

Advisory Circular

Federal Aviation Administration

Subject: AIRWORTHINESS CERTIFICATION OF U.S-PRODUCED AIRCRAFT AND ENGINE KITS ASSEMBLED OUTSIDE THE UNITED STATES

Date: 6/28/90 Initiated by: AIR-200 **AC No:** 21–28

Change:

- 1. <u>PURPOSE</u>. This advisory circular (AC) provides information and guidance concerning airworthiness certification requirements for aircraft or aircraft engines, assembled from kits by aircraft or aircraft engine manufacturers located in other countries.
- 2. <u>REFERENCES</u>. Federal Aviation Regulations (FAR) Part 21, Sections 21.29, 21.183, and 21.500, AC 21-23, Airworthiness Certification of Civil Aircraft, Engines, Propellers, and Related Products Imported to the United States, and Advisory Circular 20-5F, Plane Sense.

3. BACKGROUND.

The Federal Aviation Administration (FAA), Aircraft Certification Service, has learned of private industry contracts whereby certain aircraft and aircraft engine manufacturers have sold unassembled aircraft and aircraft engine kits in other countries. These kits (which when assembled are similar in configuration and appearance to U.S.-manufactured products) were sold with the understanding that the assembled product or kit would not be considered manufactured under the seller's production certificate, therefore, these assembled kits are not U.S. type certificated and would not be eligible for FAA airworthiness certification. For example, an unsuspecting buyer in the United States purchases an aircraft originally assembled from a kit and tested by a manufacturer located outside the United States. The purchased aircraft resembles a U.S. type certificated aircraft in appearance, but in fact was not produced pursuant to a U.S. type or production certificate. The buyer now contacts the FAA for the purpose of obtaining an FAA standard airworthiness certificate for their newly acquired aircraft. aircraft assembled and tested by a manufacturer located outside the United States was not produced pursuant to FAR Section 21.29, Issuance of Type Certificate: Import Products, and is not eligible for a standard airworthiness certificate.

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b. Another example, certain United States aircraft engine manufacturers have entered into research and development programs with manufacturers outside the United States using aircraft engines of a like configuration to the United States manufacturer's type certificated model. Aircraft engines have also been shipped unassembled to distributors outside the United States for use in military applications in countries with which the United States has not entered into a bilateral airworthiness agreement (BAA). Aircraft engines which fall into these categories may not be eligible for installation on U.S. type certificated aircraft because their airworthiness status could not be adequately determined upon entry into the United States.

c. Aircraft and aircraft engines that fall into the above categories have recently been sold by both private individuals and United States government agencies and mistaken by purchasers for U.S. type certificated products. These aircraft and aircraft engines were purchased with the belief that they were manufactured under an FAA production certificate. In reality, however, they were purchased by a manufacturer outside the United States as kits or as asssembled products and not produced pursuant to the FAR, or under cognizance of the FAA.

4. AIRWORTHINESS CERTIFICATION.

a. Persons considering purchasing aircraft assembled from kits by manufacturers located outside the United States should take every precaution to determine that such aircraft are eligible for airworthiness certificates in accordance with the requirements described in FAR Part 21, Subpart H, Airworthiness Certificates. In addition, purchasers of aircraft engines should determine prior to purchase that the product meets the eligibility requirements for installation in U.S. type certificated aircraft.

NOTE: Information is available to help potential purchasers of aircraft determine whether an aircraft is eligible for U.S. airworthiness certification. This information can be obtained by providing the serial number of the aircraft to the U.S. manufacturer to determine whether the aircraft was produced pursuant to the manufacturer's production certificate or produced under a type certificate only. This information may also be obtained by reviewing the applicable Type Certificate Data Sheet under "Certification Basis and Model and Serial Numbers Eligible for Certification."

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b. The BAA's between the United States and other countries provide for the reciprocal acceptance of certificates of airworthiness for import and export of aircraft, aircraft engines, and propellers which have been issued a U.S. type certificate.

- c. Federal Aviation Regulations Section 21.29 contains the procedural requirements for the issuance of U.S. type certificates for import aircraft, aircraft engines, and propellers, provided such products are included in the applicable BAA.
- d. Federal Aviation Regulations Section 21.183 contains the procedural requirements for the issuance of standard airworthiness certificates for the import of aircraft manufactured outside the United States which has a U.S. type certificate issued under FAR Section 21.29.
- e. Federal Aviation Regulations, Section 21.500 describes the requirement for the issuance of export certificates of airworthiness by the civil aviation authority of other countries for import of U.S. type certificated engines and propellers manufactured outside the United States.
- f. Advisory Circular 21-23 provides information on the FAA's objectives, regulations, and general practices for U.S. airworthiness certification or acceptance of civil aeronautical products imported into the United States.
- g. Advisory Circular 20-5F provides general aviation information for private aircraft owner's and outlines requirements of owning and operating an aircraft.

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Service