

Republic of the Philippines CIVIL AVIATION AUTHORITY OF THE PHILIPPINES

MEMORANDUM CIRCULAR NO.: ___17-17___

TO : ALL CONCERNED

FROM : THE DIRECTOR GENERAL

SUBJECT: AMENDMENT TO THE PHILIPPINE CIVIL

AVIATION REGULATIONS - AIR NAVIGATION SERVICES

(CAR-ANS) PART 10

REFERENCE:

1. Philippine Civil Aviation Regulations- Air Navigation Services Part 10

- 2. Republic Act 9497, Civil Aviation Authority Act of 2008
- 3. ICAO Document 9734, Safety Oversight Manual
- 4. ICAO Document 8071 Vol. II Testing of Satellite-based Radio Navigation Systems
- 5. ICAO Document 8071 Vol. III Testing of Surveillance Radar Systems
- 6. Regulations Amendment Procedures (RAP)
- 7. 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 Board Resolution No.: 2012-054 dated 28 September 2012, I hereby approve the incorporation of the following amendments to the Philippine Civil Aviation Regulations – Air Navigation Services (CARANS) Part 10:

ORIGINAL REGULATIONS:

CAR-ANS PART 10

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10.1 GENERAL

10.1.1 Scope of CAR-ANS

This CAR-ANS specifies the standards and basic regulatory framework for all Air Navigation Service (Service Provider) all Communications, Surveillance, Airfield Ground lighting and power systems service providers on the following matters:

1. Prescribed Standards and required Practices on the establishment, dissolution, operation, and maintenance of CNS Service/ air navigation facilities to provide allied services.

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10.1.3 Definitions for this Part

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Air navigation Service, means an aeronautical radio navigation service intended to provide guidance information or position data and for the efficient and safe operation of aircraft supported by one or more radio navigation aids.

Air Navigation Service Provider (ANSP), means a person, an organization or entity authorized to operate and maintain air navigation (CNS) facilities and/or provide air navigation (CNS) service including airfield lighting and associated power systems.

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CNS Service means a person, an organization or entity authorized to operate and maintain air navigation (CNS) facilities and/or provide air navigation (CNS) service including airfield lighting and associated power systems.

CNS Service Provider (CNSSP), see Air Navigation Service Provider (ANSP).

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10.1.4 Prohibition

10.1.4.1 Any person, organization or entity is prohibited to provide any service defined as air navigation service if it is not authorized by CAAP.

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10.2.1.2 Ground Test for Airfield Lighting and Power Systems

All airfield Lighting Installations and power systems must be subject to earth ground testing at least once every year using the procedures as provided in ICAO Annex 14, ICAO Doc. 8071, and Test equipment Manual.

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10.3.3.3 Flight inspection interval and periodicity shall conform to the Flight Inspection Manual of Standards as approved by CAAP (Refer to Doc 8071):

- a. Instrument Landing system (ILS) must be flight inspected at least twice (2) in a 360 days period following the last flight inspection certificate validity;
- b. Very High Frequency Omni-Directional Radio Range(VOR), Distance Measuring Equipment (DME), Non-Directional Beacon(NDB) must be flight inspectioned at least once every 360 days period following the last flight inspection certificate validity;
- c. Visual Ground Slope Indicators (VGSI) must be flight inspected at least once in a 360 days period following the last valid flight inspection certificate;
- d. Instrument Approach Procedure must be inspected at the same interval as the ground based system supporting the procedure i.e. VOR, DME, NDB;
- e. Approach Lighting and Communications Systems must be flight inspected to coincide with the interval of the most critical system supporting aircraft operation
- f. Surveillance systems must be flight inspected at least once every 720 days period following its commissioning as mentioned in this regulations;

g. Satellite augmentation systems must be flight checked for signal strength and interference to coincide with the flight inspection of ILS systems.

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- 10.3.5 Periodic Flight Inspection
- 10.3.5.1 Special Flight inspection must be conducted before an air navigation facility can be put into operational service following a major repair, alteration, modification or changes that may affect its required performance are made.
- 10.3.5.2 Special flight check on visual and radio navigation aids shall be requested by the air navigation service provider or Project Contractor recognized by CAAP or by other airport authority duly approved by the Director General.

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10.7 AIR NAVIGATION FACILITY CERTIFICATION

Pursuant to the provisions of RA 9497, and its Implementing Rules and Regulations (IRR) the Director General shall issue an Air Navigation Facility Certification/Rating to air navigation facilities operating within the Philippines to determine the compliance of its operation based on prescribed standards and required practices to assure safety in air navigation.

- 10.7.1 The AANSOO, shall implement the Air Navigation Facilities Certification in accordance with the requirements of this regulation.
- 10.7.2 Certification shall be applicable to all Air Navigation Facilities as defined in R.A. 9497 and this regulation.

10.8 OBLIGATIONS AND RESPONSIBILITIES OF THE SERVICE PROVIDER

10.8.1 The service provider must comply with the required standards, practices and procedures stipulated in this regulation as reference to applicable ICAO annexes and relevant Manual of Standards (MOS) for CNS Services, appropriate to the operation and maintenance of such service.

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10.22 FACILITY OPERATIONS MANUAL

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10.22.2 Organization Structure of Service Provider

An operations manual must include an approved organization structure of the service provider that shows:

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10.23 HUMAN FACTORS CONSIDERATIONS

- a. Human Factors principle must be observed in the operation and maintenance of air navigation facilities.
- b. In the adherence to this regulation, the service provider must adhere to the guidance material on Human factors principles that can be found in Human Factors training manual

(Doc 9863) and Circular 249 (Human Factors Digest No. 11 – Human Factors in CNS/ATM Systems).

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AMENDED REGULATIONS:

CAR-ANS PART 10

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10.1 GENERAL

10.1.1 Scope of CAR-ANS

This CAR-ANS specifies the standards and basic regulatory framework for all CNS Service Providers (CNSSP) including Airfield Ground lighting and power systems service providers on the following matters:

1. Prescribed Standards and required Practices on the establishment, dissolution, operation, and maintenance of CNS Service/ air navigation facilities to provide allied services.

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10.1.3 Definitions for this Part

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Air navigation services refers to and includes information, directions and other facilities furnished, issued or provided in connection with the navigation or movement of aircraft, and the control of movement of vehicles in any part of an airport used for the movement of aircraft (as defined in Republic Act 9497).

These include services provided to all air traffic during all phases of operations including air traffic management (ATM), communication, navigation, surveillance (CNS), meteorological services for air navigation (MET), search and rescue (SAR) and aeronautical information services (AIS) [as defined in ICAO document 9734 Part A, Safety Oversight Manual].

Air Navigation Service Provider (ANSP) is a legal entity providing Air Navigation Services. Air navigation service providers are either government departments, state-owned companies, or private organizations. Depending on the specific mandate, an ANSP provides one or more of the following services to airspace users:

- Air Traffic Management (ATM)
- Communications, navigation and surveillance systems (CNS)
- Meteorological services for air navigation (MET)
- Search and rescue (SAR)
- Aeronautical information services/aeronautical information management (AIS/AIM)

These services are provided to air traffic during all phases of operations (approach, aerodrome and en-route).

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CNS Service refers to aeronautical radio telecommunication, radio navigation and surveillance service.

CNS Service Provider (CNSSP) means a person, an organization or entity authorized to operate and maintain CNS facilities and/or provide CNS service.

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10.1.4 Prohibition

10.1.4.1 Any person, organization or entity is prohibited to provide any service defined as CNS service if it is not authorized by CAAP.

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10.2.1.2 Earth Ground Test for CNS Facilities, Airfield Lighting and Power Systems

All CNS facilities, airfield lighting installations and power systems must be subject to earth ground testing at least once every year using the procedures as provided in CAAP MOS for Aerodromes and Test Equipment Manual.

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- 10.3.3.3 Flight inspection interval and periodicity shall conform to the Flight Inspection Manual of Standards as approved by CAAP (Refer to Doc 8071):
 - a. Instrument Landing system (ILS) must undergo flight inspection at least twice (2) in a 360-day period following the last flight inspection certificate validity;
 - b. Very High Frequency Omni-Directional Radio Range(VOR), Distance Measuring Equipment (DME), Non-Directional Beacon(NDB) must undergo flight inspection at least once every 360-day period following the last flight inspection certificate validity;
 - c. Visual Ground Slope Indicators (VGSI) must undergo flight inspection at least once in a 360-day period following the last valid flight inspection certificate;
 - d. Instrument Approach Procedure must be inspected at the same interval as the ground based system supporting the procedure i.e. VOR, DME, NDB;
 - e. Approach Lighting and Communications Systems must undergo flight inspection to coincide with the interval of the most critical system supporting aircraft operation;
 - f. Surveillance systems must undergo flight inspection at least once every 720-day period following its commissioning as mentioned in this regulations;
 - g. Satellite augmentation systems must undergo flight check for signal strength and interference to coincide with the flight inspection of ILS systems.

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- 10.3.5 Special Flight Inspection
- 10.3.5.1 Special Flight inspection must be conducted before an air navigation facility can be put into operational service following a major repair, alteration, modification or changes that may affect its required performance are made.

10.3.5.2 Special flight check on visual and radio navigation aids shall be requested by the CNS service provider or Project Contractor recognized by CAAP or by other airport authority duly approved by the Director General.

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10.7 AIR NAVIGATION FACILITY CERTIFICATION

Pursuant to the provisions of RA 9497, and its Implementing Rules and Regulations (IRR) the Director General shall issue an Air Navigation Facility Certification/Rating to air navigation facilities operating within the Philippines to determine the compliance of its operation based on prescribed standards and required practices to assure safety in air navigation.

- 10.7.1 The AANSOO, shall implement the Air Navigation Facilities Certification in accordance with the requirements of CAR-ANS.
- 10.7.2 Certification shall be applicable to all Air Navigation Facilities as defined in R.A.9497and this regulation.

10.8 OBLIGATIONS AND RESPONSIBILITIES OF THE CNS SERVICE PROVIDER

10.8.1 The service provider must comply with the required standards, practices and procedures stipulated in this regulation as reference to applicable ICAO annexes and relevant Manual of Standards (MOS) for CNS Services, appropriate to the operation and maintenance of such service.

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10.22 FACILITY OPERATIONS MANUAL

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10.22.2 Organization Structure of CNS Service Provider

An operations manual must include an approved organization structure of the service provider that shows:

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10.23 HUMAN FACTORS CONSIDERATIONS

- a. Human Factors principle must be observed in the air navigation facilities. The consequences of human performance could affect the operation and maintenance of facilities and should be taken into consideration.
- b. Guidance material on Human factors principles can be found in Human Factors training manual (Doc 9863) and Circular 249 (Human Factors Digest No. 11 Human Factors in CNS/ATM Systems).

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EFFECTIVITY CLAUSE:

This amendment shall be added to the Philippine CAR-ANS Part 10, and shall take effect immediately after publication in a requisite single newspaper of general circulation or the Official Gazette and a copy filed with the U.P. Law Center- Office of the National Administrative Register. This Memorandum Circular shall supersede any orders and/or memoranda in conflict herewith.

So ordered. Signed this 23rd day of MAY 2017, CAAP, Pasay City.

CAPTAIN JIM J. SYDIONGCO