

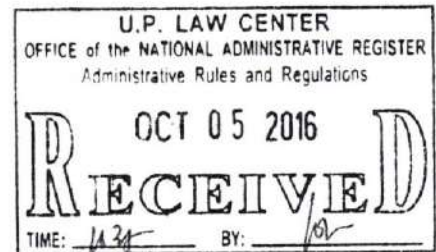


Republic of the Philippines
Department of Transportation

CIVIL AVIATION AUTHORITY OF THE PHILIPPINES
Office of the Director General

MEMORANDUM CIRCULAR NO. 32-16
Series of 2016

TO : ALL CONCERNED
FROM : ACTING DIRECTOR GENERAL
SUBJECT : AMENDMENTS TO THE PHILIPPINE CIVIL AVIATION REGULATIONS (PCAR) PART 2



REFERENCES:

1. Philippine Civil Aviation Regulations Part 2
2. Board Resolution No.: 2011-025 dated 11 April 2011
3. Regulations Amendment Procedures with Board Resolution No.: 2011-054 dated 28 September 2012

Pursuant to the powers vested on the Director General of the Civil Aviation Authority of the Philippines under Republic Act 9497, otherwise known as the Civil Aviation Authority Act of 2008 and in accordance with the Regulations Amendment/Revision Procedure with Board Resolution No.: 2012-054 dated 28 September 2013, I hereby approve the incorporation of the following amendments to the Philippine Civil Aviation Regulations.

AMENDED REGULATIONS:

PCAR PART 2

2.1.2 DEFINITIONS

- 6) Air Traffic Safety Electronic Personnel – also known as CNS Systems Officer in the CAAP

2.1.3 ABBREVIATIONS

ADS-B – Automatic Dependent Surveillance-Broadcast

ATSEP – Air Traffic Safety Electronic Personnel

CNS/ATM – Communications, Navigation, Surveillance Air Traffic Management

DME – Distance Measuring Equipment

GBAS – Ground-Based Augmentation System

GNSS – Global Navigation Satellite System

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GPS – Global Positioning System

HMI – Human-Machine Interface

NDB – Non-Directional Beacon

SBAS – Satellite-Based Augmentation System

SMC – System Monitoring and Control

VOR – Very High Frequency Omni-Directional Radio

2.2.2.1 LICENSES

(j) Air Traffic Safety Electronic Personnel (ATSEP)

2.14 AIR TRAFFIC SAFETY ELECTRONIC PERSONNEL LICENSE AND RATINGS

2.14.1 APPLICABILITY

This section prescribes the requirements for the issuance of an Air Traffic Safety Electronic Personnel (ATSEP) license and ratings.

2.14.2 GENERAL

An applicant shall, before being issued with an ATSEP license, meet such requirements in respect of age, knowledge, experience, skill, medical fitness as specified for that license or rating.

2.14.3 REQUIREMENTS FOR THE ISSUE OF THE LICENSE

2.14.3.1 Age.

The applicant shall be at least 21 years of age.

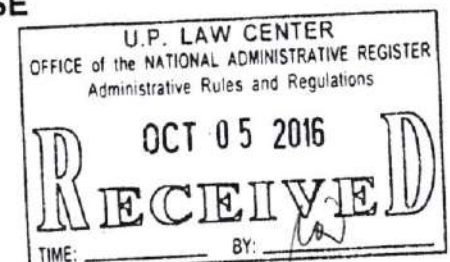
2.14.3.2 Knowledge

The applicant for an ATSEP license shall:

- (i) have satisfactorily completed an approved training course conducted by an authorized instructor and/or acceptable to the Authority with at least knowledge subject as specified in IS 2.14.3.2 APPENDIX A;
- (ii) have received an endorsement from an authorized instructor who certifies that the person is prepared for the required knowledge test; and
- (iii) have passed the required knowledge test on the knowledge subjects of item (i) of this Part.

2.14.3.3 Experience.

The applicant for an ATSEP license shall have completed not less than Three Hundred Twenty (320) hours of Facility Familiarization Training in the preventive maintenance



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of an Air Navigation Facility Equipment under the supervision of an authorized instructor.

2.14.3.4 Skill

The applicant for an ATSEP license shall:

- (i) have received an endorsement from an authorized instructor who certifies that the person is prepared for the required skill test as specified in IS 2.14.3.4 APPENDIX B; and
- (ii) have demonstrated, by passing a skill test, the ability to perform the privileges as specified in 2.14.4.(a) or (b) as appropriate.

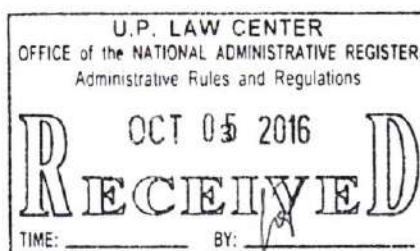
2.14.3.5 Medical fitness.

The applicant shall hold a current Class 3 Medical Certificate.

2.14.4 PRIVILEGES OF THE HOLDER OF LICENSE

Subject to compliance with the requirements specified in 2.14.3, the privileges of the holder of an ATSEP license shall:

- (a) except as specified in paragraphs (b) of this subsection and provided the licensed ATSEP has:
 - 1) Satisfactorily performed the work at an earlier date;
 - 2) Demonstrated the ability to perform the work to the satisfaction of the Authority;
 - 3) Received training acceptable to the Authority on the tasks to be performed; and
 - 4) Performed the work under the direction of a licensed ATSEP designated by the Authority:
 - (i) perform activities related to the establishments and/or improvement of air navigation facilities;
 - (ii) implement approved plans and design for the establishment and/or improvement of air navigation facilities;
 - (iii) formulate and/or implement standard procedures and regulations, and conduct evaluation of air navigation facilities; and
 - (iv) administer, manage, supervise, and/or train on the functional operation and maintenance of CNS/ATM systems.
- (b) operate and maintain a CNS/ATM system and equipment under the direct supervision of an appropriately rated ATSEP.



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2.14.5 VALIDITY OF LICENSE

Subject to compliance of the requirements specified in 2.14.3, the license is valid for five (5) years from the date of issuance provided that the license holder shall:

- (a) continue to perform ATSEP functions within the Authority;
- (b) continue to exercise any of the Privileges as specified in 2.14.4; and
- (c) hold a current class 3 medical certificate.

2.14.6 REQUIREMENTS FOR THE RENEWAL OF LICENSES

A holder of an ATSEP license desiring to renew his/her license must accomplish and submit the following, within 30 days prior to the expiry of his/her license:

- (a) Application for the renewal of license;
- (b) current Class 3 medical certificate; and
- (c) Certification or proof that the holder continues to exercise any of the privileges of the license.

2.14.7 ATSEP RATING

ATSEP ratings are issued specific for each equipment type, brand and model, and shall comprise the following categories:

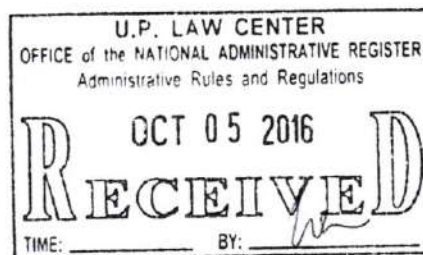
- (a) Communications Equipment Rating
- (b) Radio Navigational Aids Equipment Rating
- (c) Surveillance Equipment Rating
- (d) Data Processing System Rating

2.14.8 REQUIREMENTS for ATSEP RATINGS

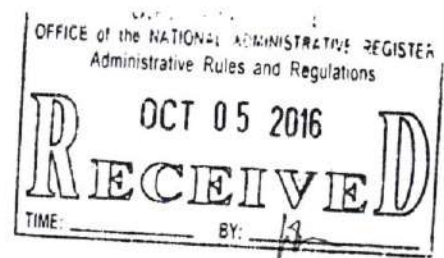
2.14.8.1 Knowledge

The applicant for an ATSEP rating shall:

- (i) have satisfactorily completed an approved training course conducted by an authorized instructor and/or acceptable to the Authority with at least subject areas as specified in IS 2.14.8.1 APPENDIX C
- (ii) have received an endorsement from an authorized instructor who certifies that the person is prepared for the required written and/or oral test; and
- (iii) have demonstrated a required level of knowledge, through written and/or oral test, covering the areas specified in item (i) of this Part for a specific equipment for which the rating is sought.



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2.14.8.2 *Experience.*

The applicant for an ATSEP rating shall:

- (i) have rendered a service of at least one (1) year in the preventive and corrective maintenance of a specific equipment for which the rating is sought under the supervision of an appropriately rated ATSEP.

2.14.8.3 *Skill*

The applicant for an ATSEP rating shall:

- (i) have received an endorsement from an authorized instructor who certifies that the person is prepared for the required practical/skill test as specified in IS 2.14.8.3 APPENDIX D; and
- (ii) have demonstrated a level of skills, by passing a practical/skill test, appropriate to the privileges as specified in 2.14.9 for a specific equipment for which the rating is sought.

2.14.9 PRIVILEGES OF THE HOLDER OF RATING

Subject to compliance with the requirements specified in 2.14.8, the privileges of the holder of an ATSEP license with one or more ratings shall be to:

- (a) perform and/or supervise the operation, and maintenance of a specific equipment for which the license holder is rated;
- (b) conduct on-the-job training for a specific equipment; and
- (c) certify the reliability and recommend the return-to-service of a specific equipment for which the license holder is rated following a preventive and/or corrective maintenance procedures.

2.14.10 VALIDITY OF RATINGS

The rating shall become invalid when an ATSEP has ceased to exercise any of the privileges of the rating for at least one (1) year. A rating shall remain invalid until the ATSEP's ability to exercise the privileges of the rating has been re-validated.

2.14.11 REQUIREMENTS FOR THE RE-VALIDATION OF RATING

A holder of an ATSEP Rating desiring to re-validate his/her Rating shall:

- (a) hold a current Class 3 medical certificate; and
- (b) pass the skill test for the relevant ratings that he or she wants to be validated relevant to the privileges of the rating held and/or demonstrate to the satisfaction of the Authority the knowledge relevant to the rating to be validated.

IS 2.14.3.2 APPENDIX A: ATSEP LICENSE - KNOWLEDGE

The knowledge instruction and test for ATSEP license - shall include at least the following subjects as recommended in the ICAO Doc 7192 Part E-2:

(a) ATSEP GENERAL EXAM

- 1) Air Law
- 2) International and national organizations and standards
- 3) Familiarization with air traffic service and air space standards
- 4) Familiarization with CNS/ATM concepts
- 5) System Safety
- 6) Human Performance and Limitation

(b) COMMUNICATION SYSTEMS

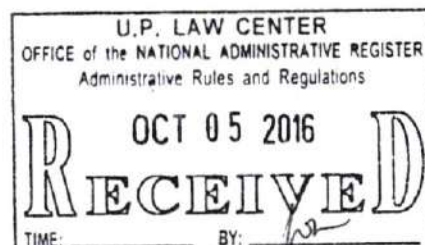
- 1) Communication System Concepts
- 2) Radio Transmitters and Receivers
- 3) Communication Protocols
- 4) Networks
- 5) Types of Medium
- 6) Recorders
- 7) Safety aspects

(c) RADIO NAVIGATIONAL AIDS

- 1) Navigational Aids Concepts
- 2) Ground-Based Systems (NDB, VOR, DME, ILS, etc.)
- 3) Satellite-Based Navigation Systems (GNSS, GBAS, SBAS, GPS etc.)
- 4) On-board Navigation Architecture
- 5) Display Systems
- 6) Inertia Navigation
- 7) Vertical Navigation
- 8) Safety Aspects

(d) SURVEILLANCE

- 1) Surveillance System Concepts
- 2) Primary Surveillance
- 3) Surface Movement Radar
- 4) Secondary Surveillance
- 5) ADS-B
- 6) Human-Machine Interface
- 7) Safety Aspects



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(e) DATA PROCESSING SYSTEM

- 1) User functional view
- 2) Data processing chain
- 3) Software process
- 4) Hardware Platform
- 5) Data Essential Features
- 6) Life Cycle
- 7) Aviation Data Details Structure
- 8) Safety Aspects

(f) POWER SUPPLY

- 1) Power Distribution
- 2) Uninterruptible Power Supply
- 3) Engine Generator Set
- 4) Batteries and Battery Stations
- 5) Power Supply Network
- 6) Safety Aspects

IS 2.14.3.4 APPENDIX B: ATSEP LICENSE – SKILL TEST

Each applicant for ATSEP License shall pass both oral and practical tests. The tests cover the applicant's skill in performing the practical projects on the subject covered by the written test.

The applicant will be provided with appropriate tools, materials and manuals.

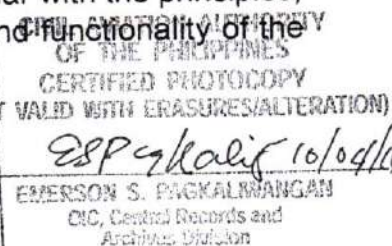
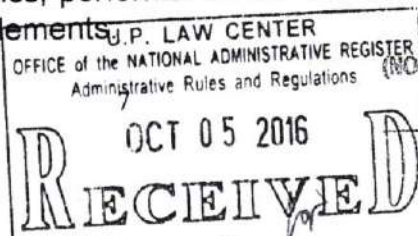
The skill tests for the ATSEP License shall include, but not limited to:

- a) Use of Test Instruments
- b) Identification of electronic/electrical components
- c) Reading schematic Diagrams
- d) Troubleshooting analysis

IS 2.14.8.1 APPENDIX C: ATSEP RATING – KNOWLEDGE

The On-the-job training (OJT) instruction and test for ATSEP rating Experience requirement shall include at least the following subjects for each specific equipment:

- a) Environmental knowledge for the equipment or system.
Detailed view of the technical and operational environment of the system and equipment.
- b) Theoretical section of the equipment or system.
Familiarization with the system or equipment, in particular with the principles, descriptions, characteristics, performance standards and functionality of the hardware and software elements.



- c) Practical section enhanced by OJT on the equipment or system.
Work on live equipment under the supervision of an experienced ATSEP or instructor.

IS 2.14.8.3 APPENDIX D: ATSEP RATING – SKILL TEST

The applicant shall have successfully completed the system and equipment rating training and competency assessment.

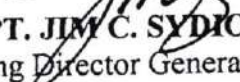
The applicant shall have mastery on, but not limited to:

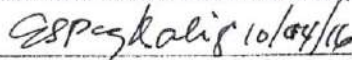
- a) Details of the different components of the equipment;
- b) Protocols used and the data flow;
- c) Parameters and error messages;
- d) Measurement and checking of different modules and their parameters;
- e) Procedures in performing unit replacement and calibration;
- f) Functionality of the Human Machine Interface (HMI) and System Monitoring & Control (SMC) and their operation.

EFFECTIVITY CLAUSE:

Fifteen (15) days after compliance with the requisite single newspaper publication and a copy filed with the U.P. Law Center – Office of the National Administrative Register, these amendments shall be added to the Philippine CAR Part 2 series of 2016 and shall take effect immediately and supersede any other memoranda, advisory circulars, regulations and directives in conflict with these regulations.

Signed this 30th day of September 2016, CAAP, Pasay City.


CAPT. JIM C. SYDIONGCO
Acting Director General

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