

NPA 20-4
GAI-20 and the reorganisation of AMJ's in JAR-25 and JAR-E
Comment Response Document

General

NPA 20-4 has been published for comments on 27 March 1998. An Erratum on NPA 20-4 was circulated for comments on 2 April 1998 on Erratum 20X3 concerning Airworthiness Approval and Operational Criteria for the use of the Navstar Global Positioning System. The comments received expressed a general support for the introduction of a new single compendium for all acceptable means of compliance and interpretative and explanatory material of a multidisciplinary character. Also the use of the acronym GAI-20 was in general supported.

Comments were received on both the introduction of the GAI-20 concept and on the technical content of the NPA itself. These are outlined below.

It should be noted that this NPA was circulated at the time that a draft JAR-11 was not finalised yet. Now that a draft JAR-11 is available, the NPA 20-4 as a concept need to be reviewed on consistency with the latter JAR. Where necessary the JAR-11 will be adapted to proper reflect the existence of the GAI-20 document. On the other hand the GAI-20 document will be revised, if needed, to achieve consistency with the JAR-11 system.

A) General comments with regard to the concept and general structure of GAI-20 document

1. The title/the acronym: GAI-20

Comment:

DGAC-F: The name GAI may not look ideal and a name comprising the letter <<J>> which is the trademark of the JAA regulations may seem preferable, but I easily admit that this is a matter essentially subjective, especially for our French ears for which GAI has a fancy meaning.

ESG: The "name" GAI 20 is questionable because it does not reflect the title: should it be CAMCIEM? In any case, GAM 20 would be better: closer to the title, easier to pronounce and to be confused with "gay".

S-LFV: Also we find that the title of the new document - GAI-20 General Acceptable Means of Compliance/Interpretative & Explanatory Material - is comprehensive and clearly explains the status of the document. Therefore we are happy to support the publishing of GAI-20.

Reply:

The title/acronym will be retained. As explained in para 3.2. of the proposal, much consideration has been given to the title of this document. In particular it was stressed that any reference to and confusion with the notion advisory material (joint) should be avoided. In addition draft JAR 11 introduces the single acronym ACJ (Advisory Material Joint), meaning an accompanying text providing guidance to help implement requirements, containing explanations, interpretations and/or acceptable means of compliance. Regardless the other meanings the acronym may have in common language, it is felt that the acronym as chosen clearly reflects the intent and the purpose of the document.

2. The management and responsibility for the development and issuance of GAI-20

Comment:

DGAC-F: Secondly, our representatives in the different JAA working groups are concerned that the general nature of such a text, or collection of texts, may create some confusion with regard to whom is in charge of their management. In order to solve that problem, we would suggest that a clear assignment is made in a written form to the chairperson of the working group in charge of each text so as to avoid any confusion....Strict management by the JAA Regulation Division is therefore necessary.

ESG: It is of prime importance that JAA use a very controlled procedure for modifying JARs.... The ESG has a serious concern about the control of the GAI 20 document. We would not want changes to engine related documents be made without involvement of the engine specialists. There are plenty of examples of such behaviour in the JAA system. So, who is in charge of GAI 20? How will the ESG be involved?

CAA-UK: It is worth note that the proposals for this section are taken from JAA Interim Guidance Material that have never been the subject of a formal JAA NPA procedures. I believe this raises an important procedural issue and at the very least should have featured in the justification.

Reply:

GAI-20 document is part of Section 2 material and has the character of ACJ as defined in the future JAR-11. Therefore the procedure as set out in the future JAR-11 concerning the development, on consultation and with regard to the adoption and publication of ACJ will be respected. Because of the multidisciplinary character of GAI-20 documents it is indeed necessary that the Regulation Director involves the relevant Working Groups, when developing GAI-20 material. The Terms of Reference need to reflect the tasks and responsibilities of the Working Groups involved.

3. Structure GAI-20; List of (cross-) references

Comment:

LBA-Germany: As in future two documents instead of one must be consulted, we recommend to add to each requirement of the basic codes in section 1 supported by advisory material the precise reference to the new GAI-20 system, if applicable. From our point of view this will help to obtain the complete information faster.

Airbus Industrie: The text of the regulatory paragraphs (Section 1 of corresponding JARs) must continue to have references to the relevant AMC/IEM clearly written... This is essential to allow the easy introduction of comprehensive hyperlinks between the rules and the guidance material in JAR computer data bases (including the JAA CD-ROM). In order to further ease the regulatory consultation, we recommend to add at the beginning of GAI 20 a Chapter comprised of tables of regulatory cross-references between the AMC and IEM contained in the GAI 20 and the JAR paragraphs themselves. These tables would be based on the content of the Paragraph (Applicable regulations) of each AMC/IEM.

Reply:

Comment noted. In line with cross-references used between section 1 and section 2, this will also be applied to each GAI-20 document, meaning that the JARs will contain, where applicable, references to the relevant GAI-20 document. The need for a cross-reference table addressing all (future) GAI-20 documents will be considered, based on experience, at a later stage.

B. Comments with regard to the (technical) content of the GAI-20 document

CAA-UK has identified a number of text-parts in the NPA which shows "an unjustified difference from the existing published text".

Reply:

Comment noted and agreed. The actual texts in AGMs and JARs will be incorporated in the GAI-20 document without any changes. The present NPA text will therefore be revised accordingly.

DGAC-F proposes

- to delete in paragraph 2 entitled "Glossary of acronyms" line 8: "ACJ (Advisory Material Joint)";
- to include "AMJ 20x2 - Certification of essential APU equipped with electronic controls" for reasons that this AMJ is similar to AMJ 20x1 on engines, propellers and aircraft;
- to reserve a paragraph to be reserved for the ACJ on certification of propeller equipped with electronic controls, similar to ETOPS information leaflet, IL no. 20 and RVSM information leaflet, IL no. 23;
- to include ACJ E-515 in GAI-20, for reason that the methodology described in ACJ E-515 is applicable to APU;
- to have a general format for all AMC/IEM included in GAI-20;

Reply:

First three proposals noted and agreed. Text to be revised accordingly. With regard to ACJ E-515. This proposal will be considered at the next amendment of GAI-20. With regard to the proposal on a general format for all AMC/IEM. This proposal is agreed but will be taken on board for the next edition of GAI-20.

LBA-Germany informed that the NPA 20-4 refers to an old version of the table included in chapter 6.1 and submits the renewed version. In addition some editorial remarks were made.

Reply:

Comments and remarks noted. A revised table will be included and the editorial remarks will be taken on board.

ENAC (formerly RAI) proposes to make reference in para 4.5.1.to the updated version (rev. B). In addition ENAC proposes to delete the paragraph "For a stand-alone GPS installation, a dedicated course deviation indication,, may be an acceptable alternative means of compliance with Section" and to restore the paragraph "Traditional navigation equipment of the original leaflet no. 2 rev. 1 (dated 21.05.97).

Reply:

The comment with regard to 'rev.B' need referred to Engine group for further discussion. The proposal to delete the paragraph as described and to restore the paragraph referring to 'the tradition navigation equipment' is agreed.

FAA noted some minor editorial inconsistencies.

Reply:

Comments noted and agreed.

US-ALPA noted that it has yet to approve or support the concept of GPS as the only on-board NAV sensor(s) on aircraft used for passenger transport, even where redundant GPS systems are fitted. Aircraft used for passenger transport must have both redundant and independent NAV Systems.

Reply:

The US-ALPA position is noted. However the proposed 20X3 refers to the use of GPS (airworthiness and operational criteria). 20X3 refers only to GPS stand-alone except in the case of oceanic/remote operations.

List of Commentors

Airbus	DGAC-F	FOCA (no comments)
CAA-UK	ESG (Chairman)	LBA-Germany
CAA Monaco (no comment)	ENAC (formerly RAI)	LFV-Sweden
	FAA	US-ALPA

