

## Advisory Circular

Subject:

PRODUCTION CERTIFICATION MULTINATIONAL/MULTI-CORPORATE CONSORTIA

**Date:** 7/14/89

Initiated by: AIR-200

**AC No:** 21-27

Change:

1. <u>PURPOSE</u>: This advisory circular (AC) provides information and describes criteria to be emphasized in evaluating and approving the quality control system of a multinational and/or multicorporate consortium seeking a production certificate (PC). This AC would not apply to a type certificate holder who enters into a licensing agreement with a manufacturer who at the time of license holds a PC. The Federal Aviation Administration (FAA) would not consider such a licensing arrangement the formation of a PC. Production certificate extensions are addressed in AC 21-24, Extending a Production Certificate to a Facility Located in a Bilateral Airworthiness Agreement Country.

- 2. <u>RELATED FEDERAL AVIATION REGULATIONS</u>. Federal Aviation Regulations (FAR) Part 21, Certification Procedures for Products and Parts, Subpart G, Production Certificates.
- 3. <u>DEFINITION</u>. <u>Multinational/Multicorporate Consortium</u>. A multinational/multicorporate consortium consists of a group of U.S. manufacturers and manufacturers located outside the U.S. who have agreed to form a single company for production of a particular product. A consortium company usually exists in name only in that it does not physically manufacture a product in one location. The consortium company will retain responsibility for the design and quality of the product for which the PC has been issued, but may assign the manufacturing task to other partner companies or suppliers located domestically or in combination with manufacturers located outside the United States.
- 4. <u>BACKGROUND</u>. Agreements to form a consortium for the coproduction of aviation products are a new trend in the aviation industry. Such a consortium may be composed of multiple entities, including companies from outside the United States and domestic companies. The FAA has received a number of applications for PCs from consortium companies.

## 5. QUALITY CONTROL SYSTEM.

a. Section 21.139 of the FAR requires applicants for a PC to demonstrate that they have established and can maintain a quality control system for their product, so that each article will meet the design provisions of the pertinent type certificate. The FAA considers the consortium company to be the PC applicant, and the partner companies to be suppliers. The consortium company will be named on the PC, along with the consortium company address (possibly a

AC 21-27 7/14/89

corporate office) and the address(es) of the principal and subordinate manufacturing facilities. Extension of a PC to facilities located outside of the United States may be authorized when certain criteria are met, as listed in AC 21-24. If a PC is extended to a facility located in a country outside the United States, certificate management responsibility remains with the FAA.

- b. In the case of multinational/multicorporate consortia, the fact that a partner company or supplier may have an FAA approved quality system in place for its own product does not affect the FAR requirements for the PC applicant to have an independent quality system which meets the requirements of the FAR sections 21.139 and 21.143.
- c. A PC applicant functioning in reality as a corporate entity, a distributor, or an assembler, shall have a viable means of ensuring that all articles, processes, procedures, and completed products are properly inspected for conformity to the approved type design.

## 6. QUALITY CONTROL DOCUMENTATION.

- a. The applicant for a PC must establish to the FAA's satisfaction that its quality control system and procedures meet the requirements of FAR sections 21.139 and 21.143 before a PC is issued.
- b. The quality control system data must clearly specify that all facilities, domestic and those outside the U.S. will be made accessible to the FAA and to the Civil Air Authorities (CAA) when acting on behalf of the FAA. If parts or services are provided by a supplier/manufacturer in a country outside the U.S., accessibility would include review of the data, i.e., drawings, specifications, procedures, inspection records, etc., and equipment pertinent to the parts produced under the PC.
- c. The quality control system manual proposed by the applicant must contain sufficient details to establish the quality control organization and its procedures as a separate and independent entity, rather than simply incorporating by reference the quality control systems of its partner companies. This does not preclude the use of, or reference to, applicable portions of a partner company's quality system, but ensures that the applicant's system will be evaluated on its own merits. This also enables the FAA to conduct surveillance to ensure compliance with the FAR.

## 7. QUALITY ORGANIZATION AND AUTHORITY.

- a. The applicant's quality control director or manager must have direct access to the consortium's top management.
- b. The applicant's quality control organization must have an independent management organization which establishes the departmental control in quality matters over the partner companies with respect to the jointly produced product. The individuals chosen to fill these management positions must have a clearly defined and separate allegiance to the applicant's top management.

rather than to any previous company they may have been employed by or are presently working for.

- c. The responsibility and authority of the employees in the consortium's management organization, including their relationship to the quality and production organizations of the partner companies, must be clearly defined in the quality control data.
- d. The applicant may propose to assign inspection authority for ensuring the quality of products being produced to a limited number of its employees. While no minimum number of employees can or should be specified by the FAA. the viability of the proposed quality control procedures shall be assessed with respect to the number of employees available to implement it.
- e. It is particularly important to establish accountability for compliance with the FAR in case of a multinational consortium, in that responsibilities of suppliers' outside the U.S. for their other products under their own civil airworthiness authorities may be inconsistent with those required by the FAR. Compliance responsibility for the consortium product will rest with the PC holder; this direct responsibility will be understood by the applicant's management and the management of the supplier, and be described in the quality control manual.
- f. The fact that the actual manufacture of the applicant's product may take place in a country outside the U.S. will not affect the applicability of FAA regulations, orders, and ACs pertaining to management and surveillance of the PC holder.
- 8. <u>CONCLUSION</u>. Careful review of a consortium company's proposed quality control system prior to production approval will facilitate FAA surveillance and certificate management after approval is granted, and will help ensure that the PC applicant is awars of its independent responsibilities with respect to its product.

David W. Ostrowski, Acting Assistant Director, Aircraft

aris W. Ostrowski

Certification Service

Par 6

3