



Republic of the Philippines
Department of Transportation and Communications
CIVIL AVIATION AUTHORITY OF THE PHILIPPINES
Office of the Director General

MEMORANDUM CIRCULAR NO.: 35-14 Series of 2014

ALL : ALL CONCERNED

FROM : THE DIRECTOR GENERAL

SUBJECT : AMENDMENT TO THE PHILIPPINE CIVIL AVIATION REGULATIONS (PCAR) PART 4 AND PART 11

REFERENCE:

1. Philippine Civil Aviation Regulations Part 4 and Part 11
2. Board Resolution No.: 2011-025 dated 11 April 2011
3. Regulations Amendment Procedures with Board Resolution No.: 2011-054 dated 28 September 2012

AMENDED REGULATION:

PCAR PART 4

4.3.1.12 REGISTRATION FOR UAV

- (a) Consistent with R.A. 9497 and PCAR Part 4, all large UAV shall be registered to bear the registration markings "RP-U" followed by the assigned number 001 to 999, followed by a letter from A to Z.
- (b) Required registration marks must be located on the visible side of the Electronic Control Module (ECM). All UAVs where the ECM can be installed must comply with the registration marking requirements of the Authority.
- (c) Size of registration marks must be proportionate to the UAV or ECM.
- (d) Registration marks must be made of waterproof, weather resistant inks, paints or sticker (decal).

PCAR PART 11

11.1.1.2 DEFINITIONS

Certified UAV Controller means a person certified under Subpart 11.11.1.7 as a controller of UAVs.

Controller of a UAV means a person who performs a function that would be, if the UAV were a manned aircraft, a function of its flight crew.

"The Future is in the Skies"

Large UAV means any of the following:

- (a) An unmanned airship with an envelope capacity greater than 100 cubic meters;
- (b) An unmanned powered parachute with a launch mass greater than 150 kilograms;
- (c) An unmanned airplane with a launch mass greater than 150 kilograms;
- (d) An unmanned rotorcraft with a launch mass greater than 100 kg.
- (e) An unmanned powered lift device with a launch mass greater than 100kg.

Micro UAV means a UAV with a gross weight of 100 grams or less.

Small UAV means UAV that is not a large UAV or a micro UAV.

UAV means unmanned aircraft, other than a balloon or a kite.

11.11 UNMANNED AERIAL VEHICLE (UAV)

11.11.1.1 APPLICABILITY

- (a) This Subpart applies to the following UAV's:
 - (1) the operation of a large UAV; and
 - (2) the operation of a small UAV except for model, sports, hobby and recreational.

11.11.1.2 GENERAL UAV OPERATIONS

11.11.1.2.1 OPERATION NEAR PEOPLE

- (a) Subject to paragraph (b) and (c), a person shall not operate a UAV within 30 meters of a person who is not directly associated with the operation of the UAV.
- (b) Paragraph (a) does not apply in relation to a person who stands behind the UAV while it is taking off.
- (c) Paragraph (a) also does not prevent the operation of a UAV airship within 30 meters of a person if the airship approaches no closer to the person than 10 meters horizontally and 30ft vertically.

11.11.1.3 UAV AREAS OF OPERATION

- (a) No person may operate UAV beyond the following envelope unless prior approval has been granted by the Authority:
 - (1) 400ft Above Ground Level (AGL);
 - (2) 10 km radius from the Aerodrome Reference Point (ARP); and
- (b) The UAV shall stay clear of populated area unless prior approval has been granted by the Authority.
- (c) No person may operate a large and small UAV in a controlled airspace unless a prior certificate of Waiver is issued by the Authority.

11.11.1.4 LARGE UAVs – REQUIREMENT FOR CERTIFICATE OF REGISTRATION AND SPECIAL CERTIFICATE OF AIRWORTHINESS

- (a) No person may operate a large UAV unless a certificate of registration and a special certificate of airworthiness (restricted category) or an experimental certificate has been issued in accordance with PCAR Part 4 and Part 5.

11.11.1.5 MAINTENANCE OF LARGE UAVs

- (a) No person shall carry out maintenance on a large UAV unless they comply with any directions given in writing by the Authority in relation to the maintenance of the UAV or the maintenance of UAVs of a class that includes the UAV.

11.11.1.6 REQUIREMENT FOR UAV CERTIFICATE OF AUTHORIZATION

- (a) No person may operate a UAV for hire or reward unless the person holds a UAV Certificate of Authorization that authorizes the person to operate the UAV.
- (b) The applicant for UAV Certificate of Authorization must hold the following documents:
 - (1) Operations Manual and Flight Manual;
 - (2) Command Clearance (J2 AFP);
 - (3) UAV Insurance/Third Party Liability (TPL);
 - (4) Special Certificate of Airworthiness; and
 - (5) Certificate of Registration

11.11.1.7 APPROVAL OF OPERATION FOR LARGE AND SMALL UAVs

- (a) No person may operate a large and small UAV without the Authority's approval.
- (b) The Authority may impose conditions on an approval in the interest of air navigation safety.
- (c) Without limiting the generality of paragraph (b), the Authority may impose conditions on an approval:
 - (1) prohibiting the operation of the relevant UAV at night or in conditions other than VMC; or
 - (2) restricting the extent to which the UAV may be operated at night or in conditions other than VMC; or
 - (3) requiring the UAV to stay within a specified area, or
 - (4) requiring the operator to make specified broadcasts.
- (d) The Operator of a UAV must comply with a condition of the approval of its operation.
- (e) If the person is certificated as an operator of large and small UAVs, and the proposed operation would not contravene any condition of the certification, the Authority may approve the proposed operation, but

may impose conditions (including conditions mentioned in paragraph (c)).

11.11.1.8 UAVs NOT TO BE OPERATED OVER POPULOUS AREAS

- (a) Without the approval of the Authority, no person shall operate a certificated UAV over a populous area at a height less than the height from which, if any of its components fails, it would be able to clear the area.
- (b) In considering whether to give an approval under this paragraph (a), the Authority may take into account:
 - (1) the degree of redundancy in the UAV's critical systems;
 - (2) any fail-safe design characteristics of the UAV; and
 - (3) the security of its communications and navigation systems.
- (c) Before giving an approval under paragraph (a), the Authority must be satisfied that the person who intends to operate the UAV will take proper precautions to prevent the proposed flight from being dangerous to people and property.

11.11.1.9 USE OF RADIO TELEPHONE

- (a) No person may control a UAV in controlled airspace, unless he or she:
 - (1) holds an aircraft radio telephone operator's certificate of proficiency;
 - (2) maintains a listening watch on a specified frequency or frequencies; and
 - (3) makes broadcast on a specified frequency or frequencies at the specified interval giving the specified information.
- (b) In paragraph (a):
 - Specified frequency* for particular airspace means a frequency specified from time to time in AIP or by ATC as a frequency for use in the airspace.
 - Specified information* for particular airspace means information specified from time to time in AIP or by ATC as information that must be broadcast in the airspace.
 - Specified interval* for particular airspace means the interval specified from time to time in AIP or by ATC as the interval at which broadcasts must be made while in that airspace.
- (c) The Authority may direct that a particular person must not control a UAV unless the person:

- (1) holds an aircraft radiotelephone operator's certificate of proficiency;
- (2) maintains a listening watch on a frequency or frequencies specified in the direction; and
- (3) makes broadcasts:
 - (i) on a frequency or frequencies;
 - (ii) at intervals; and
 - (iii) giving information— specified in the direction.

(d) The person must comply with the direction.

11.11.1.10 UAV CONTROLLER CERTIFICATE OF AUTHORIZATION

11.11.1.10.1 APPLICATION FOR UAV CONTROLLER CERTIFICATE OF AUTHORIZATION

- (a) The application for UAV Controller's Certificate of Authorization shall be made in writing, signed and sworn to by the applicant. The application shall also state the following:
 - (1) The date and place of filing;
 - (2) The name of applicant;
 - (3) The address of the applicant;
 - (4) The intended UAV to be controlled;
 - (5) Details of any flight crew license, air traffic control license or operations officer license that the applicant holds (include details of ratings, endorsements and qualifications);
 - (6) Details of aeronautical experience that the applicant has;
 - (7) Details of any aviation theory examinations the applicant has passed related to UAV operations; and
 - (8) Details of applicant's experience in operating UAVs.
 - (9) Evidence of the completion of any training course in UAV operation that the applicant has undertaken.
- (b) If the Authority reasonably needs more information about the applicant's qualifications and experience, or a document, to arrive at a decision whether to certify the applicant as a UAV operator, it may ask the applicant in writing for the information or a copy of the document.
- (c) The Authority may refuse to consider, or cease considering, the application until the applicant gives the information or a copy of it.

11.11.1.11 ELIGIBILITY FOR UAV CONTROLLER CERTIFICATE OF AUTHORIZATION

- (a) No person is eligible to be authorized as a UAV Controller unless he or she:
 - (1) In possession of a restricted radiotelephone operator certificate;
 - (2) Passed the Theory of Flight knowledge test conducted by the Authority;

- (3) Has completed a training course as conducted by the UAV manufacturer in the operation of the type of UAV that he or she proposes to operate; and
- (4) Has at least five (5) hours experience in operating UAVs outside controlled airspace.
- (5) Passed knowledge test on the Philippine Civil Aviation Regulations.

11.11.1.12 CONDITIONS AS UAV CONTROLLER CERTIFICATE OF AUTHORIZATION

- (a) The Authority may impose a condition on the authorization of a person as a UAV controller in the interest of air navigation safety.
- (b) Without limiting the generality of paragraph (1), the following conditions may be imposed:
 - (1) Allow the person to control UAVs of only specified kinds; or
 - (2) Limit the areas where he or she may control UAVs; or
 - (3) Allow him or her to control UAVs only in VMC.
- (c) It is a condition of a UAV controller certificate of authorization that he or she must not operate a UAV in controlled airspace unless he or she holds an aircraft radiotelephone operator's certificate or proficiency.

11.11.1.13 UAV CONTROLLER CERTIFICATE OF AUTHORIZATION

- (a) The UAV Controller Certificate of Authorization shall contain the following information:
 - 1) Name of the person so certified
 - 2) The imposed condition for certification if any, if the person is so certified.

11.11.1.14 VALIDITY OF UAV CONTROLLER CERTIFICATE OF AUTHORIZATION

- (a) A UAV controller certificate of authorization remains in force unless otherwise cancelled.
- (b) However, a UAV controller certificate of authorization is not in force during any period of suspension.

11.11.1.15 SHOW CAUSE NOTICE TO AUTHORIZED UAV CONTROLLER

- (a) The Authority may give a show cause notice to an authorized UAV controller if there are reasonable grounds for believing that there are facts or circumstances that would justify the cancellation of the certification under Subpart 11.11.1.16.
- (b) A show cause notice shall include the following:

- (1) tell the controller of the facts and circumstances that, in Authority's opinion, would justify the cancellation of the authorization under Subpart 11.11.1.16; and
- (2) invite the controller to show in writing, within a reasonable time stated in the notice, why the authorization should not be cancelled.
- (c) A show cause notice may state that the authorization is suspended if the Authority reasonably considers that there may be a serious risk to air navigation safety if the certification were not to be suspended.
- (d) If a show cause notice states that the authorization is suspended, the authorization is suspended from when the notice is given to the holder.
- (e) The Authority may at any time revoke the suspension.
- (f) If the approval is suspended and the Authority has not dealt with it under Subpart 11.11.1.16 within 90 days after the day it is suspended, the suspension lapses at the end of that period.

11.11.1.16 CANCELLATION OF UAV CONTROLLER CERTIFICATE OF AUTHORIZATION

- (a) The Authority may cancel a certified UAV controller certificate of authorization by written notice to the controller, if:
 - (1) The Authority has given to the controller a show cause notice under Subpart 11.11.1.15 in relation to it;
 - (2) The Authority has taken into account any representations made, within the period stated in the notice, by or on behalf of the controller; and
 - (3) there are reasonable grounds for believing that the controller:
 - (i) has operated a UAV in contravention of these Subpart or of a condition of the certification; or
 - (ii) has operated the UAV negligently or carelessly; or
 - (iii) in operating the UAV, has recklessly endangered human life or property.
- (b) If the Authority has given a show cause notice under subpart 11.11.1.15 to an authorized UAV controller, and it decides not to cancel the approval, the Authority shall:
 - (1) Inform the controller in writing of the decision; and/or
 - (2) Revoke the suspension if the controller's authorization is suspended under that regulation.

11.11.1.17 CANCELLATION AT REQUEST OF HOLDER

- (a) The Authority may cancel a UAV controller certificate of authorization if asked to do so in writing by the controller.
- (b) The cancellation takes effect when the request is received by the Authority, or if a later day is stated in the request, on the later day.

11.11.1.18 UAV OPERATOR CERTIFICATE OF AUTHORIZATION

11.11.1.18.1 APPLICATION FOR UAV OPERATOR CERTIFICATE OF AUTHORIZATION

- (a) An application for UAV operator certificate of authorization shall include:
 - (1) details of:
 - (i) the applicant's structure and organization;
 - (ii) its staff and their qualifications and experiences (including, in particular, the names, qualifications, experiences, duties and functions of the persons who are to be the applicant's chief UAV controller and maintenance controller);
 - (iii) its facilities and equipment;
 - (iv) its practices and procedures; and
 - (2) a general description of the proposed operations, including the type or types of UAV to be used.
- (b) The application shall be accompanied by a copy of each of the applicant's manuals relevant to the operation of UAVs.
- (c) If the Authority reasonably needs more information about the applicant, or a document, to arrive at a decision whether to certify the applicant as a UAV operator, it may ask the applicant in writing for the information or a copy of the document.
- (d) The Authority may refuse to consider, or cease considering, the application until the applicant furnishes the information or copy of the document.

11.11.1.19 ELIGIBILITY FOR UAV OPERATOR CERTIFICATE OF AUTHORIZATION

- (a) No person is eligible to be authorized as a UAV operator unless:
 - (1) the person has an organization and structure that is appropriate for safe operation of UAVs;
 - (2) the person has enough qualified and experienced personnel to undertake the proposed operations safely;
 - (3) the person has facilities and equipment appropriate to carry out the proposed operations using UAVs of the type to be used;
 - (4) the person has suitable practices and procedures to conduct operation;
 - (5) if necessary, the flight crew are certified as UAV controllers and hold restricted radiotelephone operators' certificates of proficiency; and
 - (6) the person has nominated suitable persons as chief UAV controller and maintenance controller.
- (b) Two or more persons cannot be certified jointly as a UAV operator.

11.11.1.20 CONDITIONS ON UAV OPERATOR CERTIFICATE OF AUTHORIZATION

- (a) It is a condition of the certification of a person as a UAV operator that he/she:
 - (1) maintains within its organization a position of chief UAV controller having at least the functions and duties of a chief controller.
 - (2) employs as its chief UAV controller a person who is certified as a UAV controller and who is competent to carry out those duties and perform those functions; and
 - (3) either:
 - (i) maintains a position within its organization of maintenance controller, with functions and duties; or
 - (ii) has an arrangement with another qualified and competent person to carry out those functions and duties; and
 - (4) if it maintains within its organization a position of maintenance controller—employs as its maintenance controller a person who is competent to carry out the duties and perform the functions of a maintenance controller.
- (b) If the UAV operator operates more than 1 UAV, the chief UAV controller must carry out the duties and functions of a chief UAV controller on a full-time basis.
- (c) The Authority may impose a condition on the certification of a person as a UAV operator in the interest of air navigation safety.
- (d) Without limiting paragraph (c), under any or all of the following conditions:
 - (1) Allow the person to operate UAVs of only a specific kind/s; or
 - (2) Allow the person to operate UAVs only for specified purposes; or
 - (3) Limit the areas where the person may operate UAVs; or
 - (4) Allow the person to operate UAVs only in VMC.

11.11.1.21 UAV OPERATOR CERTIFICATE OF AUTHORIZATION

- (a) The UAV Operator Certificate of Authorization shall contain at least the following:
 - 1) name of the person so certified; and
 - 2) the imposed condition for Certification if any, of the person so certified.

11.11.1.22 VALIDITY OF UAV OPERATOR CERTIFICATE OF AUTHORIZATION

- (a) An operator's authorization remains in force unless otherwise cancelled.
- (b) However, an operator's authorization is not in force during any period of suspension.

11.11.1.23 AUTHORIZATION NOT TRANSFERABLE

- (a) Authorization as a UAV operator is not transferable.

11.11.1.24 SHOW CAUSE NOTICE TO AUTHORIZED UAV OPERATOR

- (a) The Authority may give a show cause notice to an authorized UAV operator if there are reasonable grounds for believing that there are facts or circumstances that would justify the cancellation of the approval under Subpart 11.11.1.25.
- (b) A show cause notice must:
 - (1) tell the holder of the facts and circumstances that, in the Authority's opinion, would justify the cancellation of the authorization under Subpart 11.11.1.16; and
 - (2) invite the operator to show in writing, within a reasonable time stated in the notice, why the authorization should not be cancelled.
- (c) A show cause notice may state that the authorization is suspended if the Authority reasonably considers that there may be a serious risk to the safety of air navigation if the approval were not suspended.
- (d) If a show cause notice states that the authorization is suspended, the authorization is suspended from when the notice is given to the holder.
- (e) The Authority may at any time revoke the suspension.
- (f) If the approval is suspended and the Authority has not dealt with it under Subpart 11.11.1.16 within 90 days after the day it is suspended, the suspension lapses at the end of that period.

11.11.1.25 CANCELLATION OF UAV OPERATOR CERTIFICATE OF AUTHORIZATION

- (a) The Authority may cancel UAV operator certificate of authorization by written notice to the operator, if:
 - (1) The Authority has given to the operator a show cause notice under Subpart 11.11.1.15 in relation to it; and
 - (2) The Authority has taken into account any representations made, within the period stated in the notice, by or on behalf of the operator; and
 - (3) there are reasonable grounds for believing that:
 - (i) the operator has operated a UAV in contravention of these Regulations or of a condition of the authorization; or
 - (ii) an employee of the operator has operated a UAV negligently or carelessly; or

- (iii) an employee of the operator, in operating a UAV, has recklessly endangered human life or property.
- (b) If the Authority has given a show cause notice under Subpart 11.11.1.15 to UAV operator certificate of authorization, and it decides not to cancel the approval, the Authority shall:
 - (1) inform the operator in writing of the decision; and
 - (2) revoke the suspension, if the UAV operator certificate of authorization is suspended.

11.11.1.26 CANCELLATION AT REQUEST OF HOLDER

- (a) The Authority may cancel UAV operator certificate of authorization if asked to do so in writing by the operator.
- (b) The cancellation takes effect when the request is received by the Authority, or if a later day is stated in the request, on the later day.

EFFECTIVITY CLAUSE:

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 4 and Part 11, series of 2011 and shall take effect immediately and supersede any other memoranda, regulations and directives in conflict with these regulations.

So Ordered. Signed this 20 day of Nov. 2014, CAAP, Pasay City.

(SDG) LT GEN WILLIAM K HOTCHKISS III AFP (RET)