

European Aviation Safety Agency CRD to NPA 2012-03 and 2013-01 (C)

This document is presented in support of ongoing changes proposed but not implemented in respect of supplier approval systems within the 145 and Part M Subpart F organisations

Airbus Comment: - The NPA 2012-03 refers to the ICAO Airworthiness Manual (Doc. 9760), Volume II, and the FAA AC 00-56.

Not all recommendations of the ICAO Doc. 9760, Vol. II, Chapter 9 have been taken into account.

Rationale for the comment:

There is a concern about the efficiency of measures intended for mitigation of the risk of supplying suspected unapproved parts or counterfeit parts.

The NPA 2012-03, paragraph A.IV. 'Content of the draft Opinion/Decision', subparagraph

11 refers to the ICAO Airworthiness Manual (Doc 9760) Volume II, Part B, Chapter 9, paragraph 9.7 for the influence that suppliers have over the control of unapproved parts and the importance of "purchasing only from those suppliers having a known satisfactory record".

However, it has not been possible to identify an explicit requirement in European regulations corresponding to the recommendations of paragraph 9.6, and in particular sub-paragraphs 9.6.1 and 9.6.5:

"Systems used by end users to report to Type Certificate holders and regulatory agencies are intended to provide widespread warning of the detection of unapproved parts so that operators of similar equipment can be made aware as soon as possible. In view of the likely random appearance of unapproved parts, access to a reporting system must be easy and available at all reasonable times. It follows that publicity for the reporting system (and the programmes generally) should be widespread."

"A relatively simple database, preferably computer driven, will be required to maintain a record and allow easy processing of reports of suspected unapproved parts. The database should be capable of interrogation such that any common thread within the reports received is readily identified by keyword access. The database itself can be a dedicated system or part of a much larger

Airbus recommends that there should be a control of access to sensitive data (particularly for critical components).

EASA response Noted.

Part-145 contains requirements for occurrence reporting in 145.A.60(a); this includes reporting on products, parts, appliances and materials of unknown or suspect origin (see AMC 20-8). Currently, maintenance organisations have to report this condition to their competent authority and to the TC holder.

Authors note – Consider how superior is the FAA system due to a single point of control and the web presentation of status – how it is able to react how does AMC 20-8 compare with the FAA Suspect Parts program – currently it does not.

Eventually, in some cases this information is also reported to the Agency via IORS and the Agency issues an SIB to inform all affected stakeholders and competent authorities.

This process will improve with the adoption of the amendments proposed in NPA 2013-01 and the introduction of 145.B.13(b) 'Information to the Agency':
(b) The competent authority shall provide the Agency with safety significant information stemming from the occurrence reports it has received pursuant to 145.A.60.

Authors note – NPA 2013-01 is stalled and is unlikely to be active before 2016 - 2017 note the increased exposure !

The information related to SUP would fall under the category of significant safety information to be reported to the Agency, this means that all reports affecting SUP notified to the competent authorities will be available to the Agency which in turn will produce an SIB to inform stakeholders and NAAs.

It is considered that this process would address the recommendations of the ICAO Airworthiness Manual (Doc 9760) Volume II, Part B, Chapter 9, paragraph 9.6.

Authors note - This is now years away EASA should consider a direct system to manage suspect part reporting exactly as exists with the FAA.

Comment

Part-145 and Part-21 approval certificates grant organisations certain privileges (i.e. to perform maintenance, produce parts) and therefore these organisations are audited against the requirements linked to these privileges.

Part-145 and Part-21 organisations may also supply/sell parts to other Part-145 organisations, in this case they become suppliers.

The majority of the elements of a supplier quality system which are listed in GM3 145.A.42(b)(1) are applicable to any Part-145 organisation. But there are a few elements, such as procedures for adequate packing and shipping, procedures for batch splitting, etc., which are only applicable when the Part-145 organisation is also a supplier.

Paragraph No: 19 of the Explanatory Note and point 145.A.42 (a)

Comment: The Explanatory Note says:

“19. The working group agreed that the proposal should tackle the need to mitigate the risks associated with the use of suppliers of components.

As a result the course of action agreed by the working group consisted of, firstly, an amendment to 145.A.42 to add a new paragraph

(a) to require organisations to implement procedures to ensure that components and material received from suppliers are in satisfactory condition and meet the applicable requirements.”

But this is not what the proposed amendment actually states, it says:

“(a) The organisation shall establish procedures for the acceptance of components and material.”

Justification: This is an inadequate basis for the proposed AMC and GMC. The rule must specify the purpose of the required procedures which is currently only implied.

Proposed Text: “(a) The organisation shall establish procedures for the acceptance of components and material **to ensure that components and material received from suppliers are in satisfactory condition and meet the applicable requirements.**”

EASA response Accepted

Text amended. The commentator rightly points out that the objective is to establish procedures for the acceptance of serviceable components and material to be used during maintenance.

Part-145 organisations may also receive unserviceable components to be maintained or unsalvageable components to be stored. But the acceptance of these components is not subject to the above requirements.

Paragraph: **IV. Draft Decision AMC and GM to Part-145**

Proposed amendment

*20. Secondly **a new AMC 145.A.42 (a) is added** to describe the elements that may be contained in the procedure required by 145.A.42 (a). These elements are:*

a. Incoming inspection of the components and material received from suppliers.

The inspection should consist of a physical inspection to detect obvious damage and a verification that the accompanying documentation and data complies with the requirements of 145.A.45 (b).

b. Supplier evaluation. This does not necessarily mean an on-site audit. Other means of control including desk-top evaluation may be adequate provided the approval holder can justify the use of the means of control selected.

IV. Draft Decision AMC and GM to Part-145
AMC 145.A.42 (a) Acceptance of components

The procedures for acceptance of components should have the objective of ensuring that the supplied components and material are in satisfactory condition and meet the organisation's requirements. These procedures may be based upon:

1) incoming inspections which include:

- physical inspection of components and/or material;*
- review of accompanying documentation and data, which should be acceptable in accordance with 145.A.42(e).*

2) supplier evaluation and control.

Clarification is needed in both sections as to whether both incoming inspections AND supplier evaluation are necessary, or whether one OR the other is necessary. The fact that the text states, "*These procedures **may** be based upon: ...*" does not clearly delineate whether either or both actions **must** be used as the basis for acceptance.

In light of this, we suggest inserting either the word "and" or the word "or" between paragraphs a. and b. on page 7, and between 1) and 2) on page 17, as appropriate

Further, if both actions are necessary, then we suggest changing the word "may" to "**must**" in the lead-in sentence.

JUSTIFICATION: Clarification is needed as to which actions are to be used as the basis for acceptance of a component.

response Accepted - Word 'and' added.

The proposal requires that Part-145 organisations establish procedures for the acceptance of components. AMC 145.A.42(b)(1) proposes a means to comply with this requirement based on incoming inspection and supplier evaluation.

Organisations may have different procedures for acceptance of components depending on different factors such as the type of component (e.g. raw material

vs communications equipment), type of supplier (e.g. whether or not the supplier is also the OEM), specific cases (e.g. the material is ordered on routine provisioning or it is an AOG case), etc.

Comment: DGAC recommend considering in a near future the possibility to regulate suppliers. It would be more efficient to address them once by their authority rather than being audited by each of the customers, under those customers Part 145 / M agreements. In the rationale presented by EASA, if they do not want to answer the EU market and get such an agreement, they will not send answers anymore to the audits/questionnaires of each of their EU customers.

Therefore, the solution retained and proposed in this NPA just put an administrative burden on the EU maintenance organisation, which shall take anyway responsibility of the parts it procures from those non-EU suppliers.

response Not accepted

This proposal establishes a requirement to control the acceptance of components. In order to make this requirement scalable to the needs of different maintenance organisations, the proposal includes means of compliance in which evaluation of suppliers is one tool to support control of acceptance of components.

Direct regulation of suppliers could undermine the working group's efforts to make this proposal scalable to the specific needs of different maintenance organisations, including smaller organisations. In addition, the working group has found that the majority of component suppliers are from the United States.

Direct regulation of an industry where a necessary majority is situated outside of the EU would inject costs into the safety oversight mechanism that are unnecessary, in that they do not provide any additional safety benefit beyond that already achieved by the proposed mechanism.

Airbus Comment - Regulatory Impact Assessment, sub-paragraph 2.2.

Proposal: Airbus proposes to change the language of sub-para 2.2 from:

"[...]. The worst foreseeable situation would be that the failure of the installed non-conforming or un-approved parts or counterfeit parts could have catastrophic consequences; however, this occurrence is considered **improbable**. To**remote** !.
[...]"

Rationale for the Proposal:

According to the definitions given in the EASA TE.RMP.00037-003 (EASA Template, the term 'remote' includes the notion of past occurrence (i.e. possible to occur, has occurred rarely) while the term 'improbable' does not (i.e. not anticipated to occur).

The installation on aircraft of some pins and sleeves that were of an inferior quality and that did not satisfy specified values for hardness and tensile strength was one cause of the accident of the Partnair Convair CV-340/580, during the flight 394 on 08-Sep-1989 (ref. paragraphs 1.16.3 and 3.2 of the accident report made available at the following worldwide web location: <http://www.aibn.no/aviation/reports/1993-02-eng>).

Airbus would conclude that failure of installed non-conforming or unapproved parts or counterfeit parts has occurred, and therefore probability occurrence category 'remote' is more suitable than 'improbable'.

Note - Reproduction of subject definitions:

Remote: Unlikely, but possible to occur (has occurred rarely). Those failure conditions that are unlikely to occur to each aircraft within a category during its total life but that may occur several times when considering a specific type of operation.

Improbable: Very unlikely to occur. Those failure conditions not anticipated to occur to each aircraft during its total life but which may occur a few times when considering the total operational life of all aircraft within a category.
response Not accepted

B. Draft Opinion Part-M - M.A.501 - Installation

M.A.501 Installation

There is no indication of why the words "on an aircraft" are to be deleted and it is difficult to see what is being achieved