DRAFT – FOR PUBLIC COMMENT

U.S. Department
of Transportation
**Federal Aviation
Administration**

Advisory Circular

Subject: Program Letters for Applications for Experimental Airworthiness Certificates

Date: XX/XX/XX **AC No:** 21-62
Initiated By: AIR-632

1 PURPOSE.

1.1 This advisory circular (AC) provides information and guidance for program letters under Title 14 of the Code of Federal Regulations (14 CFR) part 21, *Certification Procedures for Products and Articles*, § 21.193, *Application for special airworthiness certificates issued for experimental purposes*.

1.2 This AC describes an acceptable means, but not the only means, to comply with application procedures to obtain an experimental airworthiness certificate and is not intended to prescribe what must be contained in every program letter, but to identify acceptable program letter content to facilitate Federal Aviation Administration (FAA) review. This AC is not mandatory and does not constitute a regulation.

2 APPLICABILITY.

2.1 The guidance in this AC applies to an owner (or the agent of the owner) of a U.S. registered aircraft (manned, unmanned and optionally piloted) who is preparing an application for an experimental airworthiness certificate under § 21.191, *Issue of experimental airworthiness certificates*.

2.2 This is a guidance document. Its content is not legally binding in its own right and will not be relied upon by the Department as a separate basis for affirmative enforcement action or other administrative penalty. Conformity with the guidance document is voluntary only. Nonconformity will not affect rights and obligations under existing statutes and regulations.

2.3 The FAA will consider other means of demonstrating compliance that an applicant may elect to present. Terms such as “should,” “may,” and “must” are used only in the sense of ensuring the applicability of this particular method of compliance when the acceptable method of compliance in this document is used. If the FAA becomes aware

of circumstances in which following this AC would not result in compliance with the applicable regulations, the FAA may require additional substantiation or changes as a basis for finding compliance.

2.4 The material contained in this AC does not change or create any additional regulatory requirement, nor does it authorize changes in, or permit deviations from, existing regulatory requirements.

3 EFFECTIVE DATE.

This AC is effective XX/XX/2026

4 PROGRAM LETTERS.

4.1 General Considerations.

An application for an experimental airworthiness certificate under § 21.191 must include a separate statement with certain information describing the purpose for which the aircraft is to be used, as prescribed in § 21.193. This statement is referred to as a "program letter" in FAA Orders 8130.2, 8130.34, and this AC. A clear and complete program letter enables the FAA to establish the eligibility of the requested operation for a specific experimental purpose under § 21.191. Also, a program letter enables the FAA to prescribe the operating limitations of an experimental airworthiness certificate to ensure safe operation of the aircraft. If the program letter does not contain sufficient detail, the FAA will request additional information. This request could delay certification. This AC is not intended to prescribe what must be contained in every program letter, but to identify acceptable program letter content to facilitate preparation of the program letter. The FAA neither approves nor disapproves program letters.

4.2 Operator's Responsibilities.

Compliance with applicable regulations is the operator's responsibility, regardless of information included in the program letter. Certificate issuance may be withheld if the applicant's program letter contains unsafe activities or regulatory non-compliances. For example, with a few exceptions, persons or property cannot be carried for compensation or hire per § 91.319(a)(2).

4.2.1 Restricted Information.

Since program letters are included in the aircraft record of the FAA Registry and available to the public upon request, do not include in the program letter any information that is proprietary, company-sensitive, classified, subject to International Traffic in Arms Regulations (ITAR, 22 CFR, subchapter M), subject to Export Administration Regulations (EAR, 15 CFR Part 734), or otherwise restricted from public or foreign disclosure. If such information is necessary for the FAA to make appropriate decisions in prescribing operating limitations, make this information available by other means for review by the FAA.

4.2.2 Describe the Project for the Intended Duration.

Since the duration of an experimental airworthiness certificate for research and development (R&D), showing compliance with regulations, crew training, or market survey may be up to 3 years per § 21.181(a)(4), the description of the project should cover the full duration of the certificate desired by the applicant.

4.2.3 Support Aircraft.

Aircraft may be used to support other aircraft in an experimental program. This support should be described in the program letter for the support aircraft and in the program letter for the aircraft it will support.

4.2.4 Multiple Programs Under the Same Experimental Purpose.

Using the same aircraft for overlapping programs having the same experimental purpose is permissible. In such cases, include descriptions of each program in your program letter.

4.2.5 Multiple Experimental Purposes Under the Same Experimental Airworthiness Certificate.

4.2.5.1 An aircraft may be used for multiple experimental purposes. Consider whether a single experimental airworthiness certificate with multiple experimental purposes or separate experimental airworthiness certificates with different experimental purposes would better meet your needs. The duration of a single experimental airworthiness certificate with multiple purposes is limited to the most restrictive duration of the applicable experimental purposes.

4.2.5.2 For an application for an experimental airworthiness certificate with multiple experimental purposes, the program letter should document required information in separate sections for each purpose. For example, an aircraft may be eligible for an experimental airworthiness certificate for the purposes of R&D and exhibition. The same aircraft may also conduct public aircraft operations (PAO) for a government customer. In this example, the program letter should separately describe each operation (that is, R&D, exhibition, and PAO) with the same level of detail. Describe any configuration changes that will occur between each purpose to include adding or removing external stores, enabling or disabling systems, and any inspections.

4.2.6 Falsification of Applications.

As part of an application leading to issuance of a certificate, the information provided in a program letter under § 21.193 is subject to 14 CFR part 3, subpart D, *Falsification, Reproduction, Alteration, Omission, or Incorrect Statements*.

4.3 **Regulatory Requirements.**

Section 21.193(a) through (g) specifies minimum requirements for a program letter for any experimental purpose:

- The experimental purpose for which the aircraft is to be used;
- Enough information to describe the operation, equipment, or test as applicable. Describing this information in sufficient detail enables the FAA to assess safety risks and implement appropriate measures to mitigate them via operating limitations, protecting both the test crew and the general public;
- The estimated time or number of flights required for the operation for experimental airworthiness certificates for purposes specified in § 21.191(a) through (f);
- The areas over which flights will be conducted;
- Enough data to identify the aircraft;
- Three-view drawings or three-view dimensional photographs of the aircraft unless the aircraft was converted from a previously type-certificated model without appreciable change in its external configuration, and;
- Pertinent information to safeguard the public.

4.4 **Considerations Specific to Each Experimental Purpose.**

In addition to the general program letter requirements explained above, the following should be included for the intended experimental purpose.

4.4.1 Research and Development (§ 21.191(a)).

4.4.1.1 Detailed information about the tests and operations. Because R&D tests can vary significantly, it is especially important that the program letter provide this to enable the Administrator to ensure public safety.

4.4.1.2 A detailed description of the equipment and tests, which may be needed to assist the FAA with identifying, understanding, and evaluating unique risks. R&D projects may involve new technologies, unconventional designs, or operation of equipment that could serve a military function that may present unique risks.

4.4.1.3 Registration numbers of other aircraft supporting the project, if applicable.

4.4.1.4 Contact information for the customer if the project will be performed under contract.

4.4.2 Showing Compliance With Regulations (§ 21.191(b)).

4.4.2.1 Description of the related, applicable application for the issuance of a type certificate, supplemental type certificate, or major design change.

4.4.2.2 Description of applicable functional and reliability requirements.

4.4.2.3 Description of any supporting aircraft needed to support the project.

4.4.3 Applicant Crew Training (§ 21.191(c)).

4.4.3.1 The name of the person within the company who will provide the training and that person's qualifications.

4.4.3.2 A training syllabus.

4.4.3.3 The time needed to complete the training (that is, approximate number of hours over a defined period of time).

4.4.3.4 When a pilot would need this training (for example, every six months, annually, or after a specified period of inactivity).

4.4.3.5 The performance standards to complete the training.

4.4.3.6 Airport(s) where the training will be conducted.

4.4.4 Exhibition (§ 21.191(d)).

4.4.4.1 Event names, locations, and estimated dates of exhibitions.

4.4.4.2 Any major alterations that have been made to the aircraft.

4.4.5 Air Racing (§ 21.191(e)).

4.4.5.1 Event names and dates for applicable air races.

4.4.5.2 Any major alterations that have been made to the aircraft.

4.4.6 Market Survey (§ 21.191(f)).

4.4.6.1 Detailed description of the market survey.

4.4.6.2 Intended customers.

4.4.6.3 Dates for the market survey activity.

4.4.6.4 Justification for reducing the flight hour requirement in § 21.195(d)(2), if applicable.

4.4.7 Operating Amateur-Built Aircraft (§ 21.191(g)).

The flight test program that addresses the requirements, goals, and objectives during flight testing, if applicable.

4.4.8 Operating Primary Kit-Built Aircraft (§ 21.191(h)).

No additional considerations.

4.4.9 Operating Light-Sport Aircraft (§ 21.191(i)).

No additional considerations. Under this purpose, original or recurrent airworthiness certificates are no longer issued per effective dates specified in § 21.191(i)(1) through (3). If a previous certificated aircraft in this purpose requires an amendment, an application should be made for the purpose of § 21.191(k) or (l), as applicable. The appropriate paragraph in this AC would therefore apply.

4.4.10 Operating Former Military Aircraft (§ 21.191(j)).

Although an FAA airworthiness certificate is not required by FAA regulations for PAO, operations and configurations in the public arena may impact airworthiness of the aircraft for civil operations. Accordingly, include the following in the program letter to provide a full description of intended PAO and civil operations:

Note: AC 00-1.1B, *Public Aircraft Operations—Manned and Unmanned*, provides guidance for determining whether government or government-contracted aircraft operations conducted within the territory of the United States constitute PAO under the statutory definition of "public aircraft" in 49 U.S.C. 40102(a)(41), *Definitions*, and 49 U.S.C. 40125, *Qualifications for public aircraft status*.

- Identification of the government customer, including a point of contact. Include the duration of the contract.
- Description of whether the contract under which PAO are to be conducted includes a requirement for an FAA airworthiness certificate, operating capability requirements, and any other pertinent information concerning how the aircraft will be operated.
- For operations in the United States, whether you have or intend to obtain a declaration of PAO from your government contracting entity. Provide a copy of the declaration, if available.
- For operations over other countries, the applicable foreign authority and authorization for operations.
- The estimated percentage of flight time in civil and non-civil operations.
- Description of the types of PAO to be conducted; for example, "Aircraft will be used to tow targets." Include the number of aircraft intended for operations under the government/military contract. Describe the area and airports where the aircraft will operate.
- Description of configuration changes and aircraft inspections that are necessary to establish airworthiness for civil operations following PAO. For example, external pylons, stores, or pods may require removal or securing to preclude release during civil operations; other military systems may have to be disabled; or inspections may be required for exceedances of the normal flight envelope.

4.4.11 Operating light-sport category kit-built aircraft (§ 21.191(k)). In addition to paragraph 4-3, the program letter must include the following per § 21.193(h):

- Evidence that an aircraft of the same make and model was manufactured and assembled by the aircraft kit manufacturer and issued a special airworthiness certificate in the light-sport category under § 21.190.
- Pilot's operating handbook that includes a flight training supplement.
- Aircraft's maintenance and inspection procedures.
- Manufacturer's statement of compliance for the aircraft kit used in the assembly that meets the applicable requirements of § 21.190 in effect at the time the aircraft kit was manufactured.
  - Statement need not indicate compliance with § 22.195.
  - Statement must identify assembly instructions for the aircraft that meet an applicable consensus standard.

4.4.11.1 For an aircraft kit manufactured outside the United States, evidence that the aircraft kit was manufactured in a country with which the United States has a Bilateral Airworthiness Agreement concerning airplanes or a Bilateral Aviation Safety Agreement with associated Implementation Procedures for Airworthiness concerning airplanes, or an equivalent airworthiness agreement.

Note: Regardless of the class of aircraft for which an applicant is seeking an experimental airworthiness certificate, the United States must have a bilateral airworthiness agreement concerning the acceptance of airplanes. Such an agreement signifies that the state of manufacture has a regulatory framework equivalent to the United States for a complex aeronautical product, not only, for example, simpler articles or appliances.

4.4.12 Operating former light-sport category aircraft (§ 21.191(l)).

No additional considerations.

4.4.13 Space Support Vehicles.

Conducting space support vehicle operations is a privilege of certain experimental airworthiness certificate holders per § 91.331. As such, § 21.191 does not include a specific experimental purpose for space support vehicle flights. If the program letter includes description of a space support vehicle flight operation, the operation must support one of the following requirements and be described in the program letter:

- Training for potential space flight participants, government astronauts, or crew (as those terms are defined in 51 U.S.C. chapter 509);
- Testing of hardware to be used in space flight; or
- Research and development tasks, which require the unique capabilities of the aircraft conducting the flight.

4.4.14 Unmanned and optionally piloted aircraft.

4.4.14.1 **Description of past flight history.**

A summary of the aircraft's past flight history, such as total flight hours and its use as a public aircraft or in 14 CFR part 107 or 108 operations.

4.4.14.2 **Definition of Flight Areas.**

Aeronautical charts or aerial photographs of the flight area in which the experimental flights or production flight testing (select one) will be conducted. Identify a flight test area that is over open water or sparsely populated and has light air traffic, pursuant to 14 CFR 91.305. Include the following:

- Address of the home field or the location of the launch and recovery operations.
- Latitude and longitude of the proposed flight areas in degrees:minutes:seconds format. If the perimeter of the proposed flight area is in the shape of a rectangle, the latitude and longitude of the corners must be stated. If the proposed flight area is in the shape of a circle, provide the latitude and longitude of the center point and the radius.
- Proposed ceiling and floor altitude in mean sea level (MSL) for each flight area.
- Proposed flight rules (for example, visual flight rules (VFR)).
- For an optionally piloted aircraft (OPA), will the OPA system be engaged during night operations? Are the disconnect switches for the OPA system illuminated?
- Whether the aircraft will perform any aerobatic maneuvers as defined by § 91.303.
- Densely populated areas or congested airspace that will be avoided.

4.4.14.3 **Support equipment configuration.**

- The model name, a description, and a diagram or picture of the control station and, if used, the back-up control station.
- Identification and description of required ground support equipment (for example, power carts, air carts, towing equipment, or launch and recovery equipment).

4.4.14.4 **Safety and risk mitigation.**

System information on the safety features of the aircraft to include lost link or flight termination capabilities. Describe how lost link or flight termination procedures will be used operationally for the planned flights.

Describe any risk mitigation strategies that will be used in operational procedures. Information must be sufficient in detail to allow the FAA to determine appropriate operating limitations.

4.4.14.5 **Certification category.**

Responses to the following:

- What is the aircraft's maximum takeoff weight?
- What is the aircraft's maximum speed?
- What is the aircraft's proposed maximum operating altitude?
- Is this the first flight of the aircraft? If no, how many flight hours has it logged?
- Are you requesting night operations?
- Are you requesting operations in instrument meteorological conditions (IMC)?
- Are flights beyond the visual line of sight of the ground-based pilot or visual observer planned? If yes, describe see and avoid operational procedures.
- What is the distance between the operating area and a towered airport?

5 AMENDMENTS OR CHANGES.

Special airworthiness certificates are issued for the intended experimental purpose(s) applied for as described in the supporting program letter, pursuant to §§ 21.191 and 21.193, respectively. If your operating purpose changes, you must submit a new application with a new program letter for issuance of a new airworthiness certificate.

6 LOCATION OF THIS AC.

The latest version of this AC referenced is available on the FAA website at FAA Advisory Circulars and on DRS.

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7 **ADVISORY CIRCULAR FEEDBACK FORM.**

If you have suggestions for improving this AC, you may use the Advisory Circular Feedback form at the end of this AC.

James D. Foltz

Aviation Safety Oversight & Certification

Acting Director, Certification Standards Division, Aircraft Certification Service

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Advisory Circular Feedback Form

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If you find an error in this Advisory Circular, have recommendations for improving it, or have suggestions for new items/subjects to be added, you may let us know by emailing this form to _____or faxing it to the attention of _____ at _____.

Subject:_____ Date: _____

Please mark all appropriate line items:

☐ An error (procedural or typographical) has been noted in paragraph _____on page __.

☐ Recommend paragraph _____ on page be changed as follows:

☐ In a future change to this AC, please cover the following subject:
(Briefly describe what you want added.)

☐ Other comments:

☐ I would like to discuss the above. Please contact me using the information below.

Submitted by:_____ Date: _____