

### AC 21-29C CHG 2, Detecting and Reporting Suspected Unapproved Parts

Comments on the Draft Advisory Circular Revision published for public comment on the FAA's website

Submitted to the FAA by email at andrew.ctr.allocco@faa.gov with a copy to be sent by U.S. Mail

# Submitted by the Aviation Suppliers Association

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February 25, 2011

Andrew Allocco 1625 K Street NW Suite 300 Washington DC, 20006

Dear Mr. Allocco:

Please accept these comments in response to the Draft AC 21-29C Change 2, which was published on the FAA's website for public comment.

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## Who is ASA?

Founded in 1993, ASA represents the aviation parts distribution industry and has become known as an organization that fights for safety in the aviation marketplace.

ASA and ASA's members are committed to safety and seek to give input to the United States Government regarding government policies so that the aviation industry and the government can work collaboratively to create the best possible guidance for the industry and the flying public.

ASA members have a special interest in unapproved parts controls. ASA-100 accredited distributors are required to have programs for identifying unapproved parts, and they are diligent reporters of such unapproved parts under the FAA's unapproved parts program. Unambiguous and accurate guidance helps to ensure that there are clear standards for identification of appropriate and inappropriate parts.

#### Introduction to the Comments

ASA has been a consistent supporter of the FAA's efforts to provide unapproved parts guidance to the industry. ASA applauds the FAA's effort to improve the guidance concerning unapproved parts, and we are pleased to able to offer comments in support of this effort.

Although some of our comments are directly related to conformity to the new Part 21 language (which appears to be a motivating factor in the release of this revision), some of the comments reflect errors or inconsistencies in the guidance that could be changed in this revision.

Our comments are offered in the form of a table. The third column of the table reflects the proposed changes to the guidance, and the fourth column of the table provides a discussion of why this change is necessary. Where language is being modified, we have provided "redline"-style copy to show where the language is being modified. Where additional text is being proposed, the additional text is provided in its entirety.

#### Comments

	Proposed Changes to Draft AC 21.29C Change 2		
Item #	Section Affected	Proposed Change	Explanation
1	3(b)(5) NOTE	Modify the last sentence of the NOTE to read as follows:	Effective April 16, 2011, the FAA has merged the quality system requirements for all production approvals into one
		It is not considered a licensing agreement if a PC production approval holder grants authority to a supplier to ship parts	location, 14 C.F.R. § 21.137. Thus, the rules associated with delegation of inspection authority and direct shipment
		directly to a <del>PC-production approval</del> holder's customer.	apply to all forms of production approval. This note should make it clear that one may see a direct ship relationship emanating from any production approval

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			holder, and that all of these are "not considered a licensing agreement" as described in the paragraph.
2	3(b)(5) NOTE	Add additional text at the end of the NOTE, which reads as follows:  Such "direct-shipped" parts are considered to be produced under the production approval holder's quality system and their production must be controlled by the production approval holder.	The existing language leaves the status of direct-shipped parts unclear, in that it distinguishes them from parts manufactured under licensed production approvals, but it fails to explain that a "direct ship" grant of authority remains under the complete legal control of the production approval holder. This has led to situations where companies have claimed to have direct ship authority when the parts in question were not produced under the control of the production approval holder (and were even produced without the production approval holder's knowledge). The proposed language would make it clear that "direct shipped" parts remain under the control of the production approval holder, thus establishing their production basis as well as establishing that so-called "direct shipments" made without the production approval holder's control of the quality system are not, in fact, legitimate direct shipments.
3	3(b)(10- 11)	Eliminate existing sections 3(b)(10) and 3(b)(11) and replace them with the following text:  (10) Fabricated by an appropriately rated certificate holder with a quality system, and consumed in the repair or alteration of a product or article in accordance with part 43.	Previously, case law had suggested that production approval was unnecessary for parts manufactured for consumption during maintenance/alteration because they were not produced "for sale." The FAA had issued guidance associated with production of parts in the course of maintenance/alteration in the form of an internal memorandum, Order 8000.50 and AC 43-18. This guidance-based authority has now been supplemented with the new language of 14 C.F.R. § 21.9(a)(6), which explicitly recognizes parts produced in the course of maintenance/alteration. The proposed language is meant to reflect the new regulatory authority for this category of parts consumed in the course of repair or alteration, and is drawn verbatim from the new regulatory language.

<b>~</b> .	Proposed Changes to Draft AC 21.29C Change 2		
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4	3(b)(11) NOTE	Retain the note established for section 3(b)(11) as a note for the new section 3(b)(10) and amend the note as follows:	This NOTE should be amended to make it clear that there are exceptions to the production approval rules, and that those exceptions are now listed in 14 C.F.R. §
		NOTE: In summary, approved parts are produced in accordance with the means outlined in part 21, or according to exceptions established in Part 21.	21.9 (and elsewhere). This test is necessary because limiting the note to those parts produced according to means outlined in Part 21 ignores those parts that are produced according to exceptions to those means.
5	NEW 3(b)(11)	Add a new section 3(b)(11) (to replace the one eliminated above) that reads as follows:  (11) Fabricated as commercial parts in accordance with the regulations affecting such parts.	There is a new category of parts described in the regulations, called "commercial parts." These parts are considered to be approved parts.
6	3(h)	Omit the reference to "design and" in this section, and make other changes, as follows:  Production Approval Holder (PAH). The holder of a PC, APIS, PMA or Technical Standard Order Authorization (TSOA) who controls the design and quality of a product or articlepart thereof.	A production approval holder may be distinct from the design approval holder (as is the case in some consortia). The modern trend in FAA regulations is to recognize this distinction. A production approval holder does not necessarily control design (although he may have obligations to coordinate with or assist the design approval holder, as in 14 C.F.R. § 21.137(m). Furthermore the new definitions of "production approval" and "design approval" in 14 C.F.R. § 21.1 distinguish production approval holders from design approval holders. We also recommend removing the word "thereof" in reference to parts, because TSOA articles are approved outside of the context of a product, and changing the word "part" to "article" for consistency

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7	3(k)	The last sentence of the definition of "Confidential Reporter" should be amended, as follows:  If the reporter requests confidentiality, then in the context of FOIA responses the FAA will do not release details relevant to the SUP report that could reveal the reporter's identity outside the agency; however the FAA may still be compelled to release such information through legal discovery or court order.	The last sentence of the definition of "Confidential Reporter" reads as if it is providing instructions to FAA employees. An advisory circular is intended to provide instructions to the industry. This definition should be amended in order to state the expectation from the perspective of the industry. We also recommend portraying the FAA's data-protection aspirations in an honest light, with the understanding that the FAA may not be able to inhibit release of such data when requested through discovery (unlike FOIA, discovery does not have a voluntarily-submitted-data-exception that permits the FAA to withhold release of such data).
8	3(o)(1) NOTE	Amend the note to read as follows:  NOTE: This includes parts shipped to an end user by a PAH's supplier who does not have direct ship authority from the PAH, and whose parts have not been approved by the FAA as "commercial parts." It is possible that such parts might be found to be airworthy through an inspection process performed in accordance with Part 43 or in cooperation with the FAA, and the subsequently installed on an aircraft after such a finding, but such a finding would not change the manufacturer's liability for production that failed to comply with the requirements of Part 21.	It is possible for a party performing an installation of a part to use data to determine that an otherwise-unapproved part is airworthy and to install that part on a type certificated product. Such a part would not be an approved part under section 3(b)(10) because it was not produced by the installer. Nonetheless, if test and/or analysis shows that the part returns the product to a condition at least equal to original or properly altered condition then the installation may be legitimate.  In such a case, it is important to explain that the subsequent finding of airworthiness and legitimate installation does not change the fact that the manufacturer may have violated the production approval requirements of Part 21.  An example of this may be found in the case where a part may be produced without production authority, but may nonetheless be identified as airworthy through analysis by the installer. It is highly possible that the new definition of commercial parts, in conjunction with the new language of 21.9, may make it illegal for some manufacturers of simple parts that are produced for a wide variety of industries (and used on aircraft) to produce without PMA. If those manufacturers continue to produce those parts, and air carriers continue to purchase

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			the parts, then as long as the air carrier can validate the airworthiness of the part (per 43.13(b)) it may be permissible to install (so the air carrier does not commit a violation by installing a safe part), but this does not change the fact that the manufacturer may be violating the regulations by producing without a PMA.	
			Another example lies in the case where a part may have been produced for non-aviation purposes, but it is identified as being suitable for installation on an aircraft because it would return the product to a condition at least equal to original or properly altered condition. This occurs from time to time in the general aviation realm, especially where the original manufacturer has gone out of business, is no longer supporting the product, or is no longer producing the parts. Once again, the installer's ability to install such a part following assurance of compliance with 43.13 is different from the manufacturer's potential liability for	
9	6(a)(2)(a)	Amend the section by adding a sentence to the end of the section. The new added sentence will read as follows:	compliance with the standards of Part 21.  The introductory paragraph explains that Part 21 provides the procedural requirements for approval of certain	
		Aircraft articles manufactured under production approval may be eligible for export airworthiness authorization in accordance with Part 21 subpart L, and for domestic airworthiness authorization in accordance with Order 8130.21.	materials, parts, processes and appliances. This paragraph explains that aircraft are eligible for standard airworthiness certificates, but it fails to explain that articles are also eligible for their own form of documentation. This proposed text remedies that failure and establishes parallelism.	
10	6(a)(2)(a) NOTE	Amend the note to read as follows:  Note: Part 21 requires each PAH to establishing and maintaining a quality system control (QC) or fabrication inspection system (depending on the type of production approval authorized), which ensures that each part presented for approval conforms to its approved design and is in a condition for safe operation.	This change removes outdated references to quality control and fabrication inspection systems. The new regulatory system directs all production approval holders (uniformly) to comply with 14 C.F.R. § 21.137. This new section is entitled "quality system," unlike prior systems which made reference to quality control.  The change also corrects grammar issues.	

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NEW 6(a)(3)(c)	Add the following new section:  (c) Installation of an approved part onto a type certificated product is a maintenance/alteration activity that is subject to the requirements of Part 43.	The two paragraphs immediately before this one explain the maintenance performance standards found in 14 C.F.R. § 43.13; however these paragraphs do not explain their pertinence to approved parts. This new section closes the loop on this subsection by explaining why the reference to Part 43 is relevant to this discussion.
6(a)(4)	Amend this section to read as follows:  (4) Part 45 prescribes the requirements for identification of aircraft, aircraft engines, and propellers manufactured under the terms of a type of PC, identification of certain replacement and modification parts produced for installation on TC's products under PMA or TSOA, and nationality and registration marking of U.Sregistered aircraft. Part markings may be components of the approved design and therefore mismarked parts may be unapproved parts when they are not in conformance with their FAA-approved design.	The changed text clarifies the scope of Part 45 by adding reference to PMA and TSOA markings, and also clarifies the reason that part 45 is relevant to this discussion by explaining that part markings are design components and therefore mismarked parts may represent parts that fail to meet their design criteria.
6(a)(5)	(5) Part 91 subpart E refers to maintenance, preventative maintenance, and alterations. This section includes the owner/operator's responsibilities to maintain the aircraft in an airworthy condition, to have it maintained and inspected in accordance with part 43, and to ensure record entries are made approving the aircraft for return to service. A part installed, not meeting the approval requirements of part 21, invalidates the airworthiness certificate, as this is one of the conditions necessary to keep the certificate in effect. Aircraft without an effective airworthiness certificate are therefore considered to be unairworthy. By using approved parts, the installer typically has indicia of airworthiness that permit the installer to make findings of compliance to the performance standards found in Part 43 of the FAA's regulations. Under 14 C.F.R. § 91.417, the operator is required to retain certain records associated with the installation of parts and other	It is not accurate to say that "A part installed, not meeting the approval requirements of part 21, invalidates the airworthiness certificate." This statement implies that all parts must meet the approval requirements of Part 21. This statement is contrary to the Part 21 regulations, which explicitly permit parts manufactured in accordance with certain exceptions to be made without FAA approval, and 14 C.F.R. § 43.13, which establishes the standard that an installed part must return the product to a condition at least equal to original or properly altered condition. You can see a discussion of the three ways to identify a part as airworthy in AC 20-62E section 6(c) (explaining that the installer should establish (1) that the part was manufactured under a production approval pursuant to part 21, (2) that an originally acceptable part has been maintained in accordance with part 43, or (3) that the part is otherwise acceptable for installation (e.g., has been found to conform to data approved by the FAA).
	NEW 6(a)(3)(c)	NEW 6(a)(3)(c)   Add the following new section:     (c) Installation of an approved part onto a type certificated product is a maintenance/alteration activity that is subject to the requirements of Part 43.     (d) Part 45 prescribes the requirements for identification of aircraft, aircraft engines, and propellers manufactured under the terms of a type of PC, identification of certain replacement and modification parts produced for installation on TC's productsunder PMA or TSOA, and nationality and registration marking of U.Sregistered aircraft. Part markings may be components of the approved design and therefore mismarked parts may be unapproved parts when they are not in conformance with their FAA-approved design.     (5) Part 91 subpart E refers to maintenance, preventative maintenance, and alterations. This section includes the owner/operator's responsibilities to maintain the aircraft in an airworthy condition, to have it maintained and inspected in accordance with part 43, and to ensure record entries are made approving the aircraft for return to service. A part installed, not meeting the approval requirements of part 21, invalidates the airworthiness certificate are therefore considered to be unairworthy. By using approved parts, the installer typically has indicia of airworthiness that permit the installer to make findings of compliance to the performance standards found in Part 43 of the FAA's regulations. Under 14 C.F.R. § 91.417, the operator is required to retain certain records associated with

Explanation
requirements of Part 21, and the various exceptions to those approval requirements, is the reason that the "A" revision of AC 21-29 described the approved parts definition as a "colloquial definition." It was colloquial because it did not meet the legal connotations of the word "approved" as found in the regulations. It was nonetheless valuable because it provided a list of parts generally considered to be acceptable for installation because there was a basis for the installer to make a finding that met the installer's obligations under Part 43.  Application of such a legal standard (requiring installation of only approved parts) could ground a substantial portion of the fleet, because there are a substantial number of parts that are considered "approved" under the colloquial definition of this advisory circular but that do not meet the legal definition of approval found in the approval requirements of part 21.  Furthermore, there are a substantial number of parts currently installed on aircraft that are considered "commercial" in nature because they were produced without the specific intent that they be installed on aircraft (note that this is different from the new commercial parts definition). The installation of these parts does not invalidate the airworthiness certificate, so long as the installation returned the product to a condition at least equal to original or properly altered condition.  In the general aviation community, it is not uncommon to see aircraft for which the manufacturer has gone out of business continue to fly. They are able to fly because the installer examines parts that may not have been originally produced for the aircraft, and makes a finding that they meet the requirements of the original FAA-approved design (return the aircraft to a condition at least equal to original or

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			the law (only approved parts can be installed) then many older types would have to be grounded for lack of FAA-approved parts.
			There is no obligation in Part 91 to install an "approved part." Part 91 requires inspection, placarding of certain issues, correction of certain issues, retention of the maintenance records, and other details; but the actual legal standard that applies to the installation of a part is that it must return the product to a condition at least equal to original or properly altered condition. 14 C.F.R. § 43.13(b).
			Because this clause misstates the regulatory requirements, we request that it be changed as recommended.
14	All	Throughout the Advisory Circular, change the phrase "an SUP" to "a SUP."	The acronym SUP starts with a consonant ("S"). The fully-spelled-out term "Suspected Unapproved Part" also starts with a consonant ("S"). Therefore the term "SUP" should be preceded by an "a" and not an "an."
15	All	Throughout the Advisory Circular, identify where the term "part" should be updated to "article."	The term "article" has been defined in the regulations and should now be used in those locations where it is appropriate.

# Conclusion

ASA supports FAA efforts to provide reasonable guidance on the identification of unapproved aircraft parts. We feel that these comments will help to ensure that the guidance remains consistent with new FAA regulations as well as other existing FAA policy documents.

We appreciate your consideration of these comments.

Respectfully Submitted,

Jason Dickstein General Counsel

**Aviation Suppliers Association**