HF Data Link	D	
11.1 Definitions and system capabilities	D	
11.2 HF data link system	D	
11.3 HF data link protocol	D	
11.4 Ground management sub-system	D	
Tables for Chapter 11		
Figures for Chapter 11		
CHAPTER 12 UNIVERSAL ACCESS TRANSCEIVER (UAT)		D
12.1 Definitions and overall system characteristics		
12.2 System characteristics of the ground installation		
12.3 System characteristics of the aircraft installation		
12.4 Physical layer characteristics		
12.5 Guidance material		
Tables for Chapter 12		
Figures for Chapter 12		

PART II — VOICE COMMUNICATION SYSTEMS	D	
CHAPTER 1. Definitions	√	
CHAPTER 2. Aeronautical Mobile Service	√	
2.1 Air-ground VHF communication system characteristics	√	
2.2 System characteristics of the ground installation 2.2.1.2 POWER. The output power of the transmitters may be expressed in Watts	√	
2.3 System characteristics of the airborne installation*(under the responsibility of Airworthiness)*	√	
2.4 Single sideband (SSB) HF communication system characteristics for use in the aeronautical mobile service.	√	
2.5 Satellite voice communications (SATVOICE) system characteristics	√	
Tables for Chapter 2	√	
Figures for Chapter 2	√	
CHAPTER 3. SELCAL System	√	
CHAPTER 4. Aeronautical Speech Circuits	√	
4.1 Technical provisions relating to international aeronautical speech circuit switching and signalling for ground-ground applications	√	
CHAPTER 5. Emergency Locator Transmitter (ELT) for Search and Rescue *(this falls under the responsibility of the Airworthiness Dept.)*		√
5.1 General		√
5.2 Specification for the 121.5 MHz component of emergency locator transmitters (ELT) for search and rescue		√
5.3 Specification for the 406 MHz component of emergency locator transmitters (ELT) for search and rescue		√
ATTACHMENTS		
Attachment to Part I — Guidance material for the VHF digital link (VDL		
1. Guidance material for the VHF digital link (VDL) ...		
2. System description		
3. VDL Principles		
3.1 Communications transfer principles		
3.2 VDL quality of service for ATN routing		
4. VDL ground station network concept		
4.1 Access		
4.2 Institutional issues concerning VDL ground station network operators		
4.3 VDL ground station equipment		
4.4 Ground station siting		
4.5 Ground station frequency engineering		
4.6 Ground station connection to intermediate systems		

5. VDL airborne operating concept		
5.1 Avionics		
5.2 VDL avionics certification		
5.3 Registration of aircraft with VDL network operators Figure for Attachment to Part I		
Attachment to Part II – Guidance material for communication systems		
1. VHF communications 1.1 Audio characteristics of VHF communication equipment 1.2 Off-set carrier system in 25kHZ, 50kHz and 100kHZ spaced channels		
1.3 Immunity performance of COM receiving systems in the presence of VHF FM broadcast interference		
2. SELCAL system		

1.27 Annex 10, Volume IV

(a) Reference the below Table of Contents, the "Yes" column indicates aeronautical facilities required, installed/ commissioned and pertinent for operations in Fiji. The "No" column indicates otherwise.

(b) Volume IV relates to facilities that are not currently relevant to aeronautical telecommunication service providers in Fiji.

(c) Implementation of ADS-B must meet the specification requirements stated in the latest version of the ADS-B Implementation and Operations Guidance Document (AIGD), ICAO Circular 326 and relevant ICAO docs pertaining to ADS-B. The ground and aircraft validation is required to verify the requirements of the ADS-B application in terms of data items and performance requirements. of the ADS-B system.

ICAO ANNEX 10 VOLUME IV	**Applicability** (Irrelevant)	
	Yes	**No**
Chapter 1. Definitions	√	
Chapter 2. General	√	
2.1 Secondary surveillance radar (SSR)	√	
2.2 Human Factors considerations.	√	
Chapter 3. Surveillance radar systems		√
3.1 Secondary surveillance radar (SSR) system characteristics		√
Chapter 4. Airborne collision avoidance system *(this is under the responsibility of Airworthiness Dept.)*		√
4.1 Definitions relating to airborne collision avoidance system		√
4.2 ACAS I general provisions and characteristics		√
4.3 General provisions relating to ACAS II and ACAS III		√
4.4 Performance of the ACAS II collision avoidance logic		√
4.5 ACAS use of extended squitter reports		√
Chapter 5. MODE S EXTENDED SQUITTER	√	
5.1 MODE S Extended squitter transmitter system characteristics	√	
Tables for chapter 5 – ADS-B Class A equipment characteristics	√	

Tables f5.2 ADS-B Class B equipment characteristics	√	
Table 5.3 Reception performance for airborne receiving systems	√	
Table 5.4 Mode S extended squitter airborne receiving system reporting requirements	√	
Figure ADS-B/TIS-B system functional model	√	
Chapter 6. Multilateration systems		√
6.1 Definitions		√
6.2 Functional requirements		√
6.3 Protection of the radio frequency environment		√
Chapter 7. Technical Requirements for airborne surveillance applications	√	
7.1 General requirements	√	

1.28 Annex 10, Volume V

(a) Reference the below Table of Contents, the "Yes" column indicates aeronautical facilities required, installed/ commissioned and pertinent for operations in Fiji. The "No" column indicates otherwise.

(b) All frequency bands currently allocated to civil aviation are deemed as applicable from the view of the protection of frequencies, in support of ICAO policies as stated in Doc 9718–AN/957 Handbook on Radio Frequency Spectrum for Civil Aviation and includes a statement of approved ICAO policies.

ICAO ANNEX 10 VOLUME V	Applicability	
	Yes	No
CHAPTER 1. Definitions	√	
CHAPTER 2. Distress frequencies (under SD-SAR)		√
2.1 Frequencies for emergency locator transmitters (ELTs) for search and rescue *(is under the responsibility of the Airworthiness Dept)*		√
2.2 Search and rescue frequencies (under SD-SAR)		√
CHAPTER 3. Utilization of frequencies below 30 MHz	√	
3.1 Method of operations	√	
3.2 NDB frequency management	√	
CHAPTER 4. Utilization of frequencies above 30 MHz	√	
4.1 Utilization in the band 117.975 – 137 MHz	√	
4.2 Utilization in the band 108 – 117.975 MHz	√	
4.3 Utilization in the band 960 – 1 215 MHz for DME	√	
4.4 Utilization in the band 5 030.4 – 5 150.0 MHz Utilized by MLS.	√	
Attachment A. Considerations affecting the deployment of LF/MF frequencies and the avoidance of harmful interference	√	
Attachment B Guiding principles for long distance operational control communications	√	

APPENDIX 5A
Guidance Material for the procurement and commissioning of CNS/ATM Facilities

This document is an essential guide to prepare the AMO applicant in the acquisition and commissioning of CNS/ATM facilities and equipment in meeting all ICAO and local requirements.

The guideline adopts the ICAO Technical Corporation Bureau's Procurement process for field projects. (Refer Appendix 5B - CAAF Form GS409 -CNS/ATM Facility Procurement and Commissioning Checklist).

For facilities and services used by the ANS Provider that are to be installed, commissioned and maintained by organizations other than the AMO applicant, the AMO applicant will coordinate with the aforementioned organisation to ensure the process described herein in Appendix 5 is adhered to.

1. PRE-PLANNING STAGE –Initiate project, determine requirements and bidder criteria.

The design specifications for aeronautical equipment shall meet all ICAO and local requirements. It is to be noted that a number of standards have been established for typical systems in ATM, such as those produced by the European Organisation for Civil Aviation Equipment (EUROCAE) for Europe and RTCA for the US. Reference to equipment technical specifications, compliance to the standard is set as a requirement to ensure that the required compliance will be achieved.

All equipment technical specifications and user requirements for the facility will be determined by the ANSP project team which will comprise of the technical and operational team. The operational and technical requirements specifications will be based on the existing and future requirements.

The scope, objectives, strategy and budget is to be established for the project. Key milestones are set in the project programme as a means to identify key project activities and track project accomplishments and compare project progress to planned targets. Upon completion of a key milestone, there is a sign off by the ANSP. It is recommended that the Authority be involved at each milestone sign-offs in order to deal with the assessment rigor and compliance to standards and regulatory requirements, thus increasing the chances of project success.

A safety assessment shall be conducted to mitigate the safety risks on the existing system and its limitations, and incorporating the new operational and technical requirements.

The technical safety case assessment will also assess the safety implications of the additional user requirements with the use of new technologies in meeting the operational requirements. A comprehensive safety assessment shall be conducted by the technical team in collaboration with the users for each stage of the project. Records of all safety assessments of the facility shall be filed separately and stored.

The criteria for the optimum supplier tender bidders list will be determined in the pre-planning phase.

- Qualification criteria - may include the pre-defined legal and financial criteria where this ensures that the tenderer can deliver the work.
- Qualitative criteria-requires the tenders have to comply with all the ICAO mandatory requirements and local requirements and will be rejected if they fail any of them. Otherwise, all desirable requirements are not mandatory and the tenders will still be considered if they do not comply with one or more of these requirements. However it may have an impact on the tender evaluation. The final evaluation based on the qualitative criteria is the preferred option.
- Financial criteria- may be the determinant for the final evaluation that is based on the tender price. If price is the final evaluation, then the price offered is adjusted for deviations from the desirable requirements using pre-defined formulae. A maximum adjusted price can then be specified as rejection criteria, as well as a maximum number of failed desirable requirements

2. PLANNING STAGE – Conduct tender, evaluation of tender and select the supplier.

The tender document is prepared and sent to the bidders and may contain the following details:

- Information of the ANSP buyer (to whom the quote is to be returned to)
- The due date for submission
- The description of equipment
- The specification requirements – ICAO and local requirements.
- The quantity required
- The proposed payment terms and currency
- The shipping details
- The buyers terms and conditions

The bidders may be invited to the site to conduct a site survey in order to fully understand the tender requirements before submitting a response.

The response from the supplier should include

- Price. Note the currency stated
- The lead time required
- If any minimum order of quantities required
- The validity period of the quote
- The shipping costs (if not already included in the price)
- The country of origin
- Customs tariff code (if applicable)
- Any international traffic in arms regulations(ITAR) or Export Administration Regulations (EAR) licensable requirements(these are two important United States export control laws that affect the manufacturing, sales and distribution of technology)
- confirmation of agreement or otherwise to the buyers terms and conditions

Using the criteria determined earlier, a more thorough evaluation of the supplier's capability for its technical expertise and production, quality, cost, delivery (schedule), financial stability, past performance (with buying organisation or reference from other customers for the *same product* which should be used by other ANSP), and schedule to requirement.

Negotiations on the technical and financial aspects may occur at this stage where the ANSP asks tenderers to adapt proposals and resubmits documentation following each round of negotiation with the same assessment evaluation process applied.

Once the final bidders are received, a technical and commercial evaluation will be conducted and summarized and the supplier is selected.

3. CONTRACT NEGOTIATION – Prepare contract, negotiations, signing of contract.

The project schedule and deliverables are to be finalized after the final system design review is conducted and agreed by both parties prior to the formalization of the contract.

The contract must include penalties or liquidated damages on the supplier when project deliverables are not satisfactorily met.

Final negotiations on the technical deliverables and the final price is conducted before signing of the contract. Both parties will agree before signing the contract.

Upon completion of a key milestone, there is a sign off by the ANSP. The signing of the contract is considered a key milestone of the project.

The supplier shall be required to mitigate safety concerns raised by the ANSP when required.

The safety case assessment report shall be submitted to the Authority at least 14 days before the project implementation.

Letters of regret to unsuccessful bidders are prepared at this stage.

4. IMPLEMENTATION Factory Acceptance Testing (FAT) is conducted at the factory and equipment are shipped to Fiji before the Site Acceptance Testing (SAT), Reliability Acceptance Testing (RAT) and commissioning phase.

Project Implementation is a key phase in a major delivery as it is where there is the opportunity for parties to work together to best ensure success, in particular to allow the end users to participate in the process. This is achieved by using effective communication, change management for unforeseeable variation, knowledge sharing, performance monitoring, maximizing value and opportunities, and ensure dispute resolution.

Key milestones for FAT, SAT and COMMISSIONING and RAT and activities and dates are monitored and signed off upon successful implementation.

It is to be noted that during all phases of the project, safety assessments shall continue to be conducted and safety risks mitigated to an acceptable safe level, and documented accordingly.

For any safety concerns raised after the commissioning, the ANSP shall be required to carry out a safety assessment and mitigate the risks to an acceptable level.

4.1 FAT: Factory Acceptance Testing of the system is a milestone achievement.

Procedures on Factory Acceptance and Testing will be established by the supplier, and reviewed by the ANSP and both parties (the supplier and the ANSP) will have to agree on the procedures at least 30 days before the FAT.

The FAT checklist shall ensure that all local and ICAO specification requirement is included and procedures to test each specification shall be agreed by both parties prior to the FAT. *Refer Appendix 5C for the ANNEX 10 Facility Specifications Requirements Checklist and Appendix 5D for the FAT/SAT Operational Requirement Checklist.*

Payments for FAT milestone will be arranged prior.

The FAT training shall be conducted at the factory prior to the actual FAT for operators and technical personnel. For the Technical training, the trainees need to be assessed and shall obtain scores of at least 70%. A copy of the training report, a set of all training materials, attached with copies of the training certificate, and details of the trainer shall be submitted to the Authority.

The FAT shall be conducted at the factory of the supplier and each mandatory specification shall be tested and signed off upon acceptable satisfactory performance and included in the FAT document. For any unsatisfactory specification, this would have been determined and agreed by both parties and signed and may be tested at SAT unless it is agreed by the ANSP.

The FAT will test the spares and test equipments that are included in the project deliverables.

4.2 SAT. The Site Acceptance Testing of the system is a milestone achievement.

Procedures on Site Acceptance and Testing needs to established by the supplier, and reviewed by the ANSP and both parties will have to agree on the procedures at least 30 days before the SAT.

Check for delivery of the equipment and facilitation of customs clearances will be organized prior to SAT.

The SAT training will be conducted by the supplier at the site for the operators and technical personnel. For the Technical training, the trainees need to be assessed and obtain scores of at least 70%. A copy of the training report, a set of all training materials, attached with copies of the training certificate, and details of the trainer will be submitted to the Authority.

The testing of the all operational and technical specifications of the equipment shall be conducted at the site. Upon successful testing of the specifications, the SAT report will be signed off and this will be included in the SAT document.

If mandatory requirements are not met, all efforts shall be made to resolve the deficiencies until it is tested and performance is acceptable. *Refer to refer Appendix 5C -ANNEX 10 Facility Specifications requirements checklist and .Appendix 5D –FAT/SAT Operational Requirement Checklist.*

Payments of the SAT milestone will be arranged prior.

The SAT will test the spares and test equipments that are included in the project deliverables. The copies of OEM documentation will be checked at the SAT. This will include and is not limited to the installation manual, maintenance manual, technical manual, operation manual and the operator's handbook.

4.3 COMMISSIONING -The Commissioning of the facility is the major milestone achievement.

The commissioning phase shall have a transition plan with details on the duration and date/time for the actual mimicking, ghosting, cut-over from the existing system to the new system and the decommissioning of the former system. The transition plan will be documented and signed in agreement by the ATM operators.

The commissioning of ground navigational aids is determined by the outcome of the Flight Inspection. The commissioning

of the CNS/ATM facility is determined by the successful completion of FAT and SAT
of all the components of the system, and in meeting the technical and operational requirements. The commissioning document shall be signed off by both the ANSP's operational and the technical team.

The commissioning report will be provided by the ANSP project manager and this will include the details of the implementation- the FAT results, SAT results, Commissioning results, and the wiring and route schematic, if applicable. A copy of the commissioning report shall be submitted to the Authority within 14 days after the system has been commissioned.

The project will be handed over by the ANSP technical project team to its maintenance team with the necessary documentation that includes the project commissioning report, ANSP Maintenance procedures manual, ANSP Route Schematics document, and a sign-off documentation of the project by the ANSP technical projects unit to the maintenance unit.

After the facility is commissioned, technical personnel are required to undergo OJT and facility rating assessment, if applicable.

Payments of the commissioning milestone will be arranged prior.

In some cases, the final payment of the project is subjected to successful completion of the Reliability Acceptance Testing (RAT). The RAT period is usually 30 days after commissioning.

APPENDIX 5B *CNS/ATM Facility Procurement and Commissioning Checklist* (*CAAF form GS409)*

CIVIL AVIATION AUTHORITY OF FIJI
ISO 9001:2015 Certified

CNS/ATM FACILITY PROCUREMENT AND COMMISSIONING CHECKLIST
GS409

CNS/ATM FACILITY: **LOCATION:**

PROJECT MANAGER: **DATE of IMPLEMENTATION:** Click or tap to enter a date.

CHECKLIST	SIGN OFF (Yes/No)	REMARKS
PLANNING		
TEAM MEMBERS:		
1. Safety Case report covering the technical and operational issues shall be submitted to the Authority at least 14 days prior to implementation date.	Select	
2. Facility specification and compliance to ICAO requirements. *Refer checklist GS410.*	Select	
3. Local and operational user requirements.	Select	
4. System Design Review and contractual project deliverables	Select	
5. Project Schedule and key milestones	Select	
6. Contractual agreement signed. *contract to include penalty clause	Select	
FACTORY ACCEPTANCE TESTING (FAT)		
TEAM MEMBERS: *LOCATION/DATE:*		
1. FAT procedures and documentation (submitted a month prior to FAT)	Select	
2. FAT Training and report	Select	
3. FAT - Did the specifications meet requirement? *Refer CAAF Form GS410*	Select	
4. FAT Report	Select	
SITE ACCEPTANCE TESTING (SAT)		
TEAM MEMBERS: *LOCATION/DATE:*		
1. SAT procedures and documentation signed off	Select	
2. SAT Training and report	Select	
3. SAT - Did the specifications meet requirements? *Refer CAAF Form GS410*	Select	
4. SAT Report	Select	

COMMISSIONING		
TEAM MEMBERS: *LOCATION/DATE:*		
1. Commissioning Transition Plan- Ghosting, Mimicking, Cut-over, and Decommissioning of the old(former) system	Select	
2. Commissioning Report -signed off by the technical team and the ATM Operations team. A copy of the commissioning report to be submitted to the Authority.	Select	
3. Training- Submit copy of the training report and copies of certificates, training materials and instructors CV. (technical and operations)	Select	
4. Rating Assessment Plan- Rating Assessments Plan	Select	
5. Documentation (Confirm number of copies and holders)	Select	
• OEM Technical Manual		
• OEM Installation Manual	Select	
• OEM Operation Manual	Select	
• OEM Maintenance Manual	Select	
• OEM Training Manual etc.	Select	
• Fiji Airports -Commissioning Report	Select	
• Fiji Airports -Route Schematics etc	Select	
• Fiji Airports Maintenance Procedures.	Select	
• Records of Hand-over of Project to the Maintenance Unit	Select	
• ATC Operations-each workstation to have its own Operators/User's Manual, if applicable.	Select	
• Fiji Airports Local Contingency procedures.	Select	

VERIFIED by ANSI:	**DATE**: Click or tap to enter a date.

APPENDIX 5C – FACILITY SPECIFICATION & REQUIREMENTS CHECKLIST

(*CAAF Form GS410)*

Reserved

APPENDIX 5D: FAT/SAT OPERATIONAL REQUIREMENTS CHECKLIST

Reserved

2. Safety Management

2.1 General

(a) The level of communications, navigation and surveillance facilities and systems as well as procedures concerned, are to be appropriate and adequate for maintaining an acceptable level of safety in the provisions of air navigation services. Where a service is provided by contractual arrangements, the contractor is accountable for the safety functions. However, the responsibility for safety rests with the approved maintenance organization

(b) The requirements in respect of services, systems applicable to the provision of air navigation services should be established on the basis of regional air navigation agreement in order to facilitate the harmonisation and inter-operability of system in adjacent states.

(c) To ensure that safety in the provision air navigation services is maintained, formal and systematic safety management programmes are to be implemented. Where appropriate, safety management programmes should be established on the basis of regional air navigation agreement.

(d) Guidelines on safety management policies and principles are provided in Appendix 6A to this chapter.

Note: Working examples are provided in Appendix 6B and 6C

2.2 Objectives

(a) The objectives of safety management are to ensure:

(1) The established level of safety, applicable to the provision of air navigation services

(2) Safety-related enhancements are implemented whenever necessary.

(b) An acceptable level of safety and safety objectives applicable to the provision of services within airspaces and at aerodromes should be established on the basis of regional air navigation agreements where applicable.

Note: Working examples are provided in Appendix 6B and 6 C

2.3 Safety management activities

(a) A safety management programme that include, amongst other things, the following with respect to aeronautical telecommunication services for the provision of air navigation shall be in place:

(1) Safety assessments in respect of the planned introduction of new equipment systems or facilities, and new or changed operating procedures;

(2) A mechanism for identifying actual and/or potential hazards and to determine the need for remedial action including enhancing measures;

(3) Ensure that remedial action necessary to maintain an acceptable level of safety is implemented; and

(4) Provide for continuous monitoring and regular assessment of the safety level achieved.

(b) All activities undertaken in a safety management programme shall be fully documented. All documentation shall be retained for such period of time as specified by the Authority.

2.4 Monitoring of safety levels

(a) The collection and evaluation of safety-related data shall be as follows-

(1) Collect and evaluate data from as wide a range of sources as possible for use in safety monitoring programmes, as the safety-related consequences of particular procedures or systems may not be realized until after an incident occurred.

(2) Establish a formal incident reporting system for personnel to facilitate the collection of information on actual or potential safety hazards or deficiencies related to the organizations authorized scope of responsibilities, including procedures, communications, navigation and surveillance systems and other safety significant systems and equipment as well as technicians work loads.

(3) Ensure that any information from its safety reporting system falling within the definition of mandatory occurrence report as per Air Navigation Regulations 71 is notified to the Authority via the quickest possible means, either verbally or electronically, and also submit a report via CA 338 form within 96 hours.

(b) Review of incident and other safety-related reports shall comprise of-

(1) Safety-related reports, communicated to the approved maintenance organization, concerning the operation of services, in order to detect any adverse trend in the number and types of incidents which occur;

(2) Reports concerning the serviceability of ATS and Radio Navigation facilities and systems, such as failures and degradations of communications, surveillance, navigation and other safety significant systems and equipment, in order to detect any trend in the operation of such systems which may have an adverse effect on safety.

Note: Working examples provided in Appendix 6F, 6G, 6H

2.5 Safety reviews

(a) General requirements shall be to-

(1) Conduct safety reviews of individual units with the organization, on a regular and systematic basis;

(2) Ensure personnel conducting safety reviews are qualified through training, experience and expertise, and having a full understanding of relevant SARPS and related documents, safe operating practices and Human Factors principles

(b) The scope of the Approved Maintenance organization safety reviews, shall include, at least, the following issues:

(1) Regulatory issues to ensure that:

(i) Approved Maintenance Organization's manuals, procedures and instructions are complete, concise, and up-to-date;

(ii) Facilities or systems for the provision a service or services so approved to provide, adequately meets the operational requirements for that service;

(iii) Personnel's workloads do not exceed defined, safe levels and that procedures are in place for regulating work load allocation;

(iv) Procedures to be applied in the event of failures or degradations of communications, navigation and surveillance systems, are practicable and will provide for an acceptable level of safety; and

(v) Procedures for the reporting of incidents and other safety-related occurrences are implemented, that the reporting of incidents is encouraged and that such reports are reviewed to identify the need for any remedial action.

(2) Operational and technical issues to ensure that:

(i) The environmental working conditions meet established levels for temperature, humidity, ventilation, noise and ambient lighting, and do not adversely affect personnel's performance;

(ii) Equipment, including input/output devices for automation systems, are designed and positioned in the working position in accordance with ergonomic principles;

(iii) Communications, navigation, surveillance and other safety significant systems and equipment -

- Are tested on a routine basis;
- Meet the required level of reliability and availability as defined by the appropriate authority;
- Provide for the timely and appropriate detection and warning of system failures and degradations;

- Include documentation on the consequences of system, sub-system and equipment failures and degradations;
- Include measures to control the probability of failures and degradations; and
- Include adequate back-up facilities and/or procedures in the event of a system failure or degradation; and
- Detailed records of systems and equipment serviceability are kept and periodically reviewed.

Note- The specific meanings of "reliability" and "availability are given in 2.2 - Definitions.

(c) Licensing and training issues to ensure that:

(1) Technicians are adequately trained and where applicable licensed with valid ratings;

(2) Technician's competency is maintained by adequate and appropriate refresher training, including the requirements for post accident investigations;

(3) Technicians are provided relevant and adequate training in order to ensure efficient teamwork;

(4) The implementation of new or amended procedures, and new or updated communications, surveillance and other safety significant systems and equipment is preceded by appropriate training and instruction;

(5) Technicians competency in the English language is satisfactory in relation to communication and report writing.

2.6 Safety assessments

(a) Need for safety assessments- A safety assessment shall be carried out in respect of any significant safety-related change or safety-related changes to services or facilities including, enhancements to systems, temporary tests, re-siting of a facility, change of frequency, change of identification, or the temporary suspension of a service, is only effected after a safety assessment has demonstrated that an acceptable level of safety will be met and users have been consulted.

(b) Implementation of new communications, surveillance or other safety-significant systems and equipment, including those providing new functionality and/or capabilities.

(c) Paragraphs (a) and (b) above, shall only be effected after users have been consulted and the Authority is satisfied that the safety assessment has demonstrated that an acceptable level of safety will be met.

(d) For (c) above, the safety assessment report shall be made available to the Authority no less than 14 days in advance of the effective date of implementation.

2.7 Safety-significant factors

Safety assessment takes into account all factors determined to be safety-significant, including any of the below as relevant:

(1) Suitability of facilities and systems and their performance characteristics, including reliability, availability to meet air-space operational requirements;

(2) Type and capabilities of surveillance system, and the availability of systems providing controller support and alert functions; and

2.8 Safety-enhancing measures

(a) Any actual or potential hazard related to the provision of a service/s approved to perform, whether identified through a safety management activity or by any other means, is assessed and classified for its risk acceptability.

(b) Except when the risk can be classified as acceptable, a matter of priority and as far as practicable, implement appropriate measures to eliminate the risk or reduce the risk to a level that is acceptable.

(c) If it becomes apparent that the level of safety applicable to service is not, or may not be achieved, a matter of priority and as far as practicable, implement appropriate remedial measures.

(d) An evaluation of any remedial measure implemented and assessing its effectiveness in eliminating or mitigating a risk shall be conducted.

Note: Appendix 6G for working example of risk assessment

Appendix 6A

Safety Management Policies and Principles

Introduction

Safety Management System is a coherent and comprehensive organization strategy for the management of safety. Safety is a condition where risks are managed to acceptable levels.

Safety Management Policies and Principles should be promulgated in a controlled document.

A safety function should be established within the organization. Whether this takes the form of a single person or committee will depend to a large degree upon the nature and scale of the operation. In cases a service is provided on contract, the contractor is accountable for the safety functions whilst the responsibility for safety remains with the organization as prescribed by Fiji legislation.

An organization should have systematic procedures for encouraging and processing reports on matters having potential effect on the safety of operations.

This appendix provides a standard set of generic Safety Management Policies and Principles which may be used as guidance material to develop one applicable for maintenance organization

Safety Management Approach

Safety Management is that parts of the overall management function which determines and implements an organization's safety policy.

The implementation of a safety management system by an organization should follow a practice, which ensures that:

(a) **Safety policy statements are defined:** these statements should define the organization's fundamental approach to the management of safety and should commit the organization at the highest level to the fulfillment of its stated safety policy.

(b) From the policy statements the organization should define its safety management principles: the principles should specify the safety objectives with which the organization intends to comply to implement its policy statements.

(c) Having defined the policy statements and principles, the organization should produce procedures that document the processes required to meet the stated safety objectives contained in the policy and principles and those accountable for their achievement.

Safety Management Policy Statements

The Policy Statements of an organization should define the fundamental approach to be adopted for managing safety and the organization's commitment to safety.

Note The following statements may be produced separately or as a single all embracing statement.

Safety Objective

An organization should have a top-level commitment to a business objective for safety that minimises its contribution to aviation accident risk to as low as reasonably practicable.

Rationale: *This should be the key policy statement defining what the organization is striving to achieve through its safety management system.*

Note: Where risk is concerned there is no such thing as absolute safety. 'As low as reasonably practicable' means that risk in a particular activity can be balanced against the time, cost and difficulty of taking measures to avoid the risk. The greater the risk to safety, the more likely it is that it is reasonable to go to substantial effort to reduce it. It is implicit, therefore, those hazards have to be identified and the risk assessed before a judgment can be made upon their tolerability.

Safety Management

An organization should have a commitment to the adoption of an explicit, pro-active approach to systematic safety management.

Rationale: An intuitive or ad hoc approach to safety is not acceptable.

Safety Responsibility

An organization should have a safety policy statement that confirms that everyone has an individual responsibility for the safety of their own actions, and managers are accountable for the safety performance of the activities, products, services etc. in their charge. Additionally, the organization should identify who is ultimately accountable for safety and how that accountability is delegated.

Rationale: *The safety management system depends upon individuals understanding and accepting their delegated responsibility within the organization. Accountability for safety belongs to all levels of management and the attainment of satisfactory safety performance requires the commitment and participation of all members of the organization. Everybody within an organization should be aware of the consequences of mistakes and strive to avoid them. Management should foster this basic motivation within members of an organization so that everybody accepts their responsibility for safety.*

Safety Priority

An organization should have a safety policy statement committing it to ensuring that safety is given the highest priority when considering commercial, operational, environmental or social pressures.

Rationale: *The safety management system should clearly address and resist misguided business pressures. Conversely, the safety management system should ensure that safety is not used to support commercial, financial, environmental etc. decisions inappropriately, which have little real safety significance. If the term 'safety' is abused in this way the safety management system cannot be focused on controlling the real risks.*

Safety Standards and Compliance

An organization should have a safety policy statement committing it to complying with all appropriate safety standards and requirements.

Rationale: *Compliance with safety standards and requirements can form part of a robust safety argument and facilitates the safety assessment process.*

Externally Supplied Products and Services

An organization should have a safety policy statement committing it to ensuring that the safety assurance processes used by its external suppliers satisfy its own safety management standards and safety requirements.

Rationale: *A safety assessment requires input from all phases of a product or service development. For externally supplied products or services the external supplier must understand and comply with the organization's safety and safety management system requirements.*

Safety Management Principles

The following safety management principles reflect Industry best practices. They define the scope of a safety management system. They provide a framework for the establishment of processes to identify safety shortcomings, so that remedial action can be taken, and provide assurance that safety levels are being met or improved. The Principles address three main issues:

Safety Achievement: specifying the means by which the required safety performance is achieved.

Safety Assurance: specifying the means for providing assurance that risks are being managed properly and effectively.

Safety Promotion: specifying the means by which safety issues are communicated within an organization to eliminate unnecessary risks and avoid repeat errors or risks.

Safety Achievement Safety Levels

Whenever practicable, quantitative safety levels should be derived, maintained, and improved for all aviation products and services.

Rationale: *If the safety performance of a service or product is to be assessed and monitored it is necessary to define the safety objectives that need to be met.*

System Safety Assessment

An organization should assess all existing operations, and proposed changes, additions or replacements, for their safety significance. If this assessment shows that the new or changed system has safety significance, safety assurance is required. Formal Safety assessment should then be conducted on the safety significant changes and the results documented to ensure that full consideration is given to all aspects of aviation risk prior to introduction into use.

Rationale: *The analysis process is conducted during development of the system, service or product to establish safety requirements. The safety assessment process is used to demonstrate that these requirements are met.*

System Safety Assessment Records

An organization should identify and record the safety requirements for a service or product, the results of the safety assessment process and evidence that the safety requirements have been met. These records need to be maintained throughout the life of the service or product.

Rationale: *The safety assessment documentation should provide the evidence to the organization upon which it will base its decision whether it is safe to use the service, or product Maintenance of these records throughout the life of the service or product provides ongoing assurance that it continues to meet its original safety requirements and that any remaining risks are adequately controlled.*

Competency

An organization should ensure that staff remains adequately trained, competent and qualified for the job they are required to do.

Rationale: *Staff competence is fundamental to safety.*

Safety Assurance Safety Audits

Organizations should routinely carry out safety audits to identify opportunities for improvement, to provide management with assurance of the safety of activities and to confirm conformance with the safety management system.

Rationale: *This should be a routine part of business activity. This is the pro-active safety management mechanism by which any potential risks associated with an existing service or product can be identified and controlled.*

Safety Monitoring

An organization should have in place suitable monitoring arrangements so those unacceptable trends in service or product performance can be recognized and be subject to remedial action.

Rationale: *Service and product performance can deteriorate, or the environment within which they operate can change. Such changes need to be detected, assessed and managed.*

Safety Significant Events

Occurrences experienced during the operation of a service or product that are considered to have safety significant implications, should be investigated immediately and any necessary corrective action taken.

Rationale: *If lessons are to be learnt and remedial action is to be taken promptly, safety occurrences need to be investigated in a timely manner by the organization. Some events may require reporting to the safety regulator by law.*

Safety Promotion Lesson Dissemination

An organization should ensure that lessons learnt from its safety occurrence investigations, and the case histories or experience from other organizations, are distributed widely and actioned to minimize the risk of recurrence.

Rationale: *It is essential that lessons should be beamed and then remembered, so that the chance of recurrence is reduced. Including the results of such lessons in training programmes will raise staff awareness levels.*

Safety Improvement

An organization should have in place arrangements that actively encourage staff to identify potential hazards and propose solutions. It should make appropriate changes, in respect of identified hazards, where safety can be improved.

Rationale: *This requires an effective means of communicating safety issues and the development of an internal safety culture that encourages every member of staff to focus on the achievement of safety, and to report errors and deficiencies without fear of punitive actions against them*

Appendix 6B

Example Safety Policy (1)
(Excerpt from CAP 716 (UK))

SAMPLE -Organization pledges:

- To set our safety standards at or above the level required by the Regulator or customer.
- To seek to ensure that safety standards are not eroded by commercial drivers.
- To be an open, honest and straightforward organization.
- To establish and promote a just culture such that staff is encouraged to report safety concerns without fear of inappropriate punitive action.
- To make effective use of our resources and do things right first time.
- To provide the working environment and incentives needed to attract, retain and develop skilled and committed staff capable of performing work to the highest safety standards.
- To provide incentives for staff to work in accordance with good safety practice, and disincentives for those working contrary to established good safety practice.
- To provide staff with appropriate tools, procedures and time to carry out tasks in accordance with procedures.
- To practice what we preach.

SAMPLE -Organization will:

- Establish a Safety Management System.
- Establish, and publish, a disciplinary policy.
- Establish, and publish, management safety accountabilities.

Appendix 6C

Example Safety Policy (2)
(www.gainweb.org)

SAMPLE-Organization is proud to establish the following policy statement: CORE VALUES

Among our core values, we will include:

- Safety, health and the environment.
- Ethical behaviour.
- Valuing people.

FUNDAMENTAL BELIEFS

Our fundamental safety beliefs are:

- Safety is a core business and personal value.
- Safety is a source of our competitive advantage.
- We will strengthen our business by making safety excellence an integral part of all flight and ground activities.
- We believe that all accidents and incidents are preventable.
- All levels of line management are accountable for our safety performance, starting with the CEO.

CORE ELEMENTS OF OUR SAFETY APPROACH

The five core elements of our safety approach include:

Top Management Commitment

- Safety excellence will be a component of our mission.
- Senior leaders will hold line management and all employees accountable for safety performance.
- Senior leaders and line management will demonstrate their continual commitment to safety.

Responsibility & Accountability of all Employees

- Safety performance will be an important part of our management/employee evaluation system.
- We will recognize and reward flight and ground safety performance.
- Before any work is done, we will make everyone aware of the safety rules and processes as well as their personal responsibility to observe them.

Clearly Communicated Expectations

- We will have a formal written safety goal, and we will ensure everyone understands and accepts that goal.
- We will have a communications and motivation system in place to keep our people focused on the safety goal 2002.

Auditing & Measuring

- Management will ensure regular conduct safety audits are conducted and that everyone will participate in the process.
- We will focus our audits on the behaviour of people as well as on the conditions of the operating area.
- We will establish both leading and trailing performance indicators to help us evaluate our level of safety.

Responsibility of All Employees

- Each one of us will be expected to accept responsibility and accountability for our own behaviour.
- Each one of us will have an opportunity to participate in developing safety standards and procedures.
- We will openly communicate information about safety incidents and will share the lessons with others.
- Each of us will be concerned for the safety of others in our organization.

THE OBJECTIVES OF THE SAFETY PROCESS

- ALL levels of management will be clearly committed to safety.
- We will have clear employee safety metrics, with clear accountability.
- We will have open safety communications.
- We will involve everyone in the decision process.
- We will provide the necessary training to build and maintain meaningful ground and flight safety leadership skills.

The safety of our employees, customers and suppliers is of Company strategic importance.

Signed Date

Appendix 6D

SAMPLE-Organization

Agenda for Safety Committee/Group meeting

1. Meeting opened at:
2. Attendance
3. Apologies
4. Ratification of the previous minutes of the Safety Committee
5. Business arising from previous minutes

(a) Action taken:

(1) Apron oil spill (Maintenance)

(2) Mix up with Manufacturers part number (Maintenance)

(3) Training regarding use of fire extinguishers in enclosed spaces (All Staff)

(4) Contractor failure to comply with organization safety directive (Safety Officer / Contractor).

(b) Committee Member 's reports

(1) Safety Officer

(2) Flying operations

(3) Maintenance

(4) Administration

(5) Contractors

(c) General Business

Amendment to Company Safety Policy Document – distribution to all staff.

6. Meeting closed at:
7. Distribution List:

(1) CEO

(2) Bulletin Board

(3) Committee members

(4) Report instigator

(5) File

Appendix 6E

SAMPLE-Organization

Minutes for Safety Committee/Group meeting

1. Meeting opened at: 08:30

2. **Attendance** see attendance book

3. **Apologies** Mr. Sam Meager – Sameday Safety Co

4. **Ratification of the previous minutes of the Safety Committee**
Proposed - Jane Samuel Seconded - Geoff Watt

5. **Business arising from previous minutes**

Action taken:

5.1 Mix up with Manufacturers part number (Maintenance). This matter is now resolved and details of the new part numbers have been incorporated into the maintenance schedule. No further action is required.

5.2 Training regarding use of fire extinguishers in enclosed spaces (All Staff). This training took place at intervals over the week commencing 14/5/00. A revised list of personnel trained in the use of fire extinguishers has been lodged with the training files on each person.

5.3 Contractor failure to comply with organization safety directive (Safety Officer / Contractor). The contractor concerned has been notified of this breach and has undergone a safety brief from the Safety Officer. A copy of the Company safety expectations has been re-issued to them and the register has been signed as evidence of this.

6. **Committee Member 's reports:**

6.1 Safety Officer. This month has been quiet in terms of new safety issues, follow on issues have included the contacting of the contractor and producing a risk management policy document for the introduction of the new aircraft. Details of new safety issues have been promulgated in our safety bulletin and distributed accordingly.

6.2 Flying operations. There was a minor incident concerning loading of some cargo and weight and balance and a report made to the Safety Officer.

6.3 Administration. New safety posters have been ordered regarding the carriage of ‘Dangerous Goods’. Minutes from the last meeting have placed on all notice boards

7.1 Amendment to Company safety Policy document distribution to all staff.

8. **Meeting closed at: 10.20**

9. **Distribution List:**

(1) CEO
(2) Safety Officer
(3) Bulletin Board
(4) Committee members
(5) Report instigator
(6) File

Appendix 6F

Example generic reporting form
This form is to be initiated by the person who notices the hazard and then passed to the safety Officer

Part A to be complete by the person identifying the hazard

Date of occurrence **Time of occurrence**

(approx) Location of hazard

Description of hazard

What action to eliminate, reduce or control the hazard? Suggested

Action and Timing

Has the report been entered into the company database? ⎽ ⎽ ⎽ Signature

Date

Name Position held

Part B to be completed by the Safety Officer

What action is required to ELIMINATE or CONTROL the hazard and PREVENT injury?

Referred to for further action Signed

Date

Part C to be completed by the Safety Committee/Group

What additional action has been taken by the Safety Committee/Group?

Has appropriate feedback been given ? □□□

Signed Date

Appendix 6G

Example of Risk Assessment
Table 1: Qualitative measures of consequence and likelihood

Consequence

Level Descriptor	Description
1	**Insignificant** No injuries, low financial loss (i.e. F$1K). No environmental harm, minor service disruption
2	**Minor** First aid treatment required, minor financial loss (i.e. F$1K – F$10k) on site containment without assistance, minor transient, environmental harm, short term business interruption, local newspaper (inside cover),
3	**Moderate** Medical treatment required, moderate financial loss (i.e. F$10K – F$100K), some medium-term environmental impact, business interruption over several days, local newspaper
4	**Major** Multiple long-term Extensive injuries, serious financial loss (F$100K – F$1M), significant environmental impact, serious impairment of ability to provide service, domestic hews headline.
5	**Catastrophic** One or more fatalities, major financial loss (i.e. > F$1M), long term environmental harm, loss of service for a week or more, and/or International news headline

Note: Measures used should reflect the needs and nature of the organization and activity.

Likelihood (based on the historical data)

Level Descriptor	Description
A.	**Almost Certain** Is expected to occur in most circumstances. More than once a year
B	**Likely** Will probably occur at some time. Once a year
C	**Possible** Might occur at some time. Once in 5 years
D	**Unlikely** Could occur at some time. Once in 10 years
E	**Rare** May occur only in exceptional circumstances. Less than once in 30 years

Note: These tables need to be tailored to meet the needs of an individual organization.

Qualitative risk assessment matrix

Relative Severity of Risk Consequence					
Likelihood	**Insignificant 1**	**Minor 2**	**Moderate 3**	**Major 4**	**Catastrophic 5**
5 Almost	**H**	**H**	**E**	**E**	**E**
4 Likely	**M**	**H**	**H**	**E**	**E**
3 Possible	**L**	**M**	**H**	**E**	**E**
2 Unlikely	**L**	**L**	**M**	**H**	**E**
1 Rare	**L**	**L**	**M**	**H**	**H**

Risk Action Planning Prioritization

Risk Level	Urgency of Action	Level of Management Responsible	Reporting to	Process
Extreme Risk (Level 1)	**Immediate action required**	**Chief Executive**	**Executive Committee**	**Action Plan and accountability**
High Risk (Level 1)	**Action as soon as practicable**	**Department Head**	**Chief Executive**	**Action deadline and accountability**
Moderate (Level 2)	**Action timetable to be specified**	**Senior staff or Section Head**	**Department Head**	**Responsibility to be specified**
Low risk (Level 3)	**By routine procedures**	**As appropriate**	**Supervisor**	**By routine procedures**

Appendix 6H

Confidential Hazard Report Form

The information supplied in this form will only be used to enhance safety. On receipt of this form your name and position will be removed and discarded. Under no circumstances will your identity be disclosed to any person in this company, or to any other organization, agency or person without your express permission.

Name: _____

Position: _____
[Name and position to be discarded by the safety officer]

Part A to be complete by the person identifying the hazard

Date of occurrence_____Local time_____

Location_____

Please fully describe the occurrence:
Include your suggestions on how to prevent similar occurrences.

In your opinion, what is the likelihood of a similar occurrence happening again? Likelihood
A B C D E

(Scale: A being very unlikely with E being very, very likely)

What do you consider could be the worst possible consequence if this occurrence did happen again?

Consequence
1 2 3 4 5

(Scale 1 acceptable down to 5 as the worst possible consequence)

Example: a combination of an "E" and a 5 could be classified as an extremely unacceptable condition

Intentionally Blank

7. Documentation and Data Control

7.1 Documents

Apart from an aeronautical telecommunication management having available the relevant legislation and documents, an approved maintenance organization certificate for aeronautical telecommunications shall ensure that its personnel have easy assess to those documents needed for technical applications and references.

7.2 Document Control

An approved maintenance organization certificate for aeronautical telecommunications shall have in place a documentation control system that will ensure the documents as listed in 7.3 below are timely amended and that there are procedures to ensure that technical personnel will be notified and that they have read/understood the amendments.

7.3 List of Publications and Documents

The minimum scale of fully amended publications and documents to be held at each aeronautical telecommunications unit and available for personnel to consult is as follows: —

Minimum Scale of Publications & Documents
Approved Maintenance Organization Certificate - Aeronautical Telecommunications
√ Indicates a requirement

Title					
All Current Fiji Civil Aviation Legislation	√				
Air Navigation Regulations Cap 174	√				
Civil Aviation (Security) Regulations	√				
Operations Manual of Telecommunications	√				
Local Unit Instructions (for respective unit as applicable)	√				
Temporary Aeronautical Telecommunication Service Instructions	√				
NOTAMS (as relevant to its area of responsibility)	√				
Fiji Aeronautical Information Circulars (Fiji AIC)	√				
Aeronautical Information Publication & AIP Supplement	√				
Airport Manual (for respective airport as applicable)	√				
Fiji Domestic Aerodrome Data Information					
Airport Emergency Plan (for respective aerodrome as applicable)	√				
Doc 7192 – Training Manual Part A-1 General Considerations *	√				
Doc 7383 – Aeronautical Information Services Provided by States					
Doc 8071 – Manual on Testing Radio Navigational Aids (VOL I & II)	√				
Doc 8126 – Aeronautical Information Service Manual	√				
Doc 8259 – Manual on the Planning and Engineering of the Aeronautical Fixed Telecommunication Network	√				
Doc 8400 – ICAO Abbreviations and Codes	√				
Doc 8585 – Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services	√				
Doc 8643 – Aircraft Type Designators					
Doc 9401 – Manual on Establishment and Operation of Aviation Training Centres	√				
Doc 9426 Air Traffic Service Planning Manual	√				
Doc 9432 – Manual of Radiotelephony					
Doc 9613 – Manual of Required Navigation Performance (RNP)	√				
Doc 9673 Air Navigation Plan - Asia and Pacific Region	√				
Doc 9683 – Human Factors Training Manual	√				
Doc 9688 – Manual on Mode S Specific Services					
Doc 9694 – Manual of Air Traffic Services Data Link Applications	√				
Doc 9705 – Manual of Technical Provisions for the Aeronautical Telecommunication Network	√				
Doc 9718 – Handbook on Radio Frequency Spectrum Requirements	√				

for Civil Aviation					
Doc 9740 – Convention					
Doc 9739 – Comprehensive Aeronautical Telecommunications Network (ATN) Manual	√				
Doc 9776 – Manual on VHF Digital Link (VDL) Mode 2					
Doc 9804 – Manual on Air Traffic Services (ATS) Ground-Ground Voice Switching and Signaling	√				
Doc 9805 – Manual on VHF Digital Link (VDL) Mode 3					
Doc 9806 – Human Factors Guidelines for Safety Audits Manual	√				
Doc 9816 – Manual on VHF Digital Link (VDL) Mode 4					
Annex 1 – Personnel Licensing	√				
Annex 2 – Rules of the Air					
Annex 3 – Meteorological Service for International Air Navigation	√				
Annex 4 – Aeronautical Charts	√				
Annex 5 – Units of Measurement to be used in Air and Ground Operations	√				
Annex 6 – Operations of Aircraft	√				
Annex 7 – Aircraft Nationality & Registration Marks	√				
Annex 8 – Airworthiness of Aircraft	√				
Annex 9 – Facilitation	√				
Annex 10 – Aeronautical Telecommunications	√				
Annex 11 – Air Traffic Services	√				
Annex 12 – Search and Rescue	√				
Annex 13 – Aircraft Accident and Incident Investigation	√				
Annex 14 – Aerodromes	√				
Annex 15 – Aeronautical Information Service	√				
Annex 16 – Environment	√				
Annex 17 – Security	√				
Annex 18 – The Safe Transport of Dangerous Goods	√				
ICAO Circular 183 – Guidance Material on Switched Network Planning	√				
ICAO Circular 185 – The COSPAS-SARSAT System					
ICAO Circular 212 – Secondary Surveillance Radar Mode S Data Link					
ICAO Circular 225 – Study on the Refinement of the Satellite Broadcast Concept					
ICAO Circular 226 – Automatic Dependent Surveillance (ADS) and Air Traffic Services (ATS) Data Link Applications	√				
ICAO Circular 240 – Human Factors Digest No. 7 Human Factors in Accidents and Incidents	√				
ICAO Circular 247 – Human Factors Digest No. 10 Human Factors Management and Organization	√				
ICAO Circular 249 – Human Factors Digest No. 11 Human Factors in CNS/ATM Systems	√				
ICAO Circular 256 – Automatic Dependent Surveillance (ADS) and Air Traffic Services (ATS) Data Link Applications	√				
ICAO Circular 261 – A Planning Guide for the Evolutionary Development of the Data Interchange Portion of the Aeronautical Fixed Service	√				
ICAO Circular 267 – Guidelines for the Introduction and Operational Use of the Global Navigation Satellite System (GNSS)	√				
ICAO Regional Plan for CNS/ATM Systems	√				
Doc 9673 Air Navigation Plan - Asia and Pacific Region					
South Pacific Operational Manual (SPOM)					
SD-Air Traffic Service Personnel Licensing					
SD-Aeronautical Facility Technician's Licence	√				
SD-Aeronautical Telecommunications (SD-ATELCOM)	√				
MRD-Licensing of Airports	√				

8 Forms

8.1 Application for Issue or Renewal of an Approved Maintenance Organization Certificate for Aeronautical Telecommunications

ISO 9001: 2015 CERTIFIED	**Civil Aviation Authority of Fiji** **Application for Issue of Certification of Approved Maintenance Organisation (ANS)**	**Form GS 408**

(Pursuant to ANR No. 145C) Certification of Approved Maintenance Organization provision of Air Navigation Services

Organization Details					
Legal name of organization ***(Certificate will be issued in this name)***					
Address for service				**Postal address**	
Tel:		**Fax:**		**Email:**	
Organization structure diagram *(provide on separate sheet and attached with this application)*					

	Questionnaire	
The following questions must be answered for initial issue and for renewal.	**Yes**	**No**
(a) Has the organization been convicted for any aviation safety offence in the last five years or is the organization presently facing charges for an aviation safety offence?		
(b) Has the organization previously had an application for an aviation document rejected or has an aviation document held by the organization been suspended or revoked?		
(c) Does the organization hold current radio licenses issued by the appropriate Government Ministry to operate the radio facilities under this application? Please attach copy to application form		

** If answering "Yes", please provide details on separate sheets.*

Service, Facilities to be provided and Location

For each service applied for indicate as applicable the name of the aerodrome/airspace being serviced. Where new airspace or a change in classification of existing airspace is proposed include full details.(Use separate sheet if need arises) ***(Types of services & facilities are listed on page 3)***

Services	**Facility**	**Location**

Senior Personnel		
List of Senior Persons and their areas of responsibility. (Details to be entered on form GS 408		
Name	**Job Title**	**Areas of responsibility**

Personnel	
Indicate number of persons to be employed in the organization. Management & Administrative Personnel 1-5 ☐ 6-10 ☐ 11-50 ☐	
Telecommunication Personnel 1-5 ☐ 6-10 ☐ 11-50 ☐ >51 ☐	Electrical & Mechanical Personnel 1-5 ☐ 6-10 ☐ 11-50 ☐ >51 ☐

Training	
Indicate type of training to be undertaken within the organization for its personnel.	

Exposition / Operations Manual of Aeronautical Telecommunications
This must be provided with initial application and updated as required by SD-ATELCOM.

Declaration
This application is made for and on behalf of the organization identified above. I certify that I am empowered by the organization to ensure that all activities undertaken by the organization can be financed and carried out to the standard required by the Authority. I certify that the above information provided is true and correct and the enclosed copies of the attached documents submitted with this application are authentic. I authorize the Authority to use the information on this form or attached hereto for any purpose as required or authorized by law. I further authorize such information to be disclosed by the Authority to any person who requires such information to carry out as lawfully directed by the Authority I consent to the disclosure by the Fiji Police of any details of any convictions I may have pursuant to application, to the Civil Aviation Authority of the Fiji Islands. **Full name of (nominated) Chief Executive / Accountable Manager:** **Signature of (nominated) Chief Executive / Accountable Manager and Company Stamp: Date of application:**
Notes: *(a). The provision of false information or failure to disclose information relevant to the grant or holding of an aviation document constitutes an offence of Air Navigation Regulations No. 128.* *(b) Legal name of organization: A certificate will be issued only to a registered company, a partnership, a sole trader or an incorporated society. For a registered company, submit a copy of the company's office Certificate of Registration.* *(c) For initial issue or for a change of Senior Persons, a declaration form prescribed by 8.2 will need to accompany this application for each of the senior persons nominated in the form.* *(d) The completed application and supporting documentation, should be submitted to:* ***Chief Executive*** ***Civil Aviation Authority of the Fiji Islands Private Bag,*** ***Nadi Airport, Fiji***

Aeronautical Telecommunication Services (ICAO Annex 10 Vol II) Services & Facilities in support of Air Navigation Services	
Communications systems for the **aeronautical broadcasting service**.	➢ ATIS Automatic Terminal Information Service ➢ AWIB Aerodrome and Weather Information Broadcast ➢ VOLMET Routine broadcast of meteorological information for aircraft in flight ➢ FISB Flight Information Service Broadcast
Communications services for the **aeronautical fixed service**	The aeronautical fixed service shall comprise the following systems and applications that are used for ground-ground(i.e. point-to-point and/or point-to-multipoint) communications in the international aeronautical telecommunication service: ➢ a) ATS direct speech circuits and networks; ➢ b) meteorological operational circuits, networks and broadcast systems; ➢ c) the aeronautical fixed telecommunication network (AFTN); ➢ d) the common ICAO data interchange network (CIDIN);

	➢ e) the air traffic services (ATS) message handling services; and ➢ f) the inter-centre communications (ICC).
Ground elements of communications systems for the **aeronautical mobile service**	Voice Communications ➢ HF A-G HF Air-Ground voice communications ➢ VHF A-G VHF Air-Ground voice communications ➢ UHF A-G UHF Air-Ground voice communications ➢ HF SELCAL HF Selective Calling system ➢ SATCOM Satellite voice communication system Data Link Communications ➢ HFDL HF Air-Ground Data Link ➢ VDL VHF Air-Ground Data Link ➢ UHFDL UHF Air-Ground Data Link ➢ CPDLC
Radio navigation aids for the aeronautical radio navigation service	➢ DME Distance Measuring Equipment ➢ ILS Instrument Landing System ➢ MLS Microwave Landing System ➢ GNSS (Precision Approach) ➢ NDB Non-directional Radio Beacon ➢ VOR VHF Omnidirectional Radio Range
Telecommunications and ground systems supporting **air traffic services**	➢ ADS Automatic Dependent Surveillance ➢ AIDC ATS Interfacility Data Communication ➢ PAR Precision Approach Radar ➢ PSR Primary Surveillance Radar ➢ SSR Secondary Surveillance Radar ➢ CPDLC Controller-Pilot Data Link Communications ➢ FDPS Flight Data Processing System ➢ RDPS Radar Data Processing System ➢ MLAT Multilateration system
Others (please specify) Eg Telecommunications and ground systems supporting SAR, Met	➢

Note: Applicant need only indicate facilities currently installed at locations and as listed in the Exposition. The introduction of any other facilities constitutes a variation to the Certificate and a application for the amendment of the certificate will be required (refer Form GS 409)

8.2 Accountable Management /Senior Persons Declaration

8.2.1 CAAF Fit and Proper Form AD103F for Accountable Manager/Senior Persons

ISO 9001:2015 Certified	**Civil Aviation Authority of Fiji** **Fit and Proper Person Form for Operational and Technical Vacancies & for Aviation Document & Position Holders**	Form **AD 103F**

Instructions for completing this form – please read

1. *Fit and Proper determinations can only be made at the time of application for any vacant position with the Authority.*
2. *This Fit and Proper Person form must be submitted to the interview panel when called for an interview.*
3. *A Fit and Proper Person Declaration (AD 103F) may only be used by applicants who have been shortlisted for an interview*
4. *Further instructions are contained in the grey boxes in the left-hand margin throughout the Form.*
5. *Forms which are incomplete or lacking any required documents will be null & void.*

SECTION 1. PERSONAL PARTICULARS OF APPLICANT (in BLOCK CAPITALS please)

Title *(Mr/Mrs/Ms/Miss)*		Last Name			
Given Name(s)					
Country of Birth		Nationality		Date of Birth *(dd/mm/yy)*	
Address for Service in Fiji – complete this section if this information is not an accompanying application form. Please notify CAAF of any changes to your Address for Service.					
Tel			Mob		
Fax			Email		

SECTION 2. CONFIRMATION OF IDENTITY

Please enclose a copy of one of the following items to confirm your identity, duly certified by a Commissioner for Oaths. *The copy must be of a current (unexpired) document.* *Please tick the included item.*	1. A Fiji Drivers licence ☐ 2. A Full birth certificate ☐ 3. A Fiji or overseas passport ☐ 4. FNPF Number ☐ 5. TIN Number ☐

SECTION 3. FIT AND PROPER ASSESSMENT

			Yes	No	N/A
		For the following questions, please tick the relevant box			
	a)	Have you, in any country including Fiji, previously had an application for an aviation document rejected?	☐	☐	☐

Please ensure you complete all sections, a to h: ***Note:*** *If you answer "Yes" to any of the questions, please provide details below.* • *If you need to continue on separate sheets, these may be attached in a separate envelope marked 'Confidential'.*	b)	Have you, in any country including Fiji, been the holder of an aviation document which has been suspended or revoked (other than a certificate or registration approval that has been suspended by a replacement or a higher certificate or registration approval)?	☐	☐	☐
	c)	Have you, in any country including Fiji, been convicted of any aviation safety regulatory offence?	☐	☐	☐
	d)	Have you, in any country including Fiji, during the past 5 years been issued a warning letter in relation to any aviation regulatory issues?	☐	☐	☐
	e)	Are you, in any country including Fiji, presently facing charges any aviation safety regulatory offences?	☐	☐	☐

	f)	Have you, in any country including Fiji, been convicted for any offence?	☐	☐	☐
	g)	Are you, in any country, including Fiji, presently facing charges for any offence?	☐	☐	☐
	h)	Have you any history of adverse physical or mental health or serious behavioral problems?	☐	☐	☐

Details/Explanation – *Please attach separate pages if required. These should be signed and dated.*

	Separate pages attached ☐

SECTION 4. DECLARATION

I,

_____

declare that the information so presented, including any enclosures, reflects my record of conduct.

Consent to Disclosure and Collection

I authorize the collection by CAAF or his delegate from, and the disclosure to CAAF by, any person, organization or government department of any details of the following information about me: my knowledge and compliance with aviation safety regulatory requirement; my physical or mental health or serious behavioral problems; credit checks, any criminal investigations, charges or convictions, including any matters relating to any aviation safety offence. However, I do not consent to the release of any information to which the irrelevant conviction applies, pursuant to the *Rehabilitation of Offenders (Irrelevant Convictions) Act 1997*.

I authorize CAAF to use, and disclose, the information obtained about me for any purpose associated with the lawful functions of the Civil Aviation Authority under the *Civil Aviation Act 1976*.

Applicant's Signature		**Date**	

SECTION 5. APPLICANT'S CHECKLIST

			Yes	N/A
Please ensure all documents are enclosed. ***Applications which are incomplete or lacking any required documents will be returned.*** ***Note: Keep a copy of this completed form.***	1)	Completed AD103F Form	☐	☐
	2)	Confirmation of Identity (Driving License/ Birth Certificate/ Copy of Passport) - *duly certified by a Commissioner for Oaths*	☐	☐

CAAF USE ONLY

Assessment			
Fit and Proper:	Yes☐ No ☐		
Name		**Signature**	
Position		**Date**	

8.3 Approved Maintenance Organization Certificate (CNS)

8.3.1 Aeronautical Telecommunications Certificate

This specimen certificate copy below is subject to variations determined by the Authority.

ISO 9001: 2015 CERTIFIED

Civil Aviation Authority of Fiji
Approved Maintenance Organization Certificate

Certificate Number**: GSD ANS MMYY/003**

This is to certify that
AIRPORTS FIJI LIMITED

has been approved by the Civil Aviation Authority of Fiji, pursuant to *Regulation No. 145C of the Air Navigation Regulations (as amended)*, to maintain the facilities listed in the attached approval schedule in support of Air Navigation Services;

CONDITIONS

1. The approval requires continual compliance with the procedures specified in the certificate holder's approved maintenance organization exposition and operations manuals accepted by the Authority.

2. The approval remains valid whilst the certificate holder remains in compliance with the latest revision of standards documents for approval of ANS provider and personnel published by the Authority.

3. The holder of this Approved Maintenance Organization Certificate shall apply and obtain prior acceptance by the Authority if the certificate holder proposes to change any of the following—

   i. Accountable Manager (condition 4), or
   ii. The listed senior persons (condition 4); or
   iii. The security program; or
   iv. The types of aeronautical facilities operated under the authority of this certificate if the effect of the change is that the service will no longer be provided in accordance with the approved exposition.

4. Accountable Manager Mr XXXX - General Manager
   Senior Persons Mr XXXX - Manager Air Navigation (Engineering)
   Services Mr XXXX – Safety & Quality Assurance

Stamp

Signed: ……

EXECUTIVE MANAGER GROUND SAFETY
Dated: DD Month YYYY

Effective Date: **DD MONTH YYYY to DD MONTH YYYY**