

REQUIREMENTS FOR CERTIFICATE OF AIRWORTHINESS

AIR NAVIGATION ORDER

VERSION	**:**	**5.0**
DATE OF IMPLEMENTATION	**:**	**20-10-2021**
OFFICE OF PRIME INTEREST	**:**	**Airworthiness Directorate**

	NAME	DESIGNATION	SIGNATURE
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TYPE OF DOCUMENT	AIR NAVIGATION ORDER (ANO).		
STATUS OF DOCUMENT	CONTROLLED		

A. AUTHORITY:

A1. This Air Navigation Order (ANO) is issued by Director General Civil Aviation Authority in pursuance of Rules 4, 5, 16, 18, 19, 20, 21, 22, sub-rule (3) & (5) of 333, sub-rule (3) of 334 and all other enabling provisions of Civil Aviation Rules, 1994.

B. PURPOSE:

B1. This ANO prescribes requirements for:

B1.1. Initial issuance of Certificate of Airworthiness (CoA)

B1.2. Renewal of CoA

B1.3. Recommendation for Special Ferry Flights

B1.4. Issuance of Export CoA

C. SCOPE:

C1. This ANO will be applicable to all aircraft meeting the certification criteria of ICAO Annex 8 and current PCAA ANO-006-AWRG and thus qualifying for the issuance of CoA.

D. DESCRIPTION:

D1. DEFINITIONS:

D1.1 The following terms when used in this ANO, have the meanings assigned to them respectively. Any term used in this ANO but not defined, shall have the same meaning as given in the Civil Aviation Ordinance, 1960, Pakistan Civil Aviation Authority Ordinance 1982, CARs, 1994 and relevant ICAO Annexes. For detailed definitions, kindly refer to latest issue of AWNOT-017-AWRG.

D1.1.1 **Aerial work operations'** means flight operations other than charter, or regular public transport, or private operations, for which hire or reward is given or promised to the pilot, the owner, or the operator of aircraft in respect of the flight or the purpose of the flight

D1.1.2 **'Charter operations'** means flight operations in which an aircraft is used for the carriage of passengers or cargo for hire or reward; and any reference to "charter" has a corresponding meaning:

D1.1.2.1 to and from any place but not in accordance with fixed schedules to and from fixed terminals; or

D1.1.2.2 in accordance with fixed schedules to and from fixed terminals in circumstances in which the accommodation in the aircraft is not available for use by members of the public;

D1.1.3 **'Private Operations'** means flight operations, other than aerial work, charter, or regular public transport, in which no remuneration, hire, or reward is given to the owner, or the operator of the aircraft in respect of that flight or the purpose of that flight.

D1.1.4 **'Regular Public Transport Operation'** means flight operations in which an aircraft is used for the carriage of passengers or cargo for hire or reward in accordance with fixed schedules to and from fixed terminals over specific routes with or without intermediate stopping places between terminals, and any reference to "regular public transport" has a corresponding meaning.

D1.1.5 **'Tourism Promotion and Regional Integration (TPRI) License'** means a license that is issued to promote tourism (including religious and medical tourism) and regional connectivity, including helicopter services, by PCAA.

D1.1.6 **Export CoA** is a statement by PCAA confirming the acceptable airworthiness status of the aircraft stating in effect that if the aircraft were to remain on the aircraft register of PCAA, it would continue to qualify for the continuance of its CoA.

D1.1.7 **Class I product** – is a complete aircraft, aircraft engine, or propeller which has been type certified and has been issued with a data sheet.

D1.1.8 **Class II product** – is a major component of Class I product such as wings, fuselages, empennage assemblies, landing gears, power transmission, control surfaces, etc., the failure of which would jeopardize the safety of a Class I product.

D1.1.9 **Class III products** – any part or component that is not a Class I or Class II product or a standard part.

D2. GENERAL:

D2.1 In accordance with the Convention on International Civil Aviation and Rule 16 of Civil Aviation Rules 1994, no aircraft registered in Pakistan shall fly unless there is, relating to that aircraft, a current Certificate of Airworthiness, issued or validated by the Airworthiness Directorate of Pakistan Civil Aviation Authority (PCAA). The requirements for initial issuance and renewal of CoA are prescribed at Para D3 & D4 below.

D2.2 When an aircraft does not comply with its applicable airworthiness requirements, there exist certain circumstances as detailed in Para D7 below, when Director Airworthiness may forward the recommendations for approval of special ferry flight to Flight Standards Directorate, PCAA, providing the aircraft is capable of safe flight.

D2.3 To facilitate the transfer of Pakistan registered aircraft onto the register of another contracting state, PCAA may issue 'Export Certificate of Airworthiness'. While NOT VALID for the purpose of flight, the Export CoA provides confirmation from PCAA of a recent satisfactory review of the airworthiness status of aircraft. The requirements for issuance of Export CoA are prescribed at Para D8 below.

D3. INITIAL ISSUANCE OF CoA:

D3.1 Prior to issuance of initial CoA, PCAA will carry out:

3.1.1. Aircraft configuration identification;
3.1.2. Aircraft document review; and
3.1.3. Aircraft conformity inspection.

D3.2 The tasks mentioned above are covered during the induction inspection performed by PCAA inspectors using applicable checklists, to make a judgement concerning the aircraft's history, current status, equipment fitted, modifications embodied, AD compliance, scheduled maintenance compliance and potential certification status of aircraft to be entered on Pakistan Aircraft Register and subsequent issuance of aircraft on-board certificates.

D3.3 In addition to the review of past continuing airworthiness records of an aircraft and its physical inspection to establish its airworthiness status in its previous state of registry, the induction inspection also includes assessment in regards to arrangement of continuing airworthiness management and maintenance of the aircraft in Pakistan by its operator to ensure continuing airworthiness of the aircraft in Pakistan.

D3.4 After satisfactory completion of induction inspection as per ANO-019-AWRG and approval of induction of aircraft from DG CAA, PCAA may issue aircraft on-board certificates.

D3.5 For initial issuance of CoA, the owner/ operator of aircraft shall submit the application on current PCAA form CAAF-127-AWRG to HQs. Airworthiness Directorate, duly completed and signed by authorized person, along with relevant documents as mentioned in the application form and applicable fee in accordance with AWNOT-003-AWRG.

D3.6 If an operator is inducting a new type of aircraft, which has not been previously registered on "Pakistan aircraft register", it shall ensure "Type Acceptance" of that aircraft type has been carried out by PCAA as per ANO-006-AWRG, before applying for initial CoA.

D3.7 In case, where an operator is inducting a new type of aircraft in its fleet, endorsement of the respective aircraft type rating on AML of certifying staff is a mandatory requirement before issuance of valid CoA. In pursuance to this, 'PCAA approved type training course' as per latest issue of ANO-066 is required for the certifying staff. The owner/ operator shall arrange aircraft type training course (both theoretical and Practical element) for the certifying staff along with at least two Airworthiness officials (01 Aerospace & 01 Avionics), so as to provide continued airworthiness surveillance of this aircraft type. The expenditures on the training will be at no cost to PCAA and it shall be arranged at ANO-147 approved training centre.

D3.8 PCAA, in accordance with CARs, 1994 may issue CoA in five (5) categories of operation as mentioned below, and the owner/operator shall clearly specify in application form the category(ies) of operation for which the CoA is required (depending upon the AOC categories held by the applicant):

D3.8.1 Regular Public Transport (AL/RPT);
D3.8.2 Charter (CH);
D3.8.3 Aerial work (AW);
D3.8.4 Tourism Promotion and Regional Integration (TPRI); and
D3.8.5 Private.

D3.9 Following requirements are to be met by owner/ operator before the valid CoA can be issued by PCAA:

D3.9.1 Submission of application form along with all applicable documents
D3.9.2 Submission of applicable fee or authorization to deduct fee from advance account
D3.9.3 Issuance of Certificate of Registration by PCAA
D3.9.4 Custom Clearance Documents *(Mandatory when the CoA is being ratified in Pakistan)*
D3.9.5 Valid AOC(s) of operator indicating requested category of operation *(if applicable)*
D3.9.6 Satisfactory acceptance of corrective actions taken against findings noted during induction inspection of aircraft
D3.9.7 Provision of access to updated Manufacturers (OEM) technical documentation. This provision can be in form of online document portal or other means acceptable to PCAA
D3.9.8 Approved Aircraft Maintenance Program or other means acceptable to PCAA
D3.9.9 Approved “Minimum Equipment List” or other means acceptable to PCAA

D3.10 Upon satisfactory compliance with above mentioned requirements, PCAA will issue the CoA on CAAF-009-AWRG having validity not exceeding twelve (12) months.

D4. RENEWAL OF CoA:

D4.1 Subject to meet with relevant requirements, airworthiness field office shall renew certificate of airworthiness of the aircraft when the owner/operator applies on current Form CAAF-119-AWRG duly completed and signed by authorized person, along with evidence of payment of applicable airworthiness charges.

D4.2 The application should be submitted to local Airworthiness field office preferably 30 days before expiry of CoA. The aircraft shall comply with the following requirements for renewal of CoA:

D4.2.1. The aircraft has been serviced and maintained in accordance with Approved Maintenance Program and methods & procedures specified by the design approval holder;

D4.2.2. All inspections, repairs, overhauls, modifications and replacements which affect airworthiness have been carried out as prescribed by the design approval holder and approved by the Airworthiness Directorate;

D4.2.3. If the aircraft is subject to reliability programme, particularly engine trend monitoring, corrective action has been taken to rectify any adverse trends to ensure that engine is operating within allowable limits;

D4.2.4. All certification maintenance requirements have been complied with at the prescribed intervals and in a manner prescribed by PCAA;

D4.2.5. All applicable mandatory continuing airworthiness information and modifications have been complied with as per latest revision of AWNOT-015-AWRG and approved company procedures;

D4.2.6. Following Continuing Airworthiness, information shall be presented to Airworthiness field office along with the application:

D4.2.6.1. Compliance Status of all applicable Airworthiness Directives maintained on current PCAA form CAAF-137-AWRG.

D4.2.6.2. Aircraft Modification Record maintained on current PCAA form CAAF-199-AWRG.

D4.2.6.3. Aircraft Technical & Documentation Status on current CAAF-186-AWRG for Aeroplane above 5700Kg MTOM or for an aircraft on progressive maintenance program and multiengine helicopter.

D4.2.6.4. Aircraft Technical & Documentation Status on current CAAF-187-AWRG for Aeroplane ≤ 5700Kg MTOM and single engine helicopter.

D4.2.6.5. Updated Manufacturers (OEM) technical documentation. This provision can be in form of access to online document portal or other means acceptable to PCAA.

D4.2.7. Any parts of the aircraft that have an ultimate service life limit declared by the organization responsible for the type design or the Airworthiness Directorate, have not exceeded their approved lives;

D4.2.8. If the aircraft has been released to service with any systems, components or equipment unserviceable, this is in compliance with a minimum equipment list, aircraft maintenance data or similar document approved by the PCAA;

D4.2.9. If the aircraft has been released into service with any structural parts missing, this is in compliance, with procedures approved by the Airworthiness Directorate.

D4.2.10. All minor damages and repairs are within limits as given in the structural repair manual for the aircraft;

D4.2.11. The aircraft shall be presented for physical inspection preferably 20 working days prior to CoA expiry and within office hours, after complying with following requirements:

D4.2.11.1. The aircraft shall be presented in neat and clean conditions with flap and slats in extended condition and landing gear & cargo compartment doors in open position with appropriate access platforms;

D4.2.11.2. All markings and placards included in the approved type design and mandated by design approval holder's maintenance data are available;

D4.2.11.3. Technical personnel shall be available during the CoA renewal inspection in case any need arises;

D4.2.11.4. The aircraft maintenance records are in conformity with the requirements of the Airworthiness Directorate;

D4.3 After the inspection, the findings will be uploaded on Airworthiness Management System (AMS) and sent to the owner/ operator who shall submit the details of corrective actions taken to address the findings, on the AMS for review of PCAA.

D4.4 After the findings have been satisfactorily addressed or Corrective Action Plan (CAP) has been agreed by PCAA, the CoA will be renewed for a period not exceeding twelve (12) months from the date of expiry of CoA. However, for the aircraft, which are not being maintained on 'Progressive maintenance program', the CoA will be renewed from the CAP acceptance date by airworthiness field office OR from the date of expiry of last CoA (whichever comes later).

D5. Conditions of validity of Certificate of Airworthiness

D5.1. Regardless of period of validity appended on the CoA of aircraft, failure to comply with the applicable continuing airworthiness requirements including, but not limited to any of the following, shall invalidate the CoA:

D5.1.1 If the aircraft or any of its equipment, which is essential to the continued airworthiness of the aircraft is overhauled or repaired, or such equipment, is removed or replaced, other than in a manner which complies with the maintenance and repair procedures issued by the aircraft and its equipment manufacturers and maintenance program approved by the Airworthiness Directorate;

D5.1.2 If the aircraft or its equipment is inspected and / or repaired by an organization not approved by the Airworthiness Directorate;

D5.1.3 If any inspection of the aircraft, or of its equipment, required by the approved maintenance procedures or schedules is not carried out;

D5.1.4 If any modification specified by the aircraft manufacturer or Airworthiness Directorate as mandatory for the continuing airworthiness of the aircraft is not carried out;

D5.1.5 If any modification is carried out or equipment installed, other than as approved by the Airworthiness Directorate;

D5.1.6 If any Airworthiness Directive issued by the state of design or a directive issued by the Airworthiness Directorate is not complied with;

D5.1.7 If the aircraft has sustained damage of such nature that in the opinion of a licensed aircraft maintenance engineer, or authorized person or an approved maintenance organization, it is no longer fit to fly;

D5.1.8 If any repair is not carried out in accordance with latest revision of AWNOT-060-AWEG;

D5.1.9 If an aircraft is released to service with an unserviceable system, component or equipment or any missing part that is not deferred in accordance with procedures acceptable to PCAA;

D5.1.10 Replacement of components, parts, equipment or material are not in accordance with the design requirements and are not installed in accordance with the prescribed procedures;

D5.1.11 All markings and placards included in the approval of the type design by the State of Registry are not present; and

D5.1.12 If the Airworthiness Directorate has reason to believe that the aircraft is not airworthy.

D6. DAMAGE TO AIRCRAFT:

D6.1. If the damage is sustained or ascertained when the aircraft is outside Pakistan, the National Aviation Authority of that state is entitled to prevent the aircraft from resuming its flight on the condition that they will immediately inform PCAA and provide all the necessary details that form the basis for declaring aircraft non-airworthy.

D6.2. PCAA may, however, in exceptional circumstances, prescribe particular limiting conditions to permit the aircraft to fly a noncommercial air transport operation to an aerodrome at which it will be restored to an airworthy condition. In prescribing particular limiting conditions, PCAA shall consider all limitations proposed by the Contracting State that had originally prevented the aircraft from resuming its flight.

D6.3. When PCAA considers that the damage sustained is of a nature such that the aircraft is still airworthy, the aircraft shall be allowed to resume its flight.

D7. SPECIAL FERRY FLIGHT

D7.1 In the case where an aircraft is not fully in compliance with airworthiness requirement and the owner/operator wishes to perform;

D7.1.1 a flight test required after a modification or repair during a process of applying for a supplemental type;

D7.1.2 relocating the aircraft to a base where maintenance is to be performed, or to a point of storage;

D7.1.3 delivering the aircraft; or

D7.1.4 evacuating the aircraft from an area of impending danger, or in cases of force majeure;

D7.1.5 or any other equivalent scenario.

D7.2 Under these circumstances and subject to submission of sufficient supporting documents i.e. No Technical Objection (NTO) from design approval holder or any other relevant document deemed necessary, Director Airworthiness may consider operator's request for airworthiness assessment of an

aircraft and forward its recommendation to Flight Standards Directorate (FSD) for further permission/rejection of intended 'special ferry flight'.

D7.3 Request for 'Special ferry flight' shall be submitted by operator on latest issue of CAAF-161-AWRG to local Airworthiness field office along with complete justification and relevant technical data.

D7.4 Upon satisfactory technical evaluation of the application in light of provided data, airworthiness directorate will forward their recommendations to Flight Standards Directorate (FSD) for further approval of 'special ferry flight' with appropriate limitations/conditions including, but not limited to, following;

D7.4.1. **Airworthiness Limitations (to be imposed by DAW as applicable):**

D7.4.1.1 the registration mark assigned to the aircraft by PCAA shall be displayed on the aircraft in conformity with the requirements prescribed in CARs 1994;

D7.4.1.2 placard in cockpit for invalidity of CoA;

"C of A not valid. Aircraft operating on Special Ferry Flight approval."

D7.4.1.3 The aircraft shall be inspected and repaired to a degree necessary to ensure safe flight, and a maintenance release must be signed by an appropriately qualified and authorized maintenance personnel.

D7.4.2. **Operation Limitations (to be imposed by DFS as applicable):**

D7.4.2.1 Expiry date of approval (if any);

D7.4.2.2 a copy of the approval shall be on board the aircraft at all times when operating under the terms of the approval;

D7.4.2.3 the aircraft shall be operated only by crew who are aware of the purpose of the flight and any limitations imposed, and who hold appropriate certificates or licenses acceptable to PCAA;

D7.4.2.4 all flights shall be conducted so as to avoid areas where flights might create hazardous exposure to persons or property (route permission shall be obtained from Directorate of Air Transport & Economic Regulations (D.AT&ER), PCAA);

D7.4.2.5 all flights shall be conducted within the performance operating limitations;

D7.4.2.6 persons or property shall not be carried for compensation or hire;

D7.4.2.7 no person shall be carried in the aircraft unless that person is essential to the purpose of the flight and has been advised of the contents of the approval and the airworthiness status of the aircraft;

D7.4.2.8 If the aircraft does not comply with CoA requirements and the flight involves operations over States other than Pakistan, the operator of the aircraft must obtain overfly authorization from the appropriate authorities of each of those States prior to undertaking the flight (route permission shall be obtained from D.AT&ER, PCAA as per applicable procedure in vogue);

D7.4.3. **Operation Limitations imposed by other National Aviation Authorities:**

In case of the scenario mentioned in Para D6 above, PCAA shall consider all limitations proposed by the National Aviation Authority of the state in which the aircraft is grounded.

D7.5 If required, the aircraft may be inspected by PCAA to confirm its airworthiness status prior to issuance of approval for Special ferry Flight.

D8. ISSUANCE OF EXPORT CoA:

D8.1 Part IV section I Rule 16(c) of the CARs of 1994 requires an export certificate of airworthiness to be issued, when a product is exported from Pakistan. An export certificate of airworthiness will be issued to:

D8.1.1. New aircraft that are assembled and that have been flight tested, and other Class I products located in Pakistan.

D8.1.2. Class II products.

D8.1.3. Class III products.

D8.2 Moreover, PCAA may issue 'Export Certificate of Airworthiness' for Pakistan registered aircraft or aircraft newly manufactured in Pakistan, to facilitate the transfer of that aircraft on register of another contracting state.

D8.3 The Export CoA is a statement by PCAA confirming the acceptable airworthiness status of the aircraft stating in effect that if the aircraft were to remain on the aircraft register of PCAA, it would continue to qualify for the continuance of its CoA.

D8.4 The application for issuance of Export CoA shall be submitted on current PCAA Form CAAF-107-AWRG to HQs. Airworthiness Directorate only by operator/ owner or their Authorized Designee.

D8.5 If the importing State has intimated any specific certification or operational requirement in place, in addition to those adopted or required by PCAA, the importing State will make these known to PCAA and either agree that these may be listed as exceptions on the Export Certificate of Airworthiness or require compliance with the additional requirements before agreeing to accept the Export CoA.

D8.6 Notwithstanding Para D8.3, in the case an applicant has requested for issuance of Export CoA for any class of product that do not comply with the airworthiness requirements specified by PCAA, the Export CoA with 'Exception' shall be issued only after receiving a formal written statement of acceptance from importing country or jurisdiction stating that it accepts Export CoA with the deviations from the PCAA airworthiness requirements.

D8.7 Export CoA will be issued by PCAA on CAAF-010-AWRG as per following requirements:

8.7.1. For aircraft newly manufactured in Pakistan, issuance of conformance certificates CAAF-022-AWEG and CAAF-023-AWEG will be ascertained.

8.7.2. For Pakistan registered aircraft for which CoA has been issued by PCAA, a detailed documentary review and physical inspection of aircraft will be carried out to ascertain the current airworthiness status. This activity will be at no cost to PCAA.

D8.8 The "Export Certificate of Airworthiness" issued by PCAA on Form CAAF-010-AWRG is not a Certificate of Airworthiness and does not grant the right of flight operation. To be eligible for operation of aircraft, the aircraft shall carry a valid CoA or equivalent document, such as 'Special ferry flight' approval issued by PCAA.

E. EVIDENCES (ACRONYMS / RECORDS / REFERENCES):

E1. ACRONYMS:

E1.1	ANO	Air Navigation Order
E1.2	CARs	Civil Aviation Rules
E1.3	CAP	Corrective Action Plan
E1.4	CoA	Certificate of Airworthiness
E1.5	ICAO	International Civil Aviation Organization
E1.6	PCAA	Pakistan Civil Aviation Authority
E1.7	TC	Type Certificate

E2. RECORDS:

E2.1	CAAF-009-AWRG	(Certificate of Airworthiness)
E2.2	CAAF-010-AWRG	(Export Certificate of Airworthiness)
E2.3	CAAF-107-AWRG	(Application form for Export CoA)
E2.4	CAAF-119-AWRG	(Application form for renewal of CoA)
E2.5	CAAF-127-AWRG	(Application form for initial issuance of CoA)
E2.6	CAAF-137-AWRG	(Airworthiness Directives Compliance List)
E2.7	CAAF-161-AWRG	(Application form for Special Ferry Flight)
E2.8	CAAF-186-AWRG	(Aircraft Technical & Documentation Status for aircraft above 5700Kg)
E2.9	CAAF-187-AWRG	(Aircraft Technical & Documentation Status for aircraft ≤ 5700Kg)

E2.10	CAAF-199-AWRG	(Aircraft Modification Record)
E2.11	CAAF-022-AWEG	(Certificate of Compliance (Design))
E2.12	CAAF-023-AWEG	(Certificate of Compliance (Manufacture))

E3. REFERENCES:

E3.1	ICAO Annex 8
E3.2	ICAO Doc 9760
E3.3	CARs 1994
E3.4	ANO-006-AWRG
E3.5	ANO-019-AWRG
E3.6	ANO-066-LCXX
E3.7	ANO-147-AWRG
E3.8	AWNOT-003-AWRG
E3.9	AWNOT-015-AWRG
E3.10	AWNOT-017-AWRG

IMPLEMENTATION:

This Air Navigation Order shall be implemented with effect from **20th October, 2021** and cancels/ supersedes ANO-004-AWRG-4.1 dated 25th March, 2021.

(KHAQAN MURTAZA)
Flight Lieutenant (R)
Director General
Pakistan Civil Aviation Authority

Dated: 12th October, 2021

(Engr. LUQMAN RASHEED)
Director Airworthiness
Pakistan Civil Aviation Authority
Dated:- 11th October, 2021
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