



Republic of the Philippines  
**CIVIL AVIATION AUTHORITY OF THE PHILIPPINES**

---

MEMORANDUM CIRCULAR NO.: 006-2023

**TO : ALL CONCERNED**

**FROM : THE DIRECTOR GENERAL**

**SUBJECT : AMENDMENT TO THE FOURTH ISSUE OF PHILIPPINE CIVIL AVIATION REGULATIONS – AIR NAVIGATION SERVICES PART 15 AERONAUTICAL INFORMATION SERVICES**

---

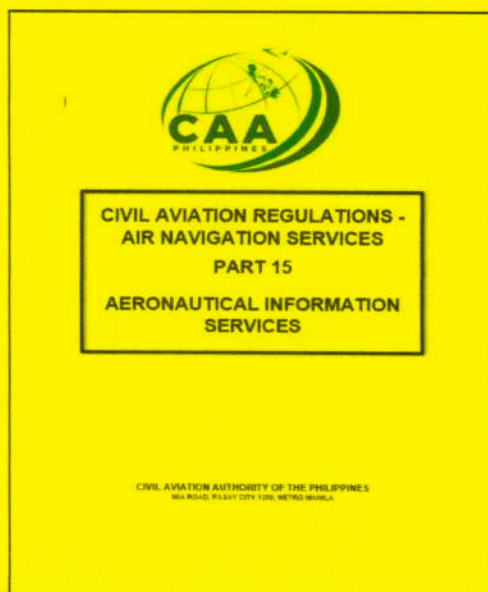
**REFERENCE:**

1. Civil Aviation Regulations- Air Navigation Services Part 15 Issue 4
2. CAAP Regulations Amendment Procedures
3. Board Resolution No. 2012-054 dated 28 September 2012

Pursuant to the powers vested in me under the Republic Act 9497, otherwise known as the Civil Aviation Authority Act of 2008 and in accordance with the Board Resolution No.: 2012-054 dated 28 September 2012, I hereby approve the following amendments to the Philippine Civil Aviation Regulations- Air Navigation Services Part 15.

**ORIGINAL REGULATION SUBJECT FOR REVIEW AND REVISION:**

**CIVIL AVIATION REGULATIONS – AIR NAVIGATION SERVICES PART 15**



*(Editorial Note: This will be the new cover page of CAR-ANS Part 15)*

## Approval Page

### Republic of the Philippines

#### CIVIL AVIATION REGULATIONS AIR NAVIGATION SERVICES (CAR-ANS)

#### PART 15

#### Governing

#### AERONAUTICAL INFORMATION SERVICES

...

#### FOREWORD

This Civil Aviation Regulation was formulated and issued by the Civil Aviation Authority of the Philippines (CAAP), ~~prescribing~~ **establishing** rules and regulations in the handling of aeronautical information ~~in order~~ to ensure the flow of such information/data necessary for the safety, regularity and efficiency of international air navigation.

This Civil Aviation Regulation was developed based on the Standards and Recommended Practices prescribed by the International Civil Aviation Organization (ICAO) as contained in Annex 15 which was first adopted by the Council on 15 May 1953 pursuant to the provisions of Article 37 of the Convention of International Civil Aviation (Chicago 1944), and consequently became applicable on 1 April 1954. Correspondingly, ~~an obligation is imposed by Article 38 of the Convention by which CAAP is required~~ **imposed an obligation to the CAAP** to notify ICAO of any differences between its national regulations and practices and the International Standards contained in Annex 15 and any amendments thereto. ~~Article 38 invites Contracting States to notify any differences from recommended practices contained in Annex 15 and national regulations, especially when the notification of such differences is~~ **are** important for the safety of air navigation. Further, CAAP is ~~invited~~ **encouraged to keep the Organization currently informed** **inform the ICAO** of any differences which may subsequently occur, or of withdrawal of any differences previously notified.

...

**II. AUTHORITY** The regulations contained herein are issued by authority of the Director General of ~~the Civil Aviation Authority of the Philippines~~ **CAAP by virtue of Board Resolution No. 2012-054** and ~~will~~ **shall** be complied with by all concerned.

~~As used in this Civil Aviation Regulation, "Appropriate Authority" means the Director General of the Civil Aviation (DGCA).~~

...

#### V. ~~SEPARABILITY~~ **AERABILITY** PROVISIONS

...

**VI. DISTRIBUTION** This Civil Aviation Regulation will be distributed to all aeronautical information services providers and those involved in AIS related activities.

...

## 15.1 GENERAL

In ~~compliance~~ **conformance** with the ICAO SARPS as contained in Annex 15, the object of the aeronautical information services (AIS) is to ensure the flow of aeronautical data and aeronautical information necessary for global air traffic management (ATM) system safety, regularity, economy and efficiency in an environmentally sustainable manner. The role and importance of aeronautical data and aeronautical information changed significantly with the implementation of area navigation (RNAV), performance-based navigation (PBN), airborne computer-based navigation systems, performance-based communication (PBC), performance-based surveillance (PBS), data link systems and satellite voice communications (SATVOICE). Corrupt, erroneous, late or missing aeronautical data and aeronautical information can potentially affect the safety of air navigation.

~~This CAR-ANS Part 15 Governing Aeronautical Information Services is to be used in conjunction with the Procedures for Air Navigation Services — ICAO Abbreviations and Codes (PANS-ABC, ICAO Doc 8400).~~

~~This CAR-ANS Part 15 Governing Aeronautical Information Services is to be used in conjunction with the Manual of Standards for Aeronautical Information Services (MOS-AIS).~~

**This CAR-ANS Part 15 for Aeronautical Information Services is to be used in conjunction with the Manual of Standards for Aeronautical Information Services (MOS-AIS).**

**This CAR-ANS Part 15 for Aeronautical Information Services is to be used in conjunction with the Procedures for Air Navigation Services — ICAO Abbreviations and Codes (PANS-ABC, ICAO Document 8400).**

Guidance material on the organization and operation of aeronautical information services is contained in the Aeronautical Information Services Manual (**ICAO Document: 8126**).

...

### 15.1.1 DEFINITIONS

When the following terms are used in the CAR-ANS Part 15 ~~Governing~~ **for** Aeronautical Information Services, they have the following meanings:

...

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

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

**High Seas** - All waters beyond the territorial waters (12NM) and where no country has jurisdiction. (Reference: Article 1 of Convention on the High Seas and United Nations Convention on the Law of the Sea)

...

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

...

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

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

...

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

...

#### **15.1.1.2 ACRONYMS AND ABBREVIATIONS**

|              |                                                        |
|--------------|--------------------------------------------------------|
| <b>ADS-B</b> | <b>Automatic Dependents Surveillance - Broadcast</b>   |
| <b>ADS-C</b> | <b>Automatic Dependents Surveillance - Contract</b>    |
| <b>AMD</b>   | <b>Aerodrome Mapping Data</b>                          |
| <b>AMDB</b>  | <b>Aerodrome Mapping Database</b>                      |
| <b>AFS</b>   | <b>Aeronautical Fixed Service</b>                      |
| <b>AIC</b>   | <b>Aeronautical Information Circular</b>               |
| <b>AIM</b>   | <b>Aeronautical Information Management</b>             |
| <b>AIP</b>   | <b>Aeronautical Information Publication</b>            |
| <b>AIRAC</b> | <b>Aeronautical Information Regulation and Control</b> |
| <b>AIS</b>   | <b>Aeronautical Information Service</b>                |
| <b>ADIZ</b>  | <b>Air Defense Identification Zone</b>                 |
| <b>ATIS</b>  | <b>Automatic Terminal Information Service</b>          |
| <b>ATM</b>   | <b>Air Traffic Management</b>                          |
| <b>ATS</b>   | <b>Air Traffic Services</b>                            |
| <b>CPDLC</b> | <b>Controller-Pilot Data Link Communications</b>       |
| <b>CRC</b>   | <b>Cyclic Redundancy Check</b>                         |
| <b>DEM</b>   | <b>Digital Elevation Model</b>                         |
| <b>GPS</b>   | <b>Global Positioning System</b>                       |
| <b>ICAO</b>  | <b>International Civil Aviation Organization</b>       |

|       |                                                  |
|-------|--------------------------------------------------|
| IERS  | International Earth Rotation Service             |
| IFR   | Instrument Flight Procedure                      |
| ISO   | International Organization for Standardization   |
| ITRF  | IERS Terrestrial Reference System                |
| MEA   | Minimum En-route Altitude                        |
| MET   | Meteorology                                      |
| MOCA  | Minimum Obstacle Clearance Altitude              |
| MSL   | Mean Sea Level                                   |
| NOTAM | Notice to Airmen                                 |
| PBC   | Performance-based Communication                  |
| PBN   | Performance-based Navigation                     |
| PBS   | Performance-based Surveillance                   |
| PIB   | Pre-flight Information Bulleting                 |
| RNAV  | Area Navigation                                  |
| RCP   | Required Communication Performance specification |
| RSP   | Required Surveillance Performance specification  |
| SAR   | Search and Rescue                                |
| UTC   | Coordinated Universal Time                       |
| VFR   | Visual Flight Rules                              |
| WGS   | World Geodetic System                            |

...

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

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

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

...

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

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

...

15.1.2.3.1 Gregorian calendar and Coordinated Universal Time (UTC) ~~are~~ shall be used as the temporal reference system for all AIS publications.

...

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

...

15.1.3.3 Units of measurement used in the origination, processing and distribution of aeronautical data and aeronautical information ~~should~~ shall be consistent to the table contained in AIP Philippines GEN 2.1.

...

15.2.1.1 The Civil Aviation Authority of the Philippines (CAAP) provides aeronautical information services (AIS) through the Aeronautical Information Services (AIS) Philippines. ~~shall:~~

~~a) provide an aeronautical information services (AIS); or~~

~~b) agree with one or more other Contracting State(s) for the provision of a joint service; or~~

~~c) delegate the authority for the provision of the service to a non-governmental agency, provided the Standards and Recommended Practices of this CAR ANS are adequately met.~~

15.2.1.2 ~~The Civil Aviation Authority of the Philippines~~ CAAP shall ensure that the provision of aeronautical data and aeronautical information covers ~~its own territory~~ the entire territory of the Republic of the Philippines and those areas over the high seas for which it is responsible for the provision of air traffic services (ATS).

15.2.1.3 ~~The Civil Aviation Authority of the Philippines~~ CAAP shall remain responsible for the aeronautical data and aeronautical information provided in accordance with 15.2.1.2. ~~Aeronautical data and aeronautical information provided for and on behalf of a State shall clearly indicate that they are provided under the authority of that State, irrespective of the format in which they are provided.~~

15.2.1.4 ~~The Civil Aviation Authority of the Philippines~~ CAAP shall ensure that the aeronautical data and aeronautical information provided are of required quality in accordance with 15.3.2.

15.2.1.5 ~~The Civil Aviation Authority of the Philippines~~ CAAP shall ensure that formal arrangements are established between originators of aeronautical data and aeronautical information and the AIS in relation to the timely and complete provision of aeronautical data and aeronautical information.

*Note.— The scope of aeronautical data and aeronautical information that would be the subject of formal arrangements is specified in 15.4*

...

15.2.2.1 An AIS shall ensure that aeronautical data and aeronautical information necessary for the safety, regularity and efficiency of air navigation are made available in a form suitable for the operational requirements of the air traffic management (ATM) community, including:

...

*Note.— A description of the ATM community is contained in the Global Air Traffic Management Operational Concept (ICAO Document 9854).*

...

15.2.3.2 Formal arrangements should be established between AIS Philippines and their users in relation to the provision of the service.

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

...

15.2.3.5 Except as provided in 15.2.3.7, one copy of each of the following aeronautical information products (where available) that have been requested by the AIS of a Contracting State ~~Philippines~~ shall be made available by the AIS ~~Philippines~~ originating State and provided in the mutually agreed form(s), without charge, even where authority for publication/storage and distribution has been delegated to a non-governmental agency:

...

15.2.3.8 The procurement of aeronautical data and aeronautical information, including the elements of aeronautical information products, and other air navigation documents, including those containing air navigation legislation and regulations, by States other than Contracting States and by other entities should ~~should~~ **shall** be subject to separate agreement between the participating States and entities.

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

...

*Note 2.— Guidance material on globally interoperable aeronautical data and aeronautical information exchange models is contained in ICAO Document 8126.*

## 15.2.4 Copyright

*Note.— In order to protect the investment in the products of a ~~Philippines~~' AIS Philippines as well as to ensure better control of their use, CAAP may wish to apply copyright to those products in accordance with ~~their~~ **the** national laws.*

...



15.2.4.2 When aeronautical data and aeronautical information are provided to other State in accordance with 15.2.3.7, the receiving State shall not provide the digital data sets ~~Philippines' AIS~~ to any ~~third~~ party without the consent of the ~~Philippines' AIS~~ ~~providing State~~.

### 15.2.5 Cost recovery

The overhead cost of collecting and compiling aeronautical data and aeronautical information ~~should~~ ~~shall~~ be included in the cost basis for airport and air navigation services charges, as appropriate, in accordance with the principles contained in ICAO's Policies on Charges for Airports and Air Navigation Services (ICAO Document 9082).

...

15.3.5.1 Automation shall be applied in order to ensure the quality, efficiency and cost-effectiveness of aeronautical information services.

*Note.— Guidance material on the development of databases and the establishment of data exchange services is contained in ICAO Document 8126.*

...

15.3.6.1 Quality management systems shall be implemented and maintained encompassing all functions of an AIS, as outlined in 15.2.2. The execution of such quality management systems shall be made demonstrable for each function stage.

*Note.— Guidance material is contained in the Manual on the Quality Management System for Aeronautical Information Services (ICAO Document 9839).*

...

15.3.6.3 The quality management system established in accordance with 15.3.6.1 shall follow the ISO 9000 series of quality assurance standards ~~as a minimum~~ and ~~should~~ be certified by an accredited certification body.

...

### 15.5.2.5 Aeronautical charts

*Note.— CAR-ANS Part 4 — ~~Governing~~ Aeronautical Charts provides regulations including provision requirements for each chart type.*

...

15.5.4.2.7 Selective distribution lists should be used when practicable.

*Note.— Guidance material relating to selective distribution lists is contained in the Aeronautical Information Services Manual (ICAO Document 8126).*

...

15.5.5.2 Aeronautical information provided for pre-flight planning purposes shall include information of operational significance from the elements of aeronautical information products.

...

*Note 2.— A recapitulation of valid NOTAM of operational significance and other information of urgent character may be made available to flight crews in the form of plain-language pre-flight information bulletins (PIB). Guidance material on the preparation of PIB is contained in ICAO Document 8126.*

...

15.6.2.7 Whenever major changes are planned and where advance notice is desirable and practicable, ~~information the AIS shall be made available by the AIS~~ ~~the information~~



available so as to reach recipients at least 56 days in advance of the effective date. This shall be applied to the establishment of, and premeditated major changes in, the circumstances listed below, and other major changes if deemed necessary:

...

e) circumstances listed in 15.6.2.1 if the entire State Philippines or any significant portion thereof is affected or if cross-border coordination is required.

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

...

15.6.3.2.3 A NOTAM shall be originated and issued concerning the following information:

...

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);

*Note.— Guidance related to conflict zones is contained in the Risk Assessment Manual for Civil Aircraft Operations Over or Near Conflict Zones (ICAO Document 10084).*

...

*Note1. — See CAR-ANS Part 11, 11.2.31 and MOS-ATS Attachment 4C.*

...

— END —

## **NEW/AMENDED REGULATION AFTER REVISION:**

### **CIVIL AVIATION REGULATIONS – AIR NAVIGATION SERVICES PART 15 ISSUE 4**

...

#### **FOREWORD**

This Civil Aviation Regulation was formulated and issued by the Civil Aviation Authority of the Philippines (CAAP), establishing rules and regulations in the handling of aeronautical information to ensure the flow of such information/data necessary for the safety, regularity and efficiency of international air navigation.

This Civil Aviation Regulation was developed based on the Standards and Recommended Practices prescribed by the International Civil Aviation Organization (ICAO) as contained in Annex 15 which was first adopted by the Council on 15 May 1953 pursuant to the provisions of Article 37 of the Convention of International Civil Aviation (Chicago 1944), and consequently became applicable on 1 April 1954. Correspondingly, Article 38 of the Convention imposed an obligation to the CAAP to notify ICAO of any differences between its national regulations and practices and the International Standards contained in Annex 15 and any amendments thereto, especially when such differences are important for the safety of air navigation. Further, CAAP is encouraged to inform the ICAO of any differences which may subsequently occur, or of withdrawal of any differences previously notified.

...

**II. AUTHORITY** The regulations contained herein are issued by authority of the Director General of CAAP by virtue of Board Resolution no. 2012-054 and shall be complied with by all concerned.

...

## **V. SEPARABILITY PROVISIONS**

...

**VI. DISTRIBUTION** This Civil Aviation Regulation will be distributed to all aeronautical information service providers and those involved in AIS related activities.

...

## **15.1 GENERAL**

In conformance with the ICAO SARPS as contained in Annex 15, the object of the aeronautical information services (AIS) is to ensure the flow of aeronautical data and aeronautical information necessary for global air traffic management (ATM) system safety, regularity, economy and efficiency in an environmentally sustainable manner. The role and importance of aeronautical data and aeronautical information changed significantly with the implementation of area navigation (RNAV), performance-based navigation (PBN), airborne computer-based navigation systems, performance-based communication (PBC), performance-based surveillance (PBS), data link systems and satellite voice communications (SATVOICE). Corrupt, erroneous, late or missing aeronautical data and aeronautical information can potentially affect the safety of air navigation.

This CAR-ANS Part 15 for Aeronautical Information Services is to be used in conjunction with the Manual of Standards for Aeronautical Information Services (MOS-AIS).

This CAR-ANS Part 15 for Aeronautical Information Services is to be used in conjunction with the Procedures for Air Navigation Services — ICAO Abbreviations and Codes (PANS-ABC, ICAO Document 8400).

Guidance material on the organization and operation of aeronautical information services is contained in the Aeronautical Information Services Manual (ICAO Document: 8126).

...

### **15.1.1 DEFINITIONS**

When the following terms are used in the CAR-ANS Part 15 for Aeronautical Information Services, they have the following meanings:

...

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

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

**High Seas** - All waters beyond the territorial waters (12NM) and where no country has jurisdiction. (Reference: Article 1 of Convention on the High Seas and United Nations Convention on the Law of the Sea)

...

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

...

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

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

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

...  
**15.1.1.2 ACRONYMS AND ABBREVIATIONS**

|       |                                                 |
|-------|-------------------------------------------------|
| ADS-B | Automatic Dependents Surveillance - Broadcast   |
| ADS-C | Automatic Dependents Surveillance - Contract    |
| AMD   | Aerodrome Mapping Data                          |
| AMDB  | Aerodrome Mapping Database                      |
| AFS   | Aeronautical Fixed Service                      |
| AIC   | Aeronautical Information Circular               |
| AIM   | Aeronautical Information Management             |
| AIP   | Aeronautical Information Publication            |
| AIRAC | Aeronautical Information Regulation and Control |
| AIS   | Aeronautical Information Service                |
| ADIZ  | Air Defense Identification Zone                 |
| ATIS  | Automatic Terminal Information Service          |
| ATM   | Air Traffic Management                          |
| ATS   | Air Traffic Services                            |
| CPDLC | Controller-Pilot Data Link Communications       |
| CRC   | Cyclic Redundancy Check                         |
| DEM   | Digital Elevation Model                         |
| GPS   | Global Positioning System                       |
| ICAO  | International Civil Aviation Organization       |

|       |                                                  |
|-------|--------------------------------------------------|
| IERS  | International Earth Rotation Service             |
| IFR   | Instrument Flight Procedure                      |
| ISO   | International Organization for Standardization   |
| ITRF  | IERS Terrestrial Reference System                |
| MEA   | Minimum En-route Altitude                        |
| MET   | Meteorology                                      |
| MOCA  | Minimum Obstacle Clearance Altitude              |
| MSL   | Mean Sea Level                                   |
| NOTAM | Notice to Airmen                                 |
| PBC   | Performance-based Communication                  |
| PBN   | Performance-based Navigation                     |
| PBS   | Performance-based Surveillance                   |
| PIB   | Pre-flight Information Bulleting                 |
| RNAV  | Area Navigation                                  |
| RCP   | Required Communication Performance specification |
| RSP   | Required Surveillance Performance specification  |
| SAR   | Search and Rescue                                |
| UTC   | Coordinated Universal Time                       |
| VFR   | Visual Flight Rules                              |
| WGS   | World Geodetic System                            |

...

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

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

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

...

*Note 2.— The set of geodetic coordinates of globally distributed permanent GPS tracking stations for the most recent realization of the WGS-84 reference frame (WGS-84 (G1150)) is*

*provided in ICAO Document 9674. For each permanent GPS tracking station, the accuracy of an individually estimated position in WGS-84 (G1150) has been in the order of 1 cm (1 $\sigma$ ).*

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

...

15.1.2.3.1 Gregorian calendar and Coordinated Universal Time (UTC) shall be used as the temporal reference system for all AIS publications.

...

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

...

15.1.3.3 Units of measurement used in the origination, processing and distribution of aeronautical data and aeronautical information shall be consistent to the table contained in AIP Philippines GEN 2.1.

...

15.2.1.1 The Civil Aviation Authority of the Philippines (CAAP) provides aeronautical information services (AIS) through the Aeronautical Information Services (AIS) Philippines.

15.2.1.2 CAAP shall ensure that the provision of aeronautical data and aeronautical information covers the entire territory of the Republic of the Philippines and those areas over the high seas for which it is responsible for the provision of air traffic services (ATS).

15.2.1.3 CAAP shall remain responsible for the aeronautical data and aeronautical information provided in accordance with 15.2.1.2.

15.2.1.4 CAAP shall ensure that the aeronautical data and aeronautical information provided are of required quality in accordance with 15.3.2.

15.2.1.5 CAAP shall ensure that formal arrangements are established between originators of aeronautical data and aeronautical information and the AIS in relation to the timely and complete provision of aeronautical data and aeronautical information.

*Note.— The scope of aeronautical data and aeronautical information that would be the subject of formal arrangements is specified in 15.4*

...

15.2.2.1 An AIS shall ensure that aeronautical data and aeronautical information necessary for the safety, regularity and efficiency of air navigation are made available in a form suitable for the operational requirements of the air traffic management (ATM) community, including:

...

*Note.— A description of the ATM community is contained in the Global Air Traffic Management Operational Concept (ICAO Document 9854).*

...

15.2.3.2 Formal arrangements should be established between AIS Philippines and their users in relation to the provision of the service.

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

...

15.2.3.5 Except as provided in 15.2.3.7, one copy of each of the following aeronautical information products (where available) that have been requested by the AIS Philippines shall be made available by the originating State and provided in the mutually agreed form(s), without charge, even where authority for publication/storage and distribution has been delegated to a non-governmental agency:

...

15.2.3.8 The procurement of aeronautical data and aeronautical information, including the elements of aeronautical information products, and other air navigation documents, including those containing air navigation legislation and regulations, by other States and entities shall be subject to separate agreement between the participating States and entities.

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

...

*Note 2.— Guidance material on globally interoperable aeronautical data and aeronautical information exchange models is contained in ICAO Document 8126.*

#### **15.2.4 Copyright**

*Note.— In order to protect the investment in the products of AIS Philippines as well as to ensure better control of their use, CAAP may wish to apply copyright to those products in accordance with the national laws.*

...

15.2.4.2 When aeronautical data and aeronautical information are provided to other State in accordance with 15.2.3.7, the receiving State shall not provide the digital data sets to any party without the consent of the providing State.

#### **15.2.5 Cost recovery**

The overhead cost of collecting and compiling aeronautical data and aeronautical information shall be included in the cost basis for airport and air navigation services charges, as appropriate, in accordance with the principles contained in ICAO's Policies on Charges for Airports and Air Navigation Services (ICAO Document 9082).

...

15.3.5.1 Automation shall be applied in order to ensure the quality, efficiency and cost-effectiveness of aeronautical information services.

*Note.— Guidance material on the development of databases and the establishment of data exchange services is contained in ICAO Document 8126.*

...

15.3.6.1 Quality management systems shall be implemented and maintained encompassing all functions of an AIS, as outlined in 15.2.2. The execution of such quality management systems shall be made demonstrable for each function stage.

*Note.— Guidance material is contained in the Manual on the Quality Management System for Aeronautical Information Services (ICAO Document 9839).*

...

15.3.6.3 The quality management system established in accordance with 15.3.6.1 shall follow the ISO 9000 series of quality assurance standards as a minimum and should be certified by an accredited certification body.

...

15.5.2.5 Aeronautical charts

*Note.— CAR-ANS Part 4 —Aeronautical Charts provides regulations including provision requirements for each chart type.*

...

15.5.4.2.7 Selective distribution lists should be used when practicable.

*Note.— Guidance material relating to selective distribution lists is contained in the Aeronautical Information Services Manual (ICAO Document 8126).*

...

15.5.5.2 Aeronautical information provided for pre-flight planning purposes shall include information of operational significance from the elements of aeronautical information products.

...

*Note 2.— A recapitulation of valid NOTAM of operational significance and other information of urgent character may be made available to flight crews in the form of plain-language pre-flight information bulletins (PIB). Guidance material on the preparation of PIB is contained in ICAO Document 8126.*

...

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

...

e) circumstances listed in 15.6.2.1 if the entire Philippines or any significant portion thereof is affected or if cross-border coordination is required.

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

...

15.6.3.2.3 A NOTAM shall be originated and issued concerning the following information:

...

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);

*Note.— Guidance related to conflict zones is contained in the Risk Assessment Manual for Civil Aircraft Operations Over or Near Conflict Zones (ICAO Document 10084).*

...



Note1. — See CAR-ANS Part 11, 11.2.31 and MOS-ATS Attachment C.

...

xxx

***“End of Amendment”***

- i. ***Separability Clause.*** - If, for any reason, any provision of this Memorandum Circular is declared invalid or unconstitutional, the other part or parts thereof which are not affected thereby shall continue to be in full force and effect.
- ii. ***Repealing Clause.*** - All orders, rules, regulations and issuances, or parts thereof which are inconsistent with this Memorandum Circular are hereby repealed, superseded or modified accordingly.
- iii. ***Determination of changes.*** – To highlight the amendments and/or revisions in the Memorandum Circular, the deleted text shall be shown with strikethrough and the new inserted text shall be highlighted with grey shading, as illustrated below:
  1. Text deleted: ~~Text to be deleted is shown with a line through it.~~
  2. New text inserted: New text is highlighted with grey shading.
  3. New text replacing existing text: ~~Text to be deleted is shown with a line through it~~ followed by the replacement text which is highlighted with grey shading.
- iv. ***Effectivity Clause.*** - This Memorandum Circular shall take effect fifteen (15) days following completion of its publication in a newspaper of general circulation or the Official Gazette and a copy filed with the U.P. Law Center - Office of the National Administrative Register. The amendment shall be incorporated to Philippine Manual of Standards in the next regular Amendment Cycle.

So Ordered. Signed this 03 day of APR 2023, at the Civil Aviation Authority of the Philippines, MIA Road, Pasay City, Metro Manila, 1301.

  
**CAPTAIN MANUEL ANTONIO L. TAMAYO**  
Director General