



**Civil Aviation Authority
of the Fiji**

AERONAUTICAL INFORMATION SERVICE PROVIDER

3rd Edition – May 2019

Published by:
Civil Aviation Authority of the Fiji
Private Mail Bag, NAP 0354
Nadi International Airport
Fiji
www.caaf.org.fj

Copyright © 2019 CAAF

Standards Document

AERONAUTICAL INFORMATION SERVICES PROVIDER

Civil Aviation Authority of Fiji
Private Mail Bag, NAP 0354
Nadi International Airport
Fiji

Copyright © 2019 CAAF

Copy number: Electronic Copy

This manual is subject to the amendment service: Yes No

Date of Effectiveness: **31st May 2019**

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 Element 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 Information Service is issued by the Civil Aviation Authority of Fiji pursuant to Regulation 145E of the Air Navigation Regulations 1981 (as amended). This Document is intended for use by CAAF, applicants for, and holders of an Aeronautical Information Services Provider Certificate, that handle aeronautical data and aeronautical information covering Fiji's territories and those areas over the high seas for which it is responsible for the provision of air navigation services and their staff.

Change Notice

This Standards Document has been developed pursuant to the Authority's obligation to provide oversight on Aeronautical Information operators/service providers and their personnel, as well as the operator's/service providers and applicants obligation to comply with standards notified by the Authority and is the means by which such notification is given.



.....
THERESA LEVESTAM
ACTING CHIEF EXECUTIVE

AMENDMENT RECORD

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

Amendment No.	Effective Date	Entered By	Date Entered	Amendment No.	Effective Date	Entered By	Date Entered
Amendment no. 1 incorporated in this edition				26			
2				27			
3				28			
4				29			
5				30			
6				31			
7				32			
8				33			
9				34			
10				35			
11				36			
12				37			
13				38			
14				39			
15				40			
16				41			
17				42			
18				43			
19				44			
20				45			
21				46			
22				47			
23				48			
24				49			
25				50			

From time to time the Authority will issue amendments to the requirements stipulated in this publication. This will be done in the form of 'Notice of Amendments' including an attachment 'Notification of Approval/Disapproval' of all or part of the proposed amendment.

The Amendments will also be accessible through CAAFI website.

Contents	Page No.
Preface	iii
Record of Amendments	iv
Contents	v
Historical Summary of Amendments	vi
<u>Chapter 1— General</u>	
1.1. Applicability	1
1.2. Definitions	1 - 8
1.3. Requirement for certificate	8
1.4. Application for certificate	8
1.5. Issue of certificate	8
1.6. Privileges of certificate	9
1.7. Duration of certificate	9
1.8. Renewal of certificate	9
1.9. Conditions & Exemptions	9
1.10. Common reference systems for Air Navigation	10
1.11. Aeronautical Information Regulation and Control (AIRAC)	11
1.12. Miscellaneous specifications	12
<u>Chapter 2 — Certification Requirements</u>	
2.1. Personnel requirements	13
2.2. Facility Requirements	13
2.3. Scope of Pre-flight Information Service	14
2.3.1 Scope of Aeronautical Data and Aeronautical Information	14
2.4. Documentation	14
2.5. Collection of Information	15
2.6. Publication of Aeronautical Information	16
2.7. Error Correction in Published Information	17
2.8. Records	18
2.9. Internal Quality Assurance	18
2.10. Organization Exposition	19
<u>Chapter 3 — Operating Requirements</u>	
3.1. Continued Compliance	20
<u>Chapter 4 — Services</u>	
4.1. AIP Service	21
4.2. Notam Service	21
4.3. Pre-flight Information Service	21-22
4.4. Post-flight Information Service	22
<u>Chapter 5 — Other Requirements</u>	
5.1. Changes to Certificate Holder's Organisation	23
5.2. Safety Inspections and Audits	23
5.3. Transitional Arrangements	23
<u>Chapter 6 — Document Format</u>	
6.1. Fiji Aeronautical Information Publications	24
6.1.1. Contents of Fiji AIP	24
6.1.2. Specifications for Fiji AIP	24
6.1.3. Specifications for AIP Amendments	25
6.1.4. Specifications for AIP Supplements	25

6.2.	Aeronautical Information Circulars	25
6.3.	Notam	25
6.3.1.	Specifications for NOTAM	26
6.3.2.	Distribution of NOTAM	26
6.4	Digital data sets	26
6.4.1	General	26
6.4.2	AIP data set	27
6.4.3	Terrain and Obstacle data sets	27
6.4.4	Aerodrome mapping data sets	27
6.4.5	Instrument flight procedure data sets	27-30
Chapter 7 — Forms		
7.1.	Application and Renewal Forms	31-32
7.2.	Responsible Management Declaration	33-34
Appendices		
1.	Aeronautical Data Catalogue	35-36
2.	Terrain and Obstacle Attributes provision Requirements	37-38
3.	Terrain and Obstacle Data Requirements	39-42

Historical Summary of Amendments

The Civil Aviation Reform Act (1999) requires the Authority to produce standards for the provision of aeronautical information services. A draft version of Standard Document- Aeronautical Information Services (SD-AIS, 1st Edition dated Dec 2005) was developed and circulated internally for comments.

New Regulation No. 145E to Air Navigation Regulations yet to be enacted will specify requirements for certification of AIS Provider. SDAIS, details the AIS standards and the AIS Provider certification requirements...

Amendment	Source(s)	Subject(s)	Effective Date
1 st Edition	CAAFI	Standards Document – Aeronautical Information Services (SDAIS) (includes Certification of AIS Provider)	1 st Dec 2005
...	CAAFI	Review of SD by Michael Hunt	12 th June 2007
...	CAAFI	Review and reformatting of the SD by ATMO	21 st July 2008
2 nd Edition	CAAF	Review of the SD remove 'Islands' ref Govt gazette	16 th Aug 2012
3 rd Edition	CAAF	Review and inclusion new definitions, scope of AIM functions, AIRAC, HF in AIM, common ref system for air navigation, Digital data sets, Metadata.	31 st May 2019

Chapter 1— General

1.1 Applicability

(a) The Minister responsible for Civil Aviation has directed the Civil Aviation Authority of Fiji to carry out the State's obligations pursuant to Article 28 of the Convention on International Civil Aviation pertaining to procedures for Aeronautical Information Services in Annex 15 -. As a Contracting State, Fiji is obligated to: -

- (1) provide an aeronautical information service; or
- (2) agree with one or more other Contracting State(s) for the provision of a joint service; or
- (3) delegate the authority for the provision of the service to a non-governmental agency, provided the Standards and Recommended Practices of this Annex are adequately met.

(b) Notwithstanding 1.1(a) (2) and (3), the Authority is responsible for the information published and shall certificate the organisation performing the AIS function provided the required Standards are met. Aeronautical information published for and on behalf of a State shall clearly indicate that it is published under the authority of that State.

(c) In order that the Authority's responsibility in (b) above can be satisfactorily met, any person providing or applying to provide aeronautical information services shall establish an arrangement with and to the satisfaction of the Authority regarding any review of or amendment to the AIS.

(d) Pursuance to 1.1(b), a provider of AIS for Fiji shall take all necessary measures to ensure that the aeronautical information/data it provides relating to the entire territory of Fiji, as well as areas in which Fiji is responsible for aeronautical information services outside its territory, is adequate, of required quality and timely. This shall include arrangements for the timely provision of required information/data to the aeronautical information service by each of the State services associated with aircraft operations.

(e) Where 24-hour service is not provided, service shall be available during the whole period an aircraft is in flight in the area of responsibility of an aeronautical information service, plus a period of at least two hours before and after such a period. The service shall also be available at such other time as may be requested by an appropriate ground organization.

(f) This SD-AIS issued by the Authority prescribes the requirements—

- (1) governing the certification and operation of organisations or persons providing an aeronautical information service Fiji on behalf of the State; and
- (2) for Fiji Intergrated Aeronautical Information Package including AICs issued by the Authority.

1.2. Definitions

(a) In this Standards Document -

Accuracy means a degree of conformance between the estimated or measured value and the true value.

Note - For measured positional data the accuracy is normally expressed in terms of a distance from a stated position within which there is a defined confidence of the true position falling.

Aerodrome. A defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft.

Aerodrome mapping data (AMD). Data collected for the purpose of compiling aerodrome mapping information.

Note. — Aerodrome mapping data is collected for purposes that include the improvement of the user's situational awareness, surface navigation operations, training, charting and planning.

Aerodrome mapping database (AMDB). A collection of aerodrome mapping data organized and arranged as a structured data set.

Aeronautical chart. A representation of a portion of the Earth, its culture and relief, specifically designated to meet the requirements of air navigation.

Aeronautical data. A representation of aeronautical facts, concepts or instructions in a formalized manner suitable for communication, interpretation or processing.

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

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

Aeronautical Information Circular (AIC). A notice containing information that does not qualify for the origination of a NOTAM or for inclusion in the AIP, but which relates to flight safety, air navigation, technical, administrative or legislative matters.

Aeronautical information product. Aeronautical data and aeronautical information provided either as digital data sets or as a standardized presentation in paper or electronic media. Aeronautical information products include:

- Aeronautical Information Publication (AIP), including Amendments and Supplements;
- Aeronautical Information Circulars (AIC);
- Aeronautical charts;
- NOTAM; and
- Digital data sets.

Note. — *Aeronautical information products are intended primarily to satisfy international requirements for the exchange of aeronautical information.*

Aeronautical Information Publication (AIP). A publication issued by or with the authority of a State and containing aeronautical information of a lasting character essential to air navigation.

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

AIP Amendment. Permanent changes to the information contained in the AIP.

AIP Supplement. Temporary changes to the information contained in the AIP which are published by means of special pages.

AIRAC. An acronym (aeronautical information regulation and control) signifying a system aimed at advance notification based on common effective dates, of circumstances that necessitate significant changes in operating practices.

Air defence identification zone (ADIZ). Special designated airspace of defined dimensions within which aircraft are required to comply with special identification and/or reporting procedures additional to those related to the provision of air traffic services (ATS).

Air traffic management (ATM). The dynamic, integrated management of air traffic and airspace (including air traffic services, airspace management and air traffic flow management) — safely, economically and efficiently — through the provision of facilities and seamless services in collaboration with all parties and involving airborne and ground-based functions.

Application. Manipulation and processing of data in support of user requirements (ISO 19104*).

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

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

ASHTAM. A special series NOTAM notifying by means of a specific format change in activity of a volcano, a volcanic eruption and/or volcanic ash cloud that is of significance to aircraft operations.

Assemble. A process of merging data from multiple sources into a database and establishing a

baseline for subsequent processing.

Note. — The assemble phase includes checking the data and ensuring that detected errors and omissions are rectified.

ATS surveillance service. Term used to indicate a service provided directly by means of an ATS surveillance system.

ATS surveillance system. A generic term meaning variously, ADS-B, PSR, SSR or any comparable ground-based system that enables the identification of aircraft.

Note.— A comparable ground-based system is one that has been demonstrated, by comparative assessment or other methodology, to have a level of safety and performance equal to or better than monopulse SSR.

Automatic dependent surveillance — broadcast (ADS-B). A means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link.

Automatic dependent surveillance — contract (ADS-C). A means by which the terms of an ADS-C agreement will be exchanged between the ground system and the aircraft, via a data link, specifying under what conditions ADS-C reports would be initiated, and what data would be contained in the reports.

Note. — The abbreviated term “ADS contract” is commonly used to refer to ADS event contract, ADS demand contract, ADS periodic contract or an emergency mode.

Automatic terminal information service (ATIS). The automatic provision of current, routine information to arriving and departing aircraft throughout 24 hours or a specified portion thereof:

— Data link-automatic terminal information service (D-ATIS). The provision of ATIS via data link.

— Voice-automatic terminal information service (Voice-ATIS). The provision of ATIS by means of continuous and repetitive voice broadcasts

Bare Earth. Surface of the Earth including bodies of water and permanent ice and snow, and excluding vegetation and man-made objects.

Calendar. Discrete temporal reference system that provides the basis for defining temporal position to a resolution of one day (ISO 19108*).

Canopy. Bare Earth supplemented by vegetation height.

Confidence level. The probability that the true value of a parameter is within a certain interval around the estimate of its value.

Note. — *The interval is usually referred to as the accuracy of the estimate.*

Controller-pilot data link communications (CPDLC). A means of communication between controller and pilot, using data link for ATC communications.

Culture. All man-made features constructed on the surface of the Earth, such as cities, railways and canals.

Cyclic redundancy check (CRC). A mathematical algorithm applied to the digital expression of data that provides a level of assurance against loss or alteration of data.

Danger area. An airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times.

Data accuracy. A degree of conformance between the estimated or measured value and the true value.

Data completeness. The degree of confidence that all of the data needed to support the intended use is provided.

Data format. A structure of data elements, records and files arranged to meet standards, specifications or data quality requirements.

Data integrity (assurance level). A degree of assurance that an aeronautical data and its value has not been lost or altered since the origination or authorized amendment.

Data product. Data set or data set series that conforms to a data product specification (ISO 19131*).

Data product specification. Detailed description of a data set or data set series together with additional information that will enable it to be created, supplied to and used by another party (ISO 19131*).

Note. — *A data product specification provides a description of the universe of discourse and a specification for mapping the universe of discourse to a data set. It may be used for production, sales, end-use or other purpose.*

Data quality. A degree or level of confidence that the data provided meet the requirements of the data user in terms of accuracy, resolution, integrity (or equivalent assurance level), traceability, timeliness, completeness and format.

Data resolution. A number of units or digits to which a measured or calculated value is expressed and used.

Data set. Identifiable collection of data (ISO 19101*).

Data set series. Collection of data sets sharing the same product specification (ISO 19115*).

Data timeliness. The degree of confidence that the data is applicable to the period of its intended use.

Data traceability. The degree that a system or a data product can provide a record of the changes made to that product and thereby enable an audit trail to be followed from the end-user to the originator.

Datum. Any quantity or set of quantities that may serve as a reference or basis for the calculation of other quantities (ISO 19104*).

Digital Elevation Model (DEM). The representation of terrain surface by continuous elevation values at all intersections of a defined grid, referenced to common datum.

Note – Digital Terrain Model (DTM) is sometimes referred to as DEM

Direct transit arrangements. Special arrangements approved by the public authorities concerned by which traffic which is pausing briefly in its passage through the Contracting State may remain under their direct control.

Ellipsoid height (Geodetic height). The height related to the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question.

Feature. Abstraction of real world phenomena (ISO 19101*).

Note – A feature attribute has a name, a data type and a value domain associated with it

Feature attribute. Characteristic of a feature (ISO 19101*).

Feature operation. Operation that every instance of a feature type may perform (ISO 19110*).

Note – An operation upon the feature type dam is to raise the dam. The result of this operation is to raise the level of water in the reservoir.

Feature relationship. Relationship that links instances of one feature type with instances of the same or a different feature type (ISO 19101*).

Feature type. Class of real world phenomena with common properties (ISO 19110*).

Note – In a feature catalogue, the basic level of classification is the feature type.

Geodesic distance. The shortest distance between any two points on a mathematically defined ellipsoidal surface.

Geodetic datum. A minimum set of parameters required to define location and orientation of the local reference system with respect to the global reference system/frame.

Geoid. The equipotential surface in the gravity field of the Earth which coincides with the undisturbed mean sea level (MSL) extended continuously through the continents.

Note – The geoid is irregular in shape because of local gravitational disturbances (wind tides, salinity, current, etc) and the direction of gravity is perpendicular to the geoid at every point.

Geoid undulation. The distance of the geoid above (positive) or below (negative) the mathematical reference ellipsoid.

Note. — In respect to the World Geodetic System — 1984 (WGS-84) defined ellipsoid, the difference between the WGS-84 ellipsoidal height and orthometric height represents WGS-84 geoid undulation.

Gregorian calendar. Calendar in general use; first introduced in 1582 to define a year that more closely approximates the tropical year than the Julian calendar (ISO 19108*).

Note. — In the Gregorian calendar, common years have 365 days and leap years 366 days divided into twelve sequential months.

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

Heliport. An aerodrome or a defined area on a structure intended to be used wholly or in part for the arrival, departure and surface movement of helicopters.

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

Integrity classification (aeronautical data). Classification based upon the potential risk resulting from the use of corrupted data. Aeronautical data is classified as:

- a) **routine data:** there is a very low probability when using corrupted routine data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe;
- b) **essential data:** there is a low probability when using corrupted essential data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe; and
- c) **Critical data:** there is a high probability when using corrupted critical data that the continued safe flight and landing of an aircraft would be severely at risk with the potential for catastrophe.

International airport. Any airport designated by the Contracting State in whose territory it is situated as an airport of entry and departure for international air traffic, where the formalities incident to customs, immigration, public health, animal and plant quarantine and similar procedures are carried out.

International NOTAM office (NOF). An office designated by a State for the exchange of NOTAM internationally.

Logon address. A specified code used for data link logon to an ATS unit.

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

Metadata. Data about data (ISO 19115*).

Note - Data that describes and documents data

Minimum en-route altitude (MEA). The altitude for an en-route segment that provides adequate reception of relevant navigation facilities and ATS communications, complies with the airspace structure and provides the required obstacle clearance.

Minimum obstacle clearance altitude (MOCA). The minimum altitude for a defined segment of flight that provides the required obstacle clearance.

Movement area. That part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, consisting of the manoeuvring area and the apron(s).

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

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

Area navigation (RNAV) specification. A navigation specification based on area navigation that does not include the requirement for performance monitoring and alerting, designated by the prefix RNAV, e.g. RNAV 5, RNAV 1.

Note 1. — *The Performance-based Navigation (PBN) Manual (Doc 9613), Volume II, contains detailed guidance on navigation specifications.*

Note 2. — *The term RNP, previously defined as “a statement of the navigation performance necessary for operation within a defined airspace”, has been removed from this Annex as the concept of RNP has been overtaken by the concept of PBN. The term RNP in this Annex is now solely used in the context of navigation specifications that require performance monitoring and alerting, e.g. RNP 4 refers to the aircraft and operating requirements, including a 4 NM lateral performance with on-board performance monitoring and alerting that are detailed in Doc 9613.*

Next intended user. The entity that receives the aeronautical data or information from the aeronautical information service.

NOTAM. A notice distributed by means of telecommunication 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.

Obstacle. All fixed (whether temporary or permanent) and mobile objects, or parts thereof, that:

- a) are located on an area intended for the surface movement of aircraft; or
- b) extend above a defined surface intended to protect aircraft in flight; or
- c) Stand outside those defined surfaces and that have been assessed as being a hazard to air navigation.

Obstacle/terrain data collection surface. A defined surface intended for the purpose of collecting obstacle/terrain data.

Origination (aeronautical data or aeronautical information). The creation of the value associated with new data or information or the modification of the value of existing data or information.

Originator (aeronautical data or aeronautical information). An entity that is accountable for data or information origination and/or from which the AIS organization receives aeronautical data and aeronautical information.

Orthometric height. Height of a point related to the geoid, generally presented as an MSL elevation.

Performance-based communication (PBC). Communication based on performance specifications applied to the provision of air traffic services.

Note. — *A required communication performance (RCP) specification includes communication performance requirements that are allocated to system components in terms of the communication to be provided and associated transaction time, continuity, availability, integrity, safety and functionality needed for the proposed operation in the context of a particular airspace concept.*

Performance-based navigation (PBN). Area navigation based on performance requirements for aircraft operating along an ATS route, on an instrument approach procedure or in a designated airspace.

Note. — *Performance requirements are expressed in navigation specifications (RNAV specification, RNP specification) in terms of accuracy, integrity, continuity, availability and functionality needed for the proposed operation in the context of a particular airspace concept.*

Performance-based surveillance (PBS). Surveillance based on performance specifications applied to the provision of air traffic services.

Note. — A required surveillance performance (RSP) specification includes surveillance performance requirements that are allocated to system components in terms of the surveillance to be provided and associated data delivery time, continuity, availability, integrity, accuracy of the surveillance data, safety and functionality needed for the proposed operation in the context of a particular airspace concept.

Portrayal. Presentation of information to humans (ISO 19117*).

Position (geographical). Set of coordinates (latitude and longitude) referenced to the mathematical reference ellipsoid which define the position of a point on the surface of the Earth.

Post spacing. Angular or linear distance between two adjacent elevation points.

Precision. The smallest difference that can be reliably distinguished by a measurement process.

Note. — In reference to geodetic surveys, precision is a degree of refinement in performance of an operation or a degree of perfection in the instruments and methods used when taking measurements.

Pre-flight information bulletin (PIB). A presentation of current NOTAM information of operational significance, prepared prior to flight.

Prohibited area. An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is prohibited.

Quality. Degree to which a set of inherent characteristics fulfils requirements. (ISO 9000*).

Note 1. — The term “quality” can be used with adjectives such as poor, good or excellent.

Note 2. — “Inherent”, as opposed to “assigned”, means existing in something, especially as a permanent characteristic.

Quality assurance. Part of quality management focused on providing confidence that fulfill quality requirements will be fulfilled. (ISO 9000*).

Quality control. Part of quality management focused on fulfilling quality requirements will be fulfilled. (ISO 9000*).

Quality management. Coordinated activities to direct and control an organisation with regard to quality (ISO 9000*).

Radio navigation service. A service providing guidance information or position data for the efficient and safe operation of aircraft supported by one or more radio navigation aids.

Required communication performance (RCP) specification. A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based communication.

Required surveillance performance (RSP) specification. A set of requirements for air traffic service provision and associated ground equipment, aircraft capability, and operations needed to support performance-based surveillance.

Requirements. Need or expression that is stated, generally implied or obligatory. (ISO 9000*).

Note 1. — “Generally implied” means that it is custom or common practice for the organization, its customers and other interested parties, that the need or expectation under consideration is implied.

Note 2. — A qualifier can be used to denote a specific type of requirement,

e.g. Product requirement, quality management requirement, customer requirement.

Note 3. — A specified requirement is one which is stated, for example, in a document.

Note 4. — Requirements can be generated by different interested parties.

Restricted area. An airspace of defined dimensions, above the land areas or territorial waters of a State, within which the flight of aircraft is restricted in accordance with certain specified conditions.

Route stage. A route or portion of a route flown without an intermediate landing.

Station declination. An alignment variation between the zero degree radial of a VOR and true north, determined at the time the VOR station is calibrated.

Terrain. The surface of the Earth containing naturally occurring features such as mountains, hills, ridges, valleys, bodies of water, permanent ice and snow, and excluding obstacles.

Note. — In practical terms, depending on the method of data collection used, terrain represents the continuous surface that exists at the bare Earth, the top of the canopy or something in-between, also known as “first reflective surface”.

Traceability. Ability to trace the history, application or location of that which is under consideration (ISO 9000*).

Note. — When considering product, traceability can relate to:

- The origin of materials and parts;
- The processing history; and
- The distribution and location of the product after delivery.

Validation. Confirmation through the provision of objective evidence that, the requirements for a specific intended use or application have been fulfilled (ISO 9000*).

Verification. Confirmation by thought the provision of objective evidence that, specified requirements have been fulfilled (ISO 9000*).

Note 1. — The term “verified” is used to designate the corresponding status.

Note 2. — Confirmation can comprise activities such as:

- performing alternative calculations;
- comparing a new design specification with a similar proven design specification;
- undertaking tests and demonstrations; and
- reviewing documents prior to issue

VOLMET. Meteorological information for aircraft in flight.

Data link-VOLMET (D-VOLMET). Provision of current aerodrome routine meteorological reports (METAR) and aerodrome special meteorological reports (SPECI), aerodrome forecasts (TAF), SIGMET, special air-reports not covered by a SIGMET and, where available, AIRMET via data link.

VOLMET broadcast. Provision, as appropriate, of current METAR, SPECI, TAF and SIGMET by means of continuous and repetitive voice broadcasts.

1.3 Requirement for Certificate

No person shall provide an aeronautical information service for —

- (a) the Fiji airspace; or
- (b) the areas of the Nadi Oceanic FIR for which Fiji has responsibility for aeronautical information services —

Except under the authority of, and in accordance with the provisions of, an aeronautical information service certificate issued under this SD-AIS Air Navigation Regulation 145E.

1.4 Application for Certificate

Each applicant for the grant of an aeronautical information service certificate shall complete form GS700 and submit it to the Authority with—

- (a) the exposition required by 2.10; and
- (b) A payment of the appropriate application fee prescribed by regulations made under the Act.

1.5 Issue of Certificate

An applicant is entitled to an aeronautical information service certificate if the Authority is satisfied that—

- (a) the applicant meets the requirements of paragraph 2; and
- (b) the applicant, and the applicant’s senior person or persons required by sub-paragraphs

- 2.1(a)(1), (2) and (3) are fit and proper persons; and
- (c) The granting of the certificate is not contrary to the interests of aviation safety.

1.6 Privileges of Certificate

The aeronautical information service certificate specifies the aeronautical information services that the certificate holder is authorised to provide.

1.7 Duration of Certificate

- (a) An aeronautical information service certificate may be granted or renewed for a period of up to 12 months.
- (b) An aeronautical information service certificate remains in force until it expires or is suspended or revoked.
- (c) The holder of an aeronautical information service certificate that expires or is revoked shall forthwith surrender the certificate to the Authority.
- (d) The holder of an aeronautical information service certificate that is suspended shall forthwith produce the certificate to the Authority for appropriate endorsement.

1.8 Renewal of Certificate

- (a) An application for the renewal of an aeronautical information service certificate shall be made on form GS700
- (b) The application shall be submitted to the Authority 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.

1.9 Conditions and Exemptions

In granting or renewing a certificate, the Authority in doing so may also prescribe conditions. Upon application supported by aeronautical studies and a safety risk assessment, the Authority may exempt any person from any requirement in this SD-AIS.

1.10 Common Reference Systems for Air Navigation

1.10.1 Horizontal reference system

1.10.1.1 The World Geodetic System — 1984 (WGS-84) shall be used as the horizontal (geodetic) reference system for Fiji international and domestic air navigation. Consequently, published aeronautical geographical coordinates (indicating latitude and longitude) shall be expressed in terms of the WGS-84 geodetic reference datum.

Note. — *Comprehensive guidance material concerning WGS-84 is contained in the World Geodetic System — 1984 (WGS-84) Manual (Doc 9674).*

1.10.1.2 This Standard recommends in precise geodetic applications and some air navigation applications, temporal changes in the tectonic plate motion and tidal effects on the Earth's crust should be modelled and estimated. To reflect the temporal effect, an epoch should be included with any set of absolute station coordinates.

Note 1. — *The epoch of the WGS-84 (G873) reference frame is 1997.0 while the epoch of the latest updated WGS-84 (G1150) reference frame, which includes a plate motion model, is 2001.0. (G indicates that the coordinates were obtained through Global Positioning System (GPS) techniques, and the number following G indicates the GPS week when these coordinates were implemented in the United States' National Geospatial-Intelligence Agency's precise ephemeris estimation process.)*

Note 2. — *The set of geodetic coordinates of globally distributed permanent GPS tracking stations for the most recent realization of the WGS-84 reference frame (WGS-84 (G1150)) is provided in Doc 9674. For each permanent GPS tracking station, the accuracy of an individually estimated position in WGS-84 (G1150) has been in the order of 1 cm (1□).*

Note 3. — Another precise worldwide terrestrial coordinate system is the International Earth Rotation Service (IERS) Terrestrial Reference System (ITRS), and the realization of ITRS is the IERS Terrestrial Reference Frame (ITRF). Guidance material regarding the ITRS is provided in Appendix C of Doc 9674. The most current realization of WGS-84 (G1150) is referenced to the ITRF 2000 epoch. WGS-84 (G1150) is consistent with ITRF 2000 and in practical realization the difference between these two systems is in the one to two-centimetre range worldwide, meaning WGS-84 (G1150) and ITRF 2000 are essentially identical.

1.10.2 Vertical reference system

1.10.2.1 Mean sea level (MSL) datum shall be used as the vertical reference system for Fiji international and domestic air navigation.

Note 1. — The geoid globally most closely approximates MSL. It is defined as the equipotential surface in the gravity field of the Earth which coincides with the undisturbed MSL extended continuously through the continents.

Note 2. — Gravity-related heights (elevations) are also referred to as orthometric heights while distances of points above the ellipsoid are referred to as ellipsoidal heights.

1.10.2.2 The Earth Gravitational Model — 1996 (EGM-96) shall be used as the global gravity model for Fiji international and domestic air navigation.

1.10.2.3 At those geographical positions where the accuracy of EGM-96 does not meet the accuracy requirements for elevation and geoid undulation on the basis of EGM-96 data, regional, national or local geoid models containing high resolution (short wavelength) gravity field data shall be developed and used. When a geoid model other than the EGM-96 model is used, a description of the model used, including the parameters required for height transformation between the model and EGM-96, shall be provided in the Aeronautical Information Publication (AIP).

Note. — Specifications concerning determination and reporting (accuracy of field work and data integrity) of elevation and geoid undulation at specific positions at aerodromes/heliports are given in the PANS-AIM (Doc 10066), Appendix 1.

1.2.3 Temporal reference system

1.10.3.1 The Gregorian calendar and Coordinated Universal Time (UTC) shall be used as the temporal reference system for Fiji international and domestic air navigation.

Note 1. — A value in the time domain is a temporal position measured relative to a temporal reference system.

Note 2. — UTC is a time scale maintained by the Bureau International de l'Heure and the IERS and forms the basis of a coordinated dissemination of standard frequencies and time signals.

Note 3. — Guidance material relating to UTC is contained in Attachment D of Standards Document — Units of Measurement to be Used in Air and Ground Operations (SD-UMAGO).

Note 4. — ISO Standard 8601* specifies the use of the Gregorian calendar and 24-hour local or UTC for information interchange while ISO Standard 19108* prescribes the Gregorian calendar and UTC as the primary temporal reference system for use with geographic information.

1.10.3.2 Under this Standard, when a different temporal reference system is used for some applications, the feature catalogue, or the metadata associated with an application schema or a data set, as appropriate, shall include either a description of that system or a citation for a document that describes that temporal reference system.

Note. — ISO Standard 19108*, Annex D, describes some aspects of calendars that may have to be considered in such a description.

1.11 Aeronautical information regulation and control (AIRAC)

1.11.1 Information concerning the following items specified under this Standard Document shall be distributed under the regulated system (AIRAC), i.e. basing establishment, withdrawal or significant changes upon a series of common effective dates at intervals of 28 days, including 8 November 2018:

- a) limits (horizontal and vertical), regulations and procedures applicable to:
 - 1) flight information regions;
 - 2) control areas;
 - 3) control zones;
 - 4) advisory areas;
 - 5) air traffic services (ATS) routes;
 - 6) permanent danger, prohibited and restricted areas (including type and periods of activity when known) and air defence identification zones (ADIZ);
 - 7) permanent areas or routes or portions thereof where the possibility of interception exists;
- b) positions, frequencies, call signs, identifiers, known irregularities and maintenance periods of radio navigation aids, and communication and surveillance facilities;
- c) holding and approach procedures, arrival and departure procedures, noise abatement procedures and any other pertinent ATS procedures;
- d) transition levels, transition altitudes and minimum sector altitudes;
- e) meteorological facilities (including broadcasts) and procedures;
- f) runways and stopways;
- g) taxiways and aprons;
- h) aerodrome ground operating procedures (including low visibility procedures);
- i) approach and runway lighting; and
- j) Aerodrome operating minima if published by a State.

1.11.2 The information notified under the AIRAC system shall not be changed further for at least another 28 days after the effective date, unless the circumstance notified is of a temporary nature and would not persist for the full period.

1.11.3 Information provided under the AIRAC system shall be made available by the aeronautical information service (AIS) so as to reach recipients at least 28 days in advance of the effective date.

Note. — *AIRAC information is distributed by the AIS unit at least 42 days in advance of the AIRAC effective dates with the objective of reaching recipients at least 28 days in advance of the effective date.*

1.11.4 When information has not been submitted by the AIRAC date, a NIL notification shall be distributed not later than one cycle before the AIRAC effective date concerned.

1.11.5 Implementation dates other than AIRAC effective dates shall not be used for pre-planned operationally significant changes requiring cartographic work and/or for updating of navigation databases.

1.11.6 The regulated system (AIRAC) should be used for the provision of information relating to the establishment and withdrawal of, and premeditated significant changes in, the circumstances listed below:

- a) position, height and lighting of navigational obstacles;
- b) hours of service of aerodromes, facilities and services;
- c) customs, immigration and health services;
- d) temporary danger, prohibited and restricted areas and navigational hazards, military exercises and mass movements of aircraft; and
- e) Temporary areas or routes or portions thereof where the possibility of interception exists.

1.11.7 Whenever major changes are planned and where advance notice is desirable and practicable, information should be made available by the AIS so as to reach recipients at least 56 days in advance of the effective date. This should be applied to the establishment of, and premeditated major changes in, the circumstances listed below, and other major changes if deemed necessary:

- a) new aerodromes for international instrument flight rules (IFR) operations;
- b) new runways for IFR operations at international aerodromes;
- c) design and structure of the ATS route network;
- d) design and structure of a set of terminal procedures (including change of procedure bearings due to magnetic variation change);
- e) Circumstances listed in 1.11.1 if the entire State or any significant portion thereof is affected or if cross-border coordination is required.

Note. — *Guidance material on what constitutes a major change is included in the Aeronautical Information Services Manual (Doc 8126).*

1.12 Miscellaneous specifications

1.12.1 Aeronautical information products intended for international distribution shall include English text for those parts expressed in plain language.

1.12.2 Place names shall be spelt in conformity with local usage, transliterated.

1.12.3 Units of measurement used in the origination, processing and distribution of aeronautical data and aeronautical information should be consistent with the use of the tables contained in SD-UMAGO.

1.12.4 ICAO abbreviations shall be used in aeronautical information products whenever they are appropriate and their use will facilitate distribution of aeronautical data and aeronautical information.

* ISO Standard

8601 — *Data elements and interchange formats — Information interchange — Representation of dates and times*

9000 — *Quality Management Systems — Fundamentals and Vocabulary*

19101 — *Geographic information — Reference model*

19104 — *Geographic information — Terminology*

19108 — *Geographic information — Temporal schema*

19109 — *Geographic information — Rules for application schema*

19110 — *Geographic information — Feature cataloguing schema*

19115 — *Geographic information — Metadata*

19117 — *Geographic information — Portrayal*

19131 — *Geographic information — Data product specification*

Chapter 2 Certification Requirements

2.1 Personnel Requirements

(a) Each applicant for the grant of an aeronautical information service certificate shall engage, employ or contract:

- (1) A senior person identified as the Accountable Manager who has the authority within the applicant's organisation to ensure that each aeronautical information service listed in their exposition —
 - (i) can be financed and is provided to meet operational requirements; and
 - (ii) is provided in accordance with the requirements prescribed by this SD-AIS;
- (2) a senior person or group of senior persons who having successfully completed an approved course in AIS and cartography and are responsible for ensuring that the applicant's organisation complies with the requirements of this SD-AIS. Such nominated person or persons shall be ultimately responsible to the Accountable Manager;
- (3) A senior person responsible for quality assurance and safety management systems; and
- (4) Sufficient personnel to collect, collate, check, coordinate, edit, and publish aeronautical information for the aeronautical information services listed in the applicant's exposition.

(b) The applicant shall —

- (1) establish a procedure to initially and periodically assess the competence of those personnel authorised by the applicant to check, edit and publish aeronautical information for the aeronautical information services listed in their exposition; and
- (2) establish a procedure to maintain the competence of those authorised personnel by developing a training programme which ensures periodic refresher training is conducted; and
- (3) Provide those authorised personnel with written evidence of the scope of their authorization.

(c) The applicant shall —

- (1) establish the design of systems, procedures and operating environment that take into consideration human factors principles which facilitate their optimum utilization in the design, contents, processing and distribution of aeronautical data and aeronautical information; and
- (2) Give due consideration to the integrity of information where human interaction is required and mitigating steps taken where risks are identified.

2.2 Facility Requirements

Each applicant for the grant of an aeronautical information service certificate shall establish offices, facilities and equipment that —

- (1) are appropriate for the aeronautical information services listed in their exposition; and
- (2) meet the applicable requirements of 4.1(b) and 4.2; and
- (3) Ensures automation of AIS for quality, efficiency and cost-effectiveness.

2.2.1 The applicant shall meet the data quality requirements for automation to:

- (1) enable digital aeronautical data exchange between the parties involved in the data processing chain; and
- (2) Use aeronautical information exchange models and data exchange models designed to be globally interoperable.

2.3 Scope of Pre-flight Information Service

Each applicant for the grant of an aeronautical information service certificate for a pre-flight information service shall, for the pre-flight services listed in their exposition, specify —

- (1) the geographic area; and
- (2) The aerodromes and the air routes originating from those aerodromes.

2.3.1 Scope of Aeronautical Data and Aeronautical Information

2.3.1.1 Each applicant for the grant of an aeronautical information service certificate shall specify procedures for resolution, traceability, timeliness, completeness and format of aeronautical data and aeronautical information to be received and managed by the aeronautical information service (AIS) to include the following:

- a) national regulations, rules and procedures;
- b) aerodromes and heliports;
- c) airspace;
- d) air traffic services (ATS) routes;
- e) instrument flight procedures;
- f) radio navigation aids/systems;
- g) obstacles;
- h) terrain; and
- i) Geographic information.

Note 1. — *Detailed specifications concerning the content of data and information for the above are contained in the Appendix 1.*

Note 2. — *Aeronautical data and aeronautical information in 2.3.1.1 may be originated by more than one organization or authority.*

2.3.1.2 Determination and reporting of aeronautical data shall be in accordance with the accuracy and integrity classification required to meet the needs of the end-user of aeronautical data.

Note. — *Specifications concerning the accuracy and integrity classification related to aeronautical data are contained Appendix 1.*

2.3.2 Metadata

2.3.2.1 Each applicant for the grant of an aeronautical information service certificate shall specify procedures for Metadata to be collected for aeronautical data processes and exchange points.

2.3.2.2 Each applicant for the grant of an aeronautical information service certificate shall specify procedures for Metadata collection to be applied throughout the aeronautical information data chain, from origination to distribution to the next intended user.

Note. — *Detailed specifications concerning metadata are contained in the PANS-AIM (Doc 10066).*

2.4 Documentation

(a) Each applicant for the grant of an aeronautical information service certificate shall —

- (1) document the format and standards for the aeronautical information published under the authority of their certificate; and
- (2) ensure that the format and standards take into account the circumstances under which the information will be used; and
- (3) Hold copies of relevant reference material, standards, practices and procedures, and any other documentation that is necessary for the aeronautical information services listed in their exposition.

(b) The applicant shall establish a procedure to control all the documentation required by paragraph (a),

to ensure that —

- (1) the documentation is reviewed and authorised by appropriate personnel before issue; and
- (2) current issues of relevant documentation are available to staff at all locations where they need access to such documentation for the aeronautical information services listed in their exposition; and
- (3) all obsolete documentation is promptly removed from all points of issue or use; and
- (4) changes to documentation are reviewed and approved by appropriate personnel; and
- (5) The current version of each item of documentation can be identified to preclude the use of out-of-date editions.

2.5 Collection of Information

- (a) Each applicant for the grant of an aeronautical information service certificate shall establish procedures to collect and collate, verify and validate the information required for the aeronautical information services listed in their exposition.
- (b) An aeronautical information service shall, in addition, obtain information to enable it to provide pre-flight information service and to meet the need for in-flight information. The procedures shall ensure —
 - (1) applicable information is obtained from organisations that provide services in support of Fiji air navigation system and from other sources that may be available; and
 - (2) Applicable information is obtained from the aeronautical information services of other States relevant to the requirements of international aircraft operators operating —
 - (i) In the areas of the Nadi Oceanic FIR in which Fiji is responsible for air traffic services; and
 - (ii) On international air routes originating from Fiji; and
 - (3) Arrangements for the timely provision of information are made with the information originators prescribed in paragraph (b)(1) and (2); and
 - (4) information/data received from the information originators prescribed in paragraph (b)(1) is certified as accurate by a person identified by the originator to be responsible for the accuracy of that information, and if not verified shall be clearly identified as such; and
 - (5) Information/data received from the information originators prescribed in paragraph (b) (2) shall be clearly identified as having the authority of the State of Origin.
- (c) The procedures for the NOTAM service shall, in addition to paragraph (b), ensure that any originator's request for the issue of a NOTAM does not require the NOTAM to be effective for more than 3 months.

2.5.1 Exchange of aeronautical data and aeronautical information

2.5.1.1 Each applicant for the grant of an aeronautical information service certificate shall designate the office to which all elements of aeronautical information products provided by other States shall be addressed. Such an office shall be qualified to deal with requests for aeronautical data and aeronautical information provided by other States.

2.5.1.2 This Standard recommends formal arrangements should be established between applicant for the grant of an aeronautical information service certificate and those parties providing aeronautical data and aeronautical information on behalf of Fiji and their users in relation to the provision of the service.

Note. — *Guidance material on such formal arrangements is contained in the Aeronautical Information Services Manual (Doc 8126).*

2.5.1.3 Each applicant for the grant of an aeronautical information service certificate shall establish procedures to arrange, as necessary, to satisfy operational requirements for the issuance and receipt of NOTAM distributed by telecommunication.

2.5.1.4 Each applicant for the grant of an aeronautical information service certificate shall establish procedures for direct contact between AIS in order to facilitate the international exchange of aeronautical data and aeronautical information.

2.6 Publication of Aeronautical Information

(a) Each applicant for the grant of an aeronautical information service certificate shall establish procedures to verify, validate, co-ordinate, edit, publish and disseminate aeronautical information for the services listed in their exposition.

(b) The procedures shall ensure that —

- (1) The information received under 2.5 is checked against available information to verify its accuracy prior to publication;
- (2) The information received under 2.5 is edited, accurately published, and disseminated —
 - (i) in the format applicable to the operational significance of the information;
 - (ii) where applicable, in accordance with 6.1, 6.2, 6.3; and
 - (iii) in a format that takes account of the circumstances under which the information will be used;
- (3) Except for paragraph (b) (4), permanent publications and long-term temporary publications are clearly identified as being published under the authority of the applicant's aeronautical information service certificate;
- (4) When aeronautical information obtained from the aeronautical information services of other States under 2.5 (b) (2) is disseminated, that information is clearly identified as having the authority of the originating State;
- (5) When information that has not been certified as required under 2.5 (b) (4) is disseminated, that information is clearly identified as being unverified;
- (6) Any permanent change to published information is coordinated with other applicable information originators before the change is published;
- (7) Temporary information that is published without a defined expiry date is reviewed at an appropriate time to ensure that the originator takes the required action to cancel or reissue the information;
- (8) The aeronautical information is published in the English language;
- (9) Place names are spelt according to local usage, transliterated when necessary into the Latin alphabet;
- (10) Units of measurement are consistent with those prescribed in Standards Document-units of measure or any difference filed by the state;
- (11) Abbreviations, consistent with those prescribed in ICAO Doc 8400, are used in the published aeronautical information when —
 - (i) Their use is appropriate; and
 - (ii) Their use will facilitate the dissemination of the information; and
- (12) Any of the aeronautical information published is promptly made available to the aeronautical information services of other States, upon request by those States;
- (13) The aeronautical information is made available in a form that is suitable for the operational requirements of —
 - (i) Flight operations personnel, including flight crew members and the services responsible for pre-flight briefing; and

- (ii) The air traffic service units responsible for the provision of air traffic control services, flight information services and, where appropriate, the provision of Search and Rescue services.
- (c) The procedures for the AIP service shall, in addition to paragraph (b), ensure that —
- (1) Aeronautical charts, and operationally significant information published in AIP Amendments and AIP Supplements, are published in accordance with the AIRAC system;
 - (2) The information published under the AIRAC system is clearly identified with the acronym AIRAC;
 - (3) The information published under the AIRAC system is distributed so that recipients receive the information at least 28 calendar days before its effective date;
 - (4) the information published under the AIRAC system is not changed for at least 28 calendar days after the effective date, unless the circumstance notified is of a temporary nature and would not persist for the full period;
 - (5) Where an AIP Supplement is published to replace a NOTAM, the supplement includes a reference to the serial number of the NOTAM;
 - (6) Where an AIP Amendment or AIP Supplement is published under the AIRAC system, a NOTAM is originated giving a brief description of the operationally significant contents, the effective date and the reference number of each amendment or supplement. The NOTAM shall —
 - (i) Come into force on the same effective date as the amendment or supplement; and
 - (ii) Remain in force until the next AIRAC date; and
 - (7) When there is no applicable information to be published by the AIRAC date, a NIL notification is issued; and
 - (8) A NOTAM is originated when information to be published as an AIP Amendment or AIP Supplement takes effect prior to the effective date of the amendment or supplement.

2.7 Error Correction in Aeronautical Information

- (a) Each applicant for the grant of an aeronautical information service certificate shall establish procedures to record, investigate, correct, and report any errors including digital data errors that are detected in the aeronautical information published under the authority of their certificate.
- (b) The procedures shall ensure that —
- (1) the error is detected and corrected by the most appropriate means relative to the operational significance of the error;
 - (2) the correction is clearly identified in the republished information;
 - (3) the source of the error is identified and, where possible, eliminated; and
 - (4) The Authority is notified of a promulgated information incident in accordance with Air Navigation Regulation.71 – Mandatory Occurrence Reporting and Investigation.

2.8 Records

- (a) Each applicant for the grant of an aeronautical information service certificate shall establish procedures to identify, collect, index, store, maintain, protect and dispose of the records that are necessary for the aeronautical information services listed in their exposition.
- (b) The procedures shall ensure that —
- (1) there are records enabling all incoming and outgoing aeronautical information to be readily identified by serial number and date, and that supplementary information can be similarly verified and, where necessary, authenticated; and
 - (2) there is a record of each person who is authorised by the applicant to check, edit, and publish aeronautical information; and
 - (3) there is a record of each occurrence of error correction under the procedures required by 2.7; and

- (4) there is a record of each internal quality assurance review of the applicant's organisation carried out under the procedures required by 2.9; and
- (5) all records are legible and of a permanent nature; and
- (6) All records are retained for at least 5 years except NOTAM, AIP Supplements and Aeronautical Information Circulars, which need only be retained for 30 days after cancellation.

2.9 Internal Quality Assurance

(a) Each applicant for the grant of an aeronautical information service certificate shall establish and maintain internal quality system containing procedures, processes and resources to ensure compliance with, and the adequacy of, the procedures required to implement demonstrable quality management at each function stage.

(b) The procedures shall specify —

- (1) the level of quality that the applicant intends to achieve;
- (2) the level and frequency of internal reviews;
- (3) the person or persons responsible for carrying out the internal reviews;
- (4) how the findings of the internal reviews are to be recorded and reported to the certificate holder's Accountable Manager;
- (5) how quality indicators such as error reports, incidents, and complaints are incorporated into the internal quality assurance procedures;
- (6) the senior person's responsibilities for analysis and overview of the internal reviews; and
- (7) the means for rectifying any deficiencies found during an internal review;
- (8) applicability to the whole aeronautical data chain from data origination to distribution to the next intended user, taking into consideration the intended use of data;
- (9) necessary policies, processes and procedures, including those for the use of metadata, to ensure and verify that aeronautical data is traceable throughout the aeronautical information data chain so as to allow any data anomalies or errors detected in use to be identified by root cause, corrected and communicated to affected users under para 2.7 ; and
- (10) The documentation requirements for all aspects of the review.

(c) The senior person who has the responsibility for internal quality assurance shall have direct access to the certificate holder's Accountable Manager on matters affecting the adequacy, accuracy, timeliness, format, and dissemination of the published aeronautical information.

Note: It is recommended that the quality system established in accordance with 2.9 (a) and (b) should be in conformity with International Organization for Standardization (ISO) 9000 series of quality assurance standards.

2.10 Organisation Exposition

(a) An applicant for the grant of an aeronautical information service certificate shall provide the Authority with an exposition containing —

- (1) a statement signed by the Accountable Manager on behalf of the applicant's organisation confirming that —
 - (i) The exposition and any included manuals define the organisation and demonstrates its means and methods for ensuring ongoing compliance with this SD-AIS; and
 - (ii) The exposition and any included manuals will be complied with at all times; and
- (2) the titles and names of the senior person or persons required by 2.1(a)(1), (2); and (3) and
- (3) the duties and responsibilities of the senior persons specified in paragraph (a)(2) and (3) including matters for which they have responsibility to deal directly with the Authority on behalf of the organisation; and
- (4) an organisation chart showing lines of responsibility of the senior persons specified in paragraph (a)(2) and (3); and

- (5) a summary of the applicant's staffing structure for each aeronautical information service listed under paragraph (a)(6); and
 - (6) a list of the aeronautical information services to be covered by the certificate; and
 - (7) for a pre-flight information service, details of the area, aerodromes and air routes required by 2.3; and
 - (8) the location and address details of the applicable offices required by 4.1(b)(1) and 4.2 (1); and
 - (9) details of the applicant's format and standards required by 2.4(a)(1) for their published aeronautical information; and
 - (10) details of the applicant's procedures required regarding
 - (i) The competence of personnel; and
 - (ii) The control of documentation; and
 - (iii) The collection of information; and
 - (iv) The publication of aeronautical information; and
 - (v) The correction of errors in published information; and
 - (vi) The identification, collection, indexing, storage, maintenance, and disposal of records; and
 - (vii) Internal quality assurance; and
 - (11) Procedures to control, amend and distribute the exposition.
- (b) The applicant's exposition must be acceptable to the Authority.

Chapter 3 Operating Requirements

3.1 Continued Compliance

Each holder of an aeronautical information service certificate shall —

- (1) hold at least one complete and current copy of their exposition at each office listed in their exposition; and
- (2) comply with all procedures and standards detailed in their exposition; and
- (3) make each applicable part of their exposition available to personnel who require those parts to carry out their duties; and
- (4) continue to meet the standards and comply with the requirements of Chapter 2 prescribed for certification under ANR 145E; and
- (5) notify the Authority of any change of address for service, telephone number, facsimile number or email address required by form GS700 within 5 days of the change; and
- (6) Notify the Authority of any change in the personnel nominated in 2.1(a) (1), (2) and (3) within 3 days of the change.

Chapter 4 Services

4.1 AIP Service

- (a) The holder of the aeronautical information service certificate for the AIP service shall publish—
- (1) Fiji-AIP in accordance with 6.1; and
 - (2) Fiji-AIP Amendments in accordance with 6.1.3; and
 - (3) Fiji-AIP Supplements in accordance with 6.1.4 for notification of
 - (i) Temporary changes that are effective for 3 months or longer; and
 - (ii) Information of less than 3 months duration which contains extensive text or graphics
- (b) The certificate holder shall, in addition to paragraph (a), —
- (1) designate an office as Fiji's point of contact with the aeronautical information services of other States for the interchange of the Integrated Aeronautical Information Package, except AIC; and
 - (2) make the Fiji AIP, AIP Amendments and AIP Supplements available to any person upon payment of any charge that may apply to the supply of the publications; and
 - (3) establish a system to disseminate the Fiji AIP, AIP Amendments, AIP Supplements and aeronautical charts in accordance with 2.6 (c)(3); and
 - (4) ensure that all aeronautical charts published as part of the Fiji AIP conform to the applicable standards for the charts and/or instrument flight procedures design; and
 - (5) coordinate the input of all aeronautical information from the originators prescribed in 2.5 (b)(1), except —
 - (i) information which is of immediate operational significance necessitating the immediate issue of a NOTAM; and
 - (ii) Temporary information of a duration of less than three months that only requires the issue of a NOTAM.

4.2 NOTAM Service

The holder of the aeronautical information service certificate for the NOTAM service shall —

- (1) designate a NOF for Fiji; and
- (2) operate the NOF on a 24-hour basis; and
- (3) establish agreements with other international NOTAM offices for the exchange of NOTAM; and
- (4) ensure that —
 - (i) the NOF is connected to the AFTN; and
 - (ii) the AFTN connection provides for printed communication; and
 - (iii) the NOF has appropriate facilities to issue and receive NOTAM distributed by means of telecommunication or other means acceptable to the Authority; and
- (5) promptly issue a NOTAM that is in accordance with 6.3, whenever information received under 2.5 requires the issue of a NOTAM; and
- (6) At intervals of not more than one month, issue a checklist over the AFTN or other means acceptable to the Authority of the NOTAMs that are currently in force.

4.3 Pre-flight Information Service

- (a) Each holder of an aeronautical information service certificate for a pre-flight information service shall make available to flight operations personnel and flight crew members, aeronautical information that —
- (1) is essential for the safety, regularity and efficiency of air navigation; and

- (2) Relates to the geographic area, aerodromes and air routes of the intended operations listed in their exposition.
- (b) The aeronautical information provided under paragraph (a) shall include, where applicable, but is not limited to —
- (1) a summary of current NOTAM and other information of an urgent character, in a plain text PIB; and
 - (2) relevant elements of the Integrated Aeronautical Information Package except AICs; and
 - (3) relevant maps and charts (but refer to 4.1 (b)(2) re charges for charts or other items); and
 - (4) current information relating to the aerodrome of departure, alternates and arrival concerning any of the following:
 - (i) construction or maintenance work on or immediately next to the manoeuvring area:
 - (ii) rough portions of any part of the manoeuvring area, whether marked or not, including broken parts of the surface of runways and taxiways:
 - (iii) presence and depth of snow, ice, or water on runways and taxiways, including their effect on surface friction:
 - (iv) snow, drifted or piled on or next to runways or taxiways:
 - (v) parked aircraft or other objects on or immediately next to taxiways:
 - (vi) the presence of other temporary hazards including those created by birds or animals:
 - (vii) failure or irregular operation of part or all of the aerodrome lighting system including approach, threshold, runway, taxiway, and obstruction lights, and manoeuvring area unserviceability lights, and aerodrome power supply:
 - (viii) failure, irregular operation or changes in the operational status of air navigation facilities including ILS and markers, GNSS, DME, ADS-B, ADS-C, CPDLC, ATIS, VOR, NDB, VHF aero mobile channels, , other services and/or facilities nominated by the Authority and secondary power supply.

4.4 Post-flight Information Service

- (a) The certificate holder shall make provisions for flight crew members to report post-flight information at those aerodromes listed in the holder's exposition.
- (b) The certificate holder shall forward any post-flight information reported by flight crew members under paragraph (a) concerning the state and operation of air navigation facilities and information on the presence of birds, to the operator of the navigation facility or the aerodrome operator.

Chapter 5 Other Requirements

5.1 Changes to Certificate Holder's Organisation

- (a) Each holder of an aeronautical information service certificate shall ensure that their exposition is amended so as to remain a current description of the holder's organisation and services.
- (b) The certificate holder shall ensure that any amendments made to the holder's exposition meet the applicable requirements of this SD-AIS and comply with the amendment procedures contained in the holder's exposition.
- (c) The certificate holder shall provide the Authority with a copy of each amendment to the holder's exposition as soon as practicable after its incorporation into the exposition.
- (d) Where a certificate holder proposes to make a change to any of the following, prior notification to and acceptance by the Authority is required:
 - (1) the Accountable Manager required under 2.1 (a)(1):
 - (2) the listed senior persons required under 2.1 (a)(2) and (3):
 - (3) the aeronautical information services provided by the holder:
 - (4) The format and standards for the aeronautical information published under the authority of their certificate.
- (e) The Authority may prescribe conditions under which a certificate holder may operate during or following any of the changes specified in paragraph (d).
- (f) A certificate holder shall comply with any conditions prescribed under paragraph (e).
- (g) Where any of the changes referred to in this standard requires an amendment to the certificate, the certificate holder shall forward the certificate to the Authority as soon as practicable.
- (h) The certificate holder shall make such amendments to the holder's exposition as the Authority may consider necessary in the interests of aviation safety.

5.2 Safety Inspections and Audits

- (a) The Authority may in writing require the holder of an aeronautical information service certificate to undergo or carry out such inspections and audits of the holder's offices, facilities, documents, and records as the Authority considers necessary in the interests of civil aviation safety and security in accordance with section 15 of the Act.
- (b) The Authority may require the holder of an aeronautical information service certificate to provide such information as the Authority considers relevant to the inspection or audit.

5.3 Transitional Arrangements

- (a) After SD-AIS comes into force, any organisation that currently provides an aeronautical information service and which is required under SD-AIS to hold an aeronautical information service certificate may continue to provide the service under existing delegations until the expiry of a period of 12 months from the date that SD-AIS commences.
- (b) At the expiry of 12 months all such organisations must be operating under an SD-AIS certificate. If an organisation is unable by itself to meet any requirements for certification, then it must contract for the provision of such services that it cannot provide with an organisation that can meet the requirements that is acceptable to the Authority.

Chapter 6 Document Format

6.1 Fiji Aeronautical Information Publications

Unless specified in this SD-AIS or otherwise approved by the Authority or in accordance with a difference from Annex 15 filed by Fiji, the Fiji AIP shall adhere to the format provided for in ICAO Annex 15-AIS and Doc 8126-AIS Manual.

6.1.1 Contents of FIJI AIP

- (a) The FIJI AIP shall contain current information, data and aeronautical charts relating to —
 - (1) the regulatory and airspace requirements for air navigation in Fiji FIR and the areas of the Nadi Oceanic FIR for which Fiji is responsible for air traffic services; and
 - (2) Fiji services and facilities that support international air navigation to and from Fiji; and
 - (3) the services and facilities that support air navigation within Fiji Flight Information Region; and
 - (4) Aerodromes operating under an aerodrome operating certificate issued under Aerodrome Regulations and SD-Aerodromes.
- (b) The FIJI AIP may contain current information, data, and aeronautical charts relating to aerodromes not operating under an aerodrome operating certificate, where —
 - (1) the aerodrome operator provides the holder of the aeronautical information service certificate for the AIP service with the required data and information relating to the aerodrome; and
 - (2) The aerodrome operator accepts responsibility for the accuracy and currency of that data and information.
- (c) The Fiji AIP shall include at an appropriate location —
 - (1) a statement to advise which certificated organisations are responsible for the air navigation facilities, services and procedures covered by the FIJI AIP; and
 - (2) the general conditions under which those services and facilities are available for use; and
 - (3) a list of the differences from the ICAO Standards, Recommended Practices and Procedures that the Authority has filed under Article 38 of the Convention; and
 - (4) a summary of any significant standards, practices and procedures followed by Fiji, where the ICAO Standards, Recommended Practices and Procedures allow alternative courses of action.

6.1.2 Specifications for FIJI AIP

- (a) Each publication that forms part of the FIJI AIP shall —
 - (1) Specify the purpose of the publication, the geographic area covered and that the publication is part of the FIJI AIP; and
 - (2) be self-contained, include a table of contents with page numbers, and be paginated clearly; and
 - (3) Specify that it is published —
 - (i) by the holder of the aeronautical information service certificate for the provision of AIP service; and
 - (ii) under the authority of their certificate issued by the Civil Aviation Authority of Fiji; and
 - (4) Not duplicate information unnecessarily and if duplication is necessary, there shall be no difference in the duplicated information in respect of the same facility, service or procedure; and
 - (5) Each page of the AIP shall be dated. The date shall consist of the day, month by name, and the year when that page becomes effective; and
 - (6) Be kept up-to-date by means of AIP Amendments or by reissue at regular intervals; and
 - (7) Show clearly the degree of reliability of any unverified information.
- (b) A publication published in loose-leaf form shall —

- (1) specify on each page, which publication the page belongs to and that the page is part of the FIJI AIP; and
- (2) contain a checklist that —
 - (i) gives the current date, and page number or chart title of each page or chart in the publication; and
 - (ii) is issued with each AIP Amendment; and
 - (iii) specifies which publication it belongs to; and
 - (iv) Is printed with a page number and the date as prescribed in subparagraph (a) (5).

6.1.3 Specifications for FIJI AIP Amendments

- (a) Each AIP Amendment shall —
 - (1) clearly identify, by a distinctive symbol or annotation, all changes to the published information, and all new information on a reprinted page; and
 - (2) Be allocated a serial number or the aria effective date, which shall be consecutive and based on the aria calendar year.
- (b) A NIL notification shall be originated and distributed by Noam or monthly printed plain-language list of valid No tams when an AIP amendment will not be published at the established interval.

6.1.4 Specifications for AIP Supplements

- (a) Each AIP Supplement shall be allocated a serial number that shall be consecutive and based on the calendar year.
- (b) The AIP Supplement pages shall remain part of the FIJI AIP while any part of their contents remains valid.
- (c) A checklist of AIP Supplements currently in force shall be issued with each AIP Supplement or at intervals of not more than one month. The checklist shall be given the same distribution as the supplement.
- (d) AIP Supplement pages shall be colored in order to be conspicuous, preferably in yellow.

6.2 Aeronautical Information Circulars

AIC shall be published by the Authority to provide:

- (a) a long-term forecast of any major change in legislation, regulations, procedures or facilities; or
- (b) information of a purely explanatory or advisory nature liable to affect flight safety; or
- (c) Information or notification of an explanatory or advisory nature concerning technical, legislative or purely administrative matters.

6.2.1 An AIC shall not be used for information that qualifies for inclusion in AIP and NOTAM.

6.2.2 The validity of AIC currently in force shall be reviewed at least once a year.

6.2.3 A checklist of currently valid AIC shall be regularly provided.

6.3 NOTAM

6.3.1 Specifications for NOTAM

- (a) Each NOTAM shall be allocated a serial number by the NOTAM Office in either an A series or a D series. The serial number within each series shall be consecutive and based on the calendar year.

- (b) The A series of NOTAM shall only contain aeronautical information that —
 - (1) is operationally significant to international operators operating within the Nadi FIR; and/or
 - (2) Relates to Canton Island and/or Christmas Island (PLCH).
- (c) The D series of NOTAM shall contain aeronautical information that is operationally significant to domestic operators operating in Fiji domestic airspace.
- (d) Each NOTAM shall be brief, deal with only one subject, and be compiled so that its meaning is clear without reference to another document.
- (e) When a NOTAM contains information that requires an amendment to the FIJI AIP or an AIP Supplement, the NOTAM shall contain a cross-reference to the affected FIJI AIP text or AIP Supplement.
- (f) When a NOTAM is issued that cancels or supersedes a previous NOTAM, the serial number of the previous NOTAM shall be specified.
- (g) When an error is detected in a NOTAM, a replacement NOTAM that cancels the original shall be issued.
- (h) Location indicators included in the text of a NOTAM shall conform to those approved by ICAO.
- (i) A curtailed form of location indicator shall not be used.
- (j) Where no location indicator is assigned to the location, the name of the place, spelt in accordance with 2.6 (b) (9), shall be entered in the text of the NOTAM.
- (k) The NOTAM checklist required under 4.2 (6) shall —
 - (1) refer to the latest AIP Amendments, AIP Supplements and the internationally distributed AIC; and
 - (2) Have the same distribution as the actual NOTAM series to which they refer and shall be clearly identified as a checklist.
- (l) Each NOTAM in the A series shall be prepared and composed in a manner suitable for international distribution.

6.3.2 Distribution of NOTAM

- (a) Each NOTAM shall —
 - (1) where possible, be transmitted as a single telecommunication message; and
 - (2) Be distributed to addressees to whom the information is of direct operational significance, and who would not otherwise have at least 5 days prior notification.
- (b) The A series of NOTAM shall be distributed within Fiji and to those international NOTAM offices with whom agreements have been established under 4.2 (3).
- (c) The D series of NOTAM shall be distributed within Fiji.
- (d) Whenever practicable, the AFTN shall be employed for NOTAM distribution, any alternative means shall be documented and acceptable to the Authority.
- (e) When a NOTAM exchanged under the agreement established under 4.2 (3), is sent by means other than the AFTN, a six-digit date-time group indicating the date and time of filing the NOTAM and the identification of the originator shall precede the text of the NOTAM.
- (f) Whenever possible, a predetermined distribution system for NOTAM transmitted on the AFTN shall be used, subject to the agreements established under 4.2 (3) with other international NOTAM offices.

6.4 Digital data sets

6.4.1 General

6.4.1.1 Digital data shall be in the form of the following data sets:

- a) AIP data set;
- b) terrain data sets;
- c) obstacle data sets;
- d) aerodrome mapping data sets; and
- e) Instrument flight procedure data sets.

Note. — Detailed specifications concerning the content of the digital data sets are contained in the Appendix 1.

6.4.1.2 Each data set shall be provided to the next intended user together with at least the minimum set of metadata that ensures traceability.

Note. — Detailed specifications concerning metadata are contained in the PANS-AIM (Doc 10066).

6.4.1.3 A checklist of valid data sets shall be regularly provided.

6.4.2 AIP data set

6.4.2.1 An AIP data set should be provided covering the extent of information as provided in the AIP.

6.4.2.2 When it is not possible to provide a complete AIP data set, the data subset(s) that are available should be provided.

6.4.2.3 The AIP data set shall contain the digital representation of aeronautical information of lasting character (permanent information and long duration temporary changes) essential to air navigation.

6.4.3 Terrain and obstacle data sets

Note 1. — Numerical requirements for terrain and obstacle data sets are contained in Appendices 1 and 2.

Note 2. — Requirements for terrain and obstacle data collection surfaces are contained in the Appendix 3.

6.4.3.1 The coverage areas for terrain and obstacle data sets shall be specified as:

- **Area 1:** the entire territory of a State;
- **Area 2:** within the vicinity of an aerodrome, subdivided as follows:
 - **Area 2a:** a rectangular area around a runway that comprises the runway strip plus any clearway that exists;
 - **Area 2b:** an area extending from the ends of Area 2a in the direction of departure, with a length of 10 km and a splay of 15 per cent to each side;
 - **Area 2c:** an area extending outside Area 2a and Area 2b at a distance of not more than 10 km from the boundary of Area 2a; and
 - **Area 2d:** an area outside Areas 2a, 2b and 2c up to a distance of 45 km from the aerodrome reference point, or to an existing terminal control area (TMA) boundary, whichever is nearest;
- **Area 3:** the area bordering an aerodrome movement area that extends horizontally from the edge of a runway to 90 m from the runway centre line and 50 m from the edge of all other parts of the aerodrome movement area; and
- **Area 4:** the area extending 900 m prior to the runway threshold and 60 m each side of the extended runway centre line in the direction of the approach on a precision approach runway, Category II or III.

6.4.3.2 Where the terrain at a distance greater than 900 m (3 000 ft) from the runway threshold is mountainous or otherwise significant, the length of Area 4 should be extended to a distance not exceeding 2 000 m (6 500 ft) from the runway threshold.

6.4.3.3 Terrain data sets

6.4.3.3.1 Terrain data sets shall contain the digital representation of the terrain surface in the form of continuous elevation values at all intersections (points) of a defined grid, referenced to common datum.

6.4.3.3.2 Terrain data shall be provided for Area 1.

6.4.3.3.3 For aerodromes regularly used by international civil aviation, terrain data shall be provided for:

- a) Area 2a;
- b) the take-off flight path area; and
- c) An area bounded by the lateral extent of the aerodrome obstacle limitation surfaces.

6.4.3.3.4 For aerodromes regularly used by international civil aviation, additional terrain data should be provided within Area 2 as follows:

- a) in the area extending to a 10-km radius from the ARP; and
- b) Within the area between 10 km and the TMA boundary or a 45-km radius (whichever is smaller), where terrain penetrates a horizontal terrain data collection surface specified as 120 m above the lowest runway elevation.

6.4.3.3.5 Arrangements should be made for coordinating the provision of terrain data for adjacent aerodromes where their respective coverage areas overlap to assure that the data for the same terrain is correct.

6.4.3.3.6 For those aerodromes located near territorial boundaries, arrangements should be made among States concerned to share terrain data.

6.4.3.3.7 For aerodromes regularly used by international civil aviation, terrain data should be provided for Area 3.

6.4.3.3.8 For aerodromes regularly used by international civil aviation, terrain data shall be provided for Area 4 for all runways where precision approach Category II or III operations have been established and where detailed terrain information is required by operators to enable them to assess the effect of terrain on decision height determination by use of radio altimeters.

6.4.3.3.9 Where additional terrain data is collected to meet other aeronautical requirements, the terrain data sets should be expanded to include this additional data.

6.4.3.4 Obstacle data sets

6.4.3.4.1 Obstacle data sets shall contain the digital representation of the vertical and horizontal extent of obstacles.

6.4.3.4.2 Obstacle data shall not be included in terrain data sets.

6.4.3.4.3 Obstacle data shall be provided for obstacles in Area 1 whose height is 100 m or higher above ground.

6.4.3.4.4 For aerodromes regularly used by international civil aviation, obstacle data shall be provided for all obstacles within Area 2 that are assessed as being a hazard to air navigation.

6.4.3.4.5 For aerodromes regularly used by international civil aviation, obstacle data shall be provided for:

- a) Area 2a for those obstacles that penetrate an obstacle data collection surface outlined by a rectangular area around a runway that comprises the runway strip plus any clearway that exists. The Area 2a obstacle collection surface shall have a height of 3 m above the nearest

runway elevation measured along the runway centre line, and for those portions related to a clearway, if one exists, at the elevation of the nearest runway end;

- b) objects in the take-off flight path area which project above a plane surface having a 1.2 per cent slope and having a common origin with the take-off flight path area; and
- c) Penetrations of the aerodrome obstacle limitation surfaces.

Note. — *Take-off flight path areas are specified in SD-AC, 3.8.2. Aerodrome obstacle limitation surfaces are specified in SD-AD*

6.4.3.4.6 For aerodromes regularly used by international civil aviation, obstacle data should be provided for Areas 2b, 2c and 2d for obstacles that penetrate the relevant obstacle data collection surface specified as follows:

- a) Area 2b: an area extending from the ends of Area 2a in the direction of departure, with a length of 10 km and a splay of 15 per cent to each side. The Area 2b obstacle collection surface has a 1.2 per cent slope extending from the ends of Area 2a at the elevation of the runway end in the direction of departure, with a length of 10 km and a splay of 15 per cent to each side;
- b) Area 2c: an area extending outside Area 2a and Area 2b at a distance of not more than 10 km from the boundary of Area 2a. The Area 2c obstacle collection surface has a 1.2 per cent slope extending outside Area 2a and Area 2b at a distance of not more than 10 km from the boundary of Area 2a. The initial elevation of Area 2c has the elevation of the point of Area 2a at which it commences; and
- c) Area 2d: an area outside Areas 2a, 2b and 2c up to a distance of 45 km from the aerodrome reference point, or to an existing TMA boundary, whichever is nearest. The Area 2d obstacle collection surface has a height of 100 m above ground;

except that data need not be collected for obstacles less than a height of 3 m above ground in Area 2b and less than a height of 15 m above ground in Area 2c.

6.4.3.4.7 Arrangements should be made for coordinating the provision of obstacle data for adjacent aerodromes where their respective coverage areas overlap to assure that the data for the same obstacle is correct.

6.4.3.4.8 For those aerodromes located near territorial boundaries, arrangements should be made among States concerned to share obstacle data.

6.4.3.4.9 For aerodromes regularly used by international civil aviation, obstacle data should be provided for Area 3 for obstacles that penetrate the relevant obstacle data collection surface extending a half-metre (0.5 m) above the horizontal plane passing through the nearest point on the aerodrome movement area.

6.4.3.4.10 for aerodromes regularly used by international civil aviation, obstacle data shall be provided for Area 4 for all runways where precision approach Category II or III operations have been established.

6.4.3.4.11 Where additional obstacle data is collected to meet other aeronautical requirements, the obstacle data sets should be expanded to include this additional data.

6.4.4 Aerodrome mapping data sets

6.4.4.1 Aerodrome mapping data sets shall contain the digital representation of aerodrome features.

Note. — *Aerodrome features consist of attributes and geometries, which are characterized as points, lines or polygons. Examples include runway thresholds, taxiway guidance lines and parking stand areas.*



- 6.4.4.2** Aerodrome mapping data sets should be made available for aerodromes regularly used by international civil aviation.
- 6.4.5** Instrument flight procedure data sets
 - 6.4.5.1** Instrument flight procedure data sets shall contain the digital representation of instrument flight procedures.
 - 6.4.5.2** Instrument flight procedure data sets should be made available for aerodromes regularly used by international civil aviation.

Chapter 7 - Forms

7.1 Application and Renewal forms

APPLICATION FOR ISSUE OR RENEWAL OF AN AERONAUTICAL INFORMATION SERVICE CERTIFICATE (Pursuant to ANR No. 145E)			
Organisation Details			
Name of organisation <i>(Certificate will be issued in this name)</i>			
Address for service		Postal address	
Tel:		Fax:	
Email:			
AIS organisation structure diagram <i>(provide on separate sheet and attached with this application)</i>			
Reason for Application – Mark appropriate box			
Initial issue <input type="checkbox"/>		Renewal <input type="checkbox"/>	
Questionnaire - <i>*Delete as applicable. If answering “Yes”, please provide details on separate sheet</i>			
The following questions must be answered: -			
(a) Has the organisation been convicted for any transport safety offence in the last five years or is the organisation presently facing charges for a transport safety offence?			Yes/No*
(b) Has the organisation previously had an application for an aviation document rejected or has an aviation document held by the organisation been suspended or revoked?			Yes/No*
(c) Has the organization contracted out services?			Yes/No*
(d) Has the organization been contracted to provide services?			Yes/No*
Aeronautical Information Service to be provided			
Aeronautical Information Publication <input type="checkbox"/>	AIP & Supplements Amendment Service <input type="checkbox"/>		
AIP Supplements <input type="checkbox"/>	NOTAMs <input type="checkbox"/>		
Pre-flight Information Bulletin <input type="checkbox"/>	Checklists and List of Valid NOTAMs <input type="checkbox"/>		
Aeronautical Charting <input type="checkbox"/>			
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.			
<i>Service</i>	<i>Aerodrome/Airspace</i>		
<i>Use an additional sheet if necessary and submit a separate application for each separate ATS unit</i>			
Senior Personnel			
List of Senior Persons and their areas of responsibility.			
<i>Name</i>	<i>Job Title</i>	<i>Areas of responsibility</i>	

Personnel	
Indicate number of persons to be employed in the organisation.	
Aeronautical Information Services personnel:	
1-5 <input type="checkbox"/>	6-10 <input type="checkbox"/>
11-50 <input type="checkbox"/>	51-100 <input type="checkbox"/>
	>100 <input type="checkbox"/>
Training	
Indicate type of training to be undertaken within the organisation for personnel.	
Basic Air Traffic Control (ICAO 052) <input type="checkbox"/>	Fundamentals of Aeronautical Information Service <input type="checkbox"/>
Aeronautical Cartography <input type="checkbox"/>	ICAO Pans-Ops Instrument Flight Procedure Design OJT (On-the-Job Training) <input type="checkbox"/>
Exposition / AIS Manual	
This must be provided with initial application and updated as required by SD-AIS.	
Declaration	
This application is made for and on behalf of the organisation identified above. I certify that I am empowered by the organisation to ensure that all activities undertaken by the organisation 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 authorise the Authority to use the information on this form or attached hereto for any purpose as required or authorised by law. I further authorise 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 Fiji	
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) Name of organisation: 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 9.2 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:	
<p>Chief Executive Civil Aviation Authority of the Fiji Private Bag, Nadi Airport, Republic of Fiji</p>	

7.2 Responsible Management Declaration

ACCOUNTABLE MANAGER DECLARATION FORM (To be completed by all key AIS managerial personnel)		
Name of the Officer:		
Name of Employer:		
Post title:		
Principal Responsibilities:		
Report to:		
Academic Qualifications		
Work Qualification & Experience		
Years in Current Position		
Last position held		
Sub-ordinate staffing structure <i>(Provide on separate sheet)</i>		
Declaration of Undertaking (1) I, _____, an employee of _____ and holding the position of _____, having understood my principal responsibilities, is prepared to uphold them ensuring that the operation of the said aeronautical information services is for the safety of aircraft operations. (2) I am fully aware that any failure on my part on the area of responsibility so assigned to me to ensure: (i) compliance to the applicable standards published by the Authority; and (ii) conformance to the procedures promulgated by my employer; Will be in breach of 3.1 of SD-AIS; and may invalidate the AIS Provider Certificate issued to my employer. (3) I understand that each post holder is accountable for the responsibilities/functions so prescribed for the said position and that accountability entails competency on the part of the post holder in his/her performance. Signature: _____ Date: _____		
For CAAFI Use Only		
Exposition / AIS MATM		
Acceptability of the applicant:	Yes / No*	
Remarks: <i>(*Areas of non-compliance, reasons, etc.)</i>		
Name:	Signature	Date

7.3 AIS Provider Certificate Specimen

A specimen copy of an AIS Provider Certificate given below is for official usage only.

AERONAUTICAL INFORMATION SERVICES PROVIDER CERTIFICATE

Certificate No. xxx

NNNNN

(Name of the certificate holder)

This aeronautical information services provider certificate is issued by the Civil Aviation Authority of Fiji pursuant to Air Navigation Regulations Part VIII A – Institutions and Organisation No. 145E Certification of Aeronautical Information Services Providers and certified that the said holder is contracted for the provision of manpower to

X.x

and may exercise the following functions -

- (a) Aeronautical Information Publication (AIP)
- (b) AIP & Supplements amendment service
- (c) NOTAM
- (d) Pre-flight Information Service
- (e) Checklists and List of valid NOTAMs
- (f) Instrument Flight Procedure Design;

Within the Nadi Flight Information Region and the Fiji Domestic Airspace in accordance with the standards and requirements prescribed by Standards Documents–Aeronautical Information Services and the aeronautical information service procedures specified in certificate holder's approved Operations Manual of Aeronautical Information Services (AIS).

The said certificate holder, in respect of its aeronautical information service functions, shall-

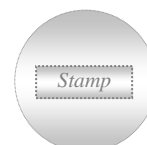
(Conditions of certificate)

The Authority may suspend or cancel this aeronautical information service provider certificate where the holder fails to comply with the requirements and conditions set forth in the Civil Aviation Act, Air Navigation Regulations, Standards Document– Aeronautical Information Services and the approved Operations Manual of Aeronautical Information Services.

Unless suspended or cancelled, this certificate is not transferable and is effective for the period from

d/m/y to d/m/y

(Name)
Chief Executive
Civil Aviation Authority of Fiji
Date: d/m/y)



Appendix 1 - Aeronautical Data Catalogue

Note 1. — *The Aeronautical Data Catalogue is available electronically and provided as part of the SD-AIS.*

Note 2. — *The Aeronautical Data Catalogue is a general description of the aeronautical Information management (AIM) data scope and consolidates all data that can be collected and maintained by the aeronautical information service (AIS). It provides a reference for aeronautical data origination and publication requirements.*

Note 3. — *The Aeronautical Data Catalogue provides a means in this Standards to facilitate the identification of the organizations and authorities responsible for the origination of the aeronautical data and aeronautical information. It also provides a common list of terms and facilitates the formal arrangements between data originators and the AIS. It includes data quality requirements applicable from origination through to publication.*

Note 4. — *The Aeronautical Data Catalogue contains the aeronautical data subjects, properties and sub-properties organized in:*

Table A1-1	Aerodrome data;
Table A1-2	Airspace data;
Table A1-3	ATS and other routes data;
Table A1-4	Instrument flight procedure data;
Table A1-5	Radio navigation aids/systems data;
Table A1-6	Obstacle data;
Table A1-7	Geographic data;
Table A1-8	Terrain data;
Table A1-9	Data types; and
Table A1-10	Information about national and local regulation, services and procedures.

Note 5. — *The Aeronautical Data Catalogue provides detailed descriptions of all subjects, properties and sub-properties, the data quality requirements and the data types.*

Note 6. — *The data types describe the nature of the property and sub-property and specify the data elements to be collected.*

Note 7. — *The tables of the Aeronautical Data Catalogue are composed of the following columns:*

- (1) *Subject for which data can be collected.*
- (2)(3) *Property is an identifiable characteristic of a subject which can be further defined into sub-properties. The classification of a catalogue element as subject, property or sub-property does not impose a certain data model.*
- (4) *The data is classified in different types. See Table A1-9 for more information on data types.*
- (5) *A description of the data element.*
- (6) *Notes are additional information or conditions of the provision.*
- (7) *Accuracy requirements for aeronautical data are based on a 95 per cent confidence level. For those fixes and points that are serving a dual purpose, e.g. holding point and missed approach point, the higher accuracy applies. Accuracy requirements for obstacle and terrain data are based on a 90 per cent confidence level.*
- (8) *Integrity classification.*

- (9) *Origination type. Positional data is identified as surveyed, calculated or declared.*
- (10) *Publication resolution. The publication resolutions for geographical position data (latitude and longitude) are applicable to coordinates formatted in degrees, minutes and seconds. When a different format is used (such as degrees with decimals for digital data sets) or when the location is significantly further to the north/south, the publication resolution needs to be commensurate with the accuracy requirements.*
- (11) *Chart resolution*

Note 8.— *The Aeronautical Data Catalogue contains quality requirements for aeronautical data as originally provided in: Annex 4 — Aeronautical Charts, Appendix 6; Annex 11 — Air Traffic Services, Appendix 5; Annex 14 — Aerodromes, Volume I — Aerodromes Designs and Operations, Appendix 4 and Volume II — Heliports, Appendix 1; Annex 15 — Aeronautical Information Services, Appendices 7 and 8, and the Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS, Doc 8168), Volume II — Construction of Visual and Instrument Flight Procedures. The framework of the Aeronautical Data Catalogue is designed to adapt to future quality requirements for the remaining aeronautical data properties and sub-properties.*

Appendix 2

Terrain and Obstacle Attributes provision Requirements

Table A2-1. Terrain attributes

Terrain attribute	Mandatory/Optional
Area of coverage	Mandatory
Data originator identifier	Mandatory
Data source identifier	Mandatory
Acquisition method	Mandatory
Post spacing	Mandatory
Horizontal reference system	Mandatory
Horizontal resolution	Mandatory
Horizontal accuracy	Mandatory
Horizontal confidence level	Mandatory
Horizontal position	Mandatory
Elevation	Mandatory
Elevation reference	Mandatory
Vertical reference system	Mandatory
Vertical resolution	Mandatory
Vertical accuracy	Mandatory
Vertical confidence level	Mandatory
Surface type	Optional
Recorded surface	Mandatory
Penetration level	Optional
Known variations	Optional
Integrity	Mandatory
Date and time stamp	Mandatory
Unit of measurement used	Mandatory

Table A2-2. Obstacle attributes

Obstacle attribute	Mandatory/Optional
Area of coverage	Mandatory
Data originator identifier	Mandatory
Data source identifier	Mandatory
Obstacle identifier	Mandatory
Horizontal accuracy	Mandatory
Horizontal confidence level	Mandatory
Horizontal position	Mandatory
Horizontal resolution	Mandatory
Horizontal extent	Mandatory
Horizontal reference system	Mandatory
Elevation	Mandatory
Height	Optional
Vertical accuracy	Mandatory
Vertical confidence level	Mandatory
Vertical resolution	Mandatory
Vertical reference system	Mandatory
Obstacle type	Mandatory
Geometry type	Mandatory
Integrity	Mandatory
Date and time stamp	Mandatory
Unit of measurement used	Mandatory
Operations	Optional
Effectivity	Optional
Lighting	Mandatory

Appendix 3

Terrain and Obstacle Data Requirements

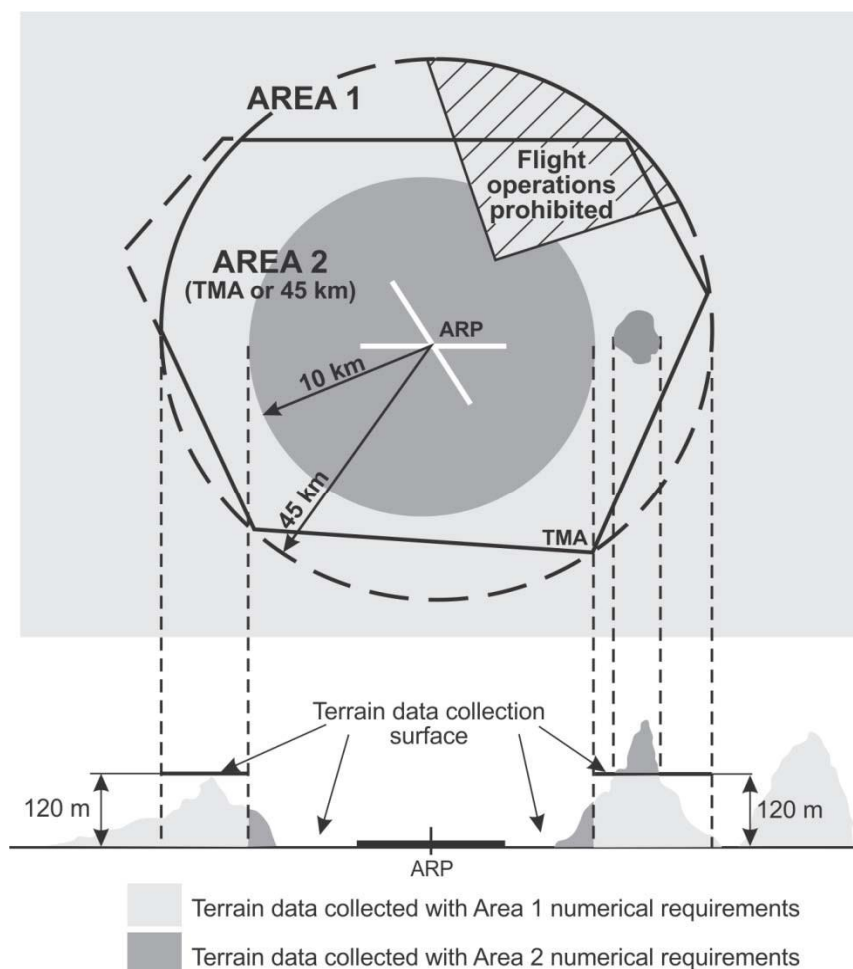


Figure A3-1. Terrain data collection surfaces — Area 1 and Area 2

1. Within the area covered by a 10-km radius from the aerodrome reference point (ARP), terrain data shall comply with the Area 2 numerical requirements.
2. In the area between 10 km and the terminal control area (TMA) boundary or 45-km radius (whichever is smaller), data on terrain that penetrates the horizontal plane 120 m above the lowest runway elevation shall comply with the Area 2 numerical requirements.
3. In the area between 10 km and the TMA boundary or 45-km radius (whichever is smaller), data on terrain that does not penetrate the horizontal plane 120 m above the lowest runway elevation shall comply with the Area 1 numerical requirements.
4. In those portions of Area 2 where flight operations are prohibited due to very high terrain or other local restrictions and/or regulations, terrain data shall comply with the Area 1 numerical requirements.

Note. — *Terrain data numerical requirements for Areas 1 and 2 are specified in Appendix 1.*

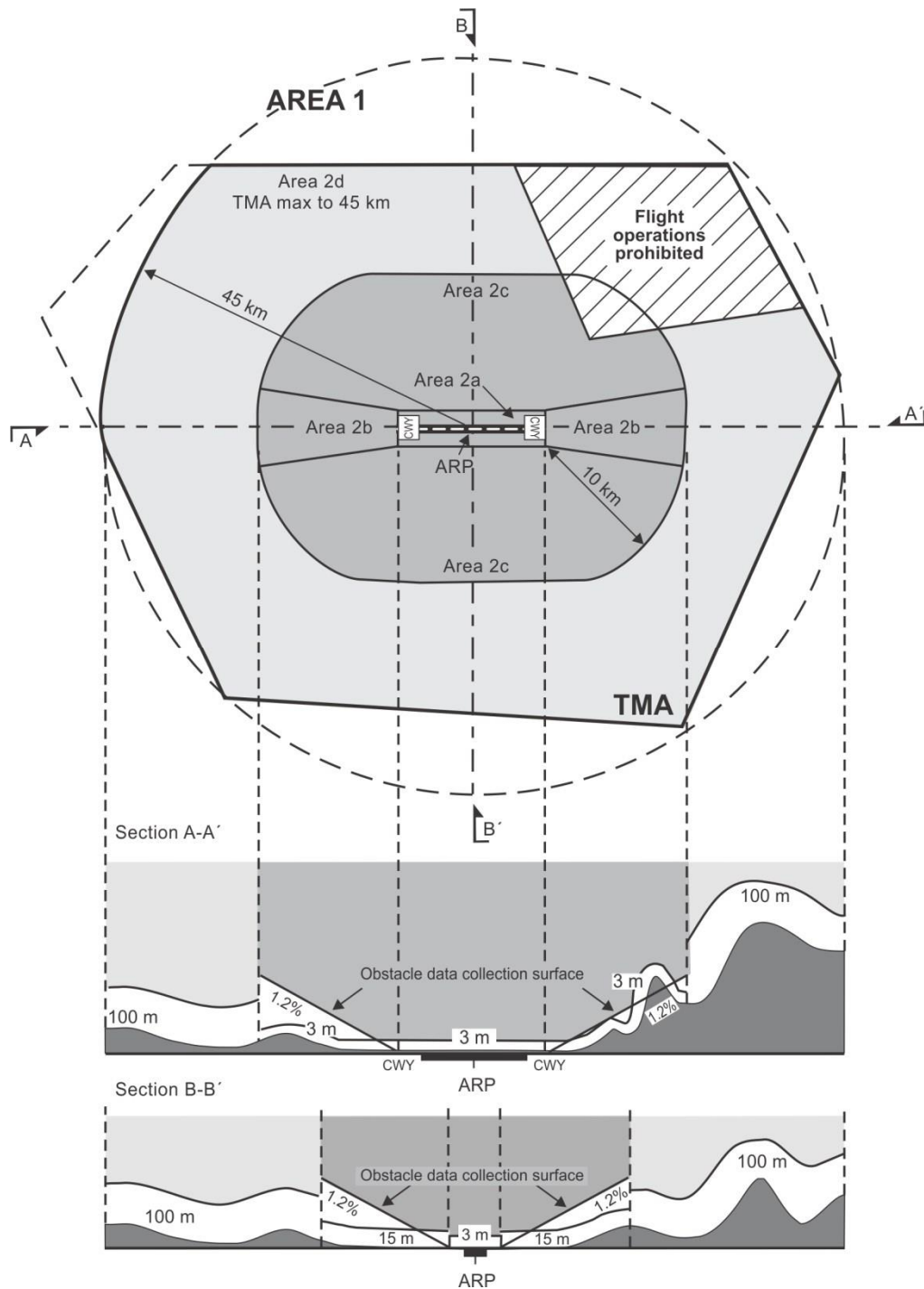


Figure A3-2. Obstacle data collection surfaces — Area 1 and Area 2

1. Obstacle data shall be collected and recorded in accordance with the Area 2 numerical requirements specified in Appendix 1.
2. In those portions of Area 2 where flight operations are prohibited due to very high terrain or other local restrictions and/or regulations, obstacle data shall be collected and recorded in accordance with the Area 1 requirements.
3. Data on every obstacle within Area 1 whose height above the ground is 100 m or higher shall be collected and recorded in the database in accordance with the Area 1 numerical requirements specified in Appendix 1.

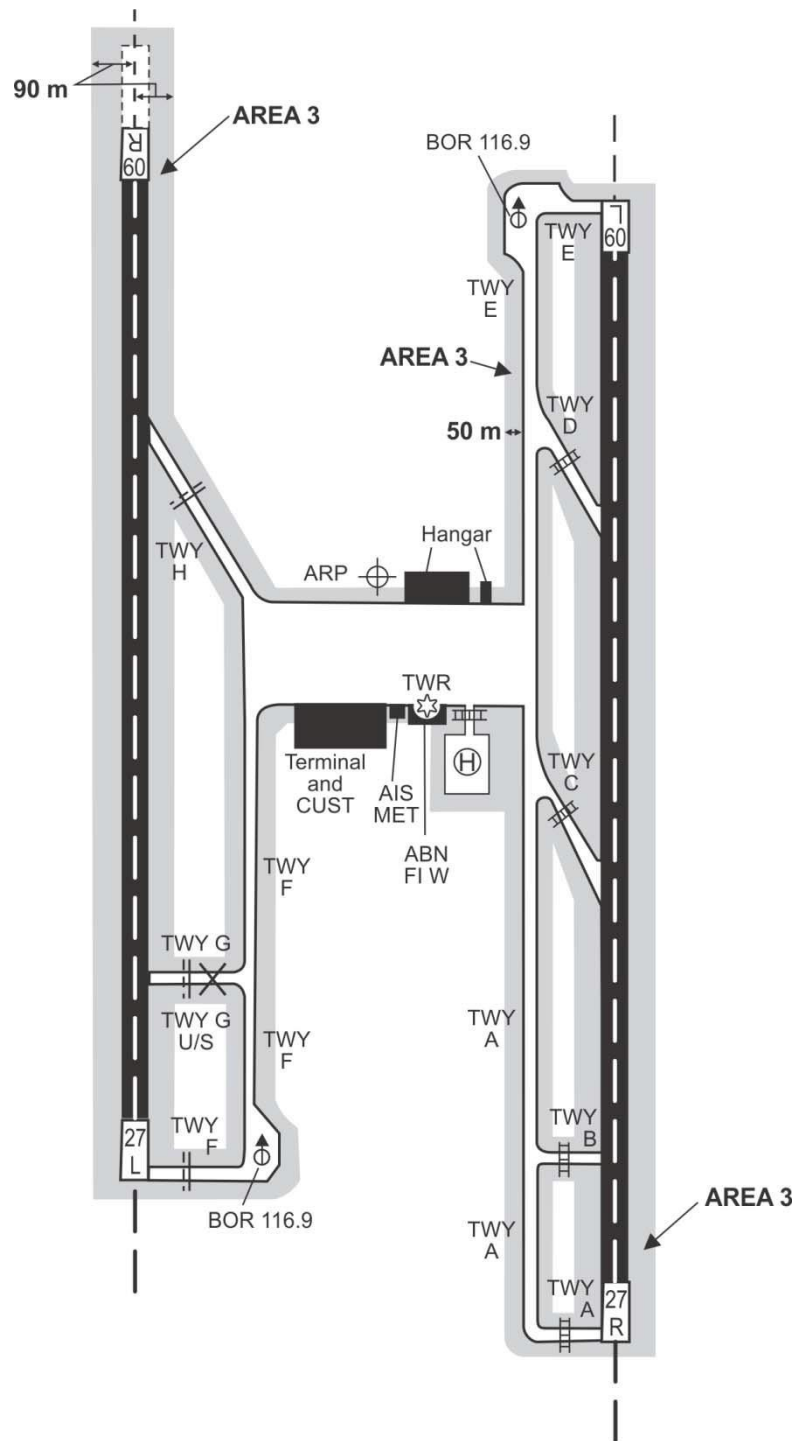


Figure A3-3. Terrain and obstacle data collection surface — Area 3

Terrain and obstacle data in Area 3 shall comply with the numerical requirements specified in Appendix 1.

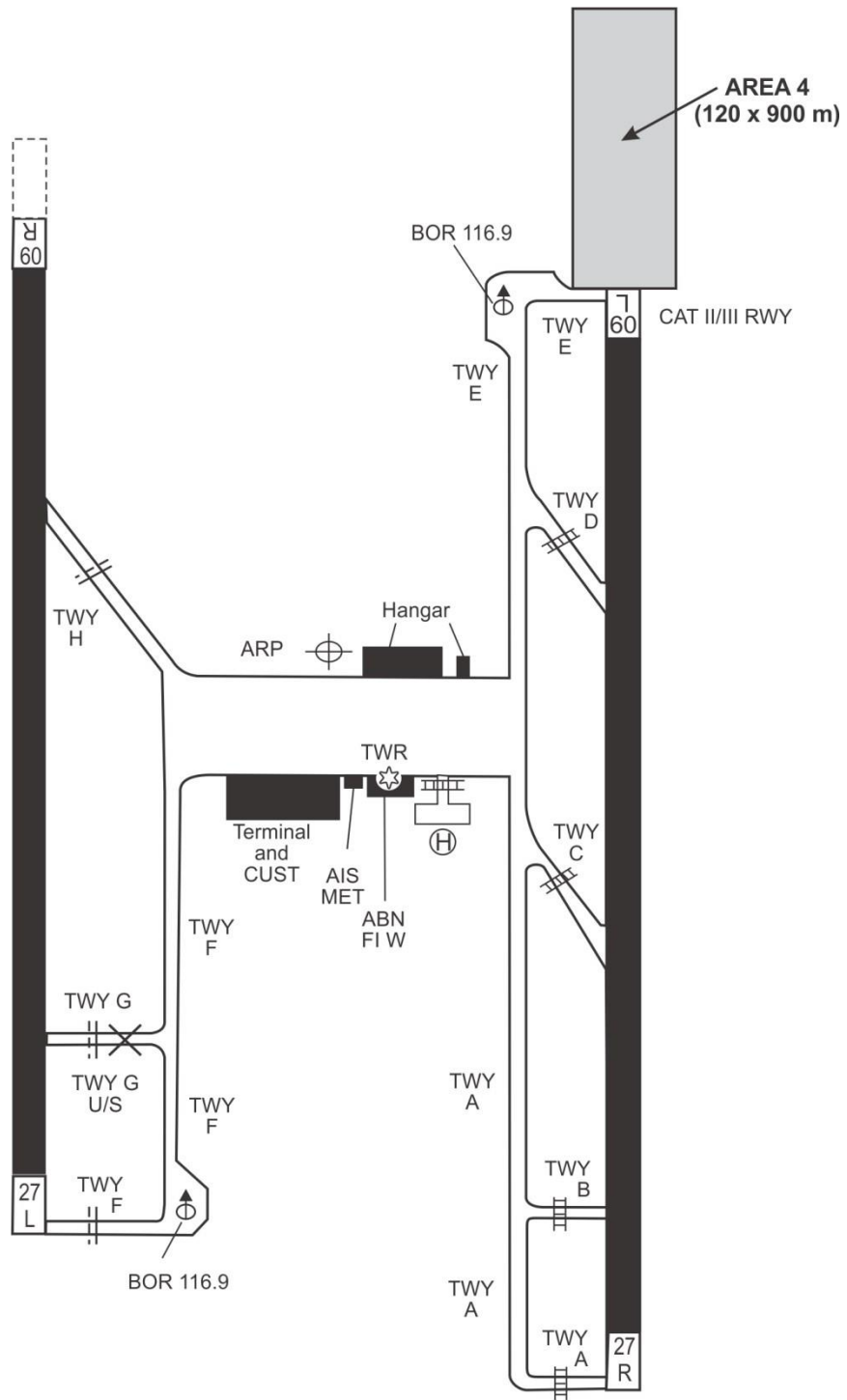


Figure A3-4. Terrain and obstacle data collection surface — Area 4

Terrain and obstacle data in Area 4 shall comply with the numerical requirements specified in Appendix 1.