



DEFENCE AVIATION SAFETY AUTHORITY

SUMMARY OF RESPONSES TO NPA 02/2017 – Military Type Certificate Holder Arrangements

INTRODUCTION

- General.** This Summary of Responses outlines DG-DASA's agreed policy and intended regulation changes and finalises the public consultation process in respect of this NPA. Only under extreme or unusual circumstances will DG-DASA consider views or arguments opposing the views expressed in the Summary of Responses. Any member of the public having views or arguments to support an appeal against the decisions documented in this Summary of Responses may petition DG-DASA to consider such an appeal.
- Background.** On 25 Aug 17 DASA released NPA DASA 02/2017 for comment. The period for public comment on the proposals contained in this NPA closed on 25 Sep 17.
- DG-DASA staff received responses to the NPA from five respondents either via the formal NPA response template, verbal discussion to DD DASR 21 during the DASA Roadshow held during the response period, or e-mail feedback from internal DASA staff. The quality of comments received was very high. As a consequence, some concerns with the proposed regulation changes have been identified. This Summary of Responses discusses those comments, and provides a DASA response and disposition.
- DASA would like to thank everyone who has taken the time to respond to the NPA. The final regulation changes when released will, to the greatest extent possible, reflect the content of comments received.

ANALYSIS OF COMMENTS

General

- The disposition of Comments is shown in figure 1.

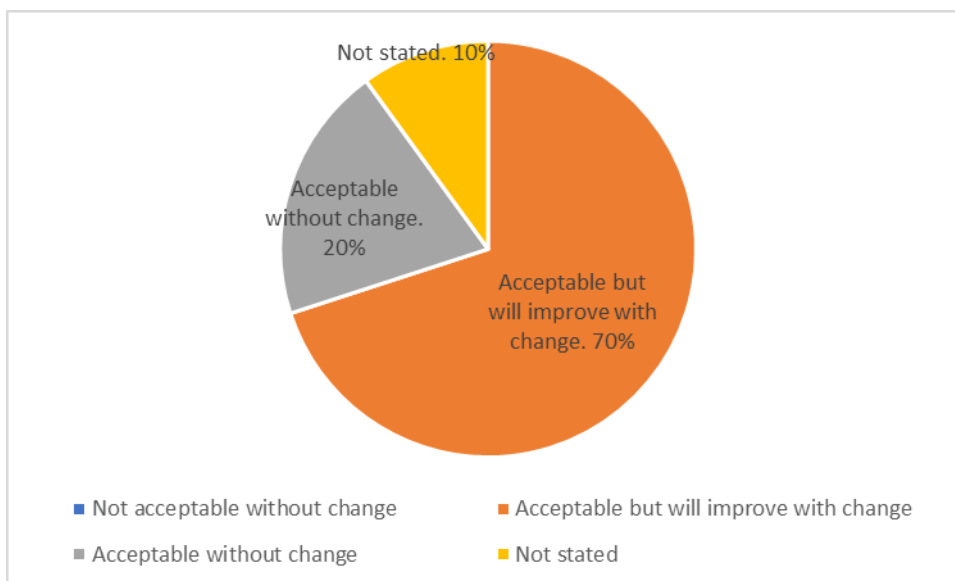


Figure 1



6. All comments received were evaluated and where appropriate, suggestions were incorporated into the 31 Sep 17 DASR release, or will be incorporated in the next DASR update. Comments of a general nature are addressed collectively in this summary of responses rather than individually. All comments, and the DASA response are included in Annex A.

DAVREG-DASA POSITION

Regulation changes

7. Key changes introduced following DASA review of the NPA responses are:
- a. AMC and GM to 21.A.44 updated to remove reference to an individual 'Holder'. Terminology now includes a 'senior Defence engineer' as part of the holder organisation.
 - b. AMC and GM to 21.A.44 amended to clarify MTC holder actions include 'risk characterisation and communication' rather than risk assessment. A placeholder has also been added to GM to 21.A.44 to highlight that DASA is continuing to develop guidance on the management / retention of technical risk by Design and MTC holder organisations.
 - c. Additional wording has been included in GM to 21.A.44 to stipulate that DASA will require any Design Organisations, selected to execute holder functions for the government holder organisation, to include compliance to the holder requirements in their MDOE.
 - d. AMC to 21.A.44 now only requires contracted design organisations to be compliant with 21.A.14(a) (was 21.A.14(a) or (b)). GM to 21.A.44 also amended to provide latitude in the case where existing support arrangements preclude achieving full 21.A.14(a) compliance (i.e C17, JSF).
 - e. Risk characterisation and communication by the MTC holder organisation in support of operator intent to operate with non-std CRE has been amended to reflect that while not an obligation per se, may still be provided by the 21J MDO supporting the MTC holder organisation.
8. Key comments that were not adopted are:
- a. The proposed inclusion within the 21.A.14(c), 21.A.112B.(c), and 21A.432.(c) regulation, for reference to 21.A.2 for design organisations contracted to execute the holder functions, will remain as that regulation wording conforms to EMAR.
 - b. Not all reference to management of technical risk by the MTC holder organisation was removed. A placeholder was however added to acknowledge ongoing DASA development on this issue.

Other issues

9. The timeframe for NPA review and comment was toward the more expeditious limits, as was the timeframe between response cut-off and update of the DASR. As such, not all comments and DASA responses were able to be incorporated in the 31 Sep 2017 release. The following changes will be made in future DASR updates:

- a. Rectify scope of MTC holder risk characterisation and communication.
- b. Improve technical risk management expectations for MTC holders.

AUTHORITY

10. The content of this Summary of Responses has been reviewed and is authorised.

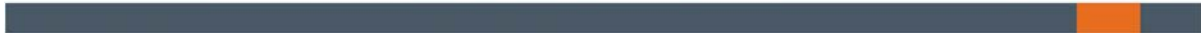
Original signed on December 2017

Director Aviation Regulation
Defence Aviation Safety Authority

Annex:

A. Response Comments and DASA Disposition

Serial	Clause	Comment	DASA Reponse
1	All	I notice you're coining the terminology (as it is proposed in 'green text') of a MTCH Organisation and a MTCH (as a person) – Everywhere else in the regulations, and indeed in all civil regulation suites a 'Holder' is an organisation. To that extent we seem to be deviating from convention by having a 'Holder Organisation' as an organisation and a 'Holder' as a person. Prior to release of DASRs, the direction and mantle was to align with global convention as much as possible – therefore shouldn't we adopt MTCH/AMTCH as an organisational descriptor, and use another acronym or title for the O5 engineer? (We could use executive/representative/steward/officer/official/delegate – though that might cause confusion with DoSA)	<p>Agreed.</p> <p>Informal feedback via other agencies (AIRCDRE Tindal included) also highlighted that formal association of the word 'Organisation' with the MTC Holder creates the impression that the MTCHO is equivalent to an approved DADR organisation (such as MDOA, CAMO, or 145 Maintenance organisation).</p> <p>While the government organisation will be issued a MTC, it does not require to be recognised as an 'approved organisation'. Instead, the related exposition (TCAE) is the mechanism through which DASA assures itself that the organisation is suitable to hold a MTC. DASA issue of the MTC to that organisation is recognition of that status.</p> <p>Once the expectation for formal organisational approval is removed, so too is the need for the O5 Engineer to be a Form 4 holder. Instead, the qualifications and experience will be only be required to be noted in the TCAE.</p> <p>Outcome: AMC and GM to 21.A.44 was updated to remove reference to an individual 'Holder'. The terminology now includes a 'senior Defence engineer' as part of the holder organisation.</p>
2	All	Replace content referring to EMAR with DASR. Ideally the reader of the Regulations would not need to refer to the European Regulations to understand the application of DASR requirements.	<p>Agree.</p> <p>Outcome: AMC and GM to 21.A.44 amended to replace references to 'EMAR' with 'DASR'.</p>
3	21.A.14(c) 21.A.112B.(c) 21A.432.(c)	This included Regulation is somewhat superfluous in that Regulation DASR 21.A.2 is applicable to "...any actions and obligations undertaken by the holder of or applicant for a certificate ... under this Section..." That is, any of these newly included Regulations were already encompassed by DASR.A.2. The new inclusion only repeats what	<p>Noted.</p> <p>This wording has been adopted directly from the EMAR Ed1.2 update. Unless compelling reasons exist, DASR regulation will remain aligned with EMAR. Hence, in this case, the wording will remain as is.</p>



		was already enabled by the A.2 Regulation.	Outcome: No change
4	AMC for: 21.A.14(c) 21.A.112B.(c) 21A.432.(c)	<p>Depending on the consideration to Serial 3, this AMC would need to be retained within the (a) part of the associated Regulation.</p> <p>The included AMC provides necessary clarification for the Australian government organisations. The AMC also makes it clear that the retention of the AMTCH, MSTCH and Major Repair Design obligations are intended to be held by Australian government organisations.</p>	<p>Outcome: No change</p> <p>Noted.</p> <p>This AMC, and the placement against the (c) paragraph has been adopted from the EMAR Ed1.2 update. Unless compelling reasons exist, DASR regulation and AMC/GM numbering will remain aligned with EMAR. Hence, in this case, the placement will remain as is.</p> <p>Outcome: No change</p>
5	AMC 21.A.44	<p>Include clarity on the difference in responsibility associated with the assessment of technical risk (supportable by the MTCHO) and the retention/acceptance of that assessed risk (performed by the MAO duty holder)</p> <p>Update wording to make it clear that the CAM can source technical risk assessment for any 21J and not just the MTCH.</p> <p>----</p> <p>Concern raised with respect to the ‘assessment of technical risk’ with the root cause of concern being the MTCH’s inability to retain risk and overstating the responsibility of the MTCH for continuing airworthiness.</p> <p>The MTCH Obligations would be associated to the demonstration of the Type Design’s satisfaction of the accepted level of risk (through compliance to the appropriate Airworthiness Code or equivalent level of safety pre-agreed by the Authority through the Type Certification Basis).</p> <p>Therefore para c 2 of the AMC overstates the responsibility of the MTCH to make risk assessments for several conditions which should be the responsibility of the CAM through an approved 21J with privilege. While the MTCHO clearly has the resources and tech data to provide this risk assessment (but not retain the risk), the CAM should be able to assess this risk through engagement of any 21J with the relevant Authority privilege and hence it is not specifically the MTCH’s responsibility to provide this service. Hence this AMC overstates the role of the MTCH as opposed to</p>	<p>Partial agreement.</p> <p>The obligations of the MTC Holder include 21.A.3A <i>Failures, malfunctions and defects</i>, which requires the holder to continually collect and analyse failure and defect information to ensure the type design remains free of hazards and is safe to use. When a shortfall is identified that exceeds a certain threshold (as guided by GM 21.A.3B(b) <i>Determination of an unsafe condition</i>) 21.A.3B requires the holder to notify the Authority, develop corrective actions, and potentially to assist development of an Airworthiness Directive.</p> <p>The EMAR (and EASA regulations) however provide minimal guidance on other actions to be taken by the holder in addressing identified shortfalls, and are silent on the responsibilities of the holder where a shortfall is identified that does not reach or exceed the 21.A.3B unsafe condition threshold. The extant guidance in GM to DASR 21.A.44 on operational hazards is DASA’s initial attempt to provide additional guidance for those circumstances, and draws upon TAD 05/2015 <i>Risk Management in Aircraft Design</i>, especially in relation to the holder’s communication of those deficiencies to the operator organisation(s). During these scenarios, the MTC holder may retain some (small) risk for minor hazards where immediate notification to the operator would bring no safety benefit. This is distinctly different to the retention of risk by the CAM or operator, which is focussed on operation of their aircraft.</p>

		<p>the CAM and any 21J the CAM chooses to engage (with Authority privilege) to provide this advice.</p> <p>The MTCH should be sufficiently well placed to assess the risk (in terms of consequence and likelihood), but it should be clear that this assessment is not accepting a level of risk when the aircraft is operating outside its established type-certification basis. The AMC should be updated to clarify.</p>	<p>That said, some changes have been made to better clarify the role of the holder in 'characterising' risk rather than 'assessing' risk, and in replacing reference to management of 'in-service' hazards with 'continued airworthiness' hazards to reduce the confusion between the Holder and CAMO responsibilities.</p> <p>In regards to CAM ability to seek technical risk advice, the existing GM to 21.A.44 is considered to provide sufficient guidance that highlights CAMs may seek advice from other design or technical sources where necessary. No change made on this issue.</p> <p>Outcome: AMC and GM to 21.A.44 amended to clarify MTC Holder actions include 'risk characterisation and communication' rather than risk assessment. Additionally a placeholder has been inserted in GM to 21.A.44 to highlight that DASA is continuing to develop guidance on the management / retention of technical risk by Design and MTC Holder organisations.</p>
6	GM 21.A.44	<p>Content specific to MAO and CAMO requirements regarding communication within this section seems out of place. Suggest remove. See examples:</p> <p>"...Some design deficiencies discovered in-service may not introduce undue risk or jeopardise the type-certification basis, provided additional controls, e.g. additional maintenance inspections, are implemented to reduce the hazard so far as is reasonably practicable. These circumstances require little (if any) coordination or communication with the CAM and operator. ..."</p> <p>Suggest remove any reference to <i>MPTFs</i> or <i>Command Clearances</i> from this section – it is not a means to handle deficiencies of Type Certification which should be addressed through unsafe condition assessments and the Authority.</p>	<p>Partial agreement.</p> <p>For identified deficiencies in the type design, except for potentially supporting development of an AD, EMAR wording provides minimal guidance on other actions to be taken by the holder in addressing identified shortfalls, and is silent on the responsibilities of the holder where a shortfall is identified that does not reach or exceed the 21.A.3B unsafe condition threshold.</p> <p>The example paragraph highlighted in the NPA feedback relate to filling that gap, and hence include a range of outcomes that can be undertaken prior to an AD having to be released (which may include risk characterisation to support operator applications for MPTF or Command Clearances).</p> <p>Outcome: GM to 21.A.44 wording related to management of risk, especially wording that is closely linked to TAD 05/2016 concepts, has been amended to be more generic, however references to MPTF and Command Clearance remain. A Placeholder has also been inserted into the GM to highlight that DASA consideration of</p>

			this issue is ongoing.
7	All	The issuance of Type Certificates, especially MSTC, to a government organisation is counter to practice in other countries, even in those countries with EMAR like regulations. The DASA intent to issue all MTC, MSTC and major repair design approvals to the government organisation is seen as an unnecessary overhead to industry.	<p>Noted.</p> <p>The rationale behind issue of MTC/MRTC to a government organisation, i.e to ensure holder obligations are contracted for, and also extend to STC and Major repair designs. Therefore issue of those approvals to a government organisation is justified.</p> <p>Once arrangements are in place and industry partners become familiar with interacting with the Holder Organisation during application for major design changes, DASA believes these concerns will be put to rest. An Advisory Circular has being drafted to provide guidance on this issue.</p> <p>Another concern, closely aligned with this comment, that was raised during the DASA Roadshow, is that by not holding the MTC, STC or major design approval instrument, the industry design organisations that have supplied Defence with major design products (such as modifications) will be unable to market that design to other customers. That concern is unfounded. A DASA issued MTC or major design/repair approval is the DASA attestation of assurance that the product is safe for operation within the ADF context and CRE. The ability of an industry design organisation to market a design product depends instead upon contractual rights to the Design, which is a purely contractual issue. Nevertheless, a design product that has a DASA Type Certification may assist other customers of that Design achieve certification within their own NAA/NMAA (depending upon their NAA/NMAA recognition arrangements with DASA).</p> <p>Outcome: No change.</p>
8	AMC 21.A.44	The O5 engineer is essentially uninvolved once a contract is established, particularly for thin SPOs. I believe we need to critically re-assess the role of the O5. That is, we need to either define a role that absolutely demands a guru engineer, or we realise the person could be a glorified contract manager and adjust accordingly.	<p>Noted.</p> <p>The identification of an O5 Engineer achieves two particular outcomes:</p> <ul style="list-style-type: none"> - Retains a link to the extant arrangements where the

		<p>Personally, I see this person as pivotal for risk characterisation, management of the 'product' SMS, etc, and therefore a guru O5 is easily justifiable.</p>	<p>AMTCH DoSA is the CENGR of the relevant platform. This will make the transition to a 'government organisation' reasonably straight-forward, as the platform SPO will be already staffed and conducting the needed functions.</p> <ul style="list-style-type: none"> - Retains a Defence Engineer in the risk characterisation and communication activities. I think that the current wording for them to be involved is strong enough, but can be strengthened later if needed. <p>Outcome: No change. Current wording for the O5 engineer will remain as is, but acknowledged that this can be addressed later if required.</p>
9	<p>AMC 21.A.14(c) 21.A.112B(c) 21.A.432(c)</p>	<p>I'm concerned by the weak SMS arrangements inferred in AMC to 21.A.14(c) (and for 112B and 432), which requires the design organisation to be 21.A.14(a) or (b) compliant. Just because a MDOA has a SMS for mods they design themselves, doesn't mean they have an SMS that is suitable for an entire aircraft (and more importantly, is able to be the focus point for all organisation SMS's from a "product" perspective).</p>	<p>Partial agreement.</p> <p>Given that the ADF is still in transition to the DASR and the implementation of SMS into design organisations is also a new concept, the maturity and understanding of SMS within design organisations will be growing. DAVCOMP involvement in surveillance and guidance will assist this process.</p> <p>Outcome: Additional wording has been included in GM to 21.A.44 to stipulate that DASA will require any Design Organisations, selected to execute holder functions for the government holder organisation, to include compliance to the holder requirements in their MDOE. This will assure that the approved MDO has an SMS that achieves DAVCOMP approval to the extent that can be as far as practicably achieved.</p>
10	<p>AMC 21.A.14(c) 21.A.112B(c) 21.A.432(c)</p>	<p>I suggest the requirement for the contracted design organisation to be 21.A.14(a) or (b) compliant is not implementable for some aircraft, because it demands the support organisation to be an approved MDO. ADOAs (21.A.14(b)) are aimed at " ... a starting phase for a Subpart J MDOA, allowing at a later stage ... to move towards a full Subpart J MDOA" Consequently, I suggest 14(b) is irrelevant, so you're demanding all be MDOAs. It isn't going to happen for C-17, JSF, etc.</p>	<p>Agree.</p> <p>Will retain the AMC requirement for 21.A.14(a) compliance, but will also acknowledge that this is un-achievable for some existing platforms (JSF, C17) that rely on procurement/support arrangements that will not allow compliance. In those cases DAVCOMP is to agree alternate arrangements to ensure the holder obligations and SMS requirements are met as far as practicable.</p>

			<p>Outcome: AMC to 21.A.44 now only requires contracted design organisations to be compliant with 21.A.14(a). GM to 21.A.44 also amended to provide latitude in the case where existing support arrangements (i.e C17, JSF) will preclude that scenario.</p>
11	AMC & GM 21.A.44	<p>I don't believe the requirement for risk characterisation and communication should be regulated as a responsibility of the holding organisation. It is the Operator's responsibility to seek risk advice on whoever they choose to obtain it from. One would agree that the holding organisation would be a good source for this information, but it is the operator's choice and responsibility to develop this relationship, not the holding organisation's responsibility. I also note that EMAR does not have this expectation in any of its obligations.</p>	<p>Agreed.</p> <p>The likely MTC Holder interaction with the CAMO/MAO in regards to risk characterisation derives from two sources:</p> <ul style="list-style-type: none"> - In response to an identified deficiency in the type design, identified either through analysis of failure/defect data or via a more immediate failure event, and - In support of operations with a non-standard CRE to meet military objectives such as input to support MPTF, Command Clearances, and other command decisions etc. <p>DASA agrees that the MTC holder <u>obligation</u> only extends to provision of risk characterisation in regards to identified deficiency in the type design.</p> <p>That said, the unique requirement in the military to regularly operate with non standard CRE, will also drive a need for regular technical risk advice to support those decisions/instruments in a timely manner, and the MDO supporting the MTC holder is not precluded from providing such advice.</p> <p>Outcome: AMC and GM 21.A.44 wording to be amended to reflect that the MTC holder obligation only extends to provision of technical risk characterisation and advice pertaining to type design deficiencies and unsafe conditions. However this does not preclude the ability of the MDO providing the execution of MTC functions from also providing risk advice regarding non-standard CRE operations.</p>
12	21.A.14	<p>The EMAR derogation specifically requires a detailed arrangement in place with an organisation that has access to the</p>	<p>Agree.</p>

		<p>type design data in order to comply with requirements of Subpart J to demonstrate capability under the 21.A.14. This means that the holding organisation needs to meet the requirements of MDOA through combination of internal capability and arrangements with external design organisations.</p> <p>The main reason for the slight twist is that in the case of FMS, it is unlikely that an SMS will exist within the contractor. Also, the term 'alternate DASR design org approval' suggests a regulatory organisational approval which does not exist.</p>	<p>This aligns with serial 10 comments.</p> <p>Outcome: As mentioned above, the requirement for compliance to 21.A.14(b) will be removed and instead be replaced with wording that directs the case-by-case consideration of alternate arrangements by DAVCOMP for FMS/JSF type circumstances.</p>
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