Civil Aviation Safety Authority
of Papua New Guinea

Advisory Circular

AC175-2

Aeronautical Information Publication - AIP

Initial Issue

01 November 2024

GENERAL

Civil Aviation Authority Advisory Circulars (AC) contain information about standards, practices and procedures that the Director has found to be an Acceptable Means of Compliance (AMC) with the associated rule.

An AMC is not intended to be the only means of compliance with a rule, and consideration will be given to other methods of compliance that may be presented to the Director. When new standards, practices or procedures are found to be acceptable, they will be added to the appropriate Advisory Circular.

PURPOSE

This Advisory Circular provides methods, acceptable to the Director, for showing compliance with the aerodrome certification exposition requirements of Part 175 and explanatory material to assist in showing compliance.

RELATED CAR

This AC relates specifically to Civil Aviation Rule 175.151 – Subpart D – Aeronautical Information Publication.

CHANGE NOTICE

There was no previous issue of this AC and consequently no change is in effect.

Published by Civil Aviation Authority of Papua New Guinea

TABLE OF CONTENT

CHAPTER 1 – AERONAUTICAL INFORMATION PUBLICATION

1.1 Introduction

1.1.1 The AIP is intended primarily to satisfy international requirements for the exchange of aeronautical information of a lasting character essential to air navigation and constitutes the basic information source for permanent information and long duration temporary changes.

1.1.2 An AIP service supports the publication issued by or with the authority of the State containing aeronautical information of a lasting character essential to air navigation.

1.1.3 If it is necessary by reason of bulk or for convenience, to publish an AIP in two or more parts or volumes, each of them should indicate that the remainder of the information is to be found in the other part(s) or volume(s).

1.1.4 If no facilities or services are provided or no information is available for publication in respect of one of the categories of information specified in the AIP, an indication should be given as to which of these circumstances applies (e.g. “NIL” or “Not AVBL”).

1.1.5 Where appropriate, charts produced in conformity with aeronautical charting requirements may be used to fulfil this requirement.

1.1.6 Index maps and diagrams included in the AIP should comply with the following specifications:

a) Base map: The base map should be an outline map of the area adapted from existing material with general details. Graticule, topography and other details should be as simple as possible. Political subdivisions should be shown and identified. It should be produced in one color.

b) Sheet size and scale: The overall dimensions should be 210 mm × 297 mm. If a larger map is required, it should be folded to conform to this size. A uniform scale should be used for all charts produced as a series and other charts where practicable.

c) Title and marginal notes: The title should be shown on the top border and should be as short and simple as possible.

d) Colors: The number of colors used should be kept to a minimum. If more than one colour is used, the colors should offer adequate contrast.

e) Symbols: Symbols should conform, where practicable, to the ICAO chart symbols shown in Annex 4 — Aeronautical Charts, Appendix 2. The basic, general purpose symbols for AIP index maps are a filled circle and an empty circle. Except when the symbols used are self-explanatory, a legend should be provided. For details for which no ICAO symbol has been provided, any appropriate symbol may be chosen provided it does not conflict with an ICAO symbol.

1.2 Content of the Aeronautical Information Publication (AIP)

The contents of the AIP shall be in accordance with the Procedures for Air Navigation Services— Aeronautical Information Management (PANS-AIM, Doc 10066) Appendix 2, with differences as determined by the Civil Aviation Safety Authority of PNG (CASA PNG).

PART 1 _ GENERAL (GEN)

When the AIP is produced as one volume, the preface, record of AIP Amendments, record of AIP Supplements, checklist of AIP pages and list of current hand amendments appear only in Part 1 — GEN, and the annotation “not applicable” shall be entered against each of these subsections in Parts 2 and 3.

GEN 0.1 PREFACE

Brief description of the AIP, including:

(1) name of the publishing authority;

(2) applicable ICAO documents;

(3) publication media (i.e. printed, online or other electronic media);

(4) AIP structure and established regular amendment interval;

(5) copyright policy, if applicable; and

(6) service to contact in case of detected AIP errors or omissions.

GEN 0.2 RECORD OF AIP AMENDMENTS

A record of AIP Amendments and AIRAC AIP Amendments (published in accordance with the AIRAC system) containing:

(1) amendment number;

(2) publication date;

(3) date inserted (for the AIRAC AIP Amendments, effective date); and

(4) initials of officer who inserted the amendment.

GEN 0.3 RECORD OF AIP SUPPLEMENTS

A record of issued AIP Supplements containing:

(1) supplement number;

(2) supplement subject;

(3) AIP section(s) affected;

(4) period of validity; and

(5) cancellation record.

GEN 0.4 CHECKLIST OF AIP PAGES

A checklist of AIP pages containing:

(1) page number/chart title; and

(2) publication or effective date (day, month by name and year) of the aeronautical information.

GEN 0.5 LIST OF HAND AMENDMENTS TO THE AIP

A list of current hand amendments to the AIP containing:

(1) AIP page(s) affected;

(2) amendment text; and

(3) AIP Amendment number by which a hand amendment was introduced.

GEN 0.6 TABLE OF CONTENTS TO PART 1

A list of sections and subsections contained in Part 1 — General (GEN).

Note: Subsections may be listed alphabetically.

GEN 1. NATIONAL REGULATIONS AND REQUIREMENTS

GEN 1.1 DESIGNATED AUTHORITIES

The addresses of designated authorities concerned with the facilitation of international air navigation (civil aviation, meteorology, customs, immigration, health, en-route and aerodrome/heliport charges, and agricultural quarantine and aircraft accident investigation for each authority;

(1) designated authority;

(2) name of the authority;

(3) postal address;

(4) telephone number;

(5) telefax number;

(6) e-mail address;

(7) aeronautical fixed service (AFS) address; and

(8) website address, if available.

GEN 1.2 ENTRY, TRANSIT AND DEPARTURE OF AIRCRAFT

Regulations and requirements for advance notification and applications for permission concerning entry, transit and departure of aircraft on international flights.

GEN 1.3 ENTRY, TRANSIT AND DEPARTURE OF PASSENGERS AND CREW

Regulations (including customs, immigration and quarantine, and requirements for advance notification and applications for permission) concerning entry, transit and departure of non- immigrant passengers and crew.

GEN 1.4 ENTRY, TRANSIT AND DEPARTURE OF CARGO

Regulations (including customs, and requirements for advance notification and applications for permission) concerning entry, transit and departure of cargo.

Note: *Provisions for facilitating entry and departure for search, rescue, salvage, investigation, repair or salvage in connection with lost or damaged aircraft are detailed in section GEN 3.6, Search and rescue.*

GEN 1.5 AIRCRAFT INSTRUMENTS, EQUIPMENT AND FLIGHT DOCUMENTS

Brief description of aircraft instruments, equipment and flight documents, including:

(1) instruments, equipment (including aircraft communication, navigation and surveillance equipment) and flight documents to be carried on aircraft, including any special requirement in addition to the provisions specified in Annex 6, Part I, Chapters 6 and 7; and

(2) emergency locator transmitter (ELT), signaling devices and life-saving equipment as presented in Annex 6, Part I, 6.6 and Part II, 2.4.5, where so determined by regional air navigation agreement, for flights over designated land areas.

GEN 1.6 SUMMARY OF NATIONAL REGULATIONS AND INTERNATIONAL AGREEMENTS /CONVENTIONS

A list of titles and references and, where applicable, summaries of national regulations affecting air navigation, together with a list of international agreements/conventions ratified by the State.

GEN 1.7 DIFFERENCES FROM ICAO STANDARDS, RECOMMENDED PRACTICES AND PROCEDURES

A list of significant **differences** between national regulations and practices of the State and related ICAO provisions, including:

(1) provision affected (Annex and edition number, paragraph);

(2) and difference in full text.

a) All significant differences shall be listed under this subsection. All Annexes shall be listed in numerical order even if there is no difference to an Annex, in which case a NIL notification shall be provided. National differences or the degree of non-application of the regional supplementary procedures (SUPPs) shall be notified immediately following the Annex to which the supplementary procedure relates.

GEN 2. TABLES AND CODES

GEN 2.1 MEASURING SYSTEM, AIRCRAFT MARKINGS, HOLIDAYS

GEN 2.1.1 UNITS OF MEASUREMENT

Description of units of measurement used including table of units of measurement.

GEN 2.1.2 TEMPORAL REFERENCE SYSTEM

Description of the temporal reference system (calendar and time system) employed, together with an indication of whether or not daylight saving hours are employed and how the temporal reference system is presented throughout the AIP.

GEN 2.1.3 HORIZONTAL REFERENCE SYSTEM

Brief description of the horizontal (geodetic) reference system used, including:

(1) name/designation of the reference system;

(2) identification and parameters of the projection;

(3) identification of the ellipsoid used;

(4) identification of the datum used;

(5) area(s) of application; and

(6) an explanation, if applicable, of the asterisk used to identify those coordinates that do not meet the accuracy requirements.

GEN 2.1.4 VERTICAL REFERENCE SYSTEM

Brief description of the vertical reference system used, including:

(1) name/designation of the reference system;

(2) description of the geoid model used including the parameters required for height transformation between the model used and EGM-96; and

(3) an explanation, if applicable, of the asterisk used to identify those elevations/geoid undulations that do not meet the accuracy requirements.

GEN 2.1.5 AIRCRAFT NATIONALITY AND REGISTRATION MARKS

Indication of aircraft nationality and registration marks adopted by the State.

GEN 2.1.6 PUBLIC HOLIDAYS

A list of public holidays with indication of services being affected.

GEN 2.2 ABBREVIATIONS USED IN AERONAUTICAL INFORMATION PRODUCTS

A list of alphabetically arranged abbreviations and their respective significations used by the State in its AIP and in the distribution of aeronautical data and aeronautical information with appropriate annotation for those national abbreviations that are different from those contained in the *Procedures for Air Navigation Services — ICAO Abbreviations and Codes (PANS-ABC, Doc 8400)*.

Note: A list of alphabetically arranged definitions/glossary of terms may also be added.

GEN 2.3 CHART SYMBOLS

A list of chart symbols arranged according to the chart series where symbols are applied.

GEN 2.4 LOCATION INDICATORS

A list of alphabetically arranged location indicators assigned to the locations of aeronautical fixed stations to be used for encoding and decoding purposes. An annotation to locations not connected to the aeronautical fixed service (AFS) shall be provided.

GEN 2.5 LIST OF RADIO NAVIGATION AIDS

A list of radio navigation aids arranged alphabetically, containing:

(1) identifier;

(2) name of the station;

(3) type of facility/aid; and

(4) indication whether aid serves en-route (E), aerodrome (A) or dual (AE) purposes.

GEN 2.6 CONVERSION OF UNITS OF MEASUREMENT

Tables for conversion or, alternatively, conversion formulae between:

(1) nautical miles and kilometres and vice versa;

(2) feet and metres and vice versa;

(3) decimal minutes of arc and seconds of arc and vice versa; and

(4) other conversions as appropriate.

GEN 2.7 SUNRISE/SUNSET

Information on the time of sunrise and sunset including a brief description of criteria used for determination of the times given and either a simple formulae or table from which times may be calculated for any location

within its territory/area of responsibility, or an alphabetical list of locations for which the times are given in a table with a reference to the related page in the table and the sunrise/sunset tables for the selected stations/locations, including:

(1) station name;

(2) ICAO location indicator;

(3) geographical coordinates in degrees and minutes;

(4) date(s) for which times are given;

(5) time for the beginning of morning civil twilight;

(6) time for sunrise;

(7) time for sunset; and

(8) time for the end of evening civil twilight.

GEN 3. SERVICES

GEN 3.1 AERONAUTICAL INFORMATION SERVICES

GEN 3.1.1 RESPONSIBLE SERVICE

Description of the aeronautical information service (AIS) provided and its major components, including:

(1) service/unit name;

(2) postal address;

(3) telephone number;

(4) telefax number;

(5) e-mail address;

(6) AFS address;

(7) website address, if available;

(8) statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

(9) an indication if service is not H24.

GEN 3.1.2 AREA OF RESPONSIBILITY

The area of responsibility for the AIS.

GEN 3.1.3 AERONAUTICAL PUBLICATIONS

a) Description of the elements of the aeronautical information products, including:

   (1) AIP and related amendment service;

   (2) AIP Supplements;

   (3) AIC;

   (4) NOTAM and pre-flight information bulletins (PIB);

   (5) checklists and lists of valid NOTAM; and

   (6) how they may be obtained.

b) When an AIC is used to promulgate publication prices that shall be indicated in this section of the AIP.

GEN 3.1.4 AIRAC SYSTEM

Brief description of the AIRAC system provided including a table of present and near future AIRAC dates.

GEN 3.1.5 PRE-FLIGHT INFORMATION SERVICE AT AERODROMES/HELIPORTS

A list of aerodromes/heliports at which pre-flight information is routinely available, including an indication of relevant:

(1) elements of the aeronautical information products held;

(2) maps and charts held; and

(3) general area of coverage of such information.

GEN 3.1.6 DIGITAL DATA SETS

Description of the available data sets, including:

(1) data set title;

(2) short description;

(3) data subjects included;

(4) geographical scope; and

(5) if applicable, limitations related to its usage.

(6) Contact details of how data sets may be obtained, containing:

i. name of the individual, service or organization responsible;

ii. street address and e-mail address of the individual, service or organization responsible;

iii. telefax number of the individual, service or organization responsible;

iv. contact telephone number of the individual, service or organization responsible;

v. hours of service (time period including time zone when contact can be made);

vi. online information that can be used to contact the individual, service or organization; and

vii. supplemental information, if necessary, on how and when to contact the individual, service or organization

GEN 3.2 AERONAUTICAL CHARTS

GEN 3.2.1 RESPONSIBLE SERVICE(S)

Description of service(s) responsible for the production of aeronautical charts, including:

(1) service name;

(2) postal address;

(3) telephone number;

(4) telefax number;

(5) e-mail address;

(6) AFS address;

(7) website address, if available;

(8) a statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

(9) an indication if service is not H24.

GEN 3.2.2 MAINTENANCE OF CHARTS

Brief description of how aeronautical charts are revised and amended.

GEN 3.2.3 PURCHASE ARRANGEMENTS

Details of how charts may be obtained, containing:

(1) service/sales agency(ies);

(2) postal address;

(3) telephone number;

(4) telefax number;

(5) e-mail address;

(6) AFS address; and

(7) website address, if available.

GEN 3.2.4 AERONAUTICAL CHART SERIES AVAILABLE

A list of aeronautical chart series available followed by a general description of each series and an indication of the intended use.

GEN 3.2.5 LIST OF AERONAUTICAL CHARTS AVAILABLE

A list of aeronautical charts available, including:

(1) title of series;

(2) scale of series;

(3) name and/or number of each chart or each sheet in a series;

(4) price per sheet; and

(5) date of latest revision.

GEN 3.2.6 INDEX TO THE WORLD AERONAUTICAL CHART (WAC) — ICAO 1:1 000 000

An index chart showing coverage and sheet layout for the WAC 1:1 000 000 produced by a State. If Aeronautical Chart — ICAO 1:500 000 is produced instead of WAC 1:1 000 000, index charts shall be used to indicate coverage and sheet layout for the Aeronautical Chart — ICAO 1:500 000.

GEN 3.2.7 TOPOGRAPHICAL CHARTS

Details of how topographical charts may be obtained, containing:

(1) name of service/agency(ies);

(2) postal address;

(3) telephone number;

(4) telefax number;

(5) e-mail address;

(6) AFS address; and

(7) website address, if available.

GEN 3.2.8 CORRECTIONS TO CHARTS NOT CONTAINED IN THE AIP

A list of corrections to aeronautical charts not contained in the AIP, or an indication where such information can be obtained.

GEN 3.3 AIR TRAFFIC ERVICES

GEN 3.3.1 RESPONSIBLE SERVICE

Description of the air traffic service (ATS) and its major components, including:

(1) service name;

(2) postal address;

(3) telephone number;

(4) telefax number;

(5) e-mail address;

(6) AFS address;

(7) website address, if available;

(8) a statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

(9) an indication if service is not H24.

GEN 3.3.2 AREA OF RESPONSIBILITY

Brief description of area of responsibility for which ATS is provided.

GEN 3.3.3 TYPES OF SERVICES

Brief description of main types of ATS provided.

GEN 3.3.4 COORDINATION BETWEEN THE OPERATOR AND ATS

General conditions under which coordination between the operator and air traffic services is effected.

GEN 3.3.5 MINIMUM FLIGHT ALTITUDE

The criteria used to determine minimum flight altitudes.

GEN 3.3.6 ATS UNITS ADDRESS LIST

A list of ATS units and their addresses arranged alphabetically, containing:

(1) unit name;

(2) postal address;

(3) telephone number;

(4) telefax number;

(5) e-mail address;
(6) AFS address; and

(7) website address, if available.

GEN 3.4 COMMUNICATION AND NAVIGATION SERVICES

GEN 3.4.1 RESPONSIBLE SERVICE

Description of the service responsible for the provision of telecommunication and navigation facilities, including:

(1) service name;

(2) postal address;

(3) telephone number;

(4) telefax number;

(5) e-mail address;

(6) AFS address;

(7) website address, if available;

(8) a statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

(9) an indication if service is not H24.

GEN 3.4.2 AREA OF RESPONSIBILITY

Brief description of area of responsibility for which telecommunication service is provided.

GEN 3.4.3 TYPES OF SERVICE

Brief description of the main types of service and facilities provided, including:

(1) radio navigation services;

(2) voice and/or data link services;

(3) broadcasting service;

(4) language(s) used; and

(5) an indication of where detailed information can be obtained.

GEN 3.4.4 REQUIREMENTS AND CONDITIONS

Brief description concerning the requirements and conditions under which the communication service is available.

GEN 3.4.5 MISCELLANEOUS

Any additional information (e.g. selected radio broadcasting stations, telecommunications diagram).

GEN 3.5 METEOROLOGICAL SERVICES

GEN 3.5.1 RESPONSIBLE SERVICE

Brief description of the meteorological service responsible for the provision of meteorological information, including:

(1) service name;

(2) postal address;

(3) telephone number;

(4) telefax number;

(5) e-mail address;

(6) AFS address;

(7) website address, if available;

(8) a statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed; and

(9) an indication if service is not H24.

GEN 3.5.2 AREA OF RESPONSIBILITY

Brief description of area and/or air routes for which meteorological service is provided.

GEN 3.5.3 METEOROLOGICAL OBSERVATIONS AND REPORTS

Detailed description of the meteorological observations and reports provided for international air navigation, including:

(1) name of the station and the ICAO location indicator;

(2) type and frequency of observation including an indication of automatic observing equipment;

(3) types of meteorological reports (e.g. METAR) and availability of a trend forecast;

(4) specific type of observation system and number of observation sites used to observe and report surface wind, visibility, runway visual range, cloud base, temperature and, where applicable, wind shear (e.g. anemometer at intersection of runways, transmissometer next to touchdown zone, etc.);

(5) hours of operation; and

(6) indication of aeronautical climatological information available.

GEN 3.5.4 TYPES OF SERVICES

Brief description of the main types of service provided, including details of briefing, consultation, display of meteorological information, flight documentation available for operators and flight crew members, and of the methods and means used for supplying the meteorological information.

GEN 3.5.5 NOTIFICATION REQUIRED FROM OPERATORS

Minimum amount of advance notice required by the meteorological authority from operators in respect of briefing, consultation and flight documentation and other meteorological information they require or change.

GEN 3.5.6 AIRCRAFT REPORTS

As necessary, requirements of the meteorological authority for the making and transmission of aircraft reports.

GEN 3.5.7 VOLMET SERVICE

(a) Description of VOLMET and/or D-VOLMET service, including:

(1) name of transmitting station;

(2) call sign or identification and abbreviation for the radio communication emission;

(3) frequency or frequencies used for broadcast;

(4) broadcasting period;

(5) hours of service;

(6) list of aerodromes/heliports for which reports and/or forecasts are included; and

(7) reports, forecasts and SIGMET information included and remarks.

GEN 3.5.8 SIGMET AND AIRMET SERVICE

Description of the meteorological watch provided within flight information regions or control areas for which air traffic services are provided, including a list of the meteorological watch offices with:

(1) name of the meteorological watch office and the ICAO location indicator;

(2) hours of service;

(3) flight information region(s) or control area(s) served;

(4) SIGMET validity periods;

(5) specific procedures applied to SIGMET information (e.g. for volcanic ash and tropical cyclones);

(6) procedures applied to AIRMET information (in accordance with relevant regional air navigation agreements);

(7) ATS unit(s) provided with SIGMET and AIRMET information; and

(8) additional **information (e.g. concerning any limitation of service, etc.).**

This chart, in combination with the relevant information published in the AIP, shall provide the data necessary to enable an operator to comply with the Aeroplane performance operating limitations.

GEN 3.5.9 OTHER AUTOMATED METEOROLOGICAL SERVICES

Description of available automated services for the provision of meteorological information (e.g. automated pre-flight information service accessible by telephone and/or computer modem), including:

(1) service name;

(2) information available;

(3) areas, routes and aerodromes covered; and

(4) telephone and telefax number(s), e-mail address, and, if available, website address.

GEN 3.6 SEARCH AND RESCUE

GEN 3.6.1 RESPONSIBLE SERVICE(S)

Brief description of service(s) responsible for the provision of search and rescue (SAR), including:

(1) service/unit name;

(2) postal address;

(3) telephone number;

(4) telefax number;

(5) e-mail address;

(6) AFS address;

(7) website address, if available; and

(8) a statement concerning the ICAO documents on which the service is based and a reference to the AIP location where differences, if any, are listed.

GEN 3.6.2 AREA OF RESPONSIBILITY

Brief description of area of responsibility within which SAR services are provided.

Note: A chart may be included to supplement the description of the area.

GEN 3.6.3 TYPES OF SERVICE

Brief description and geographical portrayal, where appropriate, of the type of service and facilities provided including indications where SAR aerial coverage is dependent upon significant deployment of aircraft.

GEN 3.6.4 SAR AGREEMENTS

Brief description of SAR agreements in force, including provisions for facilitating entry and departure of other States' aircraft for search, rescue, salvage, repair or salvage in connection with lost or damaged aircraft, either with airborne notification only or after flight plan notification.

GEN 3.6.5 CONDITIONS OF AVAILABILITY

Brief description of provisions for SAR, including the general conditions under which the service and facilities are available for international use, including an indication of whether a facility available for SAR is specialized in SAR techniques and functions, or is specially used for other purposes but adapted for SAR purposes by training and equipment, or is only occasionally available and has no particular training or preparation for SAR work.

GEN 3.6.6 PROCEDURES AND SIGNALS USED

Brief description of the procedures and signals employed by rescue aircraft and a table showing the signals to be used by survivors.

GEN 4. CHARGES FOR AERODROMES/HELIPORTS AND AIR NAVIGATION SERVICES

Note: *Reference may be made to where details of actual charges may be found, if not itemized in this chapter.*

GEN 4.1 AERODROME/HELIPORT CHARGES

Brief description of type of charges which may be applicable at aerodromes/heliports available for international use, including:

(1) landing of aircraft;

(2) parking, hangar-age and long-term storage of aircraft;

(3) passenger service;

(4) security;

(5) noise-related items;

(6) other (customs, health, immigration, etc.);

(7) exemptions/reductions; and

(8) methods of payment.

GEN 4.2 AIR NAVIGATION SERVICES CHARGES

Brief description of charges which may be applicable to air navigation services provided for international use, including:

(1) approach control;

(2) route air navigation services;

(3) cost basis for air navigation services and exemptions/reductions; and

(4) methods of payment.

PART 2 _ ENROUTE (ENR)

If an AIP is produced and made available in more than one volume with each having a separate amendment and supplement service, a separate preface, record of AIP amendments, records of AIP Supplements, checklist of AIP pages and list of current hand amendments shall be included in each volume. In the case of an AIP being published as one volume, the annotation “not applicable” shall be entered against each of the above subsections.

ENR 0.1 TABLE OF CONTENTS TO PART 2

A list of sections and subsections contained in Part 2 — En-route.

Note: *Subsections may be listed alphabetically.*

ENR 1. GENERAL RULES AND PROCEDURES

ENR 1.1 GENERAL RULES

The requirement is for publication of the general rules as applied within the State.

ENR 1.2 VISUAL FLIGHT RULES

The requirement is for publication of the visual flight rules as applied within the State.

ENR 1.3 INSTRUMENT FLIGHT RULES

The requirement is for publication of the instrument flight rules as applied within the State.

ENR 1.4 ATS AIRSPACE CLASSIFICATION AND DESCRIPTION

ENR 1.4.1 ATS AIRSPACE CLASSIFICATION

Description of ATS airspace classes in the form of the ATS airspace classification table in Annex 11, Appendix 4, appropriately annotated to indicate those airspace classes not used by the State.

ENR 1.4.2 ATS AIRSPACE DESCRIPTION

Other ATS airspace descriptions as applicable, including general textual descriptions.

ENR 1.5 HOLDING, APPROACH AND DEPARTURE PROCEDURES

ENR 1.5.1 GENERAL

The requirement id for a statement concerning the criteria on which holding, approach and departure procedures are established. If different from ICAO provisions, the requirement is for presentation of criteria used in a tabular form.

ENR 1.5.2 ARRIVING FLIGHTS

The requirement is to present procedures (conventional or area navigation or both) for arriving flights which are common to flights into or within the same type of airspace. If different procedures, apply within a terminal airspace, a note to this effect shall be given together with a reference to where the specific procedures can be found.

ENR 1.5.3 DEPARTING FLIGHTS

The requirement is to present procedures (conventional or area navigation or both) for Departing flights which are common to flights departing from any aerodrome/heliport.

ENR 1.5.4 OTHER RELEVANT INFORMATION AND PROCEDURES

Brief description of additional information, e.g. entry procedures, final approach alignment, holding procedures and patterns.

ENR 1.6 ATS SURVEILLANCE SERVICES AND PROCEDURES

ENR 1.6.1 PRIMARY RADAR

Description of primary radar services and procedures, including:

(1) supplementary services;

(2) the application of radar control service;

(3) radar and air-ground communication failure procedures;

(4) voice and CPDLC position reporting requirements; and

(5) graphic portrayal of area of radar coverage.

ENR 1.6.2 SECONDARY SURVEILLANCE RADAR

Description of secondary surveillance radar (SSR) operating procedures, including:

(1) emergency procedures;

(2) air-ground communication failure and unlawful interference procedures;

(3) the system of SSR code assignment;

(4) voice and CPDLC position reporting requirements; and

(5) graphic portrayal of area of SSR coverage.

Note: The SSR description is of particular importance in areas or routes where the possibility of interception exists.

ENR 1.6.3 AUTOMATIC DEPENDENT SURVEILLANCE — BROADCAST (ADS-B)

Description of automatic dependent surveillance – broadcast (ADS-B operating procedures including;

(1) emergency procedures;

(2) air-ground communication failure and unlawful interference procedures;

(3) aircraft identification requirements;

(4) voice and CPDLC position reporting requirements; and

(5) graphic portrayal of area of ADS-B coverage.

Note: The ADS-B description is of particular importance in areas or routes where the possibility of interception exists.

ENR 1.6.4 OTHER RELEVANT INFORMATION AND PROCEDURES

Brief description of additional information and procedures, e.g. radar failure procedures and transponder failure procedures

ENR 1.7 ALTIMETER SETTING PROCEDURES

The requirement is for a statement of altimeter setting procedures in use, containing:

(1) brief introduction with a statement concerning the ICAO documents on which the procedures are based together with differences to ICAO provisions, if any;

(2) basic altimeter setting procedures;

(3) description of altimeter setting region(s);

(4) procedures applicable to operators (including pilots); and

(5) table of cruising levels.

ENR 1.8 REGIONAL SUPPLEMENTARY PROCEDURES

The requirement is for presentation of regional supplementary procedures (SUPPs) affecting the area of responsibility.

ENR 1.9 AIR TRAFFIC FLOW MANAGEMENT AND AIRSPACE MANAGEMENT

Brief description of air traffic flow management (ATFM) system and airspace management, including:

(1) ATFM structure, service area, service provided, location of unit(s) and hours of operation;

(2) types of flow messages and descriptions of the formats; and

(3) procedures applicable for departing flights, containing:

i. service responsible for provision of information on applied ATFM measures;

ii. flight plan requirements; and

iii. slot allocations.

(4) information on overall responsibility regarding airspace management within FIR(s), details of civil/military airspace allocation and management coordination, structure of manageable airspace (allocation and changes to allocation) and general operating procedures.

ENR 1.10 FLIGHT PLANNING

(a) The requirement is to indicate any restriction, limitation or advisory information related to the flight planning stage which may assist the user in the presentation of the intended flight operation, including:

(1) procedures for the submission of a flight plan;

(2) repetitive flight plan system; and

(3) changes to the submitted flight plan.

ENR 1.11 ADDRESSING OF FLIGHT PLAN MESSAGES

(a) The requirement is for an indication, in tabular form, of the addresses allocated to flight plans, showing:

(1) category of flight (IFR, VFR or both);

(2) route (into or via FIR and/or TMA); and

(3) message address.

ENR 1.12 INTERCEPTION OF CIVIL AIRCRAFT

(a) The requirement is for a complete statement of interception procedures and visual signals to be used with a clear indication of whether ICAO provisions are applied and, if not, that differences exist.

Note: *A list of significant differences between national regulations and practices of the State and related ICAO provisions is found in Gen 1.7.*

ENR 1.13 UNLAWFUL INTERFERENCE

(a) The requirement is for presentation of appropriate procedures to be applied in case of unlawful interference.

ENR 1.14 AIR TRAFFIC INCIDENTS

(a) Description of air traffic incidents reporting system, including:

(1) definition of air traffic incidents;

(2) use of the “Air Traffic Incident Reporting Form”;

(3) reporting procedures (including in-flight procedures); and

(4) purpose of reporting and handling of the form.

ENR 2 ATS AIRSPACE

ENR 2.1 FIR, UIR TMA AND CTA

(a) #AIP-DS# Detailed description of flight information regions (FIR), upper flight information regions (UIR), and control areas (CTA) (including specific CTA such as TMA), including:

(1) name, geographical coordinates in degrees and minutes of the FIR/UIR lateral limits and in degrees, minutes and seconds of the CTA lateral limits, vertical limits and class of airspace;

(2) identification of unit providing the service;

(3) call sign of aeronautical station serving the unit and language(s) used, specifying the area and conditions, when and where to be used, if applicable;

(4) frequencies, and if applicable SATVOICE number, supplemented by indications for specific purposes; and

(5) remarks.

(b) #AIP-DS# Control zones around military air bases not otherwise described in the AIP shall be included in this subsection. Where the requirements of Annex 2 concerning flight plans, two-way communications and position reporting apply to all flights in order to eliminate or reduce the need for interceptions and/or where the possibility of interception exists and the maintenance of guard on the VHF emergency channel 121.5 MHz is required, a statement to this effect shall be included for the relevant area(s) or portion(s) thereof.

(c) A description of designated areas over which the carriage of an emergency locator transmitter (ELT) is required and where aircraft shall continuously guard the VHF emergency frequency 121.5 MHz, except for those periods when aircraft are carrying out communications on other VHF channels or when airborne equipment limitations or cockpit duties do not permit simultaneous guarding of two channels.

Note: *Other types of airspace around civil aerodromes/heliports such as control zones and aerodrome traffic zones are described in the relevant aerodrome or heliport section*

ENR 2.2 OTHER REGULATED AIRSPACE

(a) Where established, a detailed description of other types of regulated airspace and airspace classification.

ENR 3 ATS ROUTES

Note 1: Bearings, tracks and radials are normally magnetic. In areas of high latitude, where it is determined by the appropriate authority that reference to Magnetic North is impractical, another suitable reference, i.e. True North or Grid North, may be used.

Note 2: Changeover points established at the midpoint between two radio navigation aids, or at the intersection of the two radials in the case of a route which changes direction between the navigation aids, need not be shown for each route segment if a general statement regarding their existence is made.

Note 3: Guidance material on the organization of ATS route publication is contained in the

Aeronautical Information Services Manual (Doc 8126).

ENR 3.1 CONVENTIONAL NAVIGATION ROUTES

(a) #AIP-DS# Detailed description of conventional navigation routes, including:

(1) route designator, designation of the required communication performance (RCP) specification(s), required surveillance performance (RSP) specification(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including “compulsory” or “on-request” reporting points;

(2) tracks or VOR radials to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between each successive designated significant point and, in the case of VOR radials, changeover points;

(3) upper and lower limits or minimum en-route altitudes, to the nearest higher 50 m or 100 ft, and airspace classification;

(4) lateral limits and minimum obstacle clearance altitudes;

(5) direction of cruising levels; and

(6) remarks, including an indication of the controlling unit, its operating channel and, if applicable, its logon address, SATVOICE number, and any navigation, RCP and RSP specification(s) limitations.

ENR 3.2 AREA NAVIGATION ROUTES

(a) #AIP-DS# Detailed description of PBN (RNAV and RNP) routes, including:

(1) route designator, designation of the required communication performance (RCP) specification(s), navigation specification(s) and/or required surveillance performance (RSP) specification(s) applicable to a specified segment(s), names, coded designators or name-codes and the geographical coordinates in degrees, minutes and seconds of all significant points defining the route including “compulsory” or “on-request” reporting points;

(2) in respect of waypoints defining an area navigation route, additionally as applicable:

(i) station identification of the reference VOR/DME;

(ii) bearing to the nearest degree and the distance to the nearest tenth of a kilometre or tenth of a nautical mile from the reference VOR/DME, if the waypoint is not collocated with it; and

(iii) elevation of the transmitting antenna of DME to the nearest 30 m (100 ft);

(3) magnetic reference bearing to the nearest degree, geodesic distance to the nearest tenth of a kilometre or tenth of a nautical mile between defined end-points and distance between each successive designated significant point;

(4) upper and lower limits and airspace classification;

(5) direction of cruising levels;

(6) the navigation accuracy requirement for each PBN (RNAV or RNP) route segment; and remarks, including an indication of the controlling unit, its operating channel and, if applicable, its logon address, SATVOICE number, and any navigation, RCP and RSP specification(s) limitations.

Note: *In relation to Annex 11, Appendix 1, and for flight planning purposes, defined navigation specification is not considered to be an integral part of the route designator.*

ENR 3.3 OTHER ROUTES

(a) #AIP-DS# The requirement is to describe other specially designated routes which are compulsory within specified area(s).

Note: *Arrival, transit and departure routes which are specified in connection with procedures for traffic to and from aerodromes/heliports need not be described since they are described in the relevant section of Part 3 — Aerodromes.*

ENR 3.4 EN-ROUTE HOLDING

(a) #AIP-DS# The requirement is for a detailed description of en-route holding procedures, containing:

(1) holding identification (if any) and holding fix (navigation aid) or waypoint with geographical coordinates in degrees, minutes and seconds;

(2) inbound track;

(3) direction of the procedure turn;

(4) maximum indicated airspeed;

(5) minimum and maximum holding level;

(6) time/distance outbound; and

(7) indication of the controlling unit and its operating frequency.

Note: *Obstacle clearance criteria related to holding procedures are contained in Procedures for Air Navigation Services — Aircraft Operations (PANS-OPS, Doc 8168), Volumes I and II.*

ENR 4. RADIO NAVIGATION AIDS/SYSTEMS

ENR 4.1 RADIO NAVIGATION AIDS — EN-ROUTE

(a) #AIP-DS# A list of stations providing radio navigation services established for en-route purposes and arranged alphabetically by name of the station, including:

(1) name of the station and magnetic variation to the nearest degree and for VOR, station declination to the nearest degree used for technical line-up of the aid;

(2) identification;

(3) frequency/channel for each element;

(4) hours of operation;

(5) geographical coordinates in degrees, minutes and seconds of the position of the transmitting antenna;

(6) elevation of the transmitting antenna of DME to the nearest 30 m (100 ft); and

(7) remarks.

(b) If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority shall be indicated in the remarks column. Facility coverage shall be indicated in the remarks column.

ENR 4.2 SPECIAL NAVIGATION SYSTEMS

(a) #AIP-DS# Description of stations associated with special navigation systems (DECCA, LORAN, etc.), including:

(1) name of station or chain;

(2) type of service available (master signal, slave signal, colour);

(3) frequency (channel number, basic pulse rate, recurrence rate, as applicable);

(4) hours of operation;

(5) geographical coordinates in degrees, minutes and seconds of the position of the transmitting station; and

(6) remarks.

(b) If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority shall be indicated in the remarks column. Facility coverage shall be indicated in the remarks column.

ENR 4.3 GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)

(a) A list and description of elements of the global navigation satellite system (GNSS) providing the navigation service established for en-route purposes and arranged alphabetically by name of the element, including:

(1) the name of the GNSS element, (GPS, GLONASS, EGNOS, MSAS, WAAS, etc.);

(2) frequency(ies), as appropriate;

(3) geographical coordinates in degrees, minutes and seconds of the nominal service area and coverage area; and

(4) remarks.

(b) If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority shall be indicated in the remarks column.

ENR 4.4 NAME-CODE DESIGNATORS FOR SIGNIFICANT POINTS

(a) #AIP-DS# A list of alphabetically arranged name-code designators (five-letter pronounceable “name-code”) established for significant points at positions not marked by the site of radio navigation aids, including:

(1) name-code designator;

(2) geographical coordinates in degrees, minutes and seconds of the position;

(3) reference to ATS or other routes where the point is located; and

(4) remarks, including supplementary definition of positions where required.

ENR 4.5 AERONAUTICAL GROUND LIGHTS — EN-ROUTE

(a) #AIP-DS# A list of aeronautical ground lights and other light beacons designating geographical positions which are selected by the State as being significant, including:

(1) name of the city or town or other identification of the beacon;

(2) type of beacon and intensity of the light in thousands of candelas;

(3) characteristics of the signal;

(4) operational hours; and

(5) remarks.

ENR 5. NAVIGATION WARNINGS

ENR 5.1 PROHIBITED, RESTRICTED AND DANGER AREAS

(a) #AIP-DS# Description, supplemented by graphic portrayal where appropriate, of prohibited, restricted and danger areas together with information regarding their establishment and activation, including:

(1) identification, name and geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries;

(2) upper and lower limits; and

(3) remarks, including time of activity.

(b) Type of restriction or nature of hazard and risk of interception in the event of penetration shall be indicated in the remarks column.

ENR 5.2 MILITARY EXERCISE AND TRAINING AREAS AND AIR DEFENCE IDENTIFICATION ZONE (ADIZ)

(a) #AIP-DS# Description, supplemented by graphic portrayal where appropriate, of established military training areas and military exercises taking place at regular intervals, and established air defence identification zone (ADIZ), including;

(1) geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries;

(2) upper and lower limits and system and means of activation announcements together with information pertinent to civil flights and applicable ADIZ procedures; and

(3) remarks, including time of activity and risk of interception in the event of penetration of ADIZ.

ENR 5.3 OTHER ACTIVITIES OF A DANGEROUS NATURE AND OTHER POTENTIAL HAZARDS

ENR 5.3.1 OTHER ACTIVITIES OF A DANGEROUS NATURE

(a) #AIP-DS# Description, supplemented by charts where appropriate, of activities that constitute a specific or obvious danger to aircraft operation and could affect flights, including:

(1) geographical coordinates in degrees and minutes of centre of area and range of influence;

(2) vertical limits;

(3) advisory measures;

(4) authority responsible for the provision of information; and

(5) remarks, including time of activity.

ENR 5.3.2 OTHER POTENTIAL HAZARDS

(a) #AIP-DS# Description, supplemented by charts where appropriate, of other potential hazards that could affect flights (active volcanoes, nuclear power stations, etc.), including:

(1) geographical coordinates in degrees and minutes of location of potential hazard;

(2) vertical limits;

(3) advisory measures;

(4) authority responsible for the provision of information; and

(5) remarks.

ENR 5.4 AIR NAVIGATION OBSTACLES

(a) #OBS-DS# A list of obstacles affecting air navigation in Area 1 (the entire State territory), including:

(1) obstacle identification or designation;

(2) type of obstacle;

(3) obstacle position, represented by geographical coordinates in degrees, minutes and seconds;

(4) obstacle elevation and height to the nearest metre or foot; and

(5) type and colour of obstacle lighting (if any).

Note 1: *An obstacle whose height above the ground is 100 m and higher is considered an obstacle for Area 1.*

Note 2: *Specifications concerning the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations/heights for obstacles in Area 1 are given in Appendix 1.*

ENR 5.5 AERIAL SPORTING AND RECREATIONAL ACTIVITIES

(a) #AIP-DS# Brief description, supplemented by graphic portrayal where appropriate, of intensive aerial sporting and recreational activities together with conditions under which they are carried out, including:

(1) designation and geographical coordinates of the lateral limits in degrees, minutes and seconds if inside and in degrees and minutes if outside control area/control zone boundaries;

(2) vertical limits;

(3) operator/user telephone number; and

(4) remarks, including time of activity.

Note: This subsection may be subdivided into different sections for each different category of activity, giving the indicated details in each case.

ENR 5.6 BIRD MIGRATION AND AREAS WITH SENSITIVE FAUNA

(a) Description, supplemented by charts where practicable, of movements of birds associated with migration, including migration routes and permanent resting areas and areas with sensitive fauna.

ENR 6. EN-ROUTE CHARTS

(a) The requirement is for the En-route Chart — ICAO and index charts to be included in this section.

PART 3 _ AERODROME (AD)

(a) If an AIP is produced and made available in more than one volume with each having a separate amendment and supplement service, a separate preface, record of AIP Amendments, record of AIP Supplements, checklist of AIP pages and list of current hand amendments shall be included in each volume. In the case of an AIP being published as one volume, the annotation “not applicable” shall be entered against each of the above subsections.

AD 0.1 TABLE OF CONTENTS TO PART 3

(a) A list of sections and subsections contained in Part 3 — Aerodromes (AD).

Note: *Subsections may be listed alphabetically.*

AD 1. AERODROMES/HELIPORTS — INTRODUCTION

AD 1.1 AERODROME/HELIPORT AVAILABILITY AND CONDITIONS OF USE

AD 1.1.1 GENERAL CONDITIONS

(a) Brief description of the State’s designated authority responsible for aerodromes and heliports, including:

(1) the general conditions under which aerodromes/heliports and associated facilities are available for use; and

(2) a statement concerning the ICAO documents on which the services are based and a reference to the AIP location where differences, if any, are listed.

AD 1.1.2 USE OF MILITARY AIR BASES

(a) Regulations and procedures, if any, concerning civil use of military air bases.

AD 1.1.3 LOW VISIBILITY PROCEDURES

(a) The general conditions under which the low visibility procedures applicable to Cat II/III operations at aerodromes, if any, are applied.

AD 1.1.4 AERODROME OPERATING MINIMA

(a) Details of aerodrome operating minima applied by the State.

AD 1.1.5 OTHER INFORMATION

(a) If applicable, other information of a similar nature.

AD 1.2 RESCUE AND FIREFIGHTING SERVICES AND SNOW PLAN

AD 1.2.1 RESCUE AND FIREFIGHTING SERVICES

(a) Brief description of rules governing the establishment of rescue and firefighting services at aerodromes and heliports available for public use together with an indication of rescue and firefighting categories established by a State.

AD 1.3 INDEX TO AERODROMES AND HELIPORTS

(a) A list, supplemented by graphic portrayal, of aerodromes and heliports within a State, including:

(1) aerodrome/heliport name and ICAO location indicator;

(2) type of traffic permitted to use the aerodrome/heliport (international/national, IFR/VFR, scheduled/non-scheduled, general aviation, military and other); and

(3) reference to AIP, Part 3 subsection in which aerodrome/heliport details are presented.

AD 1.4 GROUPING OF AERODROMES/HELIPORTS

(a) Brief description of the criteria applied by the State in grouping aerodromes/heliports for production/distribution/provision of information purposes (international/national; primary/secondary; major/other; civil/military; etc.).

AD 1.5 STATUS OF CERTIFICATION OF AERODROMES

(a) A list of aerodromes in the State, indicating the status of certification, including:

(1) aerodrome name and ICAO location indicator;

(2) date and, if applicable, validity of certification; and

(3) remarks, if any.

AD 2. AERODROMES

Note: *'OMXX' is to be replaced by the relevant ICAO location indicator.*

AD 2.1 AERODROME LOCATION INDICATOR AND NAME

(a) The requirement is for the ICAO location indicator allocated to the aerodrome and the name of aerodrome. An ICAO location indicator shall be an integral part of the referencing system applicable to all subsections in section AD 2.

AD 2.2 AERODROME GEOGRAPHICAL AND ADMINISTRATIVE DATA

(a) The requirement is for aerodrome geographical and administrative data, including:

(1) aerodrome reference point (geographical coordinates in degrees, minutes and seconds) and its site;

(2) direction and distance of aerodrome reference point from centre of the city or town which the aerodrome serves;

(3) aerodrome elevation to the nearest metre or foot, reference temperature and mean low temperature;

(4) where appropriate, geoid undulation at the aerodrome elevation position to the nearest metre or foot;

(5) magnetic variation to the nearest degree, date of information and annual change;

(6) name of aerodrome operator, address, telephone and telefax numbers, e-mail address, AFS address and, if available, website address;

(7) types of traffic permitted to use the aerodrome (IFR/VFR); and

(8) remarks.

AD 2.3 OPERATIONAL HOURS

(a) Detailed description of the hours of operation of services at the aerodrome, including:

(1) aerodrome operator;

(2) customs and immigration;

(3) health and sanitation;

(4) AIS briefing office;

(5) ATS reporting office (ARO);

(6) MET briefing office;

(7) air traffic service;

(8) fuelling;

(9) handling;

(10) security;

(11) de-icing; and

(12) remarks.

AD 2.4 HANDLING SERVICES AND FACILITIES

(a) Detailed description of the handling services and facilities available at the aerodrome, including:

(1) cargo-handling facilities;

(2) fuel and oil types;

(3) fuelling facilities and capacity;

(4) de-icing facilities;

(5) hangar space for visiting aircraft;

(6) repair facilities for visiting aircraft; and

(7) remarks.

AD 2.5 PASSENGER FACILITIES

(a) Passenger facilities available at the aerodrome, provided as a brief description or a reference to other information sources such as a website, including:

(1) hotel(s) at or in the vicinity of aerodrome;

(2) restaurant(s) at or in the vicinity of aerodrome;

(3) transportation possibilities;

(4) medical facilities;

(5) bank and post office at or in the vicinity of aerodrome;

(6) tourist office; and

(7) remarks.

AD 2.6 RESCUE AND FIREFIGHTING SERVICES

(a) Detailed description of the rescue and firefighting services and equipment available at the aerodrome, including:

(1) aerodrome category for firefighting;

(2) rescue equipment;

(3) capability for removal of disabled aircraft; and

(4) remarks.

AD 2.7 SEASONAL AVAILABILITY — CLEARING

(a) Detailed description of the equipment and operational priorities established for the clearance of aerodrome movement areas, including:

(1) type(s) of clearing equipment;

(2) clearance priorities; and

(3) remarks.

AD 2.8 APRONS, TAXIWAYS AND CHECK LOCATIONS/POSITIONS DATA

(a) Details related to the physical characteristics of aprons, taxiways and locations/positions of designated checkpoints, including:

(1) until 27 November 2024, designation, surface and strength of aprons;

(2) as of 28 November 2024, designation, surface and strength (PCR) of aprons;

(3) until 27 November 2024, designation, width, surface and strength of taxiways;

(4) as of 28 November 2024, designation, width, surface and strength (PCR) of taxiways;

(5) location and elevation to the nearest metre or foot of altimeter checkpoints;

(6) location of VOR checkpoints;

(7) position of INS checkpoints in degrees, minutes, seconds and hundredths of seconds; and

(8) remarks.

(b) If check locations/positions are presented on an aerodrome chart, a note to that effect shall be provided under this subsection.

AD 2.9 SURFACE MOVEMENT GUIDANCE AND CONTROL SYSTEM AND MARKINGS

(a) Brief description of the surface movement guidance and control system and runway and taxiway markings, including:

(1) use of aircraft stand identification signs, taxiway guide lines and visual docking/parking guidance system at aircraft stands;

(2) runway and taxiway markings and lights;

(3) stop bars and runway guard lights (if any);

(4) other runway protection measures; and

(5) remarks.

AD 2.10 AERODROME OBSTACLES

(a) #OBS-DS# Detailed description of obstacles, including:

(1) obstacles in Area 2:

(i) obstacle identification or designation;

(ii) type of obstacle;

(iii) obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;

(iv) obstacle elevation and height to the nearest metre or foot;

(v) obstacle marking, and type and colour of obstacle lighting (if any); and

(vi) NIL indication, if appropriate.

Note 1: *Annex 15, Chapter 5 provides a description of Area 2 while Appendix 8, Figure A8-2 of this document contains graphical illustrations of obstacle data collection surfaces and criteria used to identify obstacles in Area 2.*

Note 2: *Specifications concerning the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations for obstacles in Area 2 are given in Appendix 1.*

(2) the absence of an Area 2 data set for the aerodrome is to be clearly stated and obstacle data are to be provided for:

(i) obstacles that penetrate the obstacle limitation surfaces;

(ii) obstacles that penetrate the take-off flight path area obstacle identification surface; and

(iii) other obstacles assessed as being hazardous to air navigation.

(3) indication that information on obstacles in Area 3 is not provided, or if provided:

(i) obstacle identification or designation;

(ii) type of obstacle;

(iii) obstacle position, represented by geographical coordinates in degrees, minutes, seconds and tenths of seconds;

(iv) obstacle elevation and height to the nearest tenth of a metre or tenth of a foot;

(v) obstacle marking, and type and colour of obstacle lighting (if any);

(vi) if appropriate, an indication that the list of obstacles is available as a digital data set, and a reference to GEN 3.1.6; and

(vii) NIL indication, if appropriate.

Note 2: *Specifications concerning the determination and reporting (accuracy of field work and data integrity) of positions (latitude and longitude) and elevations for obstacles in Area 3 are given in Appendix 1.*

AD 2.11 METEOROLOGICAL INFORMATION PROVIDED

(a) Detailed description of meteorological information provided at the aerodrome and an indication of which meteorological office is responsible for the service enumerated, including:

(1) name of the associated meteorological office;

(2) hours of service and, where applicable, the designation of the responsible meteorological office outside these hours;

(3) office responsible for preparation of TAFs and periods of validity and interval of issuance of the forecasts;

(4) availability of the trend forecasts for the aerodrome, and interval of issuance;

(5) information on how briefing and/or consultation is provided;

(6) types of flight documentation supplied and language(s) used in flight documentation;

(7) charts and other information displayed or available for briefing or consultation;

(8) supplementary equipment available for providing information on meteorological conditions, e.g. weather radar and receiver for satellite images;

(9) the air traffic services unit(s) provided with meteorological information; and

(10) additional information (e.g. concerning any limitation of service).

AD 2.12 RUNWAY PHYSICAL CHARACTERISTICS

(a) Detailed description of runway physical characteristics, for each runway, including:

(1) designations;

(2) true bearings to one-hundredth of a degree;

(3) dimensions of runways to the nearest metre or foot;

(4) until 27 November 2024, strength of pavement (PCN and associated data) and surface of each runway and associated stopways;

(5) as of 28 November 2024, strength of pavement (PCR and associated data) and surface of each runway and associated stopways;

(6) geographical coordinates in degrees, minutes, seconds and hundredths of seconds for each threshold and runway end and, where appropriate, geoid undulation of:

(i) thresholds of a non-precision approach runway to the nearest metre or foot; and

(ii) thresholds of a precision approach runway to the nearest tenth of a metre or tenth of a foot;

(7) elevations of:

(i) thresholds of a non-precision approach runway to the nearest metre or foot; and

(ii) thresholds and the highest elevation of the touchdown zone of a precision approach runway to the nearest tenth of a metre or tenth of a foot;

(8) slope of each runway and associated stopways;

(9) dimensions of stopway (if any) to the nearest metre or foot;

(10) dimensions of clearway (if any) to the nearest metre or foot;

(11) dimensions of strips;

(12) dimensions of runway end safety areas;

(13) location (which runway end) and description of arresting system (if any);

(14) the existence of an obstacle-free zone; and

(15) remarks.

AD 2.13 DECLARED DISTANCES

(a) Detailed description of declared distances to the nearest metre or foot for each direction of each runway, including:

(1) runway designator;

(2) take-off run available;

(3) take-off distance available, and if applicable, alternative reduced declared distances;

(4) accelerate-stop distance available;

(5) landing distance available; and

(6) remarks, including runway entry or start point where alternative reduced declared distances have been declared.

(b) If a runway direction cannot be used for take-off or landing, or both, because it is operationally forbidden, then this shall be declared and the words “not usable” or the abbreviation “NU” entered (Annex 14, Volume I, Attachment A, Section 3).

AD 2.14 APPROACH AND RUNWAY LIGHTING

(a) Detailed description of approach and runway lighting, including:

(1) runway designator;

(2) type, length and intensity of approach lighting system;

(3) runway threshold lights, colour and wing bars;

(4) type of visual approach slope indicator system;

(5) length of runway touchdown zone lights;

(6) length, spacing, colour and intensity of runway centre line lights;

(7) length, spacing, colour and intensity of runway edge lights;

(8) colour of runway end lights and wing bars;

(9) length and colour of stopway lights; and

(10) remarks.

AD 2.15 OTHER LIGHTING AND SECONDARY POWER SUPPLY

(a) Description of other lighting and secondary power supply, including:

(1) location, characteristics and hours of operation of aerodrome beacon/identification beacon (if any);

(2) location and lighting (if any) of anemometer/landing direction indicator;

(3) taxiway edge and taxiway centre line lights;

(4) secondary power supply including switch-over time; and

(5) remarks.

AD 2.16 HELICOPTER LANDING AREA

(a) Detailed description of helicopter landing area provided at the aerodrome, including:

(1) geographical coordinates in degrees, minutes, seconds and hundredths of seconds and, where appropriate, geoid undulation of the geometric centre of touchdown and lift-off (TLOF) or of each

threshold of final approach and take-off (FATO) area:

(i) for non-precision approaches, to the nearest metre or foot; and

(ii) for precision approaches, to the nearest tenth of a metre or tenth of a foot;

(2) TLOF and/or FATO area elevation:

(i) for non-precision approaches, to the nearest metre or foot; and

(ii) for precision approaches, to the nearest tenth of a metre or tenth of a foot;

(3) TLOF and FATO area dimensions to the nearest metre or foot, surface type, bearing strength and marking;

(4) true bearings to one-hundredth of a degree of FATO;

(5) declared distances available, to the nearest metre or foot;

(6) approach and FATO lighting; and

(7) remarks.

AD 2.17 AIR TRAFFIC SERVICES AIRSPACE

(a) #AIP-DS# Detailed description of air traffic services (ATS) airspace organized at the aerodrome, including:

(1) airspace designation and geographical coordinates in degrees, minutes and seconds of the lateral limits;

(2) vertical limits;

(3) airspace classification;

(4) call sign and language(s) of the ATS unit providing service;

(5) transition altitude;

(6) hours of applicability; and

(7) remarks.

AD 2.18 AIR TRAFFIC SERVICES COMMUNICATION FACILITIES

(a) Detailed description of ATS communication facilities established at the aerodrome, including:

(1) service designation;

(2) call sign;

(3) channel(s);

(4) SATVOICE number(s), if available;

(5) logon address, as appropriate;

(6) hours of operation; and

(7) remarks.

AD 2.19 RADIO NAVIGATION AND LANDING AIDS

(a) #AIP-DS# Detailed description of radio navigation and landing aids associated with the instrument approach and the terminal area procedures at the aerodrome, including:

(1)

(i) type of aids;

(ii) magnetic variation to the nearest degree, as appropriate;

(iii) type of supported operation for ILS/MLS/GLS, basic GNSS and SBAS;

(iv) classification for ILS;

(v) facility classification and approach facility designation(s) for GBAS; and

(vi) for VOR/ILS/MLS also station declination to the nearest degree used for technical line-up of the aid;

(2) identification, if required;

(3) frequency(ies), channel number(s), service provider and reference path identifier(s) (RPI), as appropriate;

(4) hours of operation, as appropriate;

(5) geographical coordinates in degrees, minutes, seconds and tenths of seconds of the position of the transmitting antenna, as appropriate;

(6) elevation of the transmitting antenna of DME to the nearest 30 m (100 ft) and of DME/P to the nearest 3 m (10 ft); elevation of GBAS reference point to the nearest metre or foot, and the ellipsoid height of the point to the nearest metre or foot. For SBAS, the ellipsoid height of the landing threshold point (LTP) or the fictitious threshold point (FTP) to the nearest metre or foot;

(7) service volume radius from the GBAS reference point to the nearest kilometre or nautical mile; and

(8) remarks.

(b) When the same aid is used for both en-route and aerodrome purposes, a description shall also be given in section ENR 4. If the GBAS serves more than one aerodrome, description of the aid shall be provided under each aerodrome. If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority shall be indicated in the remarks column. Facility coverage shall be indicated in the remarks column.

AD 2.20 LOCAL AERODROME REGULATIONS

(a) Detailed description of regulations applicable to the use of the aerodrome, including the acceptability of training flights, non-radio and microlight aircraft and similar, and to ground manoeuvring and parking but excluding flight procedures.

AD 2.21 NOISE ABATEMENT PROCEDURES

(a) Detailed description of noise abatement procedures established at the aerodrome.

AD 2.22 FLIGHT PROCEDURES

(a) Detailed description of the conditions and flight procedures, including radar and/or ADS-B procedures, established on the basis of airspace organization at the aerodrome. When established, detailed description of the low visibility procedures at the aerodrome, including:

(1) runway(s) and associated equipment authorized for use under low visibility procedures;

(2) defined meteorological conditions under which initiation, use and termination of low visibility procedures would be made;

(3) description of ground marking/lighting for use under low visibility procedures; and

(4) remarks.

AD 2.23 ADDITIONAL INFORMATION

(a) Additional information at the aerodrome, such as an indication of bird concentrations at the aerodrome, together with an indication of significant daily movement between resting and feeding areas, to the extent practicable.

AD 2.24 CHARTS RELATED TO AN AERODROME

(a) The requirement is for charts related to an aerodrome to be included in the following order:

(1) Aerodrome/Heliport Chart — ICAO;

(2) Aircraft Parking/Docking Chart — ICAO;

(3) Aerodrome Ground Movement Chart — ICAO;

(4) Aerodrome Obstacle Chart — ICAO Type A (for each runway);

(5) Aerodrome Obstacle Chart — ICAO Type B (when available);

(6) Aerodrome Terrain and Obstacle Chart — ICAO (Electronic);

(7) Precision Approach Terrain Chart — ICAO (precision approach Cat II and III runways);

(8) Area Chart — ICAO (departure and transit routes);

(9) Standard Departure Chart — Instrument — ICAO;

(10) Area Chart — ICAO (arrival and transit routes);

(11) Standard Arrival Chart — Instrument — ICAO;

(12) ATC Surveillance Minimum Altitude Chart — ICAO;

(13) Instrument Approach Chart — ICAO (for each runway and procedure type);

(14) Visual Approach Chart — ICAO; and

(15) bird concentrations in the vicinity of the aerodrome.

(b) If some of the charts are not produced, a statement to this effect shall be given in section GEN 3.2.

Note: *A page pocket may be used in the AIP to include the Aerodrome Terrain and Obstacle Chart — ICAO (Electronic) on appropriate electronic media.*

AD 2.25 VISUAL SEGMENT SURFACE (VSS) PENETRATION

Visual segment surface (VSS) penetration, including procedure and procedure minima affected.

Note. *— Criteria related to the VSS are contained in PANS-OPS Volume II, paragraph 5.4.6, Part I — Section 4, Chapter 5.*

Since the AIP is subject to frequent change, provisions exist for its continual updating. In addition, changes of a temporary nature affecting the contents of an AIP are often required to cater for unexpected circumstances or, in some cases, planned modifications to a service/facility.

Guidance material on the use of AIP Supplements together with examples of such use is contained in the Aeronautical Information Services Manual (ICAO Doc 8126).

CHAPTER 2 – PRINTED AIP

2. 1 When the AIP is issued as a printed volume, it shall be published in loose-leaf form unless the complete publication is reissued at frequent intervals.

2.2 Each AIP issued as a printed volume and each page of an AIP issued in loose-leaf form shall be so annotated as to indicate clearly:

(1) the identity of the AIP;

(2) the territory covered and subdivisions when necessary;

(3) the identification of the issuing State and producing organization (authority); and

(4) page numbers/chart titles.

2.3 The issuing State shall be clearly indicated on the cover and in the table of contents.

2.4 The normal method of amendment of the printed volume AIP shall be by means of replacement sheets.

2.5 New or revised information shall be identified by an annotation against it in the margin. A thick black vertical line or, where the change incorporated covers one line only or a part of a line, a thick black horizontal arrow, is sufficient to identify the change.

2.6 Each AIP Amendment page, including the cover sheet, shall contain a publication date and, when applicable, an effective date.

2.7 When the AIP is provided in more than one volume, each volume shall include a:

(1) preface;

(2) record of AIP Amendments;

(3) record of AIP Supplements;

(4) checklist of AIP pages; and

(5) list of current hand amendments.

2.8 When the AIP is published as one volume, the subsections mentioned in (g) appear only in Part 1—GEN and the annotation “not applicable” shall be entered against each of these subsections in Parts 2 and 3.

2.9 A system of page numbering adaptable to the addition or deletion of sheets should be adopted. The page number should include:

(1) an identification of the part of the AIP;

(2) the section; and

(3) the subsection, as applicable;

thus creating a separate set of numbers for each subject (e.g. GEN 2.1-3, NR 4.1-1 or AD 2.2-3).

2.10 A checklist giving the current date of each page in the AIP shall be reissued frequently to assist the user in maintaining a current publication.

2.11 Printed AIP Format

(a) The sheet size should be no larger than 210 × 297 mm, except that larger sheets may be used provided they are folded to the same size.

(b) When a small number of charts are to be included and chart size is not larger than 210mm ×297 mm or allows for folding to these dimensions, they should be contained in the AIP. If, on the other hand, there are many charts and they are frequently amended, it may be convenient to place them in a separate volume with a separate subscription service.

(c) Maps and charts included in the AIP should be paginated in the same manner as other material.