

<b>Technical Airworthiness Authority Advisory (TAA Advisory)</b>	
Title	<b>Assignment of Technical Airworthiness Authority – Airworthiness Management Roles</b>
TAA Advisory Number	<b>2013-04e-v5</b>
Effective Date	<b>1 NOV 2013 (Revised 22 JAN 2024)</b>
Reference	<b>TAM Part 1, Chapter 4, Section 2</b>
OPI / Telephone	<b>DTAES 4-5/ 819-939-4757</b>
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## **1. Purpose**

- 1.1. This Technical Airworthiness Authority (TAA) Advisory provides guidance to individuals seeking TAA designation as “Airworthiness Manager” within a TAA-accredited organization.
- 1.2. This TAA Advisory is not mandatory, nor does it constitute a regulation. It describes a means acceptable to the TAA, but not the only means to demonstrate compliance with the regulation(s). If you choose to use this TAA Advisory, then all its important aspects must be followed.

## **2. Applicability**

- 2.1 This TAA Advisory is applicable to all industry organizations seeking Assignment of Authority (AoA) for an individual responsible for the airworthiness-related activities as defined in the TAM Part 1, Chapter 4, Section 2 and associated annexes.
- 2.2 This TAA Advisory has been generated to assist organizations in achieving the applicable AoA by providing guidance on the requirements and methods of demonstration.

## **3. Related Material**

- 3.1. Definitions
  - a. Airworthiness Manager. An individual within a TAA-accredited organization who fulfills the Airworthiness Management role and is responsible and accountable for all airworthiness-related activities performed within that organization. This person is always authorized directly by the TAA staff, and is an essential link between the TAA and the organization.
- 3.2. Regulatory References:
  - a. *Technical Airworthiness Manual* (TAM), Part 1, Chapter 4, Section 2 – Assignment of Technical Airworthiness Authority.

## **4. Discussion**

### **4.1 Selection of an Airworthiness Manager**

- 4.1.1. The Airworthiness Manager role should not be attached to any particular position within an organization, but rather must be performed by a suitable individual, considering the scope and depth of technical airworthiness authority assigned to the Organization. For example, the Senior Design Engineer (SDE) does not need to be the head of engineering or the business director. The role could be assigned to the deputy head of engineering, provided the business manager makes a commitment that the appointed SDE has the necessary powers to control the airworthiness-related activities within the organization.
- 4.1.2. The Airworthiness Manager should be in a position that is actively engaged in the technical airworthiness activities performed by the organization. For example, a senior engineering director or business manager may not have the time to be actively engaged in process development.

- 4.1.3. When selecting an Airworthiness Manager, it is important to ensure their knowledge, skills and experience meet the requirements of the applicable TAM standards. If not, a waiver request must be included within the application. This advisory contains five annexes that cover the different AoA eligibility criteria within the following organizations, as published in Part 1, Chapter 4 of the TAM:
- a. Annex A – Senior Design Engineer (SDE) within an Acceptable Technical Organization (ATO);
  - b. Annex B – Senior Manufacturing Manager (SMfgM) within an Acceptable Manufacturing Organization (AMfgO);
  - c. Annex C – Senior Maintenance Manager (SMM) within an Acceptable Maintenance Organization (AMO);
  - d. Annex D – Senior Materiel Support Manager (SMSM) within an Acceptable Material Support Organization (AMSO); and
  - e. Annex E – Senior Design Engineer (SDE) within an Acceptable Design Organization (ADO).
- 4.1.4 Where airworthiness-related activities are performed at different locations, only one position (person) in the organization will be authorized as the Airworthiness Manager. Position titles, duties, responsibilities, authorities and defined eligibility criteria of the person(s) who has (have) been assigned management responsibility for each site must be described in the Airworthiness Process Manual (APM). These individuals are authorized and report to the Airworthiness Manager, rather than to the TAA.
- 4.1.5 In certain cases, it may make sense for one company to have multiple Airworthiness Managers of the same type. For example, in the case where a company is responsible for managing two unrelated fleets under separate contracts, the workload may be distributed between two separate SDEs or two SMMs. The TAA staff will provide guidance during the accreditation whether it makes sense to create separate Airworthiness Management Roles of the same type.

## **4.2 Application Package**

- 4.2.1 In order to initiate the AoA process, the Senior Business Manager of the company or a senior company representative must formally nominate an Airworthiness Manager and provide an application package to the TAA staff (DTAES 4), with an info copy to the DND WSM sponsor. The Application package should include:
- a. a Nomination Letter to the TAA staff (DTAES 4), signed by the Senior Business Manager of the company and the nominated Airworthiness Manager (if applicable);
  - b. a résumé of the nominated Airworthiness Manager;
  - c. a completed copy of the applicable eligibility matrix from this advisory;
  - d. eligibility waivers, if applicable;
  - e. in the case of an SDE who will be making findings of compliance, a scope of authority matrix listing in-scope certification elements (if not already included in the Engineering Process Manual); and
  - f. any other information as requested by the TAA staff.

## **4.3 Regulatory Staff Due Diligence**

- 4.3.1. Once an individual has been nominated, there is a significant amount of liaison required between the individual and the TAA staff (DTAES 4) to confirm that the individual meets the eligibility requirements and possesses adequate knowledge of the organization's policies and procedures. On behalf of the TAA, DTAES staff will review the application package and conduct an interview.
- 4.3.2. The interview is normally the final step prior to the TAA granting authority and is conducted and coordinated by DTAES 4 staff. Each annex within this advisory contains a non-exhaustive list of typical interview questions. In addition, the interview may include more specific questions or ask the

applicant to describe interim airworthiness plans where existing processes are vague, or future processes are under development. Depending on the complexity and scope of the organization, the interview normally takes 2-3 hours.

#### 4.4. **Acceptance of Assignment of Authority**

- 4.4.1. The person responsible for airworthiness-related activities must formally accept and acknowledge his/her assignment of authority as the Airworthiness Manager. The following are acceptable means of demonstrating acceptance of authority:
- a. A statement of acceptance in the respective APM, signed by the Airworthiness Manager is included. This statement does not replace standard 1.4.2.S1.3.a.(8) of the TAM (statement of commitment by the company senior management). This APM amendment must be incorporated within 30 days of receiving the AoA letter and its incorporation does not require TAA approval; or
  - b. An acceptance letter is signed and mailed back to the TAA (DTAES 4) within 30 days from receiving the AoA letter.

#### 4.5. **Acting Airworthiness Manager**

- 4.5.1. It is paramount that an Airworthiness Manager ensures there is, at all times, someone within the organization is capable of carrying out the responsibilities of the Airworthiness Manager. The Airworthiness Manager must, by letter, fax or e-mail, formally authorize his delegate to carry out his/her responsibilities and must specify any restrictions and/or limitations to that authority that he/she feels are necessary. Acting Airworthiness Managers may not authorize airworthiness functions or airworthiness tasks to personnel within their organization without specific consent from the TAA.
- 4.5.2. In circumstances where the Airworthiness Manager is permanently leaving the organization or leaving for an extended period of time, the TAA should be informed at the earliest opportunity of any arrangements made to ensure the responsibilities of Airworthiness Manager will continue to be held by a competent individual. The exiting Airworthiness Manager may grant a temporary AoA to a competent replacement. The limited authority of the acting Airworthiness Manager should not be effective beyond a six-month period. The acting period will normally be much shorter than six months, given that the TAA expects organizations to have a succession plan for situations where the Airworthiness Manager is leaving permanently. Longer periods of limited authority are intended to manage unforeseen departures in an organization. Prior to the expiration of this acting authority, it is the expectation that the organization nominates a replacement Airworthiness Manager in accordance with this advisory.

**Qualification Matrix for ATO SDE Applicant**

1. The following eligibility matrix allows the candidate Senior Design Engineer (SDE) of an Acceptable Technical Organization (ATO) to provide evidence that the minimum requirements of the TAM are met.

<b>Name:</b>	<b>Date:</b>
<b>Organization:</b>	

<b>Eligibility Criteria</b>		<b>Substantiation</b> (Do not simply refer to the résumé, provide examples)	<b>Acceptability</b> (DTAES use only)
<b>Knowledge:</b>			
1.	Be a graduate of an applicable engineering discipline from a university recognized by the TAA, or in the opinion of the TAA, have equivalent knowledge gained through other forms of education and training.		
2.	In the opinion of the TAA, have detailed knowledge of the organization's Airworthiness Process Manual and applicable core procedures and/or work instructions.		
3.	Have detailed knowledge, gained by formal training and/or work experience, of the DND technical airworthiness rules and standards:		
a.	through successful completion of a DND SDE course or having equivalent, relevant experience;		
b.	pertaining to the TAM chapters on design change certification, technical airworthiness clearance, type design examination, risk management, approved maintenance program, and airworthiness monitoring.		
4.	In the opinion of the TAA, have detailed knowledge gained by formal training and/or work experience of the specific aeronautical products involved.		
5.	Have a detailed understanding of the Statement of Operating Intent (SOI) document or applicable operational requirements and environment of the specific aeronautical products involved.		

<b>Eligibility Criteria</b>		<b>Substantiation</b> (Do not simply refer to the résumé, provide examples)	<b>Acceptability</b> (DTAES use only)
6.	Where the SDE is the Type Certificate Holder (TCH), he shall have a detailed understanding of all TCH responsibilities, including the DND Airworthiness Review Board (ARB) process.		
7.	Demonstrate a detailed understanding of the following topics to the satisfaction of the TAA: <b>NOTE</b> <i>These topics may also be covered as part of the formal interview process.</i>		
a.	the scope and depth of technical airworthiness authority assigned by the TAA to the ATO and to other organizations involved with the design and engineering support of the approved type designs involved;		
b.	the airworthiness responsibilities of the ATO for work that is accomplished by both the organization and external agencies through support arrangements;		
c.	the responsibilities of the airworthiness management role of SDE;		
d.	the responsibilities of the persons in the ATO who have been assigned authority to perform technical airworthiness functions on behalf of the TAA;		
e.	the Engineering Process Manual (EPM) for the ATO including associated procedures;		
f.	the inter-relationship and interfaces between Technical Airworthiness Program and Quality Management System requirements.		
<b>Skills:</b>			
As applicable for the scope and depth of technical airworthiness authority of the organization, skilled in the following and able to demonstrate or provide current and/or past examples regarding the ability to:			
1.	Correctly interpret airworthiness standards.		
2.	Correctly apply airworthiness processes.		
3.	Develop processes for inclusion in the EPM that are in compliance with the applicable airworthiness rules and standards.		
4.	Evaluate ATO procedures for compliance with the TAA-approved EPM.		
5.	Prepare risk assessments.		

<b>Eligibility Criteria</b>		<b>Substantiation</b> (Do not simply refer to the résumé, provide examples)	<b>Acceptability</b> (DTAES use only)
6.	Assess the category assigned during the development of a design change to an approved type design for an aeronautical product.		
7.	Prepare Technical Airworthiness Clearance (TAC) plans.		
8.	Approve deviations to the Approved Maintenance Program.		
9.	Provide guidance on the use of independent airworthiness reviews to personnel within the organization.		
10.	Apply management principles to:		
a.	ensure that airworthiness-related activities are conducted in accordance with the TAA-approved EPM and the ATO-approved procedures;		
b.	ensure that the authorization of personnel performing airworthiness-related tasks and technical airworthiness functions is accomplished in accordance with the TAA-approved EPM and the ATO-approved procedures;		
c.	monitor the competencies of individuals to whom technical airworthiness authority has been assigned and of the organization as a whole;		
d.	monitor the development and progress of DE candidates;		
e.	evaluate the capabilities of personnel for the assignment of technical airworthiness authority;		
f.	ensure adequate engineering competence is applied in the engineering decisions that may affect the airworthiness of an approved type design for an aeronautical product;		
g.	ensure that appropriate action is taken to correct any practice or procedure which may compromise the airworthiness of an aeronautical product and/or that the matter is brought to the attention of the TAA.		
11.	Issue airworthiness instructions when a non-compliance with airworthiness rules and standards or a non-conformance with the approved type design is discovered.		

Eligibility Criteria		Substantiation (Do not simply refer to the résumé, provide examples)	Acceptability (DTAES use only)
12.	Communicate with external agencies to:		
a.	ensure that contracts or service level agreements are developed and maintained as necessary to enable the ATO to provide the scope and depth of design and engineering support required;		
b.	ensure that the relationship with the TCH provides a clear understanding of the ATO and TCH relative responsibilities and roles in the conduct of engineering support;		
c.	ensure work performed by an external agency that is not accredited or recognized as a TAA acceptable organization is conducted in accordance with ATO approved procedures.		
<b>Experience:</b>			
1.	The SDE should have no less than six (6) years of relevant aerospace engineering experience and with progressively more responsibilities.		
2.	Where the SDE is the TCH, the SDE shall have relevant aerospace engineering and maintenance experience for the aircraft type being supported.		

2. ATO SDE Interview Questions

- 2.1. During the interview, the expectation is that the candidate relates the topic areas to their own organization. The candidate is expected to demonstrate their understanding of their organizations engineering policy requirements and core enabling procedures. For the interviews it is acceptable for the candidate to have access to any supporting policy, procedures or work instructions that they feel are needed to facilitate the discussion. The following is a list of typical areas that are discussed during the interview with a nominated SDE within an Acceptable Technical Organization.
- a. Has a general understanding of the airworthiness program. For example: the flow of authority from the Minister to the SDE, what are the three levels of assignment of authority, principles of the technical airworthiness program (4 As).
  - b. Is able to explain the responsibilities of the SDE, Design Engineers (DEs) and applicable staff that will be providing Technical Support Services (within and external to the organization).
  - c. Is able to describe the technical prerequisites for DEs and Technical Support staff.
  - d. Is able to explain each Airworthiness function assigned to your ATO (i.e., Airworthiness approval, Technical Airworthiness Clearance, Flight Permits) and what the signature means.
  - e. Is able to describe how the candidate's organization's engineering support Matrix interfaces with their ATO.
  - f. Is able to describe the scope and depth of authority being assigned to the candidate's ATO and any limitations.

- g. Is able to describe the engineering support provided by the candidate's ATO to DND (i.e., WSM).
  - h. Is able to describe their processes and ATO involvement in managing the applicable aircraft type record including configuration management.
  - i. Is able to describe their processes and ATO involvement in airworthiness monitoring of service data (Service Bulletins (SBs), Airworthiness Directives (ADs), etc.) for the aircraft and installed aeronautical products.
  - j. Is able to describe the candidate's ATO involvement in the maintenance program management and change processes.
  - k. Is able to describe the processes and activities that involve mandatory TAA approvals.
  - l. Is able to describe the candidate's ATO involvement in flight permits in support of the WSM.
  - m. Is able to discuss their Aircraft Structural Integrity Program (ASIP) (if applicable).
  - n. Is able to discuss how design changes and Non Standard Repairs (NSRs) are approved by the candidate's ATO.
  - o. Is able to describe their quality system and how it applies to the ATO activities.
  - p. Is able to describe how the candidate's organization enters into support arrangements and any limitations.
  - q. Is able to describe the type design examination process and sources of approved data.
  - r. Is able to discuss the results of the last audit(s) conducted in the candidate's organization or the AMOs that they are associated with.
- 2.2 The interview will also be used to review any known issues affecting the candidate's organization and discuss the progress and planned activities.



**ANNEX B  
TO TAA ADVISORY 2013-04  
DATED 1 NOVEMBER 2013  
REVISED 22 JANUARY 2024**

**Qualification Matrix for the AMfgO SMfgM Applicant**

1. The following eligibility matrix allows the candidate Senior Manufacturing Manager (SMfgM) of an Acceptable Manufacturing Organization (AMfgO) to provide evidence that the minimum requirements of the TAM are met.

<b>Name:</b>	<b>Date:</b>
<b>Organization:</b>	

<b>Eligibility Criteria</b>		<b>Substantiation</b> (Do not simply refer to the résumé, provide examples)	<b>Acceptability</b> (DTAES use only)
<b>Knowledge:</b>			
1.	Be a graduate of an applicable engineering discipline from a university recognized by the TAA, or be a graduate of an aerospace technology course recognized by the TAA or, in the opinion of the TAA, have equivalent knowledge and experience.		
2.	Have detailed knowledge, gained by formal training and/or work experience, of the technical airworthiness rules and standards:		
a.	through successful completion of the DND Airworthiness Familiarization Course or having equivalent, relevant experience;		
b.	pertaining to the TAM chapters on aeronautical product standards.		
3.	In the opinion of the TAA, have detailed knowledge gained by formal training and/or work experience of the specific aeronautical products involved.		
4.	Have a detailed understanding of the airworthiness responsibilities of the AMfgO for work performed by the AMfgO and external agents through maintenance support arrangements.		
5.	Demonstrate a detailed understanding of the following topics to the satisfaction of the TAA: <b>NOTE</b> <i>These topics may also be covered as part of the formal interview process.</i>		
a.	the scope and depth of technical airworthiness authority assigned by the TAA to the AMfgO;		

Eligibility Criteria		Substantiation (Do not simply refer to the résumé, provide examples)	Acceptability (DTAES use only)
b.	the airworthiness responsibilities of the AMfgO for work performed by the AMfgO and external agents through maintenance support arrangements;		
c.	the responsibilities of the role of SMfgM;		
d.	the responsibilities of the persons who have been assigned authority to perform technical airworthiness functions on behalf of the TAA;		
e.	the TAA-approved Manufacturing Process Manual (MfgPM) for the AMfgO, including associated AMfgO-approved procedures.		
f.	the interrelationship and interfaces between Technical Airworthiness Program and Quality Management System requirements.		
<b>SKILLS:</b>			
As applicable for the scope and depth of technical airworthiness authority of the organization, skilled in the following and able to demonstrate or provide current and/or past examples regarding the ability to:			
1.	Correctly interpret airworthiness standards.		
2.	Correctly apply airworthiness processes.		
3.	Develop processes for the MfgPM that comply with the applicable airworthiness rules and standards.		
4.	Evaluate AMfgO procedures for compliance with the TAA-approved MfgPM.		
5.	Analyze specifications prepared for the development, test and/or technical support of an approved aeronautical product to ensure compliance with the applicable airworthiness rules and standards.		
6.	Apply management principles to:		
a.	ensure that airworthiness-related activities are conducted in accordance with the TAA-approved MfgPM and the AMfgO-approved procedures;		
b.	ensure that the authorization of personnel performing airworthiness-related tasks and technical airworthiness functions is accomplished in accordance with the TAA approved MfgPM and the AMfgO-approved procedures;		
c.	monitor the competencies of individuals to whom technical airworthiness authority has been assigned and of the organization as a whole;		

Eligibility Criteria		Substantiation (Do not simply refer to the résumé, provide examples)	Acceptability (DTAES use only)
d.	monitor the development and progress of Product Conformance Authority candidates;		
e.	evaluate the capabilities of personnel for the assignment of technical airworthiness authority;		
f.	ensure adequate engineering competence is applied in the engineering decisions that may affect the airworthiness of an aeronautical product;		
g.	ensure that appropriate action is taken to correct any practice or procedure which may compromise the airworthiness of an aeronautical product and/or that the matter is brought to the attention of the TAA.		
7.	Issue airworthiness instructions when a non-compliance with airworthiness rules and standards is discovered.		
8.	Communicate with external agencies to:		
a.	ensure that contracts or service level agreements are developed and maintained as necessary to enable the AMfgO to provide support and technical management to the aeronautical product;		
b.	ensure work performed by an external agency that is not accredited or recognized as TAA acceptable organization is conducted in accordance with AMfgO approved procedures.		
<b>Experience:</b>			
1.	The SMfgM shall have no less than three years of experience in the management of technical activities of similar complexity to those undertaken by the organization.		

2. AMfgO SMfgM Interview Questions

2.1. During the interview, the expectation is that the candidate relates the topic areas to their own organization. The candidate is expected to demonstrate their understanding of their organizations material support policy requirements and core enabling procedures. For the interviews, it is acceptable for the candidate to have access to any supporting policy, procedures or work instructions that they feel are needed to facilitate the discussion. The following is a list of typical areas that are discussed during the interview with a nominated SMfgM within an Acceptable Manufacturing Organization.

- a. Has a general understanding of the airworthiness program. For example: the flow of authority from the Minister to the SMfgM, what are the three levels of assignment of authority, fundamental principles of the technical airworthiness program (4 As), etc.
- b. Is able to explain the MfgPM amendment process.

- c. Is able to explain the responsibilities of the SMfgM and those involved with the manufacturing process.
  - d. Is able to describe the technical prerequisites for those individuals.
  - e. Is able to describe the authorization system, who is responsible to authorize any amendments to this authorization system. This will also require a description of how authorizations are granted, recorded and tracked.
  - f. Is able to describe the organization's access and management of approved manufacturing drawings and specifications.
  - g. Is able to describe the organization's processes to develop and approve manufacturing processes from approved technical data.
  - h. Is able to describe the organization's policies on how manufactured parts are identified (i.e., labelled/stamped with part number).
  - i. Is able to describe the organization's quality control and assurance system, including handling of non-conforming parts.
  - j. Is able to describe the processes associated with the manufacture of approved parts.
  - k. Is able to describe the documentation release process for manufactured parts.
  - l. Is able to describe the supplier and subcontractor approval and management.
  - m. Is able to describe inspection, storage and handling of raw materials and supplies.
  - n. Is able to describe tool management and calibration procedures.
- 2.2. This interview will also be used to review any known issues affecting the candidate's organization and discuss the progress and planned activities.

**ANNEX C  
TO TAA ADVISORY 2013-04  
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**Qualification Matrix for AMO SMM Applicant**

1. The following eligibility matrix allows the candidate Senior Maintenance Manager (SMM) to provide evidence that the minimum requirements of the TAM are met.

<b>Name:</b>	<b>Date:</b>
<b>Organization:</b>	

<b>Eligibility Criteria</b>		<b>Substantiation</b> (Do not simply refer to the résumé, provide examples)	<b>Acceptability</b> (DTAES use only)
<b>Knowledge:</b>			
1.	Be a graduate of an engineering discipline from a university recognized by the TAA or be a graduate of an aerospace technology course recognized by the TAA, or in the opinion of the TAA have equivalent knowledge and experience.		
2.	Have detailed knowledge, gained by formal training and/or work experience, of the technical airworthiness rules and standards, and where required, an understanding of the applicable operational requirements and environment:		
a.	through successful completion of the DND Airworthiness Familiarization Course or having equivalent, relevant experience;		
b.	pertaining to the TAM chapters on conduct and control of aeronautical product maintenance.		
3.	In the opinion of the TAA, have detailed knowledge, gained by formal training and/or work experience, of the specific aeronautical products being maintained by the AMO, including any airworthiness limitations.		
4.	Demonstrate a basic understanding of the Airworthiness Review Board (ARB) process.		
5.	Demonstrate a detailed understanding of the following topics to the satisfaction of the TAA: <b>NOTE</b> <i>These topics may also be covered as part of the formal interview process.</i>		
a.	the scope and depth of technical airworthiness authority assigned by the TAA to the AMO;		

Eligibility Criteria		Substantiation (Do not simply refer to the résumé, provide examples)	Acceptability (DTAES use only)
b.	the airworthiness responsibilities of the AMO for work performed by the AMO and external agencies through maintenance support arrangements;		
c.	the responsibilities of the role of SMM;		
d.	the responsibilities of the Person Responsible for Assignment of Authority (PRAA);		
e.	the responsibilities of the persons who have been assigned authority to perform technical airworthiness functions on behalf of the TAA;		
f.	the Maintenance Process Manual (MPM) for the AMO, including associated procedures;		
g.	the interrelationship and interfaces between Technical Airworthiness Program and Quality Management System requirements.		
<b>Skills:</b>			
As applicable for the scope and depth of technical airworthiness authority of the organization, skilled in the following and able to demonstrate or provide current and/or past examples regarding the ability to:			
1.	Correctly interpret airworthiness standards.		
2.	Correctly apply airworthiness processes.		
3.	Develop processes for inclusion in the MPM that are in compliance with the applicable airworthiness rules and standards.		
4.	Evaluate AMO procedures for compliance with the TAA-approved MPM.		
5.	Apply management principles to:		
a.	ensure that airworthiness-related activities are conducted in accordance with the TAA-approved MPM and the AMO-approved procedures;		
b.	ensure that the authorization of personnel performing airworthiness-related tasks and technical airworthiness functions is accomplished in accordance with the TAA-approved MPM and the AMO-approved procedures;		
c.	monitor the competencies of individuals to whom technical airworthiness authority has been assigned and of the organization as a whole;		

Eligibility Criteria		Substantiation (Do not simply refer to the résumé, provide examples)	Acceptability (DTAES use only)
d.	monitor the development and progress of Aircraft Release Authority (ARA) and Maintenance Release Authority (MRA) candidates;		
e.	evaluate the capabilities of personnel for the assignment of technical airworthiness authority;		
f.	ensure adequate competence is applied in the maintenance decisions that may affect the airworthiness of an aeronautical product;		
g.	ensure that appropriate action is taken to correct any practice or procedure which may compromise the airworthiness of an aeronautical product and/or that the matter is brought to the attention of the TAA.		
6.	Issue airworthiness instructions when a non-compliance with airworthiness rules and standards or a non-conformance with the approved type design is discovered.		
7.	Communicate with external agencies to:		
a.	ensure that contracts or service level agreements are developed and maintained as necessary to enable the AMO to provide the scope and depth of maintenance and technical management required;		
b.	ensure work performed by an external agency that is not accredited or recognized as a TAA acceptable organization is conducted in accordance with AMO approved procedures.		
<b>Experience:</b>			
1.	The SMM should have no less than six years of relevant and progressively more responsible aerospace engineering and maintenance experience, of which two years is in the maintenance of aeronautical products.		

2. AMO SMM Interview Questions

- 2.1. During the interview, the expectation is that the candidate relates the topic areas to their own organization. The candidate is expected to demonstrate understanding of their organization's maintenance policy requirements and core enabling procedures. For the interviews, it is acceptable for the candidate to have access to any supporting policy, procedures or work instructions that they

feel are needed to facilitate the discussion. The following is a list of typical areas that are discussed during the interview with a nominated SMM within an Acceptable Maintenance Organization.

- a. A general understanding of the airworthiness program is required. For example: the flow of authority from the Minister to the SMM, what are the three levels of assignment of authority, fundamental principles of the technical airworthiness program (4 As), etc.
  - b. Is able to explain the MPM amendment process.
  - c. Is able to explain the responsibilities of the SMM, the Person Responsible for Assignment of Authority (PRAA), ARA, Aircraft Certification Authority (ACA), Shop Certification Authority (SCA) and Performance of Maintenance (POM).
  - d. Is able to describe the technical prerequisites for PRAA, ARA, SCAs, and POMs.
  - e. Is able to describe the authorization system, who is responsible to authorize any amendments to this authorization system. This will also require a description of how authorizations are granted, recorded and tracked.
  - f. Is able to describe their airworthiness control system.
  - g. Is able to describe how maintenance is recorded for the aircraft. In addition, how aircraft servicing sets, log sets and component cards are updated.
  - h. Is able to identify the technical prerequisites for independent checks.
  - i. What are the definitions of servicing and elementary work? How are servicing and elementary work controlled?
  - j. Is able to describe how maintenance can be deferred. How are operational restrictions imposed?
  - k. Is able to describe how aircraft are released.
  - l. Is able to describe the minimum acceptable documentation used in the candidate's organization to maintain an acceptable level of parts control and traceability.
  - m. Is able to describe their quality system and the key management processes.
- 2.2. This interview will also be used to review any known issues affecting the candidate's organization and discuss the progress and planned activities.



**ANNEX D  
TO TAA ADVISORY 2013-04  
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**Qualification Matrix SMSM Applicant**

1. The following eligibility matrix allows the candidate Senior Materiel Support Manager (SMSM) to provide evidence that the minimum requirements of the TAM are met.

<b>Name:</b>	<b>Date:</b>
<b>Organization:</b>	

<b>Eligibility Criteria</b>		<b>Substantiation</b> (Do not simply refer to the résumé, provide examples)	<b>Acceptability</b> (DTAES use only)
<b>Knowledge:</b>			
1.	Be a graduate of an applicable material management or aerospace technology course acceptable to the TAA or in the opinion of the TAA have equivalent knowledge and experience.		
2.	Have detailed knowledge, gained by formal training and/or work experience, of the technical airworthiness rules and standards, and where required, an understanding of the applicable operational requirements and environment:		
a.	through successful completion of the DND Airworthiness Familiarization Course or having equivalent, relevant experience;		
b.	pertaining to the TAM chapters on procurement and control of aviation replacement parts and disposal of aviation parts.		
3.	In the opinion of the TAA, have detailed knowledge, gained by formal training and/or work experience, of the accredited aviation replacements part suppliers and distributors.		
4.	Demonstrate a detailed understanding of the following topics to the satisfaction of the TAA: <b>NOTE</b> <i>These topics may also be covered as part of the formal interview process.</i>		
a.	the scope and depth of technical airworthiness authority assigned by the TAA to the Acceptable Materiel Support Organization (AMSO);		
b.	the airworthiness responsibilities of the AMSO for work performed by the AMSO and external agencies through material supplier arrangements;		

Eligibility Criteria		Substantiation (Do not simply refer to the résumé, provide examples)	Acceptability (DTAES use only)
c.	the responsibilities of the role of SMSM;		
d.	the responsibilities of the personnel responsible for material support activities;		
e.	the Materiel Support Process Manual (MSPM) for the AMSO which includes a description of the airworthiness control system and associated procedures;		
f.	the interrelationship and interfaces between the Technical Airworthiness Program and Quality System requirements.		
<b>Skills:</b>			
As applicable for the scope and depth of technical airworthiness authority of the organization, skilled in the following and able to demonstrate or provide current and/or past examples regarding the ability to:			
1.	Correctly interpret airworthiness standards.		
2.	Correctly apply airworthiness processes.		
3.	Develop processes for inclusion in the MSPM that are in compliance with the applicable airworthiness rules and standards.		
4.	Evaluate AMSO procedures for compliance with the TAA-approved MSPM.		
5.	Apply management principles to:		
a.	ensure that airworthiness-related activities are conducted in accordance with the TAA-approved MSPM and the AMSO-approved procedures;		
b.	ensure that the authorization of personnel performing airworthiness-related tasks and technical airworthiness functions is accomplished in accordance with the TAA-approved MSPM and the AMSO-approved procedures;		
c.	monitor the competencies of individuals to whom technical airworthiness authority has been assigned and of the organization as a whole;		
d.	monitor the development and progress of personnel responsible for materiel support activity candidates;		

Eligibility Criteria		Substantiation (Do not simply refer to the résumé, provide examples)	Acceptability (DTAES use only)
e.	evaluate the capabilities of personnel for the assignment of technical airworthiness authority;		
f.	ensure adequate competence is applied in the materiel support related decisions that may affect the airworthiness of an aeronautical product;		
g.	ensure that appropriate action is taken to correct any practice or procedure which may compromise the airworthiness of an aeronautical product and/or that the matter is brought to the attention of the TAA.		
6.	Communicate with external agencies to:		
a.	ensure that contracts or service level agreements are developed and maintained as necessary to enable the AMSO to provide the scope and depth of materiel support management required;		
b.	ensure work performed by parts suppliers are conducted in accordance with AMSO approved procedures and the respective procedures for the contracted organization.		
<b>Experience:</b>			
1.	The SMSM should have no less than three years of relevant and progressively more responsible materiel support experience of which one year is in the management of aviation replacement parts.		

## 2. AMSO SMSM Interview Questions

2.1. During the interview, the expectation is that the candidate relates the topic areas to their own organization. The candidate is expected to demonstrate understanding of their organization's materiel support policy requirements and core enabling procedures. For the interviews, it is acceptable for the candidate to have access to any supporting policy, procedures or work instructions that they feel are needed to facilitate the discussion. The following is a list of typical areas that are discussed during the interview with a nominated SMSM within an Acceptable Materiel Support Organization.

- a. Has a general understanding of the airworthiness program. For example: the flow of authority from the Minister to the SMSM, what are the three levels of assignment of authority, fundamental principles of the technical airworthiness program (4 As), etc.
- b. Is able to explain the MSPM amendment process
- c. Is able to explain the responsibilities of the SMSM, and those involved with procurement, shipping and receiving, parts control, documentation control, disposal etc.

- d. Is able to describe the technical prerequisites for those individuals.
  - e. Is able to describe the authorization system, who is responsible to authorize any amendments to this authorization system. This will also require a description of how authorizations are granted, recorded and tracked.
  - f. Is able to describe their airworthiness control system, procurement through to disposal.
  - g. Is able to describe the control of the associated documentation and records.
  - h. Is able to identify the supplier recognition approval process.
  - i. Is able to describe the processes to control items that have an associated life.
  - j. Is able to describe how unapproved parts are handled and recertified, if applicable.
  - k. Is able to describe the organization's Safety Programs (e.g., Petroleum, Oil and Lubricant (POL) products and hazardous materials).
  - l. Is able to describe their quality system and the key management processes.
- 2.2. The interview will also be used to review any known issues affecting the candidate's organization and discuss the progress and planned activities.

**ANNEX E  
TO TAA ADVISORY 2013-04  
DATED 1 NOVEMBER 2013  
REVISED 22 JANUARY 2024**

**Qualification Matrix for the ADO SDE Applicant**

1. The following eligibility matrix allows the candidate Senior Design Engineer (SDE) of an Acceptable Design Organization (ADO) to provide evidence that the minimum requirements of the TAM are met.

<b>Name:</b>	<b>Date:</b>
<b>Organization:</b>	

<b>Eligibility Criteria</b>		<b>Substantiation</b> (Do not simply refer to the résumé, provide examples)	<b>Acceptability</b> (DTAES use only)
<b>Knowledge:</b>			
1.	Be a graduate of an applicable engineering discipline from a university recognized by the TAA, or in the opinion of the TAA, have equivalent knowledge gained through other forms of education and training.		
2.	In the opinion of the TAA, have detailed knowledge of the organization's Airworthiness Process Manual and applicable core procedures and/or work instructions.		
3.	Have detailed knowledge, gained by formal training and/or work experience, of the DND technical airworthiness rules and standards, through successful completion of a TAA-recognized Aircraft Certification Course.		
4.	In the opinion of the TAA, have detailed knowledge gained by formal training and/or work experience of the specific aeronautical products involved.		
5.	Have a detailed understanding of the Statement of Operating Intent (SOI) document or applicable operational requirements and environment of the specific aeronautical products involved.		
6.	Where an ADO's primary role is the engineering flight test, be a graduate from a recognized flight test school or, in the opinion of the TAA, have an equivalent qualification gained through engineering flight test experience.		
7.	Demonstrate a basic understanding of the DND Airworthiness Review Board (ARB) process.		

Eligibility Criteria	Substantiation (Do not simply refer to the résumé, provide examples)	Acceptability (DTAES use only)
8.	Demonstrate a detailed understanding of the following topics to the satisfaction of the TAA: <b>NOTE</b> <i>These topics may also be covered as part of the formal interview process.</i>	
a.	the scope and depth of technical airworthiness authority assigned by the TAA to the ADO and to other organizations involved with the design and engineering support of the approved type designs involved;	
b.	the airworthiness responsibilities of the ADO for work that is accomplished by both the organization and external agencies through support arrangements;	
c.	the responsibilities of the airworthiness management role of SDE;	
d.	the responsibilities of the persons in the ADO who have been assigned authority to perform technical airworthiness functions on behalf of the TAA;	
e.	the Engineering Process Manual (EPM) for the ADO, including associated procedures;	
f.	the inter-relationship and interfaces between Technical Airworthiness Program and Quality System requirements.	
<b>Skills:</b>		
As applicable for the scope and depth of technical airworthiness authority of the organization, skilled in the following and able to demonstrate or provide current and/or past examples regarding the ability to:		
1.	Correctly interpret airworthiness standards.	
2.	Correctly apply airworthiness processes.	
3.	Develop processes for inclusion in the EPM that are in compliance with the applicable airworthiness rules and standards.	
4.	Evaluate ADO procedures for compliance with the TAA-approved EPM.	
5.	Analyze specifications prepared for the development, test and/or technical support of an approved type design for an aeronautical product to ensure compliance with the applicable airworthiness rules and standards.	
6.	Assess the category assigned during the development of a design change to an approved type design for an aeronautical product.	

<b>Eligibility Criteria</b>		<b>Substantiation</b> (Do not simply refer to the résumé, provide examples)	<b>Acceptability</b> (DTAES use only)
7.	Prepare certification plans.		
8.	Prepare, review or approve Compliance Programs.		
9.	Provide guidance on the use of independent airworthiness reviews to personnel within the organization.		
10.	Apply management principles to:		
a.	ensure that airworthiness-related activities are conducted in accordance with the TAA-approved EPM and the ADO-approved procedures;		
b.	ensure that the authorization of personnel performing airworthiness-related tasks and technical airworthiness functions is accomplished in accordance with the TAA-approved EPM and the ADO-approved procedures;		
c.	monitor the competencies of individuals to whom technical airworthiness authority has been assigned and of the organization as a whole;		
d.	monitor the development and progress of Design Engineer (DE) candidates;		
e.	evaluate the capabilities of personnel for the assignment of technical airworthiness authority;		
f.	ensure adequate engineering competence is applied in the engineering decisions that may affect the airworthiness of an approved type design for an aeronautical product;		
g.	ensure that appropriate action is taken to correct any practice or procedure which may compromise the airworthiness of an aeronautical product and/or that the matter is brought to the attention of the TAA.		
11.	Issue airworthiness instructions when a non-compliance with airworthiness rules and standards or a non-conformance with the approved type design is discovered.		
12.	Communicate with external agencies to:		
a.	ensure that contracts or service level agreements are developed and maintained as necessary to enable the ADO to provide the scope and depth of design and engineering support required;		

<b>Eligibility Criteria</b>		<b>Substantiation</b> (Do not simply refer to the résumé, provide examples)	<b>Acceptability</b> (DTAES use only)
b.	ensure that the relationship with the Type Certificate Holder (TCH) provides a clear understanding of the ADO and TCH relative responsibilities and roles in the conduct of engineering support;		
c.	ensure work performed by an external agency that is not accredited or recognized as a TAA acceptable organization is conducted in accordance with ADO approved procedures.		
<b>Experience:</b>			
1.	The SDE should have no less than ten (10) years of relevant aerospace engineering or flight test experience and with progressively more responsibilities.		

## 2. ADO SDE Interview Questions

2.1. During the interview, the expectation is that the candidate relates the topic areas to their own organization. The candidate is expected to demonstrate understanding of their organization's engineering policy requirements and core enabling procedures. For the interviews it is acceptable for the candidate to have access to any supporting policy, procedures or work instructions that they feel are needed to facilitate the discussion. The following is a list of typical areas that are discussed during the interview with a nominated SDE within an Acceptable Design Organization.

- a. Has a general understanding of the airworthiness program. For example: the flow of authority from the Minister to the SDE, what are the three levels of assignment of authority, principles of the technical airworthiness program (4 As).
- b. Is able to explain the responsibilities of the SDE, DEs and applicable staff that will be providing Design Support Services (within and external to the organization).
- c. Is able to describe the technical prerequisites for DEs and Design Support staff.
- d. Is able to explain each Airworthiness function assigned to the ADO (i.e., Findings of Compliance (FoC), Airworthiness Approval, Technical Airworthiness Clearance (TAC) and granting of Flight Authority) and what the signature means. Explain what the SDE's scope is (i.e., engineering specialty areas).
- e. Is able to describe how the ADO interfaces with the Weapon System Manager (WSM) and the ADO's Support Network and how to evaluate sources of approved data using the Type Design Examination (TDE) process.
- f. Is able to describe the scope and depth of authority being assigned to the ADO and any limitations.
- g. Is able to describe the engineering support provided by the ADO to DND (i.e., WSM).
- h. Is able to describe how the ADO supports ATO WSM/change processes (i.e., Publication Changes, Airworthiness Monitoring Activities, Risk Management, flight authority, etc.)
- i. Is able to discuss how design changes and Non Standard Repairs (NSRs) are approved.
- j. Is able to describe their quality system and how it applies to the ADO activities.



- k. Is able to describe how to enter into support arrangements and any limitations.
  - l. Is able to discuss the results of the last audit(s) conducted in the candidate's organization or organizations that the candidate is associated with.
  - m. Is able to discuss ATO type activities delegated to the ADO.
- 2.2. The interview will also be used to review any known issues affecting the candidate's organization and discuss the progress and planned activities.