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THE CIVIL AVIATION ACT,
(CAP. 80)

REGULATIONS

THE CIVIL AVIATION (AERONAUTICAL INFORMATION SERVICES)
REGULATIONS, 2026

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SCHEDULES

- “aeronautical data” means a representation of aeronautical facts, concepts or instructions in a formalised manner suitable for communication, interpretation or processing;
- “aeronautical fixed service” means 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” means information resulting from the assembly, analysis and formatting of aeronautical data;
- “aeronautical information circular” means a notice containing information that does not qualify for the origination of a NOTAM or for inclusion in the aeronautical information publication, but which relates to flight safety, air navigation, technical, administrative or legislative matters;
- “aeronautical information management” means the dynamic, integrated management of aeronautical information through the provision and exchange of quality-assured digital aeronautical data in collaboration with all parties;
- “aeronautical information product” means an aeronautical data and aeronautical information provided either as digital data sets or as a standardised presentation in paper or electronic media and it includes:
- (a) aeronautical information publication, including amendments and supplements;
 - (b) aeronautical information circulars;
 - (c) aeronautical charts;
 - (d) NOTAM; and
 - (e) digital data sets;
- “aeronautical information publication” means 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” means a service established within the defined area of coverage responsible for the provision of aeronautical data

- and aeronautical information necessary for the safety, regularity and efficiency of air navigation;
- “aeronautical information publication amendment” means permanent changes to the information contained in the aeronautical information publication;
- “aeronautical information publication supplement” means temporary changes to the information contained in the aeronautical information publication which are published by means of special pages;
- “aeronautical information regulation and control” means a system aimed at advance notification based on common effective dates of circumstances that necessitate significant changes in operating practices;
- “air defence identification zone” means special designated airspace of defined dimensions within which aircraft are required to comply with special identification or reporting procedures additional to those related to the provision of air traffic services;
- “air traffic management” means 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” means manipulation and processing of data in support of user requirements;
- “area navigation” or in its acronym “RNAV” means 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;
- “ASHTAM” means a special series NOTAM notifying by means of a specific format change in activity of a volcano, a volcanic eruption or volcanic ash cloud that is of significance to aircraft operations;

- “assemble” means a process of merging data from multiple sources into a database and establishing a baseline for subsequent processing;
- “air traffic services surveillance service” means a term used to indicate a service provided directly by means of an air traffic services surveillance system;
- “air traffic services surveillance system” means a generic term meaning variously, automatic dependent surveillance-broadcast, primary surveillance radar, secondary surveillance radar or any comparable ground-based system that enables the identification of aircraft;
- “automatic dependent surveillance - broadcast” means a means by which aircraft, aerodrome vehicles and other objects can automatically transmit or receive data such as identification, position and additional data as appropriate in a broadcast mode via a data link;
- “automatic dependent surveillance - contract” means a means by which the terms of an automatic dependent surveillance - contract will be exchanged between the ground system and the aircraft, via a data link, specifying under what conditions automatic dependent surveillance - contract reports would be initiated and what data would be contained in the reports;
- “automatic terminal information service” means the automatic provision of current and routine information to arriving and departing aircraft throughout twenty-four hours or a specified portion thereof through data-link or continuous and repetitive voice broadcasts;
- “bare earth” means a surface of the earth including bodies of water and permanent ice and snow, and excluding vegetation and manmade objects;
- “canopy” means bare earth supplemented by vegetation height;
- “confidence level” means the probability that the true value of a parameter is within a certain interval around the estimate of its value;

- “culture” means all man-made features constructed on the surface of the earth, such as cities, railways and canals;
- “danger area” means an airspace of defined dimensions within which activities dangerous to the flight of aircraft may exist at specified times;
- “data accuracy” means a degree of conformance between the estimated or measured value and the true value;
- “data completeness” means the degree of confidence that all of the data needed to support the intended use is provided;
- “data format” means a structure of data elements, records and files arranged to meet standards, specifications or data quality requirements;
- “data integrity” means a degree of assurance that an aeronautical data and its value have not been lost or altered since the origination or authorised amendment;
- “data link-VOLMET” means a 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;
- “data product” means a data set or data set series that conforms to a data product specification;
- “data product specification” means a 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;
- “data quality” means 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” means a number of units or digits to which a measured or calculated value is expressed and used;
- “data set” means an identifiable collection of data;

- “data set series” means a collection of data sets sharing the same product specification;
- “datum” means any quantity or set of quantities that may serve as a reference or basis for the calculation of other quantities;
- “ellipsoid height” or “geodetic height” means the height related to the reference ellipsoid, measured along the ellipsoidal outer normal through the point in question;
- “feature” means abstraction of real world phenomena;
- “feature type” means class of real world phenomena with common properties;
- “geoid” means the equipotential surface in the gravity field of the earth which coincides with the undisturbed mean sea level extended continuously through the continents;
- “geoid undulation” means the distance of the geoid above positive or below negative of the mathematical reference ellipsoid;
- “gregorian calendar” means calendar in general use, first introduced in 1582 to define a year that more closely approximates the tropical year than the julian calendar;
- “height” means the vertical distance of a level, point or an object considered as a point, measured from a specific datum;
- “heliport” means 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” means 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;
- “ICAO” means International Civil Aviation Organization;
- “information service” means a type of service in a service-oriented architecture that provides an air traffic

management-related information-sharing capability;

“integrity classification” or “aeronautical data” means classification based upon the potential risk resulting from the use of corrupted data and are classified as follows:

- (a) routine data, in which 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 a potential for catastrophe;
- (b) essential data, in which 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 a potential for catastrophe; and
- (c) critical data, in which 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 a potential for catastrophe;

“international airport” means an airport designated by the contracting state, in whose territory is situated, as an airport of entry and departure for international air traffic, where formalities related to customs, immigration, public health, animal and plant quarantine, and similar procedures are carried out;

“international NOTAM office” means an office designated by a state for the exchange of NOTAM internationally;

“logon address” means a specified code used for data link logon to an air traffic services unit;

“manoeuvring area” means that part of an aerodrome to be used for the take-off, landing and taxiing of aircraft, excluding aprons;

“metadata” means data about data;

“movement area” means 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;

- “next intended user” means the entity that receives the aeronautical data or information from the aeronautical information service;
- “NOTAM” means 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” means all fixed, whether temporary or permanent mobile objects, or parts thereof, that-
- (a) are located on an area intended for the surface movement of aircraft;
 - (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;
- “origination” in relation to aeronautical data or aeronautical information, means the creation of the value associated with new data or information or the modification of the value of existing data or information;
- “originator” in relation to aeronautical data or aeronautical information, means an entity that is accountable for data or information origination or from which the aeronautical information service organisation receives aeronautical data and aeronautical information;
- “orthometric height” means a height of a point related to the geoid, generally presented as a mean sea level elevation;
- “position” means a 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;
- “precision” means the smallest difference that can be reliably distinguished by a measurement process;

- “pre-flight information bulletin” means a presentation of current NOTAM information of operational significance, prepared prior to flight;
- “prohibited area” means an airspace of defined dimensions, above the land areas or territorial waters of a state, within which the flight of aircraft is prohibited;
- “quality” means a degree to which a set of inherent characteristics fulfils requirements;
- “quality assurance” means part of quality management focused on providing confidence that quality requirements will be fulfilled;
- “quality control” means part of quality management focused on fulfilling quality requirements;
- “quality management” means coordinated activities to direct and control an organization with regard to quality;
- “radio navigation service” means a service providing guidance information or position data for the efficient and safe operation of aircraft supported by one or more radio navigation aids;
- “requirement” means a need or expectation that is stated, generally implied or obligatory;
- “restricted area” means 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” means a route or portion of a route flown without an intermediate landing;
- “SNOWTAM” means a special series NOTAM given in a standard format providing a surface condition report notifying the presence or cessation of hazardous conditions due to snow, ice, slush, frost, standing water or water associated with snow, slush, ice or frost on the movement area;
- “terrain” means the surface of the earth containing naturally occurring features such as mountains, hills, ridges, valleys, bodies of water, permanent ice and snow, excluding obstacles;
- “traceability” means ability to trace the history, application or location of that which is under consideration;

“validation” means confirmation, through the provision of objective evidence, that the requirements for a specific intended use or application have been fulfilled; and

“verification” means confirmation, through the provision of objective evidence, that specified requirements have been fulfilled.

PART II COMMON REFERENCE SYSTEMS FOR AIR NAVIGATION

Horizontal
reference
system

4. An aeronautical information service provider shall ensure that-

- (a) the horizontal reference system is the world geodetic system -1984 (WGS-84); and
- (b) the published aeronautical geographical coordinates indicating latitude and longitude are expressed in terms of the WGS-84 geodetic reference datum.

Vertical
reference
system

5. An aeronautical information service provider shall ensure that-

- (a) the mean sea level datum is used as the vertical reference system for air navigation;
- (b) the earth gravitational model - 1996 (EGM-96), is used as the global gravity model for air navigation; and
- (c) the regional, national or local geoid models containing high resolution gravity field data are developed and used for geographical positions where the accuracy of EGM-96 does not meet the accuracy requirements for elevation and geoid undulation as specified in the relevant advisory circular.

Temporal
reference
system

6. An aeronautical information service provider shall ensure that-

- (a) the gregorian calendar and Coordinated Universal Time is used as the temporal reference system for international air navigation; and

- (b) when a different temporal reference system is used for some applications, the feature catalogue, the metadata associated with an application schema or a data set, as appropriate, and includes either a description of that system or a citation for a document that describes that temporal reference system.

Miscellaneous specifications

7. The aeronautical information service provider shall ensure that-

- (a) each aeronautical information product intended for international distribution includes English text for those parts expressed in plain language;
- (b) the names of places are spelt in conformity with local usage, transliterated, when necessary, into the ISO-Basic Latin alphabet;
- (c) the units of measurement used in the origination, processing and distribution of aeronautical data and aeronautical information are consistent with the tables contained in regulations relating to units of measurement to be used in air and ground operations; and
- (d) ICAO abbreviations are used in the aeronautical information services whenever appropriate and their use will facilitate distribution of aeronautical data and aeronautical information.

PART III

RESPONSIBILITIES AND FUNCTIONS

Responsibilities of Authority

8.-(1) The Authority shall-

- (a) designate an agency to provide an aeronautical information service in accordance with these Regulations;
- (b) ensure that the provision of aeronautical data and aeronautical information covers the territory of the United Republic and those areas over the high seas for which it is responsible for the provision of air traffic services;

- (c) remain responsible for the aeronautical data and aeronautical information provided in accordance with subregulation (2); and
- (d) ensure that-
 - (i) the aeronautical data and aeronautical information provided are of required quality in accordance with regulation 13;
 - (ii) formal arrangements are established between originators of aeronautical data and aeronautical information and the aeronautical information service provider in relation to the timely and complete provision of aeronautical data and aeronautical information.

(2) The aeronautical data and aeronautical information provided for and on behalf of the Authority shall clearly indicate that they are provided under the authorisation of the Authority.

Aeronautical
information
service provider
responsibilities

9.-(1) An aeronautical information service provider shall-

- (a) ensure that aeronautical data and aeronautical information necessary for the safety, regularity or efficiency of air navigation is made available in a form suitable for the operational requirements of the air traffic management community, including-
 - (i) those involved in flight operations, including flight crews, flight planning and flight simulators; and
 - (ii) the air traffic services unit responsible for flight information service and the services responsible for pre-flight information;
- (b) receive, collate or assemble, edit, format, publish or store and distribute aeronautical data and aeronautical information concerning the entire territory of the United Republic as well as those areas over the high seas for which the

United Republic is responsible for the provision of air traffic services;

- (c) obtain aeronautical data and aeronautical information for pre-flight information service and in-flight information from the aeronautical information services of other states or other sources that may be available.

(2) The aeronautical data and aeronautical information shall be provided as aeronautical information products.

(3) Where twenty-four-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 and the period of at least two hours before and after such a period.

(4) The aeronautical information service shall also be available at such other time as may be requested by an appropriate ground organisation.

(5) The aeronautical data and aeronautical information obtained from other states shall-

- (a) when distributed, be clearly identified as having the authority of the state of origin; and
- (b) where possible, be verified before distribution and if not verified, when distributed, be clearly identified as such.

(6) An aeronautical information service provider shall promptly make available to the aeronautical information services of other states, any aeronautical data and aeronautical information necessary for the safety, regularity or efficiency of air navigation required by them, to enable them to comply with subregulation (1)(a).

Exchange of
aeronautical
data and
aeronautical
information

10.-(1) An aeronautical information service provider shall-

- (a) designate the office to which all elements of aeronautical information products provided by other states shall be submitted;
- (b) arrange, as necessary, to satisfy operational requirements for the issuance and receipt of NOTAM distributed by telecommunication;

- (c) wherever practicable, establish direct contact with other providers of aeronautical information services in order to facilitate the international exchange of aeronautical data and aeronautical information;
- (d) avail one copy of each of the following aeronautical information products, where available, upon request by an aeronautical information service provider of an ICAO contracting State in the mutually agreed form, without charge, except as provided in paragraph (e)-
 - (i) aeronautical information publication, including amendments and supplements;
 - (ii) aeronautical information circulars;
 - (iii) NOTAM; and
 - (iv) aeronautical charts;
- (e) provide or receive on the basis of agreement with concerned contracting states aeronautical data and aeronautical information provided in the form of digital data sets to be used by the aeronautical information service; and
- (f) establish formal arrangements with originators of aeronautical data and aeronautical information in relation to the required data quality in provision of aeronautical data and aeronautical information.

(2) The office identified in terms of subregulation (1) shall have an address and the office shall be qualified to deal with requests for aeronautical data and aeronautical information provided by other states.

(3) Where more than one international NOTAM office is designated within the United Republic, the extent of responsibility and the territory covered by each office shall be defined.

(4) The exchange of more than one copy of the elements of the aeronautical information products, and other air navigation documents, including those containing air navigation legislation and regulations, shall be subject to

a bilateral agreement between an aeronautical information service provider and other ICAO contracting states.

(5) The procurement of aeronautical data and aeronautical information, including the elements of the aeronautical information products, and other air navigation documents, including those containing air navigation legislation and regulations, by states other than ICAO contracting states and by other entities shall be subject to separate agreement with an aeronautical information service provider.

(6) Globally interoperable aeronautical data and aeronautical information exchange models shall be used for the provision of data sets.

Copyright and
cost recovery

11.-(1) Where aeronautical information product has been granted copyright protection by a state and provided in accordance with regulation 10, an aeronautical information service provider shall only make it available to a third party on condition that the third party is aware that the product is copyright protected:

Provided that, it is appropriately annotated that the product is subject to copyright by the originating state.

(2) An aeronautical information service provider shall ensure that the digital data sets are not provided to any third party without the consent of the originating state, when the aeronautical data and aeronautical information are provided in accordance with regulation 10(1)(e).

(3) An aeronautical information service provider shall only recover the overhead cost of collecting and compiling aeronautical data and aeronautical information.

PART IV AERONAUTICAL INFORMATION MANAGEMENT

Information
management
requirements

12. An aeronautical information service provider shall ensure that the information management resources and processes established are adequate to warrant the timely collection, processing, storing, integration, exchange and delivery of quality-assured aeronautical data and

aeronautical information within the air traffic management system.

Data quality requirements

13. An aeronautical information service provider shall ensure-

- (a) the order of accuracy for aeronautical data is in accordance with its intended use as provided in the relevant advisory circular;
- (b) order of resolution of aeronautical data is commensurate with the actual data accuracy as provided in the relevant advisory circular;
- (c) the integrity classification related to aeronautical data is as provided in the relevant advisory circular;
- (d) the validation and verification procedures based on the applicable integrity classification are put in place in order to-
 - (i) in the case of routine data, avoid corruption throughout the processing of the data;
 - (ii) in the case of essential data, ensure corruption does not occur at any stage of the data processing life cycle, such as collection, processing, storing, integration, exchange and delivery, and include additional measures or steps as needed to address potential risks in the overall processing of aeronautical data to further ensure data integrity at this level; and
 - (iii) in the case of critical data, ensure corruption does not occur at any stage of the data processing life cycle, such as collection, processing, storing, integration, exchange and delivery, and include additional data integrity assurance processes to mitigate the risk of errors;

- (e) the integrity of aeronautical data is maintained throughout the data chain from origination to distribution to the next intended user;
- (f) traceability of aeronautical data is retained as long as the data is in use;
- (g) the timeliness of aeronautical data includes limits on the effective period of the data elements;
- (h) completeness of aeronautical data in order to support its intended use; and
- (i) the format of delivered aeronautical data is adequate to ensure that the data is interpreted in a manner that is consistent with its intended use.

Aeronautical data and aeronautical information verification and validation

14.-(1) Aeronautical data and aeronautical information to be published as part of an aeronautical information product shall be checked before being submitted to the aeronautical information service, in order to ensure that all necessary information has been included and that it is correct.

(2) An aeronautical information service provider shall establish verification and validation procedures which ensure that upon receipt of aeronautical data and aeronautical information, quality requirements are met.

Data error detection

15. An aeronautical information service provider shall-

- (a) use digital data error detection techniques during the transmission and storage of aeronautical data and digital data sets; and
- (b) use digital data error detection techniques in order to maintain the integrity levels as specified in regulation 13(e).

Use of automation

16. An aeronautical information service provider shall-

- (a) apply automation in order to ensure quality, efficiency and cost effectiveness of aeronautical information services;

- (b) give due consideration to the integrity of data and information when automated processes are implemented and take mitigating steps where risks are identified; and
- (c) ensure that automation-
 - (i) enables digital aeronautical data exchange between the parties involved in the data processing chain; and
 - (ii) uses aeronautical information exchange models and data exchange models designed to be globally interoperable.

Quality
management
system

shall-

- 17.** An aeronautical information service provider
- (a) implement and maintain a quality management system encompassing all functions of an aeronautical information service, as specified in regulation 9;
 - (b) ensure that the implementation of quality management system is demonstrated for each function stage;
 - (c) ensure that the quality management is applicable to the whole aeronautical data chain from data origination to distribution to the next intended user, taking into consideration the intended use of data;
 - (d) ensure that the quality management system established follows the International Organization for Standardization (ISO) 9000 series of quality assurance standards, and is certified by an approved organization;
 - (e) within the established quality management system-
 - (i) identify the competencies and the associated knowledge, skills and attitudes required for each function;
 - (ii) train appropriately the personnel assigned to perform those functions;
 - (iii) put in place processes to ensure that personnel possess the competencies

- required to perform specific assigned functions;
- (iv) maintain appropriate records so that the qualifications of personnel can be confirmed;
- (v) establish initial and periodic assessments that require personnel to demonstrate the required competencies; and
- (vi) use periodic assessments of personnel as a means to detect and correct shortfalls in knowledge, skills and attitudes;
- (f) ensure that the training methodology established in accordance with paragraph (e) follows the competency-based training and assessment methodology;
- (g) ensure that each quality management system includes the 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 to allow any data anomalies or errors detected in use to be identified by root cause, corrected and communicated to affected users;
- (h) ensure that the established quality management system provides users with the necessary assurance and confidence that distributed aeronautical data and aeronautical information satisfy the aeronautical data quality requirements;
- (i) take all necessary measures to monitor compliance with the quality management system in place;
- (j) demonstrate compliance of the quality management system applied by audit;
- (k) initiate action to determine and correct causes of identified nonconformities without undue delay; and
- (l) ensure that the audit observations and remedial actions are evidenced and properly documented.

Human factors considerations

18. An aeronautical information service provider shall ensure that-

- (a) its organization as well as the design, contents, processing and distribution of aeronautical data and aeronautical information takes into consideration human factors principles which facilitate their optimum utilisation; and
- (b) due consideration is given to the integrity of information where human interaction is required and mitigating steps are taken where risks are identified.

PART V

SCOPE OF AERONAUTICAL DATA AND AERONAUTICAL INFORMATION

Scope of aeronautical data and aeronautical information

19.-(1) An aeronautical information service provider shall ensure that aeronautical data and aeronautical information it receives and manages includes at least the following sub-domains:

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

(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.

Metadata

20.-(1) An aeronautical information service provider shall collect metadata for aeronautical data processes and exchange points.

(2) The metadata collected shall be applied throughout the aeronautical information data chain, from origination to distribution to the next intended user.

(3) The metadata to be collected shall include-

- (a) the name of the organisation or entity performing any action of originating, transmitting or manipulating the data;
- (b) the action performed; and
- (c) the date and time the action was performed.

PART VI

AERONAUTICAL INFORMATION PRODUCTS AND SERVICES

General
specification

21.-(1) Aeronautical information shall be provided in the form of aeronautical information products and associated services.

(2) When aeronautical data and aeronautical information are provided in multiple formats, an aeronautical information service provider shall implement processes to ensure data and information consistency between formats.

Aeronautical
information in
standardised
presentation

22. An aeronautical information service provider shall-

- (a) ensure aeronautical information provided in a standardised presentation include the aeronautical information publication, aeronautical information publication amendments, aeronautical information publication supplements, aeronautical information circular, NOTAM and aeronautical charts; and
- (b) provide the aeronautical information publication, aeronautical information publication amendment, aeronautical information publication supplement and aeronautical information circular on paper or as an electronic document.

Electronic
aeronautical
information
publication

23. An aeronautical information service provider shall ensure that when aeronautical information publication, aeronautical information publication amendment, aeronautical information publication supplement and aeronautical information circulars are provided as an electronic aeronautical information publication document, it allows for both displaying on electronic devices and printing on paper.

Aeronautical
information
publication

24. An aeronautical information service provider shall ensure that the aeronautical information publication includes-

- (a) a statement of the competent authority responsible for the air navigation facilities, services or procedures covered by the aeronautical information publication;
- (b) the general conditions under which the services or facilities are available for international use;
- (c) a list of significant differences between the national regulations and practices of the United Republic and the related international civil aviation organisation standards, and recommended practices and procedures, is given in a form that enables a user to differentiate readily between the requirements of the United Republic and the related International Civil Aviation Organisation provisions; and
- (d) the choice made by the United Republic in each significant case where an alternative course of action is provided for international civil aviation organisation standards, recommended practices and procedures.

Aeronautical
information
publication
supplement

25. An aeronautical information service provider shall regularly provide a checklist of valid aeronautical information publication supplements.

Aeronautical
information
circulars

26.-(1) An aeronautical information service provider shall use aeronautical information circular to provide-

- (a) a long-term forecast of any major change in legislation, regulations, procedures or facilities;
- (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.

(2) An aeronautical information service provider shall not use an aeronautical information circular for information that qualifies for inclusion in aeronautical information publication and NOTAM.

(3) An aeronautical information service provider shall review the validity of aeronautical information circular currently in force at least once a year.

(4) An aeronautical information service provider shall regularly provide a checklist of currently valid aeronautical information circular.

Aeronautical
charts

27. An aeronautical information service provider shall ensure-

- (a) the aeronautical charts listed below when available for designated international aerodromes or heliports, form part of the aeronautical information publication, or be provided separately to recipients of the aeronautical information publication:
 - (i) Aerodrome or Heliport Chart - ICAO;
 - (ii) Aerodrome Ground Movement Chart - ICAO;
 - (iii) Aerodrome Obstacle Chart - ICAO Type A;
 - (iv) Aerodrome Obstacle Chart - ICAO Type B, when available;
 - (v) Aerodrome Terrain and Obstacle Chart - ICAO (Electronic);
 - (vi) Aircraft Parking or Docking Chart - ICAO;
 - (vii) Area Chart - ICAO;
 - (viii) ATC Surveillance Minimum Altitude Chart - ICAO;

- (ix) Instrument Approach Chart - ICAO;
 - (x) Precision Approach Terrain Chart - ICAO;
 - (xi) Standard Arrival Chart - Instrument (STAR) - ICAO;
 - (xii) Standard Departure Chart - Instrument (SID) - ICAO; and
 - (xiii) Visual Approach Chart - ICAO;
- (b) the En-route Chart - ICAO, when available, forms part of the aeronautical information publication, or is provided separately to recipients of the aeronautical information publication;
- (c) the aeronautical charts listed below, when available, is provided as aeronautical information products:
- (i) World Aeronautical Chart - ICAO 1:1 000 000;
 - (ii) Aeronautical Chart - ICAO 1:500 000;
 - (iii) Aeronautical Navigation Chart - ICAO Small Scale; and
 - (iv) Plotting Chart - ICAO chart;
- (d) electronic aeronautical charts should be provided based on digital databases and the use of geographic information systems; and
- (e) the chart resolution of aeronautical data is that as specified for a particular chart.

NOTAM

28. An aeronautical information service provider shall regularly provide a checklist of valid NOTAM.

Digital data sets

29. Where digital data is provided, an aeronautical information service provider shall-

- (a) ensure digital data is in the form of the following data sets:
 - (i) aeronautical information publication data set;
 - (ii) terrain data sets;
 - (iii) obstacle data sets;
 - (iv) aerodrome mapping data sets; and

- (v) instrument flight procedure data sets;
- (b) provide each data set to the next intended user together with at least the minimum set of metadata that ensures traceability; and
- (c) regularly provide a checklist of valid data sets.

Aeronautical
information
publication data
set

30. Where digital data is in the form of aeronautical information publication data set, aeronautical information service provider shall-

- (a) ensure the aeronautical information publication data set provided covers the extent of information as provided in the aeronautical information publication;
- (b) provide the available data subset, when it is not possible to provide a complete aeronautical information publication data set; and
- (c) ensure that the aeronautical information publication data set contains the digital representation of aeronautical information of lasting character, permanent information and long duration temporary changes, essential to air navigation.

Terrain and
obstacle data
sets

31.-(1) An aeronautical information service provider shall ensure that the coverage areas for terrain and obstacle data sets are specified as-

- (a) Area 1: the entire territory of the United Republic;
- (b) Area 2: within the vicinity of an aerodrome, subdivided as follows:
 - (i) Area 2a: a rectangular area around a runway that comprises the runway strip plus any clearway that exists;
 - (ii) Area 2b: an area extending from the ends of Area 2a in the direction of departure, with a length of ten kilometers and a splay of fifteen percent to each side;
 - (iii) Area 2c: an area extending outside Area 2a and Area 2b at a distance of not more

than ten kilometers from the boundary of Area 2a; and

- (iv) Area 2d: an area outside the Areas 2a, 2b and 2c up to a distance of forty-five kilometers from the aerodrome reference point, or to an existing terminal area control boundary, whichever is nearest;
- (c) Area 3: the area bordering an aerodrome movement area that extends horizontally from the edge of a runway to ninety meters from the runway centre line and fifty meters from the edge of all other parts of the aerodrome movement area;
- (d) Area 4:
 - (i) the area extending nine-hundred meters prior to the runway threshold and sixty meters each side of the extended runway center line in the direction of the approach on a precision approach runway, Category II or III; or
 - (ii) where the terrain at a distance greater than nine-hundred (3000ft) from the runway threshold is mountainous or otherwise significant, the length of Area 4 shall be extended to a distance not exceeding two thousand meters (6500ft) from the runway threshold.

(2) An aeronautical information service provider shall ensure that-

- (a) terrain data sets 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;
- (b) terrain data is provided for Area 1;
- (c) for aerodromes regularly used by international civil aviation, terrain data is provided for-
 - (i) area 2a;
 - (ii) the take-off flight path area; and

- (iii) an area bounded by the lateral extent of the aerodrome obstacle limitation surfaces;
 - (d) for aerodromes regularly used by international civil aviation, additional terrain data should be provided within Area 2 as follows:
 - (i) in the area extending to a ten kilometers radius from the ARP; and
 - (ii) within the area between ten kilometers and the TMA boundary or a forty-five kilometers radius, whichever is smaller, where terrain penetrates a horizontal terrain data collection surface specified as one hundred and twenty meters above the lowest runway elevation;
 - (e) arrangements are 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;
 - (f) arrangements are made between United Republic and other states concerned to share terrain data for those aerodromes located near territorial boundaries;
 - (g) for aerodromes regularly used by international civil aviation, terrain data is provided for-
 - (i) Area 3; and
 - (ii) 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;
 - (h) where additional terrain data is collected to meet other aeronautical requirements, the terrain data sets shall be expanded to include this additional data.
- (3) An aeronautical information service provider shall ensure that-

- (a) obstacle data sets contain the digital representation of the vertical and horizontal extent of the obstacles;
- (b) obstacle data is not included in terrain data sets;
- (c) obstacle data are provided for obstacles in Area 1 whose height is 100m or higher above ground;
- (d) for aerodromes regularly used by international civil aviation, obstacle data are provided for-
 - (i) all obstacles within Area 2 that are assessed as being a hazard to air navigation;
 - (ii) area 2a for those obstacles that penetrate an obstacle data collection surface specified in the First Schedule;
 - (iii) objects in the take-off flight path area which project above a plane surface having a one-point-two percent slope and having a common origin with the take-off flight path area;
 - (iv) penetrations of the aerodrome obstacle limitation surfaces; and
 - (v) areas 2b, 2c and 2d for obstacles that penetrate the relevant obstacle data collection surface specified in the First Schedule, except that data need not be collected for obstacles less than a height of 3m above ground in Area 2b and less than a height of fifteen meters above ground in Area 2c;
- (e) arrangements are 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;
- (f) arrangements are made between United Republic and other states concerned to share obstacle data for those aerodromes located near territorial boundaries;
- (g) for aerodromes regularly used by international civil aviation, obstacle data is provided-

- (i) in the case of Area 3, for obstacles that penetrate the relevant obstacle data collection surface extending a half-metre above the horizontal plane passing through the nearest point on the aerodrome movement area;
- (ii) in the case of Area 4, for all runways where precision approach Category II or III operations have been established;
- (h) where additional obstacle data is collected to meet other aeronautical requirements, the obstacle data sets should be expanded to include this additional data.

Aerodrome mapping data sets

32. An aeronautical information service provider shall ensure that aerodrome mapping data sets-

- (a) contain the digital representation of aerodrome features; and
- (b) made available for aerodromes regularly used by international civil aviation.

Instrument flight procedure data sets

33. An aeronautical information service provider shall ensure that instrument flight procedure data sets-

- (a) contain the digital representation of instrument flight procedures; and
- (b) made available for aerodromes regularly used by international civil aviation.

Distribution services - general

34. An aeronautical information service provider shall-

- (a) distribute aeronautical information products to authorised users who request them;
- (b) make available aeronautical information publication, aeronautical information publication amendments, aeronautical information publication supplements and aeronautical information circular by the most expeditious means; and
- (c) whenever practicable, employ global communication networks and web services, for

the provision of aeronautical information products.

NOTAM
distribution

35. An aeronautical information service provider shall-

- (a) distribute NOTAM on the basis of a request;
- (b) prepare NOTAM in conformity with the relevant provisions of the ICAO communication procedures;
- (c) whenever practicable, employ the aeronautical fixed service for NOTAM distribution;
- (d) use a six-digit date-time group indicating the date and time of NOTAM origination, and the identification of the originator, preceding the text when a NOTAM is sent by means other than the aeronautical fixed service;
- (e) select the NOTAM that are to be given international distribution;
- (f) ensure that the international exchange of NOTAM takes place only as mutually agreed between the international NOTAM office of the United Republic and international NOTAM office of other states concerned, and between international NOTAM office of the United Republic and multinational NOTAM processing units;
- (g) upon request, grant distribution of NOTAM series other than those distributed internationally;
- (h) use selective distribution lists when practicable; and
- (i) predetermined distribution of NOTAM shall be as detailed in the Second Schedule.

Data set
information
services

36. An aeronautical information service provider shall-

- (a) make available through information services, when the digital data sets are provided as specified in regulations 29, 30, 31, 32 and 33;

- (b) ensure a data set information service provides, as a minimum, the ability to query and retrieve, as a whole, each of the digital data sets as specified in regulations 29, 30, 31, 32 and 33;
- (c) ensure a data set information service provides the ability to query and retrieve selected elements of the digital data sets as specified in regulations 29, 30, 31, 32 and 33; and
- (d) ensure a data set information service provides the option to subscribe to notifications on data sets updates.

Pre-flight
information
service

37.- (1) An aeronautical information service provider shall-

- (a) make available aeronautical information relative to the route stages originating at the aerodrome or heliport to flight operations personnel, including flight crews and services responsible for pre-flight information, for any aerodrome or heliport used for international air operations;
- (b) ensure that aeronautical information provided for pre-flight planning purposes includes information of operational significance from the aeronautical information products.

(2) An aeronautical information service provider shall provide also additional current information relating to the aerodrome of departure concerning the following:

- (a) construction or maintenance work on or immediately adjacent to the manoeuvring area;
- (b) rough portions of any part of the manoeuvring area, whether marked or not;
- (c) presence of water on runways and taxiways, including their effect on surface friction;
- (d) parked aircraft or other objects on or immediately adjacent to taxiways;
- (e) presence of other temporary hazards;
- (f) presence of birds constituting a potential hazard to aircraft operations;
- (g) failure or irregular operation of part or all of the aerodrome lighting system including approach,

threshold, runway, taxiway, obstruction and manoeuvring area unserviceability lights and aerodrome power supply;

- (h) failure, irregular operation and changes in the operational status of secondary surveillance radar, automatic dependent surveillance - broadcast, automatic dependent surveillance - contract, controller pilot data link communications, data link-automatic terminal information service data link-VOLMET, radio navigation services, very high frequency aero mobile channels, runway visual range observing system, and secondary power supply; and
- (i) presence and operation of humanitarian relief missions.

(3) An aeronautical information service provider shall make available a summary of valid NOTAM of operational significance and other information of urgent character to flight crews in the form of plain-language pre-flight information bulletins.

Automated pre-flight information systems

38.-(1) An aeronautical information service provider shall use automated pre-flight information systems to make aeronautical data and aeronautical information available to operations personnel including flight crew members for self-briefing, flight planning and flight information service purposes and the aeronautical data and aeronautical information made available shall comply with the provisions of regulation 37(1)(b) and (3).

(2) An aeronautical information service provider shall provide access of self-briefing facilities of an automated pre-flight information system to operations personnel, including flight crew members and other aeronautical personnel concerned, for consultation as necessary with the aeronautical information service by telephone or other suitable telecommunications means.

(3) The human or machine interface of self-briefing facilities shall ensure easy access in a guided manner to all relevant information or data.

(4) An aeronautical information service provider shall ensure that automated pre-flight information systems for the supply of aeronautical data and aeronautical information for self-briefing, flight planning and flight information service-

- (a) provide for continuous and timely updating of the system database and monitoring of the validity and quality of the aeronautical data stored;
- (b) permit access to the system by operations personnel including flight crew members, aeronautical personnel concerned and other aeronautical users through suitable telecommunications means;
- (c) ensure provision, in paper copy form, of the aeronautical data and aeronautical information accessed, as required by operations personnel;
- (d) use access and interrogation procedures based on abbreviated plain language and ICAO location indicators, as appropriate, or based on a menu-driven user interface or other appropriate mechanism as agreed between an aeronautical information service provider and operator concerned; and
- (e) provide for rapid response to a user request for information.

(5) An aeronautical information service provider may establish automated pre-flight information systems providing a harmonized, common point of access by operations personnel, to aeronautical information in accordance with subregulation (1) and meteorological information in accordance with aeronautical meteorology regulations, by an agreement between the Authority or the agency to which the authority to provide service has been delegated in accordance with regulation 8(1)(b) and the Tanzania Meteorological Authority.

(6) An aeronautical information service provider shall remain responsible for the quality and timeliness of the aeronautical data and aeronautical information provided by means of automated pre-flight information systems.

Post-flight
information
service

39.-(1) For aerodromes or heliports used for international air operations, an aeronautical information service provider shall make arrangements to receive information concerning-

- (a) the state and operation of air navigation facilities or services noted by flight crews; and
- (b) the presence of wildlife hazards observed by flight crews.

(2) The arrangements specified in subregulation (1) shall ensure that such information is made available to an aeronautical information service provider for distribution as the circumstances necessitate.

(3) The information about presence of wildlife hazards shall be made available to an aeronautical information service provider for distribution as the circumstances necessitate.

PART VII

AERONAUTICAL INFORMATION UPDATES

General
specifications

40. An aeronautical information service provider shall keep up to date aeronautical data and aeronautical information.

Aeronautical
information
regulation and
control

41.-(1) An aeronautical information service provider shall distribute under the aeronautical information regulation and control system, information concerning establishment, withdrawal or significant changes upon a series of common effective dates at intervals of twenty-eight days, including 8th November 2018-

- (a) limits, horizontal and vertical, regulations and procedures applicable to-
 - (i) flight information regions;
 - (ii) control areas;
 - (iii) control zones;
 - (iv) advisory areas;
 - (v) air traffic services routes;
 - (vi) permanent danger, prohibited and restricted areas, including type and

periods of activity when known, and air defence identification zones;

- (vii) 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 air traffic services 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 the United Republic.

(2) The information notified by aeronautical information regulation and control shall not be changed further for at least another twenty-eight days after the effective date, unless the circumstance notified is of a temporary nature and will not persist for the full period.

(3) An aeronautical information service provider shall make available the information provided under the aeronautical information regulation and control system so as to reach recipients at least twenty-eight days in advance of the effective date.

(4) An aeronautical information service provider shall distribute a NIL notification not later than one cycle before the aeronautical information regulation and control effective date concerned when information has not been submitted by the aeronautical information regulation and control date.

(5) Implementation dates other than aeronautical information regulation and control effective dates shall not be used for pre-planned operationally significant changes requiring cartographic work or for updating of navigation databases.

(6) Aeronautical information regulation and control system shall be used to provide information relating to the establishment and withdrawal of, and premeditated significant changes in, the following circumstances:

- (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.

(7) An aeronautical information service provider shall make available the information so as to reach recipients at least fifty-six days in advance of the effective date whenever major changes are planned and where advance notice is desirable and practicable, concerning the establishment of, and premeditated major changes in, the following circumstances, and other major changes if deemed necessary:

- (a) new aerodromes for international instrument flight rule operations;
- (b) new runways for instrument flight rule operations at international aerodromes;
- (c) design and structure of the air traffic services route network;
- (d) design and structure of a set of terminal procedures, including change of procedure bearings due to magnetic variation change; and
- (e) circumstances listed in subregulation (1), where the entire country or any significant portion thereof is affected or if cross-border coordination is required.

Aeronautical
information
product updates

shall-

- 42.** An aeronautical information service provider
- (a) amend or reissue the aeronautical information publication at such regular intervals as may be necessary to keep it up to date and ensure that-
 - (i) hand amendments or annotations are kept to the minimum; and
 - (ii) normal method of amendment is by means of replacement sheets;
 - (b) publish permanent changes to the aeronautical information publication as aeronautical information publication amendments;
 - (c) publish temporary changes of three months or more and information of short duration which contains extensive text or graphics as aeronautical information publication supplements.

NOTAM

43.-(1) An aeronautical information service provider shall originate a trigger NOTAM when an aeronautical information publication amendment or an aeronautical information publication supplement is published in accordance with aeronautical information regulation and control procedures.

(2) Except for extensive text or graphics, an aeronautical information service provider shall originate and issue a NOTAM promptly whenever-

- (a) the information to be distributed is of a temporary nature and of short duration; or
- (b) when operationally significant permanent changes, or temporary changes of long duration are made at short notice.

(3) The NOTAM originated and issued under subregulation (2) shall concern the following information:

- (a) establishment, closure or significant changes in operation of aerodrome or heliport or runways;
- (b) establishment, withdrawal or significant changes in operation of aeronautical services, including aerodromes, aeronautical information

- services, air traffic services, communications, navigation and surveillance, meteorology, search and rescue;
- (c) establishment, withdrawal or significant changes in operational capability of radio navigation and air-ground communication services, including interruption or return to operation, change of frequencies, change in notified hours of service, change of identification, change of orientation or directional aids, change of location, power increase or decrease amounting to fifty percent or more, change in broadcast schedules or contents, or irregularity or unreliability of operation of any radio navigation and air-ground communication services or limitations of relay stations including operational impact, affected service, frequency and area;
 - (d) unavailability of back-up and secondary systems, having a direct operational impact;
 - (e) establishment, withdrawal or significant changes to visual aids;
 - (f) interruption of or return to operation of major components of aerodrome lighting systems;
 - (g) establishment, withdrawal or significant changes to procedures for air navigation services;
 - (h) occurrence or correction of major defects or impediments in the manoeuvring area;
 - (i) changes to and limitations on availability of fuel, oil and oxygen;
 - (j) major changes to search and rescue facilities and services available;
 - (k) establishment, withdrawal or return to operation of hazard beacons marking obstacles to air navigation;
 - (l) changes in regulations requiring immediate action, such as prohibited areas for search and rescue action;

- (m) presence of hazards not otherwise promulgated, which affect air navigation, including obstacles, military exercises and operations, intentional and unintentional radio frequency interferences, rocket launches, displays, fireworks, sky lanterns, rocket debris, races and major parachuting events;
- (n) conflict zones which affect air navigation, to include information that is as specific as possible regarding the nature and extent of threats of that conflict and its consequences for civil aviation;
- (o) planned laser emissions, laser displays and search lights if pilots' night vision is likely to be impaired;
- (p) erecting or removal of, or changes to, obstacles to air navigation in the take-off or climb, missed approach, approach areas and runway strip;
- (q) establishment or discontinuance, including activation or deactivation, as applicable, or changes in the status of prohibited, restricted or danger areas;
- (r) establishment or discontinuance of areas or routes or portions thereof where the possibility of interception exists and where the maintenance of guard on the emergency very high frequency 121.5MHz is required;
- (s) allocation, cancellation or change of location indicators;
- (t) changes in aerodrome or heliport rescue and firefighting category provided;
- (u) presence or removal of, or significant changes in, hazardous conditions due to snow, slush, ice, radioactive material, toxic chemicals, volcanic ash deposition or water on the movement area;
- (v) outbreaks of epidemics necessitating changes in notified requirements for inoculations and quarantine measures;
- (w) an operationally significant change in volcanic activity, the location, date and time of volcanic

- eruptions or horizontal and vertical extent of volcanic ash cloud, including direction of movement, flight levels and routes or portions of routes which could be affected;
- (x) release into the atmosphere of radioactive materials or toxic chemicals following a nuclear or chemical incident, the location, date and time of the incident, the flight levels and routes or portions thereof which could be affected and the direction of movement;
 - (y) establishment of operations of humanitarian relief missions, such as those undertaken under the auspices of the United Nations, together with procedures or limitations which affect air navigation;
 - (z) implementation of short-term contingency measures in cases of disruption, or partial disruption, of air traffic services and related supporting services; and
 - (aa) any other circumstance which may affect the operation of aircraft.
- (4) The following information shall not be notified by NOTAM:
- (a) routine maintenance work on aprons and taxiways which does not affect the safe movement of aircraft;
 - (b) runway marking work, when aircraft operations can safely be conducted on other available runways, or the equipment used can be removed when necessary;
 - (c) temporary obstructions in the vicinity of aerodromes or heliports that do not affect the safe operation of aircraft;
 - (d) partial failure of aerodrome or heliport lighting facilities where such failure does not directly affect aircraft operations;
 - (e) partial temporary failure of air-ground communications when suitable alternative frequencies are known to be available and are operative;

- (f) the lack of apron marshalling services and road traffic control;
 - (g) the unserviceability of location, destination or other instruction signs on the aerodrome movement area;
 - (h) parachuting when in uncontrolled airspace under visual flight rule referred to under paragraph (m) of subregulation (3), when controlled, at promulgated sites or within danger or prohibited areas;
 - (i) training activities by ground units;
 - (j) unavailability of back-up and secondary systems if these do not have an operational impact;
 - (k) limitations to airport facilities or general services with no operational impact;
 - (l) national regulations not affecting general aviation;
 - (m) announcement or warnings about possible or potential limitations, without any operational impact;
 - (n) general reminders on already published information;
 - (o) availability of equipment for ground units without containing information on the operational impact for airspace and facility users;
 - (p) information about laser emissions without any operational impact and fireworks below minimum flying heights;
 - (q) closure of movement area parts in connection with planned work locally coordinated of duration of less than one hour;
 - (r) closure or unavailability of, or changes in, operation of aerodrome or heliport outside the aerodrome or heliport operational hours; and
 - (s) other non-operational information of a similar temporary nature.
- (5) Specifications for NOTAM, including formats for SNOWTAM and ASHTAM shall be as specified in the Third, Fourth and Fifth Schedules.

- Data set updates shall-
- 44.** An aeronautical information service provider shall-
- (a) amend or reissue the data sets at such regular intervals as may be necessary to keep it up-to-date;
 - (b) issue permanent changes and temporary changes of three months or longer made available as digital data, in the form of a complete data set or a subset that includes only the differences from the previously issued complete data set;
 - (c) when made available as a completely reissued data set, the differences from the previously issued complete data set should be indicated;
 - (d) when temporary changes of short duration are made available as digital data (digital NOTAM), they should use the same aeronautical information model as the complete data set; and
 - (e) synchronise the aeronautical information publication and digital data sets updates.

PART VIII
ADMINISTRATIVE AND PERSONNEL REQUIREMENTS

- Establishment of air traffic service reporting offices shall-
- 45.**(1) Air navigation services provider shall establish and operationalise air traffic service reporting offices as appropriate for the purpose of reception and management of flight plans.
- (2) The air traffic service reporting offices established under subregulation (1) shall be adequately equipped and staffed with personnel sufficient for the effective execution of the function.
- (3) A person shall not provide an air traffic service reporting office service other than when under supervision unless he is a holder of an appropriate instrument of Authority in the form of a certificate of competency with endorsement type equivalent to the function being undertaken.
- (4) The certificate of competency required in subregulation (3) shall be issued by the Authority.

Aeronautical
information
service and air
traffic service
reporting offices
personnel
requirements

46.-(1) An air navigation services provider shall appoint-

- (a) an accountable officer for aeronautical information service to whom authority has been granted to ensure that all activities undertaken are carried out in accordance with the applicable requirements in these Regulations;
- (b) a standards and quality assurance officer who shall be responsible for quality control and implementation of the Authority's requirements on QMS and SMS and who has direct access to the accountable manager referred to in paragraph (a);
- (c) adequately trained and certified personnel to-
 - (i) plan, provide and supervise the approved services listed in the air navigation service provider certificate and the unit's manual of operations, in a safe and efficient manner;
 - (ii) receive, collate or assemble, edit, format, publish, store and distribute aeronautical data and aeronautical information;
 - (iii) facilitate flight planning, provide pre-flight information, and receive post flight information as necessary; and
 - (iv) facilitate the development, maintenance and promulgation of aeronautical charts.

(2) An air navigation services provider shall include in the manual of operations an analysis of the personnel required to perform the aeronautical information service and aeronautical charts function by taking into account the duties and responsibilities of the staff concerned and also guidance provided by the Authority.

(3) An air navigation services provider shall develop a training policy, training programme and training plan as well as job description for each of the staff under the jurisdiction of the accountable officer and implement the same as applicable with the following considerations:

- (a) the training policy and programme shall lay down the training courses that staff have to undergo to perform their duties, including initial, recurrent and specialised training, where applicable; and
- (b) the job description shall depict the job purpose, key responsibilities, and outcome to be achieved by staff.

(4) An air navigation services provider shall maintain individual training records for each of its staff, which shall include details of the courses completed by each staff as well as the time-frame for attending future courses as required under the training plan.

(5) An air navigation services provider shall conduct a yearly review of the training plan for each staff at the beginning of the financial year to identify any gaps in competency, changes in training requirement and prioritise the type of training required for subsequent years.

(6) An air navigation services provider shall-

- (a) designate an on-job training instructor who must have undertaken training in instructional techniques as with the requisite work experience;
- (b) develop and implement an on-job training program to guide in training activities; and
- (c) amend the on-job training program and associated procedures whenever necessary to ensure accuracy and currency of the information contained therein.

(7) The on-job training program developed under subregulation (6) shall be accepted by the Authority.

Aeronautical
information
service and air
traffic service
reporting offices
personnel
competency
requirements

47. An aeronautical information service provider shall-
- (a) develop and implement a policy to guide the identification of required competencies and endorsements to undertake specific tasks or functions;
 - (b) identify the competencies and the associated knowledge, skills and attitudes required for each

function and ensure that personnel possess the competencies required to perform the specific assigned functions;

- (c) establish initial and periodic assessments that require personnel to demonstrate the required competencies;
- (d) appropriately train personnel assigned to perform specific functions;
- (e) establish procedures to maintain currency of the competence of the personnel; and
- (f) maintain sufficient numbers of personnel, with the requisite experience and give them appropriate authority to be able to discharge their duties.

Instrument of Authority to perform aeronautical information service functions

48.-(1) A person shall not provide an aeronautical information service other than when under supervision unless he is a holder of an appropriate instrument of Authority in the form of a certificate of competency with endorsement type equivalent to the function being undertaken.

(2) The certificate of competency required in subregulation (1) shall be issued by the Authority.

Aeronautical information service contingency plan

49.-(1) An aeronautical information service provider shall put in place a contingency plan that sets out the procedures to be followed if a service provided as part of its aeronautical information service is interrupted.

(2) The contingency plan required in subregulation (1) shall include-

- (a) the actions to be taken by personnel responsible for providing the service;
- (b) possible alternative arrangements for providing the service; and
- (c) arrangements for resuming normal provision of the service.

Maintenance of records

50.-(1) An aeronautical information service provider shall have procedures for making, collecting,

indexing, storing, securing, maintaining, accessing and disposing of-

- (a) records that identify all incoming and outgoing aeronautical data and aeronautical information;
- (b) records that identify each person who is authorised by the provider to process, check, edit, publish or distribute aeronautical data and aeronautical information;
- (c) records that list the endorsements, qualifications and competencies of personnel who process, check, edit, publish or distribute aeronautical data and aeronautical information;
- (d) records that identify each aeronautical information publication responsible person;
- (e) records that identify each notice to air men authorised person for an aeronautical data originator;
- (f) records that identify each occurrence of an error or omission in aeronautical data or aeronautical information published by the provider in the aeronautical information product; and
- (g) records that contain the results of any audit, inspection or review of the provider's aeronautical information service.

(2) An aeronautical information service provider shall ensure that records mentioned in subregulation (1) are legible and permanent.

(3) An aeronautical information service provider shall keep records referred to in subregulation (1), and the data or information for at least ten years after the data or information ceases to be effective.

PART IX EXEMPTIONS

Requirements
for application
for exemption

51.-(1) A person may apply to the Authority for exemption from any of the provisions of these Regulations.

(2) Save where there is a case of emergency, a person requiring exemption from any of the provisions of these Regulations shall make an application to the Authority

at least sixty days prior to the proposed effective date, giving the following information:

- (a) name and contact address including electronic mail and fax, if any;
- (b) telephone number;
- (c) a citation of the specific requirement from which the applicant seeks exemption;
- (d) justification for the exemption;
- (e) a description of the type of operations to be conducted under the proposed exemption;
- (f) the proposed duration of the exemption;
- (g) an explanation of how the exemption would be in the public interest;
- (h) a detailed description of the alternative means by which the applicant will ensure a level of safety equivalent to that established by the regulation in question;
- (i) a safety risk assessment carried out in respect of the exemption applied for;
- (j) if the applicant handles international operations and seeks to operate under the proposed exemption, an indication whether the exemption would contravene any provision of the standards and recommended practices of ICAO; and
- (k) any other relevant information that the Authority may require.

(3) Where the applicant seeks emergency processing of an application for exemption, the application shall contain supporting facts and satisfactory reasons for:

- (a) not filing the application within the time specified in subregulation (2); and
- (b) deeming the application an emergency.

(4) The Authority may, in writing, refuse the application made under subregulation (3) where it is not satisfied with the reasons given for the emergency.

(5) The application for exemption shall be accompanied by a fee prescribed by the Authority.

Review and
publication

52.-(1) The Authority shall review the application for exemption made under regulation 51 for accuracy and

compliance and if the application is satisfactory, the Authority shall publish a detailed summary of the application for comments, within a prescribed time, in either-

- (a) aeronautical information circular; or
- (b) a widely circulated newspaper.

(2) Where application requirements have not been fully complied with, the Authority shall request the applicant in writing, to comply prior to publication or making a decision under subregulation (3).

(3) Where the request is for emergency relief, the Authority shall publish the decision as soon as possible after processing the application.

Evaluation of request

53.-(1) Where the application requirements have been satisfied, the Authority shall conduct an evaluation of the request to include-

- (a) determination of whether an exemption would be in the public interest;
- (b) a determination, after a technical evaluation of whether the applicant's proposal would provide a level of safety equivalent to that established by the relevant regulation, although where the Authority decides that a technical evaluation of the request would impose a significant burden on the Authority's technical resources, the Authority may deny the exemption on that basis;
- (c) a determination of whether a grant of the exemption would contravene these Regulations; and
- (d) grant or deny the exemption based on the preceding elements, and with or without conditions.

(2) The Authority shall notify the applicant in writing of the decision to grant or deny the request and publish a detailed summary of its evaluation and decision.

(3) The summary referred to in subregulation (2) shall specify the duration of the exemption and any conditions or limitations of the exemption.

(4) Where the exemption affects a significant population of the aviation community of the United Republic, the Authority shall publish the summary in aeronautical information circular.

PART X
GENERAL PROVISIONS

Drug and
alcohol testing
and reporting

54.-(1) A person who performs any function prescribed by these Regulations directly or by contract under the provisions of these Regulations may be tested for drug or alcohol usage.

(2) A person who-

- (a) refuses to submit to be tested for the percentage of alcohol in the blood; or
- (b) refuses to submit to a test to indicate the presence of narcotic drugs, depressant or stimulant drugs or substances in the body when so requested by a law enforcement officer or the Authority, or refuses to furnish or to authorise the release of the test results requested by the Authority, shall-

- (i) be denied any licence, certificate, rating, qualification, or authorisation issued under these Regulations for a period of up to one year from the date of that refusal; or

- (ii) have their licence, certificate, rating, qualification, or authorisation issued under these Regulations suspended or revoked.

(3) A person who is convicted for the violation of any local or national statute relating to the growing, processing, manufacture, sale, disposition, possession, transportation, or importation of narcotic drugs, depressant or stimulant drugs or substances, shall-

- (a) be denied any license, certificate, rating, qualification or authorisation issued under these Regulations for a period of up to one year after the date of conviction; or

- (b) have their licence, certificate, rating, qualification or authorisation issued under these Regulations suspended or revoked.

Change of name

55.-(1) A holder of a certificate issued under these Regulations may apply to the Authority for-

- (a) a replacement of the certificate if lost or destroyed;
- (b) a change of name on the certificate; or
- (c) an endorsement on the certificate.

(2) For the purposes of subregulation (1), the holder of a certificate shall submit to the Authority the following:

- (a) the original certificate or a copy thereof in case of loss; and
- (b) a court order, or other legal document verifying the name change.

(3) The Authority shall return to the holder of the certificate, with the appropriate changes applied for, if any, the documents in subregulation (2) and, where necessary, retain copies thereof.

Change of address

56.-(1) A holder of a certificate issued under these Regulations shall notify the Authority of the change in the physical and mailing address within fourteen days of such change.

(2) A person who does not notify the Authority of the change in the physical and mailing address within the time frame specified in subregulation (1) shall not exercise the privileges of the certificate.

Replacement of documents

57. A person may apply to the Authority in the prescribed form for a replacement of the documents issued under these Regulations where the documents are lost or destroyed.

Reports of violation

58.-(1) A person who knows of a violation of the Act, these Regulation or any regulations, rules, or orders issued under the Act shall report it to the Authority.

(2) The Authority may determine the nature and type of investigation or enforcement action that need to be taken.

Failure to
comply with
direction

59. A person who fails to comply with any duly issued direction given to him by the Authority or by any authorised person under any provision of these Regulations, commits an offence.

Aeronautical
fees

60.-(1) The Authority shall notify in writing, the fees to be charged in connection with the issue, renewal or variation of any certificate, test, inspection or investigation required by, or for the purpose of these Regulations any orders, or notices made thereunder.

(2) An applicant shall, subject to these Regulations and before the application is accepted, be required to pay the fee so chargeable for the respective application.

(3) Where a payment has been made in terms of subregulation (2) and the applicant decides to withdraw the application, the Authority shall not refund the payment made.

Penalties

61.-(1) A person who contravenes any of the provisions of these Regulations commits an offence and shall, upon conviction, be liable to a fine not exceeding one million shillings or to imprisonment for a term of not more than six months or to both, and in the case of a continuing contravention, each day of the contravention shall constitute a separate offence.

(2) Where it is proved that an act or omission of any person, which would otherwise have been a contravention by that person of a provision of these Regulations was due to any cause not avoidable by the exercise of reasonable care by that person, the act or omission shall be deemed not to be a contravention by that person of that provision.

(3) Where a person is aggrieved by any order made under these Regulations the person may, within twenty-one days of such order being made, appeal against the order to a court of law with competent jurisdiction.

General penalty

62. A person who contravenes any of the provisions of these Regulations for which no penalty has been specifically provided for, commits an offence and on conviction-

- (a) shall be liable to a fine of one million and five hundred thousand; and
- (b) may have his certificate, approval, authorisation, exemption or such other document revoked or suspended.

Revocation
GN. No.
66 of 2017

63. The Civil Aviation (Aeronautical Information Services) Regulations are hereby revoked.

FIRST SCHEDULE

(Made under regulation 31(3)(d)(i) and (v))

TERRAIN AND OBSTACLE DATA REQUIREMENTS

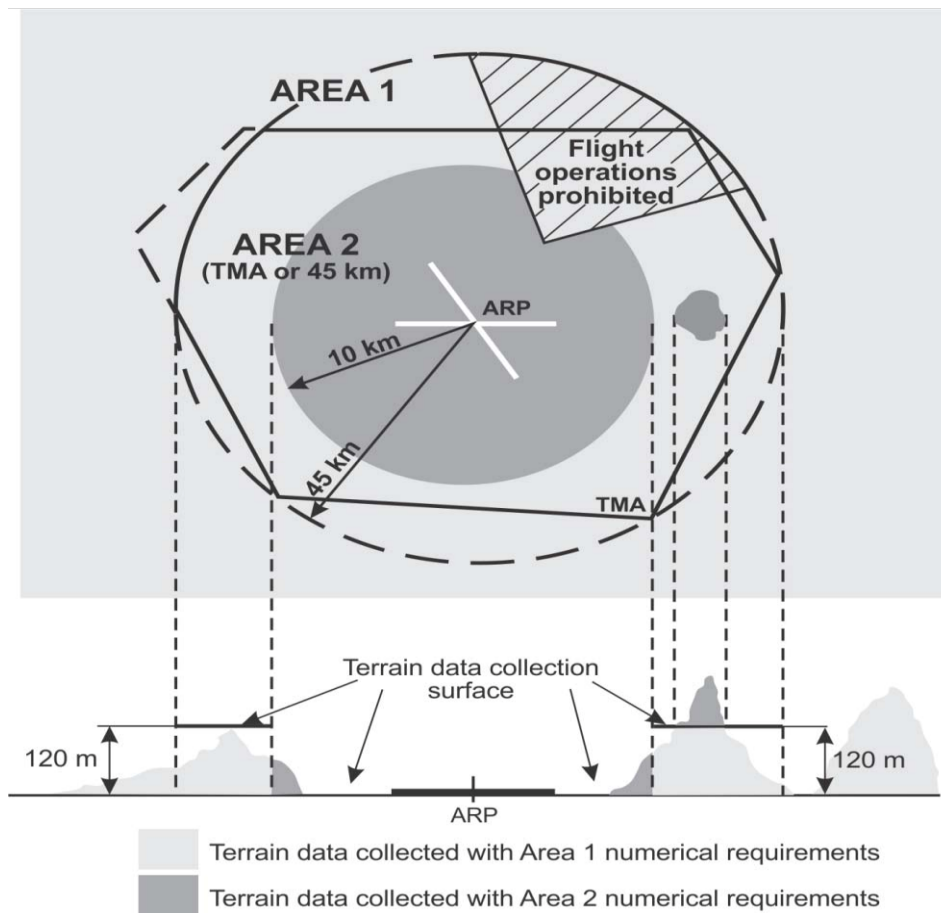


Figure S1-1. Terrain data collection surfaces - Area 1 and Area 2

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.
5. Terrain data numerical requirements for Areas 1 and 2 are as specified in relevant advisory circular.

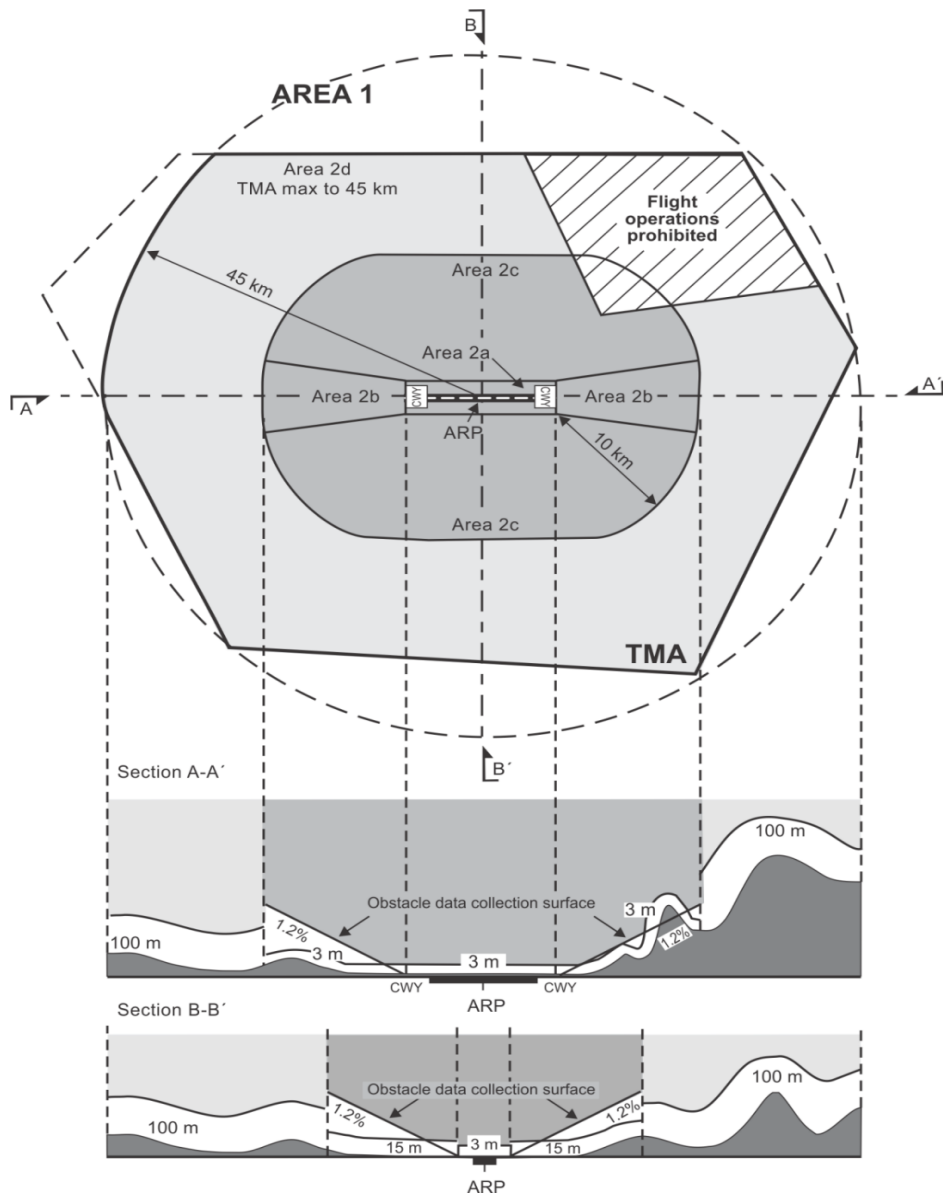


Figure S1-2. Obstacle data collection surfaces - Area 1 and Area 2

1. Obstacle data shall be collected and recorded in accordance with the Area 2 numerical requirements as specified in relevant advisory circular.
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 as specified in relevant advisory circular.

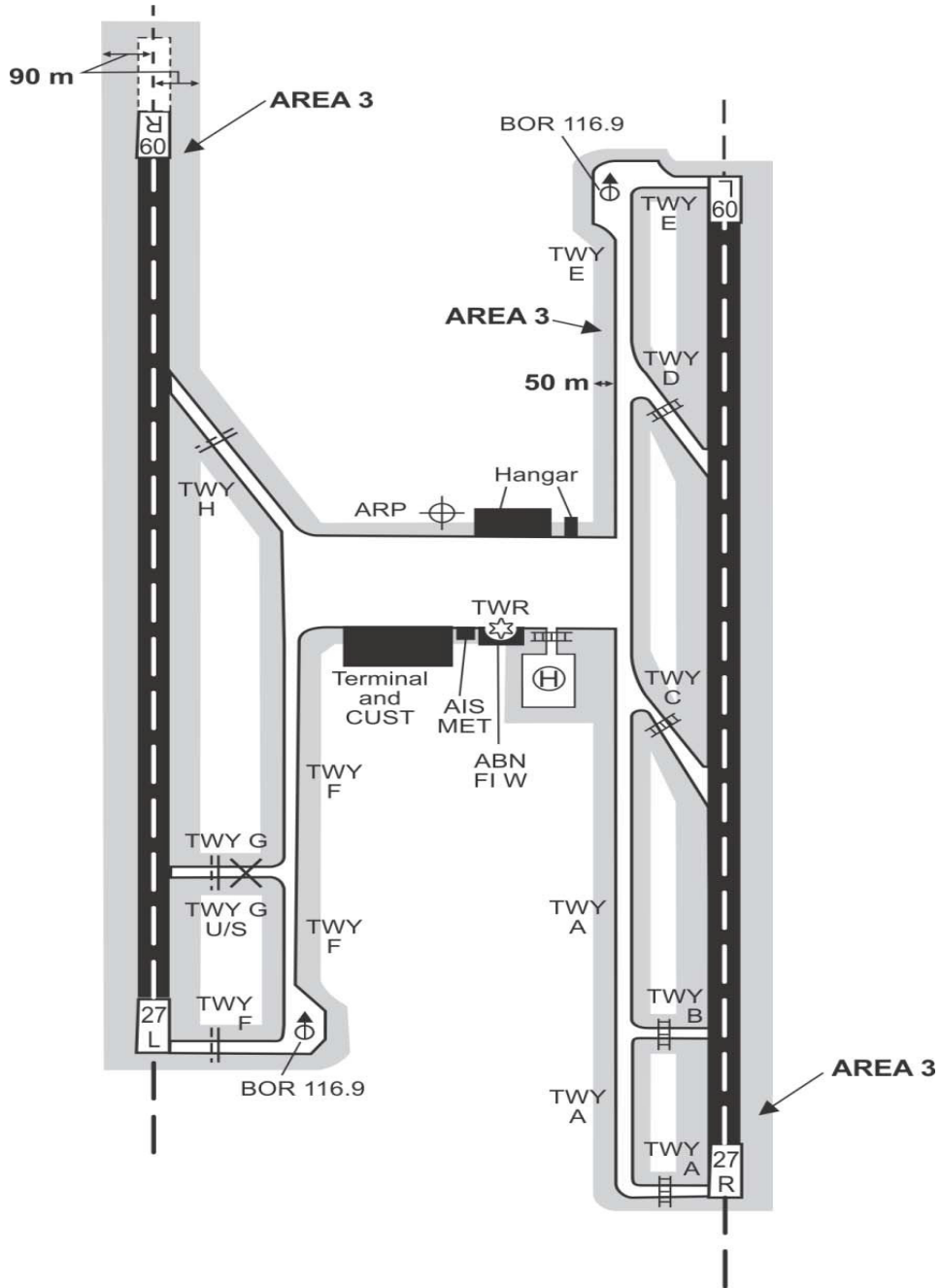


Figure S1-3. Terrain and obstacle data collection surface - Area 3

Terrain and obstacle data in Area 3 shall comply with the numerical requirements as specified in relevant advisory circular.

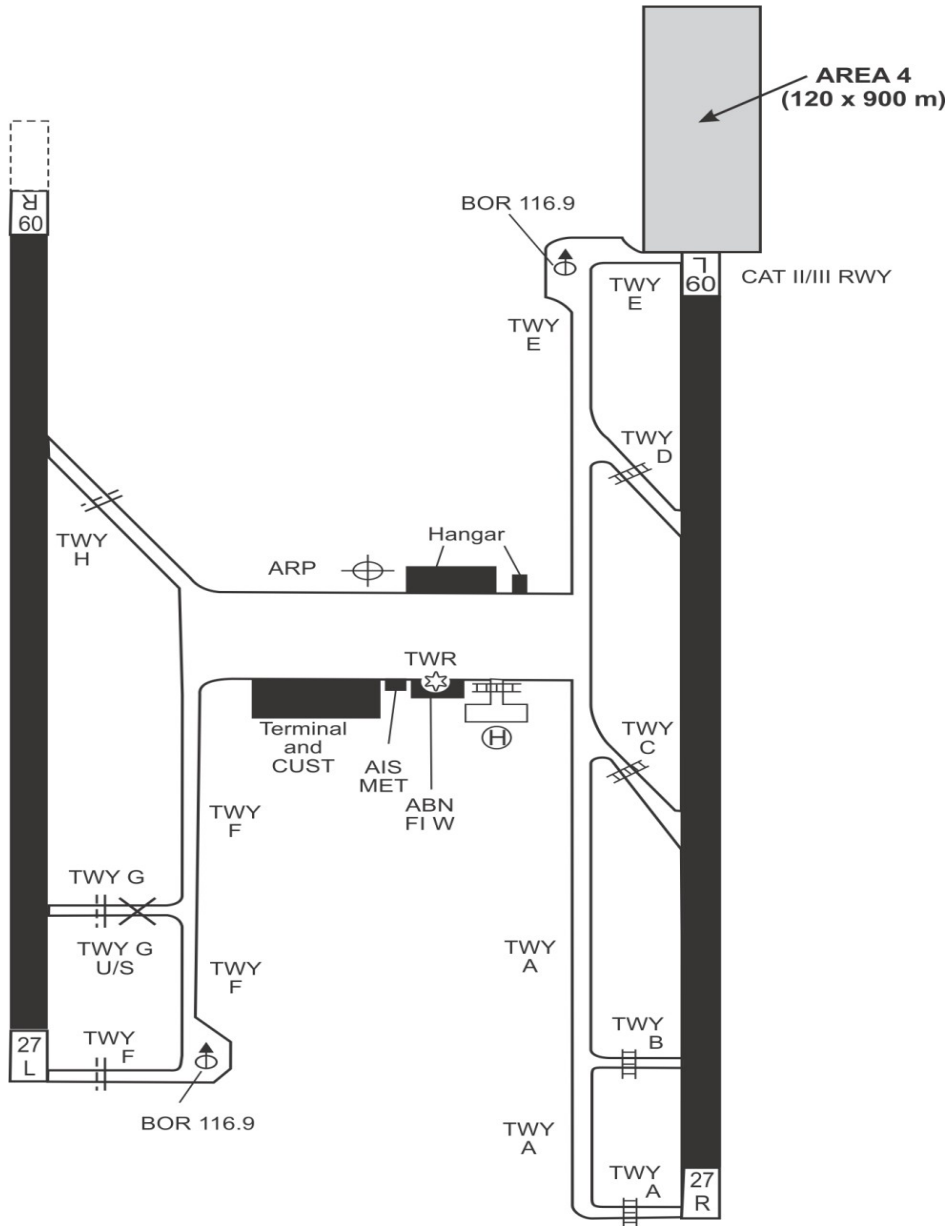


Figure S1-4. Terrain and obstacle data collection surface - Area 4

Terrain and obstacle data in Area 4 shall comply with the numerical requirements as specified in relevant advisory circular.

SECOND SCHEDULE

(Made under regulation 35(i))

PREDETERMINED DISTRIBUTION SYSTEM FOR NOTAM

1. The predetermined distribution system provides for incoming NOTAM (including SNOWTAM and ASHTAM) to be channeled through the AFS direct to designated addressees predetermined by the receiving country concerned while concurrently being routed to the international NOTAM office for checking and control purposes.
2. The addressee indicators for those designated addressees are constituted as follows:
 - 1) First and second letters: The first two letters of the location indicator for the AFS communication centre associated with the relevant international NOTAM office of the receiving country.
 - 2) Third and fourth letters: The letters “ZZ” indicating a requirement for special distribution.
 - 3) Fifth letter: The fifth letter differentiating between NOTAM (letter “N”), SNOWTAM (letter “S”), and ASHTAM (letter “V”).
 - 4) Sixth and seventh letters: The sixth and seventh letters, each taken from the series A to Z and denoting the national and/or international distribution list(s) to be used by the receiving AFS centre.
 - 6) Eighth letter: The eighth position letter shall be the filler letter “X” to complete the eight-letter addressee indicator.
3. International NOTAM Office for United Republic of Tanzania shall inform international NOTAM office of other States from which they receive NOTAM of the sixth and seventh letters to be used under different circumstances to ensure proper routing.

THIRD SCHEDULE

(Made under regulation 43(5))

NOTAM FORMAT

Priority indicator							
Address							
	<<≡						
Date and time of filing							
Originator's indicator	<<≡(
M							
NOTAM containing new information							
NOTAM replacing a previous NOTAM							
NOTAM cancelling a previous NOTAM							
NOTAM							
Q							
	FIR	NOTAM Code	Purpose	Scope	Lower limit	Upper limit	Coordinates, Radius
Q)	Q)						
Identification of ICAO location indicator in which the facility, airspace or condition reported on is located							A)
Period of validity							

To (PERM or date-time group)	C)									
Time schedule applicable)	(if									
Text of NOTAM; plain-language entry										
E)										
Lower limit	F)									
Upper limit	G)									
Signature										

*Delete as appropriate

INSTRUCTIONS FOR THE COMPLETION OF THE NOTAM FORMAT

1. General

The qualifier line (Item Q) and all identifiers (Items A) to G) inclusive) each followed by a closing parenthesis, as shown in the format, shall be transmitted unless there is no entry to be made against a particular identifier.

2. NOTAM numbering

Each NOTAM shall be allocated a series identified by a letter and a four-digit number

followed by a stroke and a two-digit number for the year (e.g. A0023/24). Each series shall start on 1 January with number 0001.

3. Qualifiers (Item Q)

Item Q) is divided into eight fields, each separated by a stroke. An entry shall be made in each field. Examples of how fields are to be filled are shown in the Aeronautical Information Services Manual (Doc 8126). The definition of the field is as follows:

1) FIR

- (a) If the subject of the information is located geographically within one FIR, the ICAO location indicator shall be that of the FIR concerned. When an aerodrome is situated within the overlying FIR of another State, the first field of Item Q) shall contain the code for that overlying FIR (e.g. Q) HTDC/...A) HTKJ); or, if the subject of the information is located geographically within more than one FIR, the FIR field shall be composed of the ICAO nationality letters of the State originating the NOTAM followed by "XX". (The location indicator of the overlying UIR shall not be used). The ICAO location indicators of the FIRs concerned shall then be listed in Item A) or indicator of State or non-governmental agency which is responsible for provision of a navigation service in more than one State.
- (b) If one State issues a NOTAM affecting FIRs in a group of States, the first two letters of the ICAO location indicator of the issuing State plus "XX" shall be included. The location indicators of the FIRs concerned shall then be listed in Item A) or indicator of State or non-governmental agency which is responsible for provision of a navigation service in more than one State.

2) NOTAM CODE

All NOTAM Code groups contain a total of five letters and the first letter is always the letter Q. The second and third letters identify the subject, and the fourth and fifth letters denote the status or condition of the subject reported upon. The two-letter codes for subjects and conditions are those contained in the PANS-ABC (Doc 8400). For combinations of second and third, and fourth and fifth letters, refer to the NOTAM Selection Criteria contained in Doc 8126 or insert one of the following combinations, as appropriate:

- (a) If the subject is not listed in the NOTAM Code (Doc 8400) or in the NOTAM Selection Criteria (Doc 8126), insert "XX" as the second and third letters (e.g. QXXAK);
- (b) If the condition of the subject is not listed in the NOTAM Code (Doc 8400) or in the NOTAM Selection Criteria (Doc 8126), insert "XX" as the fourth and fifth letters (e.g. QHTXX);
- (c) When a NOTAM containing operationally significant information is issued in accordance with Appendix 4 and Chapter 6 and when it is used to announce the existence of AIRAC aeronautical information publication amendments or supplements, insert "TT" as the fourth and fifth letters of the NOTAM Code;
- (d) When a NOTAM is issued containing a checklist of valid NOTAM, insert "KKKK" as the second, third, fourth and fifth letters; and
- (e) The following fourth and fifth letters of the NOTAM Code shall be used in NOTAM cancellations:

AK = RESUMED NORMAL OPERATION

AL	=	OPERATIVE (OR RE-OPERATIVE) SUBJECT TO PREVIOUSLY PUBLISHED LIMITATIONS/ CONDITIONS
AO	=	OPERATIONAL
CC	=	COMPLETED
CN	=	CANCELLED
HV	=	WORK COMPLETED
XX	=	PLAIN LANGUAGE

1) TRAFFIC

I = IFR

V = VFR

K = NOTAM is a checklist

2) PURPOSE

N = NOTAM selected for the immediate attention of flight crew members

B = NOTAM of operational significance selected for pre-flight information bulletin entry

O = NOTAM concerning flight operations

M = Miscellaneous NOTAM; not subject for a briefing, but it is available on request

K = NOTAM is a checklist

3) SCOPE

A = Aerodrome

E = En-route

W = Nav Warning

K = NOTAM is a checklist

If the subject is qualified AE, the aerodrome location indicator shall be reported in Item A).

4) LOWER LIMIT /

5) UPPER LIMIT

LOWER and UPPER limits shall only be expressed in flight levels (FL) and shall express the actual vertical limits of the area of influence without the addition of buffers. In the case of navigation warnings and airspace restrictions, values entered shall be consistent with those provided under Items F) and G).

If the subject does not contain specific height information, insert "000" for LOWER and "999" for UPPER as default values.

6) COORDINATES, RADIUS

The latitude and longitude accurate to one minute, as well as a three-digit distance figure giving the radius of influence in NM (e.g. 4700N01140E043).

Coordinates present approximate centre of circle whose radius encompasses the whole area of influence, and if the NOTAM affects the entire FIR/UIR or more than one FIR/UIR, enter the default value “999” for radius.

4. Item A)

Insert the location indicator as contained in ICAO Doc 7910 of the aerodrome or FIR in which the facility, airspace, or condition being reported on is located. More than one FIR/UIR may be indicated when appropriate. If there is no available ICAO location indicator, use the ICAO nationality letter as given in ICAO Doc 7910, Part 2, plus “XX” and followed up in

Item E) by the name, in plain language. If information concerns GNSS, insert the appropriate ICAO location indicator allocated for a GNSS element or the common location indicator allocated for all elements of GNSS (except GBAS).

5. Item B)

For date-time group use a ten-figure group, giving year, month, day, hours and minutes in UTC. This entry is the date-time at which the NOTAMN comes into force. In the cases of NOTAMR and NOTAMC, the date-time group is the actual date and time of the NOTAM origination. The start of a day shall be indicated by “0000”.

6. Item C)

With the exception of NOTAMC, a date-time group (a ten-figure group giving year, month, day, hours and minutes in UTC) indicating duration of information shall be used unless the information is of a permanent nature in which case the abbreviation “PERM” is inserted instead. The end of a day shall be indicated by “2359” (i.e. do not use “2400”). If the information on timing is uncertain, the approximate duration shall be indicated using a date-time group followed by the abbreviation “EST”. Any NOTAM which includes an “EST” shall be cancelled or replaced before the date-time specified in Item

C).

7. Item D)

If the hazard, status of operation or condition of facilities being reported on will be active in accordance with a specific time and date schedule between the dates-times indicated in Items B) and C), insert such information under Item D). If Item D) exceeds 200 characters, consideration shall be given to providing such information in a separate, consecutive NOTAM.

8. Item E)

Use decoded NOTAM Code, complemented where necessary by ICAO abbreviations, indicators, identifiers, designators, call signs, frequencies, figures and plain language. When NOTAM is selected for international distribution, English text shall be included for those parts expressed in plain language. This entry shall be clear and concise in order to provide a suitable pre-flight information bulletin entry. In the case of NOTAMC, a subject reference and status message shall be included to enable accurate plausibility checks.

9. Items F) and G)

These items are normally applicable to navigation warnings or airspace restrictions and are usually part of the pre-flight information bulletin entry. Insert both lower and upper height limits of activities or restrictions, clearly indicating only one reference datum and unit of measurement. The abbreviations GND or SFC shall be used in Item F) to designate ground and surface respectively. The abbreviation UNL shall be used in Item G) to designate unlimited.

FOURTH SCHEDULE

(Made under regulation 43(5))

SNOWTAM FORMAT

(COM heading)	(PRIORITY INDICATOR)	(ADDRESSES)										<=	
	(DATE AND TIME OF FILING)	(ORIGINATOR'S INDICATOR)										<=	
(Abbreviated heading)	(SWAA* SERIAL NUMBER)					(LOCATION INDICATOR)	DATE/TIME OF ASSESSMENT					(OPTIONAL GROUP)	<=
	S	W	.	.									
SNOWTAM	→ (Serial number) <=												
Aeroplane performance calculation section													
(AERODROME LOCATION INDICATOR)	M	A)											<=
(DATE/TIME OF ASSESSMENT (Time of completion of assessment in UTC))	M	B)											→
(LOWER RUNWAY DESIGNATION NUMBER)	M	C)											→
(RUNWAY CONDITION CODE (RWYCC) ON EACH -RUNWAY THIRD) (From Runway Condition Assessment Matrix (RCAM) 0, 1, 2, 3, 4, 5 or 6)	M	D)	/	/									→
(PER CENT COVERAGE CONTAMINANT FOR EACH RUNWAY THIRD)	C	E)	/	/									→
(DEPTH (mm) OF LOOSE CONTAMINANT FOR EACH RUNWAY THIRD)	C	F)	/	/									→
(CONDITION DESCRIPTION OVER TOTAL RUNWAY LENGTH) (Observed on each runway third, starting from threshold having the lower runway designation number)	M	G)	/	/									
COMPACTED SNOW DRY DRY SNOW DRY SNOW ON TOP OF COMPACTED SNOW DRY SNOW ON TOP OF ICE FROST ICE SLUSH STANDING WATER WATER ON TOP OF COMPACTED SNOW WET WET ICE WET SNOW WET SNOW ON TOP OF COMPACTED SNOW WET SNOW ON TOP OF ICE													→
(WIDTH OF RUNWAY TO WHICH THE RUNWAY CONDITION CODES APPLY, IF LESS THAN PUBLISHED WIDTH)	O	H)											<=
Situational awareness section													
(REDUCED RUNWAY LENGTH, IF LESS THAN PUBLISHED LENGTH (m))	O	I)											→
(DRIFTING SNOW ON THE RUNWAY)	O	J)											→
(LOOSE SAND ON THE RUNWAY)	O	K)											→
(CHEMICAL TREATMENT ON THE RUNWAY)	O	L)											→
(SNOWBANKS ON THE RUNWAY) (If present, distance from runway centre line (m) followed by "L", "R" or "LR" as applicable)	O	M)											→
(SNOWBANKS ON A TAXIWAY)	O	N)											→
(SNOWBANKS ADJACENT TO THE RUNWAY)	O	O)											→
(TAXIWAY CONDITIONS)	O	P)											→
(APRON CONDITIONS)	O	R)											→
(MEASURED FRICTION COEFFICIENT)	O	S)											→
(PLAIN-LANGUAGE REMARKS)	O	T))
NOTES: 1. *Enter ICAO nationality letters as given in ICAO Doc 7910, Part 2 or otherwise applicable aerodrome identifier. 2. Information on other runways, repeat from B to H. 3. Information in the situational awareness section repeated for each runway, taxiway and apron. Repeat as applicable when reported. 4. Words in brackets () not to be transmitted. 5. For letters A) to T) refer to the Instructions for the completion of the SNOWTAM Format, paragraph 1, item b).													

SIGNATURE OF ORIGINATOR (not for transmission)

INSTRUCTIONS FOR THE COMPLETION OF THE SNOWTAM FORMAT

1. General

- (a) When reporting on more than one runway, repeat Items B to H (airplane performance calculation section).
- (b) The letters used to indicate items are only used for reference purpose and should not be included in the messages. The letters, M (mandatory), C (conditional) and O (optional) mark the usage and information and shall be included as explained below.
- (c) Metric units shall be used, and the unit of measurement not reported.
- (d) The maximum validity of SNOWTAM is 8 hours. New SNOWTAM shall be issued whenever a new runway condition report is received.
- (e) A SNOWTAM cancels the previous SNOWTAM.
- (f) The abbreviated heading “TTAAiiii CCCC MMYGGgg (BBB)” is included to facilitate the automatic processing of SNOWTAM messages in computer data banks. The explanation of these symbols is:

TT = data designator for SNOWTAM = SW;
AA = geographical designator for States, e.g. HT = TANZANIA, HK = KENYA
iiii = SNOWTAM serial number in a four-digit group;
CCCC = four-letter location indicator of the aerodrome to which the SNOWTAM refers

MMYYGGgg = date/time of observation/measurement, whereby:
MM = month, e.g. January = 01, December = 12
YY = day of the month

GGgg = time in hours (GG) and minutes (gg) UTC;
(BBB) = optional group for correction, in the case of an error, to a SNOWTAM message previously disseminated with the same serial number = COR.

Example: Abbreviated heading of SNOWTAM No. 139 from Kilimanjaro International Airport, measurement/observation of 7 December at 0610 UTC: SWHT0139 HTKJ 12070610

- (g) The text “SNOWTAM” in the SNOWTAM Format and the SNOWTAM serial number in a four-digit group shall be separated by a space, for example: SNOWTAM 0124.
- (h) For readability purposes for the SNOWTAM message, include a line feed after the SNOWTAM serial number, after Item A, and after the airplane performance calculation section.
- (i) When reporting on more than one runway, repeat the information in the airplane performance calculation section from the date and time of assessment for each runway before the information in the situational awareness section.
- (j) Mandatory information is:
 - i) AERODROME LOCATION INDICATOR;
 - ii) DATE AND TIME OF ASSESSMENT;

- iii) LOWER RUNWAY DESIGNATOR NUMBER;
- iv) RUNWAY CONDITION CODE FOR EACH RUNWAY THIRD;
and
- v) CONDITION DESCRIPTION FOR EACH RUNWAY THIRD
(when runway condition code (RWYCC) is reported i) – v).

2. Aeroplane performance calculation section

- Item A* - Aerodrome location indicator (four-letter location indicator).
- Item B* - Date and time of assessment (eight-figure date/time group giving time of observation as month,
day, hour and minute in UTC).
- Item C* - Lower runway designator number (nn[L] or nn[C] or nn[R]).
- Item D* - Runway condition code for each runway third. Only one digit (0, 1, 2, 3, 4, 5 or 6) is inserted
for each runway third, separated by an oblique stroke (n/n/n).
- Item E* - Per cent coverage for each runway third. When provided, insert 25, 50, 75 or 100 for each
runway third, separated by an oblique stroke ([n]nn/[n]nn/[n]nn).
- Item F* - Depth of loose contaminant for each runway third. When provided, insert in millimetres for
each runway third, separated by an oblique stroke (nn/nn/nn or nnn/nnn/nnn).
- Item G* - Condition description for each runway third. Insert any of the following condition descriptions
for each runway third, separated by an oblique stroke.
- COMPACTED SNOW
 - DRY SNOW
 - DRY SNOW ON TOP OF COMPACTED SNOW
 - DRY SNOW ON TOP OF ICE
 - FROST
 - ICE
 - SLUSH
 - STANDING WATER
 - WATER ON TOP OF COMPACTED SNOW
 - WET

WET ICE

WET SNOW

WET SNOW ON TOP OF COMPACTED SNOW

WET SNOW ON TOP OF ICE

DRY (only reported when there is no contaminant)

Item H - Width of runway to which the runway condition codes apply. Insert the width in metres if less

than the published runway width.

3. Situational awareness section

Item I - Reduced runway length. Insert the applicable runway designator and available length in meters (example: RWY nn [L] or nn [C] or nn [R] REDUCED TO [n]nnn).

Item J - Drifting snow on the runway. When reported, insert “DRIFTING SNOW”.

Item K - Loose sand on the runway. When loose sand is reported on the runway, insert the lower runway designator and with a space “LOOSE SAND” (RWY nn or RWY nn[L] or nn[C] or nn[R] LOOSE SAND).

Item L - Chemical treatment on the runway. When chemical treatment has been reported applied, insert the lower runway designator and with a space “CHEMICALLY TREATED” (RWY nn or RWY nn[L] or nn[C] or nn[R] CHEMICALLY TREATED).

Item M - Snow banks on the runway. When snow banks are reported present on the runway, insert the lower runway designator and with a space “SNOW BANK” and with a space left “L” or right “R” or both sides “LR”, followed by the distance in metres from centre line separated by a space FM CL (RWY nn or RWY nn[L] or nn[C] or nn[R] SNOW BANK Lnn or Rnn or LRnn FM CL).

Item N - Snow banks on a taxiway. When snow banks are present on a taxiway, insert the taxiway designator and with a space “SNOW BANK” (TWY [nn]n SNOW BANK).

Item O - Snow banks adjacent to the runway. When snow banks are reported present penetrating the height profile in the aerodrome snow plan, insert the lower runway designator and “ADJ SNOW BANKS” (RWY nn or RWY nn[L] or nn[C] or nn[R] ADJ SNOW BANKS).

Item P - Taxiway conditions. When taxiway conditions are reported as poor, insert the taxiway designator followed by a space “POOR” (TWY [n or nn] POOR or ALL TWYS POOR).

- Item R - Apron conditions. When apron conditions are reported as poor, insert the apron designator followed *by a space* "POOR" (*APRON [nnnn] POOR or ALL APRONS POOR*).
- Item S - Measured friction coefficient. Where reported, insert the measured friction coefficient and friction measuring device.
- Item T - Plain language remarks.

FIFTH SCHEDULE

(Made under regulation 43(5))

ASHTAM FORMAT

(COM heading)	(PRIORITY INDICATOR)	(ADDRESSEE INDICATOR(S)) ¹										
	(DATE AND TIME (OF FILING)					(ORIGINATOR'S (INDICATOR)						
(Abbreviated heading)	(VA* ² SERIAL NUMBER)					(LOCATION INDICATOR)		DATE/TIME OF ISSUANCE			(OPTIONAL GROUP)	
	V	A	*2	*2								

ASHTAM	(SERIAL NUMBER)	
(FLIGHT INFORMATION REGION AFFECTED)		A)
(DATE/TIME (UTC) OF ERUPTION)		B)
(VOLCANO NAME AND NUMBER)		C)
(VOLCANO LATITUDE/LONGITUDE OR VOLCANO RADIAL AND DISTANCE FROM NAVAID)		D)
(VOLCANO LEVEL OF ALERT COLOUR CODE, INCLUDING ANY PRIOR LEVEL OF ALERT COLOUR CODE) ³		E)
(EXISTENCE AND HORIZONTAL/VERTICAL EXTENT OF VOLCANIC ASH CLOUD) ⁴		F)
(DIRECTION OF MOVEMENT OF ASH CLOUD) ⁴		G)
(AIR ROUTES OR PORTIONS OF AIR ROUTES AND FLIGHT LEVELS AFFECTED)		H)
(CLOSURE OF AIRSPACE AND/OR AIR ROUTES OR PORTIONS OF AIR ROUTES, AND ALTERNATIVE AIR ROUTES AVAILABLE)		I)
(SOURCE OF INFORMATION)		J)
(PLAIN-LANGUAGE REMARKS)		K)
<i>NOTES:</i>		
<ol style="list-style-type: none"> 1. See also Appendix 5 regarding addressee indicators used in predetermined distribution systems. 2. *Enter ICAO nationality letter as given in ICAO Doc 7910, Part 2. 3. See paragraph 3.5 below. 4. Advice on the existence, extent and movement of volcanic ash cloud G) and H) may be obtained from the volcanic ash advisory centre(s) responsible for the FIR concerned. 5. Item titles in brackets () not to be transmitted. 		

SIGNATURE OF ORIGINATOR (not for transmission)

INSTRUCTIONS FOR THE COMPLETION OF THE ASHTAM FORMAT

1. General

1.1 The ASHTAM provides information on the status of activity of a volcano when a change in its activity is or is expected to be of operational significance. This information is provided using the volcano level of alert colour code given in 3.5 below.

1.2 In the event of a volcanic eruption producing ash cloud of operational significance, the ASHTAM also provides information on the location, extent and movement of the ash cloud and the air routes and flight levels affected.

1.3 Issuance of an ASHTAM giving information on a volcanic eruption, in accordance with section 3 below, should not be delayed until

complete information A) to K) is available but should be issued immediately following receipt of notification that an eruption has occurred or is expected to occur, or a change in the status of activity of a volcano of operational significance has occurred or is expected to occur, or an ash cloud is reported. In the case of an expected eruption, and hence no ash cloud evident at that time, items A) to E) should be completed and items F) to I) indicated as “not applicable”. Similarly, if a volcanic ash cloud is reported, e.g. by special air-report, but the source volcano is not known at that time, the ASHTAM should be issued initially with items A) to E) indicated as “unknown”, and items F) to K) completed, as necessary, based on the special air-report, pending receipt of further information. In other circumstances, if information for a specific field A) to K) is not available indicate “NIL”.

- 1.4 The maximum period of validity of ASHTAM is 24 hours. New ASHTAM must be issued whenever there is a change in the level of alert.

2. Abbreviated heading

2.1 Following the usual AFTN communications header, the abbreviated heading “TT AAiiii CCCC MMYGgg (BBB)” is included to facilitate the automatic processing of ASHTAM messages in computer data banks. The explanation of these symbols is:

TT = data designator for ASHTAM = VA;

AA = geographical designator for States, e.g. HT -
Tanzania

iiii = ASHTAM serial number in a four-figure group;

CCCC = four-letter location indicator of the flight information region concerned

MMYGgg = date/time of report, whereby:

MM = month, e.g. January - 01, December - 12

YY = day of the month

GGgg = time in hours (GG) and minutes (gg) UTC;

(BBB) = Optional group for correction to an ASHTAM message previously disseminated with the same serial number - COR.

3. Content of ASHTAM

3.1 Item A- Flight information region affected, plain-language equivalent of the location indicator given in the abbreviated heading, in this example “Auckland Oceanic FIR”.

3.2 Item B - Date and time (UTC) of first eruption.

3.3 Item C - Name of volcano, and number of volcano

3.4 Item D - Latitude/Longitude of the volcano in whole degrees or radial and distance of volcano from NAVAID

3.5 Item E - Colour code for level of alert indicating volcanic activity, including any previous level of alert colour code follows:

Level of alert colour code	Status of activity of volcano
GREEN ALERT	Volcano is in normal, non-eruptive state <i>or, after a change from a higher alert level:</i> Volcanic activity considered to have ceased, and volcano reverted to its normal, non-eruptive state.
YELLOW ALERT	Volcano is experiencing signs of elevated unrest above known background levels. <i>or, after a change from higher alert level:</i> Volcanic activity has decreased significantly but continues to be closely monitored for possible renewed increase.
ORANGE ALERT	Volcano is exhibiting heightened unrest with increased likelihood of eruption. <i>or,</i> Volcanic eruption is underway with no or minor ash emission [specify ash-plume height if possible].
RED ALERT	Eruption is forecasted to be imminent with significant emission of ash into the atmosphere likely. <i>or,</i> Eruption is underway with significant emission of ash into the atmosphere [specify ash-plume height if possible]

3.6 Item F - If volcanic ash cloud of operational significance is reported, indicate the horizontal extent and base/top of the ash cloud using latitude/longitude (in whole degrees) and altitudes in thousands of metres (feet) and/or radial and distance from source volcano. Information initially may be based only on special air-report, but subsequent information may be more detailed based on advice from the responsible meteorological watch office and/or volcanic ash advisory centre.

3.7 Item G - Indicate forecast direction of movement of the ash cloud at selected levels based on advice from the responsible meteorological watch office and/or volcanic ash advisory centre.

3.8 Item H - Indicate air routes and portions of air routes and flight levels affected, or expected to become affected.

3.9 Item I- Indicate closure of airspace, air routes or portions of air routes, and availability of alternative routes.

3.10 Item J - Source of the information, e.g. “special air-report” or “vulcanological agency”, etc. The source of information should always be indicated, whether an eruption has actually occurred or ash cloud reported, or not.

3.11 Item K - Include in plain language any operationally significant information additional to the foregoing.

Dodoma,
22nd December, 2025

MAKAME M. MBARAWA
Minister for Transport