

## NPA 145-10 Comment Response Document

No.	Commentor	NPA 145-10 Paragraph	Comment	ORCG decision	Proposed New Text
111	JAA Maintenance HF WG	145.60	<p>The JAA Maintenance Human Factors working group is currently working on a draft NPA on JAR 145 introducing human Factors concepts. "Safety Management" is one of the important issues identified by the Working Group.</p> <p>The Working Group considers the proposed "occurrence reporting" requirement, with a few changes (see other attached NPA comment forms) fulfils part of the WG requirements for a safety management system.</p>	Noted	
002	CAA-Denmark	145.60	No comment	Noted	
33.3	ECOGAS	145.60	No Comment	Noted	
6.3	Dept of Civil Aviation, Malta	145.60	No Comment	Noted	
110.3	FOCA Switzerland	145.60	No Comment	Noted	
116.3	LFV Sweden	145.60	No Comment	Noted	
204.3	EUROCONTROL SRU	145.60	We support that ultimately all aviation bodies interested in Aviation Safety, at international but at least European level, use the same terms and associated taxonomy for reporting occurrences and capturing results of the investigation of accidents, incidents and other types of safety related occurrences in aviation. (Eg ICAO, Accident Investigation Offices, safety Regulatory bodies, including JAA and EUROCONTROL SRC, manufacturers, operators, ATM service providers).	Noted	
4	Aviall	145.60	'JAA Approved' organisations are called out in 145-10, How about 'Accepted' organisations? The JAA is very careful to distinguish between the two in other areas. It could be misunderstood that this will not be required by U.S. Accepted Repair Stations.	The requirement is included in Chapter III section 3.0 of the BASA-MIP which requires the organisation to report to the JAA NAA plus the aircraft design organisation and the customer.	
46	Dassault Aviation	145.60 Title & (a)	<p>The proposed modified JAR 145.60 refers to both ACJ 20xx and IEM 15.60 (a). Both the ACJ and the IEM define what are the conditions to be reported. This is confusing. It shall be clarified that the IEM determines what are unairworthy conditions preventing the release to service of the aircraft.</p> <p><i>Proposed text:</i> IEM 145.60(a) Reporting of <u>occurrences</u> and unairworthy conditions - <u>Unairworthy conditions</u> In respect of the JAR 145 organisation, <u>an unairworthy</u> conditions normally limited to:.....082</p>	<p>Partially Accepted see also 082 and 112.</p> <p>Agreed the title should be changed</p> <p>An IEM will still be necessary for JAR145.60</p>	JAR 145.60 Occurrence reporting
82	Martinair Holland	145.60 Title	<p>JAR 145.60 The title and the contents of this paragraph are inconsistent. The title refers to unairworthy conditions, the contents refers to conditions that could seriously hazard the aircraft.</p> <p>These two concepts are not the same, as:</p> <ul style="list-style-type: none"> <li>An unairworthy aircraft may be perfectly safe; and an airworthy aircraft may be unsafe.</li> </ul>	Title changed to Occurrence reporting	
112	JAA Maintenance HF WG	145.60	Change paragraph title to read: "Occurrence reporting"		

**NPA 145-10 Comment Response Document**

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		Title	<p>Note: this change would also need to be made in respect of IEM 145.60(a).</p> <p>The intention, as is made clear in NPA 20-6 ACJ 20-xx is to report ‘an incident, fault, malfunction, deviation or technical defect that endangers, or could endanger, the safe operation of the aircraft or its occupants or which could lead to an unsafe condition in the aircraft or product’</p> <p>It is considered that the use of the term ‘unairworthy’ gives the incorrect impression that only technical defects are to be reported.</p> <p>Also JAR-OPS 1.420 refers to just ‘occurrence reporting’, so there would be consistency between JAR-OPS and JAR-145 if the same terminology was used.</p>	<p>Title changed to Occurrence reporting</p> <p>Agreed</p>	
45.1a	Dassault Aviation	145.60 Title	<p>The title is misleading. Is it <i>occurrence</i> or <i>unairworthy conditions reporting</i>? This is very important as occurrence reporting is to inform the Authority while unairworthy conditions is to prevent the maintenance organisation to release to service the aircraft or aircraft component, Obviously the intent is to cover both case.</p> <p>The title should ensure consistency with FAR 145.63 “Reports of defects and unairworthy conditions”</p> <p>‘JAR 145.60 reporting of <u>occurrences and</u> unairworthy conditions (See IEM 145.60(a), ACJ 20.xx)’</p>	<p>Partially agreed but for different reasons.</p> <p>Title changed to Occurrence Reporting</p> <p>FAR 145.63 deals only with technical defects rather than the broader spectrun covered by this NPA , the associated NPA to JAR21 and the proposed ACJ</p>	
18	AIA	145.60	<p>Under FAR 145.63(c), the holder of a repair station certificate that is also the holder of a Type Certificate need not report a failure, malfunction or defect under this section if the failure, malfunction or defect has been reported by it under Sec 21.3.</p> <p>The same exclusion should apply for JAR-145 approved maintenance organisations that are also Type Certificate holders.</p>	<p>Not accepted. As per 112 above, this NPA relates to JAR 145 organisations, not all the other activities.</p>	
136.1	DGAC France	145.60(a)	<p>The use of notes in a rule should be forbidden according to draft JAR-11. Especially when their unique purpose is to define a wording used in the rule, it is better to incorporate the appropriate wording directly into the rule.</p> <p>The wording used here was not consistent with the wording used in JAR-21 (seriously hazard the aircraft or unairworthy conditions’ instead of ‘adverse effects on the continued airworthiness of the product or in an unsafe condition’.</p> <p>The reference to a ‘JAA Full Member Authority’ is not</p>	<p>Agreed. The information in the "Note" will be put into IEM 145.60(a) and (c) to clarify the amended text.</p> <p><i>The use of the term "adverse effect" is too broad.</i></p> <p>Not accepted</p>	<p><u>Proposal</u> JAR 145.60 <u>Occurrence</u> reporting (See IEM 145.60, <u>ACJ 20.xx</u>)</p> <p>The JAR–145 approved maintenance organisation must report to its' JAA full member Authority and the organisation responsible for the design of the aircraft / aircraft component any condition of the aircraft / aircraft component identified by the JAR–145 approved maintenance organisation that has resulted or may result in an unsafe condition that could seriously hazard the aircraft.</p>

**NPA 145-10 Comment Response Document**

No.	Commentor	NPA 145-10 Paragraph	Comment	ORCG decision	Proposed New Text
			<p>understood. It is changed by ‘Authority having granted the JAR-145 organisation approval. The wording which was proposed was not consistent with the proposed wording in JAR-21</p> <p>Proposed text:</p> <p>(Complete rewriting)            JAR 145.60 Occurrence reporting (See IEM 145.60, ACJ 20.xx)            (a) (1) The JAR-145 approved maintenance organisation must also report to the Authority having granted the JAR-145 organisation approval any data of which he is aware, collected under JAR 145(b) or known by other means which has resulted or may result in an unsafe condition for the product, part or appliance. (See ACJ 20.xx)            (2) The JAR-145 approved maintenance organisation must report to the holder of the Type Certificate, Supplemental Order (JTSO) Authorisation, as appropriate, any situation potentially unsafe which is also reported under JAR 145.60 (a)(1).            (3) When the JAR-145 approved maintenance organisation is contracted by an operator to carry out maintenance, it must also report to this operator any such condition affecting operator’s aircraft or aircraft component.</p>	<p>It is agreed that the text needs amendment for clarity. The amended text proposal in the next column incorporates the intent of the proposal.</p>	<p>(b) The JAR-145 approved maintenance organisation shall establish an internal occurrence reporting system acceptable to the JAA full member Authority to enable the collection and evaluation of such reports including the assessment and extraction of those occurrences to be reported under sub para (a) above. The procedure shall identify adverse trends, corrective actions taken to address deficiencies and include evaluation of all known relevant information relating to such occurrences and a method to circulate the information as necessary.</p> <p>(c) Reports must be made in a manner acceptable to the JAA full member Authority and contain all pertinent information about the condition and evaluation results known to the JAR–145 approved maintenance organisation.</p> <p>(d) Where the JAR–145 approved maintenance organisation is contracted by an operator to carry out maintenance, the JAR–145 approved maintenance organisation must also report to the operator any such condition affecting the operator’s aircraft or aircraft component.</p> <p>In the case of an aircraft, where the state of registration is different to that of the NAA that issued the appropriate JAR 145 or JAR Ops approvals, then the National Aviation Authority of the state of registry should also be informed.</p> <p>(e) Reports must be made as soon as practicable but in any case within 72 hours of the JAR–145 approved maintenance organisation identifying the unsafe condition to which the report relates.</p>
45.2	Dassault Aviation	145.60(a)	<p>Scheme should be replaced by system.</p> <p>(a)...occurrence reporting <u>system</u>.</p>	<p>Not relevant due to amended text.</p>	
79.1	Airbus Industrie	145.60(a)	<p><del>145.60(a)</del>: For consistency, it is suggested to replace “that could seriously hazard the aircraft” by the same wording as in 23.3: “which has resulted in or may result in an unsafe condition”.</p>	<p>Partially agreed and incorporated in new proposed text.</p>	<p>The amended text is shown in 136.1 above</p>
13.1	Rolls Royce plc	145.60(a)	<p>The use of the phrase ‘...the aircraft or aircraft component...’ could be interpreted to exclude engines, propellers etc. To avoid confusion, specific reference should, at the very least, be made to those products requiring their own Type Certificate. The proposed ‘Note@ goes some way to addressing this but changes to the rule would provide the required clarity.</p> <p>Proposed text:</p>	<p>Not accepted. The definition of Aircraft component in JAR145 is adequate to prevent this.</p>	

**NPA 145-10 Comment Response Document**

No.	Commentor	NPA 145-10 Paragraph	Comment	ORCG decision	Proposed New Text
			Wherever the phrase ‘...aircraft or aircraft component...’ is used, replace with ‘...the aircraft, engine, propeller or related component...’.		
159	CAA Netherlands	145.60(a)	Delete the “NOTE” Transfer to section 2.	Agreed. Transferred to IEM 145.60(a)	
42.2	Dassault Aviation	145.60(a) Note	<p>The definition of ‘occurrence’ is not given in JAR 1. The text before change was speaking of ‘occurrences that may involve failure, malfunctions or defects’. The definition of ‘occurrence’ was self contained. The new text speaks of ‘faults, malfunctions, defects or other occurrences’. No indication is given about what is an ‘other occurrence’ for this reason the definition given in the explanatory note to the NPA should be added to the text of the requirement.</p> <p><i>Proposed text to be add to the end of JAR 145.60(a):</i></p> <p><u>Note: An occurrence in the sense used in this requirement is an unwanted event which happens in or to an aircraft or aircraft component. This is the all encompassing term including accidents, incidents, defects, failures, malfunctions etc.</u></p>	No "Notes". For JAR 145 current IEM plus an additional paragraph should be sufficient.	<p>Current IEM 145. 60(a) becomes ; IEM 145.60(a)</p> <ol style="list-style-type: none"> <li>1. "In respect of the....."</li> </ol> <p>Add an extra note to the paragraph-</p> <p>"Note (3) Further information is contained in ACJ 20.XX "</p> <ol style="list-style-type: none"> <li>2. The organisation responsible for the design is normally the Type Certificate Holder of the aircraft, engine or propeller and/ or if known the Supplemental Type Certificate (STC) Holder, the Joint Technical Standard Order (JTSO) Authorisation Holder or the Joint Parts Approval (JPA) Holder as appropriate.</li> </ol>
45.3	Dassault Aviation	145.60(a) & Note	<p>As comment 42.2. The definition of occurrence shall be included.</p> <p>Proposed text:</p> <p>Note 1: The organisation responsible....</p> <p>Note 2: <u>An occurrence in the sense used in this requirement is an unwanted event which happens in or to an aircraft or aircraft component or the consequences of such an event which are in or on an aircraft, or aircraft component. This is the all encompassing term including accidents, incidents, defects, failures, malfunctions etc.</u></p>	See 42.2 above	See above
32	LBA	145.60(a)	<p>The LBA would like to recommend a return to a former version (e.g. Change 1) in order to lay down again the Production organisation as the recipient of an occurrence report.</p> <p>The previous draft provided that a JAR-145 approved maintenance organisation had to report among other things to the responsible design organisation. Thereby the receipt of the message by the competent receiver was ensured. Instead of this it was fixed by the version of Change 2 that only the type certificate holder had to be addressed. A great disadvantage may emerge by this regulation because the</p>	Change 1 does not address the subject as presented. The TC or STC holder is the primary channel of communication.	

**NPA 145-10 Comment Response Document**

No.	Commentor	NPA 145-10 Paragraph	Comment	ORCG decision	Proposed New Text
			<p>organisation responsible for the design is usually unknown by the JAR-145 approved maintenance organisation. As a result of this the above mentioned suggestion is offered. If the Production Organisation is not identical with the Design Organisation this procedure might cause some short delay, but on the other hand it is ensured that the responsible receiver will get the report actually. An advantage of this proposed procedure is the use of an already existing way of communication.</p>		
157.3	RLD	145.60 a)	Change 'the Authority' or 'the JAA full member authority' to 'his JAA full member Authority'	Accepted within re-write of para (a). the term Authority is defined in ACJ 20-xx See changed text of 145.60(a)	Amended to "...its' full member....."
240	CAA-UK	145.60 (f)	<p>The reporting scheme contained in JAR 145.60 should reflect a reporting line to the NAA of the aircraft's state or registration.</p> <p>Suggested text: Para 1 Proposal. Add new item (f)</p> <p>"Where the NAA for the aircraft's state of registration is different from the NAA of the JAR -145 approved maintenance organisation making the report, copies of the occurrence report should also be copied to the NAA of the aircraft's state of registration.</p>	Agreed. Added to existing 145.60(d)	
93.3	UK Flight Safety Committee	145.60	The formal recognition that effective mandatory reporting by organisations requires an in house reporting scheme with wider reporting criteria to be operated in support is welcomed.	Noted	
79.2	Airbus Industrie	145.60 (b)	NOTE: Internal reporting is a prior condition of a possible external scheme and, in order to respect that logic, the proposed paragraph 145.60(b) should be placed before the proposed paragraph 145.60(a).	The sentiment is understood, however the "requirement" part is the reason for the paragraph and the support via the internal procedure is secondary to that.	
45.4	Dassault Aviation	145.60(b)	<p>We propose to make identical text for JAR-21.129-165 and JAR-145.60.</p> <p>'Should' is not to be used in a requirement, it has to be 'shall'.</p> <p>Proposed text:</p> <p>(b) The JAR 145 approved maintenance organisation must establish <u>and maintain a documented occurrence reporting system</u> acceptable to the JAA full member Authority to enable the collation of occurrence reports including the assessment and extraction of the reportable occurrences <u>and the actions taken</u> to address deficiencies. This system <u>shall</u></p>	<p>Accepted and incorporated into amended text proposal</p> <p>Partially accepted and incorporated into new text. Text also amended for clarification.</p>	

**NPA 145-10 Comment Response Document**

No.	Commentor	NPA 145-10 Paragraph	Comment	ORCG decision	Proposed New Text
137	DGAC France	145.60(b)	<p>include evaluation of relevant information relating to the occurrences and promulgation of such related information.</p> <p>Some commas were missing making the text confusing ‘deficiencies in the interest of safety’ for example.</p> <p>The wording was not consistent with the one used in JAR-21.129 (f) in NPA 21-24. A wording almost common to Jar 21 and JAR 145 is here proposed. The word ‘collation’ is replaced by ‘collection’ for consistency with JAR-21.3.</p> <p>Proposed text:</p> <p>(b) The JAR-145 approved maintenance organisation must establish <u>and maintain, in the interest of safety</u>, an internal occurrence reporting scheme to enable the <u>collection and assessment</u> of occurrence reports in order to identify adverse trends or to address deficiencies. This system <u>shall include</u> evaluation of known and relevant information relating to the occurrences and promulgation of such related information, <u>in particular the assessment and extraction of the occurrences to be reported under JAR 145.60(a).</u></p>	Partially accepted within the amended proposal. However the phrase "in the interest of safety" has been deleted because it is not relevant in the rule. JAR 145 is by definition "in the interest of safety".	
115	JAA Maintenance HF WG	145.60 (b)	<p>Collation of occurrence reports is not enough. The reports need investigation to determine causes and analysis to determine common problems and trends. NPA 20-6 ACJ 20xx refers to ‘occurrence reporting, collection, investigation and analysis schemes’ in para 3(a). This would benefit from inclusion in the rule, as well as the advisory material.</p> <p>Line 3. Change “collation” to “collection”, investigation and analysis”.</p>	Accepted within re-write of para (b)  accepted	
113	JAA Maintenance HF WG	145.60 (b)	<p>For some organisations, the first they will know about the requirement is when it is formally issued as a change to JAR-145. In order for an occurrence reporting, investigation and analysis system to be effective, organisations will need time to carry out appropriate preparatory work and to choose the system best suited to their needs. It is suggested that 1 year will be long enough for them to do the appropriate preparatory work and research, and to have a system in place in time for the requirement to come into place.</p> <p>Proposed text:</p> <p>Para (b) line 3. After “approved maintenance organisation must establish”, add “(by {an agreed date - 1 year from the issue of the change})”</p>	agreed  Partially agreed. The amended text will go into JAR 145.3, Effectivity	JAR 145.3 (h) Organisations must be in compliance with JAR 145.60 after [1 year from date of publication] but may choose to be in compliance before that date.
66	Airbus UK	145.60(b)	This section requires for the development of a procedure.	No. The organisation must establish an MOE procedure	

**NPA 145-10 Comment Response Document**

No.	Commentor	NPA 145-10 Paragraph	Comment	ORCG decision	Proposed New Text
			Will the authorities ensure the procedure is developed correctly and then monitor it.	which would be approved by the full member Authority.	
138	DGAC France	145.60 (c), (d) & (e)	<p>The reference to 'JAA full member Authority' is not relevant. The wording which was proposed was not consistent with the wording in JAR-21.</p> <p>The proposed (c) asked for the 'assessment results', action which would take time when the proposed (e) set a strict limit to 72 hours: this is not consistent. Furthermore, the 'assessment' is not defined: what is it supposed to be? It is the assessment by the TC holder? By the JAR-145 organisation alone?</p> <p>There was not '@unless' clause in JAR-145: there could also be cases where the 72 hour time could not be complied with.</p> <p>Proposed text:</p> <p>c) <u>The reports required under JAR 145.60 (A)(1) must be made in a form and manner acceptable to the Authority, as soon as practicable and in any case despatched not later than 72 hours after the information is known, unless exceptional circumstances prevent this. (See ACJ 20.xx)</u></p>	<p>Not accepted. For consistency, in JAR145 it is necessary to mention JAA full member Authority.</p> <p>The procedure should include a method to decide which occurrences are reportable and which are not.</p> <p>The time runs from the "identification" of the Occurrence.</p> <p>There is no need for "exceptional circumstances". As above, the time runs from the "identification" of the condition as an occurrence.</p>	<p>New IEM 145.60(c) added. IEM 145.60(c) In a manner acceptable to the JAA full member Authority means that the report may be transmitted by any method acceptable to the Authority. Each report should contain at least the following information:-</p> <ul style="list-style-type: none"> <li>i) Organisation name and approval reference</li> <li>ii) Information necessary to identify the subject aircraft and / or component.</li> <li>iii) Date and time relative to any life or overhaul limitation in terms of flying hours/cycles/landings etc. as appropriate.</li> <li>iv) Details of the condition as required by JAR145.60(b)</li> <li>v) Any other relevant information found during the evaluation or rectification of the condition.</li> </ul>
136.2	DGAC France	145.60 (d)	The proposed 145.60 (d) in the NPA is better placed in (a) which will set the requirements to report to the authority, the TC holder (or etc) and the operator in a unique paragraph. The text was editorially improved.	The intent is included in the amended text of JAR 145.60(d)	
13.2	Rolls Royce plc	145.60(d)	<p>The use of the phrase '...the aircraft or aircraft component...' could be interpreted to exclude engines, propellers etc. To avoid confusion, specific reference should, at the very least, be made to those products requiring their own Type Certificate. The proposed 'Note@ goes some way to addressing this but changes to the rule would provide the required clarity.</p> <p>Proposed text:</p> <p>Wherever the phrase '...aircraft or aircraft component...' is used, replace with '...the aircraft, engine, propeller or related component...'.</p>	The definition of Aircraft component in JAR145 is adequate to prevent this.	
250	Transport Canada	4.2	The time frame of reporting within 72 hours, based on discovery and intent to report, is similar to the Canadian requirements. However, our system does not have an equivalent of the proposed 'exceptional circumstances'	Noted	

## NPA 145-10 Comment Response Document

No.	Commentor	NPA 145-10 Paragraph	Comment	ORCG decision	Proposed New Text
			clause.		
92.3	UK Flight Safety Committee	145.60 e)	The modification of the 72 hour requirement to file a report so that the time is from the reporters' determination that a hazard or potential hazard actually existed rather than from the time of the occurrence is welcomed as a step in the direction of practicality.	Noted	
12	Rolls Royce plc	145.60 (e)	The additional flexibility introduced by the proposed JAR 21.3(B)(2) which defines the start of the 72 hours from the point of 'identification of the possible unsafe condition' and which allows for despatch of the report by the end of this period is a sensible change and is supported. However, in the interests of consistency, JAR 145.60(e) which deals with the corresponding issue for maintenance organisations should be written in the same style using the same words.	The proposed para (e) includes flexibility by using the word "identifying".	
63	Airbus UK	145.60 (e)	Believe that the text used for JAR 21.3(b)(2) in respect of 72 hours and "exceptional circumstances" should be used.	See 138 above	
45.5	Dassault Aviation	145.60 (e)	There is no justification to add the word 'unsafe' to the requirement. This may only create confusion as to the reportable conditions described in JAR 145.60(a) as conditions 'that could seriously hazard the aircraft'.  Proposed test:  (e)... identifying the <del>unsafe</del> condition to which the report relates...	Once the condition is classified as "reportable" it is by definition an "unsafe condition".	