

**Safety Attribute Inspection (SAI) Data Collection Tool
1.3.13 Designated Alteration Station (DAS) (AW)**

ELEMENT SUMMARY INFORMATION

Purpose of This Element (Certificate Holder's responsibility):

- To ensure the Certificate Holder develops and uses appropriate data for major alterations or for the issuance of a Supplemental Type Certificate (STC), in accordance with its DAS privileges, limitations and ACO-approved DAS procedures manual.

Objective (FAA oversight responsibility):

- To determine if the Certificate Holder's Designated Alteration Station (DAS) process meets all applicable requirements of the Federal Aviation Regulations and FAA policies.
- To determine if the Certificate Holder's Designated Alteration Station (DAS) process incorporates the System Safety Attributes.
- To identify any shortfalls in the Certificate Holder's Designated Alteration Station (DAS) process.

Specific Instructions:

- Intentionally left blank

SUPPLEMENTAL INFORMATION

Specific Regulatory Requirement(s) (SRRs):

- SRRs:
 - 121.135(a)(1)
 - 121.135(b)(1)
 - 121.135(b)(2)
 - 121.135(b)(3)
 - 121.379(b)
 - 21.439(a)(1)
 - 21.439(a)(3)
 - 21.441(a)
 - 21.441(a)(1)
 - 21.441(a)(2)(i)
 - 21.441(b)
 - 21.451(a)(2)
 - 21.451(c)
 - 21.477(a)

Related CFR(s) & FAA Policy/Guidance:

- Related CFRs:
21.439(a)(4)
- FAA Policy/Guidance:
FAA Order 8100.7A, Appendix 17, AC 21.431-1A

| SAI SECTION 1 – PROCEDURES ATTRIBUTE | | |
|---|--|--|
| <p>Objective: Procedures, instructions and information contained in Certificate Holder's manual are documented methods for accomplishing a process. Policies contained in the Certificate Holder's manual should establish the Certificate Holder's compliance posture. Policies may not be stand-alone statements but may be imbedded within procedures, instructions or information regarding a particular regulatory requirement. The questions in this section of the data collection tool are designed to assist the inspector in determining if the Certificate Holder's manual has documented or prescribed methods of accomplishing the process requirements that provide answers to the associated who, what, when, where and how type questions. This section of the data collection tool contains policy questions, procedural questions and instructional or informational questions pertaining to various types of Certificate Holder requirements such as actions, prohibitions or resources (i.e., personnel, facilities, equipment, technical data, etc.).</p> | | |
| Tasks | | |
| To meet this objective, the inspector must accomplish the following tasks: | | |
| 1 | Review the information listed in the Supplemental Information section of this data collection tool. | |
| 2 | Review the duties and responsibilities for management and other personnel identified by the Certificate Holder who accomplish the Designated Alteration Station (DAS) process. | |
| 3 | Review the Certificate Holder's manual to ensure that it contains policies, procedures, instructions and information necessary for the Designated Alteration Station (DAS) process. | |
| Questions | | |
| To meet this objective, the inspector must answer the following questions: | | |
| 1 | Does the Certificate Holder's manual content meet the specific regulatory and FAA policy requirements for a Designated Alteration Station (DAS) process: | |
| 1.1 | <p>Does the Certificate Holder's manual contain general policies for the Designated Alteration Station (DAS) process that comply with the specific regulatory requirements? SRRs: 121.135(b)(1); 121.379(b); 21.439(a)(1); 21.451(a)(2); 21.451(c)</p> <p><i>Related Design JTI's:</i></p> <ol style="list-style-type: none"> Check that the Certificate Holder has a current Certificate Holder operating certificate under FAR Part 121. <i>Sources:</i> 21.439(a)(1) The FAA Aircraft Certification Office is an internal resource that should be contacted during activities with this item. Check that the Certificate Holder has a policy ensuring the use of approved data to perform major alterations. <i>Sources:</i> 121.379(b) <i>Interfaces:</i> 1.3.9-aw; 1.3.2-aw; 1.3.1-aw | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
| 1.2 | Does the Certificate Holder's manual cite the regulatory requirements listed in the Supplemental Information section of this SAI? SRRs: 121.135(b)(3) | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
| 1.3 | Does the Certificate Holder's manual contain the duties and responsibilities for personnel who will accomplish the Designated Alteration Station (DAS) process? SRRs: 121.135(b)(2); 21.441(a)(2)(i); 21.441(b) | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |

| | |
|--|--|
| <p>1.4 Does the Certificate Holder's manual include instructions and information for personnel to meet the requirements of the Designated Alteration Station (DAS) process? SRRs: 121.135(a)(1); 21.439(a)(3); 21.451(a)(2); 21.451(c) Related CFRs: 21.439(a)(4)</p> <p><i>Related Design JTI's:</i></p> <ol style="list-style-type: none"> 1. Check that the Certificate Holder's manual has instructions and information that ensures adequate maintenance facilities and personnel, in the United States, appropriate to the products that it may operate and maintain under its certificate. <i>Sources:</i> 21.439(a)(3) The FAA Aircraft Certification Office is an internal resource that should be contacted during activities with this item. <i>Interfaces:</i> 1.3.3–aw 2. Check that the Certificate Holder's manual has information and instructions necessary to ensure an adequate number of engineering staff, flight test, and inspection personnel to determine compliance with the applicable airworthiness requirements of this chapter. <i>Sources:</i> 21.439(a)(4) The FAA Aircraft Certification Office is an internal resource that should be contacted during activities with this item. 3. Check that Certificate Holder's manual contains instructions and information necessary to ensure that the DAS Authorization applies only to products covered by the operating certificate and maintenance manual of the Certificate Holder. <i>Sources:</i> 21.451(a)(2) The FAA Aircraft Certification Office is an internal resource that should be contacted during activities with this item. <i>Interfaces:</i> 2.1.1–op; 2.1.2–aw; 2.1.1–aw; 2.1.2–op 4. Check that the Certificate Holder has instructions and information contained in their manual ensuring compliance with additional limitations prescribed by the Administrator after inspection of the Certificate Holder's facilities or review of the staff qualifications. <i>Sources:</i> 21.451(c) The FAA Aircraft Certification Office is an internal resource that should be contacted during activities with this item. <i>Interfaces:</i> 1.3.3–aw | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
| <p>1.5 Does the Certificate Holder's manual contain instructions and information to ensure it uses its ACO–approved DAS procedures manual when performing an alteration using its DAS authority? SRRs: 121.135(a)(1); 121.379(b); 21.451(a)(2)</p> | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
| <p>1.6 Does the Certificate Holder's approved Designated Alteration Station (DAS) procedures manual contain: SRRs: 21.441(a)</p> | |
| <p>1.6.1 The procedures for issuing Supplemental Type Certificates (STC's)? SRRs: 21.441(a)(1)</p> | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
| <p>1.6.2 The names, signatures, and responsibilities of officials and of each engineering staff member, flight test, and inspection personnel, identifying those persons who have authority to make changes in procedures that require a revision to the procedures manual? SRRs: 21.441(a)(2)(i); 21.441(b)</p> | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |

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|---|--|
| <p>1.7 Does the Certificate Holder's manual contain instructions and information necessary for approving any aircraft, airframe, or aircraft engine for return to service after a major alteration (STC), in accordance with technical data approved by the Administrator (DAS)?</p> <p>SRRs: 121.135(a)(1); 121.379(b)</p> <p><i>Related Design JTI's:</i></p> <p>1. Check that the Certificate Holder has a policy ensuring the use of approved data to perform major alterations.</p> <p><i>Sources:</i> 121.379(b)</p> <p><i>Interfaces:</i> 1.3.9-aw; 1.3.2-aw; 1.3.1-aw</p> | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
| <p>1.8 Does the Certificate Holder's Designated Alteration Station (DAS) process comply with the related requirements of 14 CFR Section 21.477?</p> <p>SRRs: 21.477(a)</p> <p><i>Related Design JTI's:</i></p> <p>1. Check that the DAS has instructions and information in their manual ensuring that upon notification by the Administrator, the DAS investigates findings that a product for which an STC was issued under this subpart does not meet the applicable airworthiness requirements. Or that an unsafe feature or characteristic caused by a defect in design or manufacture exists, and reports to the Administrator the results of the investigation and the action, if any, taken or proposed.</p> <p><i>Sources:</i> 21.477(a)</p> <p>The FAA Aircraft Certification Office is an internal resource that should be contacted during activities with this item. <i>Interfaces:</i> 1.2.1-aw; 1.2.2-aw; 1.1.1-aw; 1.3.9-aw</p> | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |

| SAI SECTION 1 – PROCEDURES ATTRIBUTE –Drop Down Menu |
|--|
| 1. No procedures, policy, instructions or information specified. |
| 2. Procedures or instructions and information do not identify (who, what, when, where, how). |
| 3. Procedures, policy or instructions and information do not comply with CFR. |
| 4. Procedures, policy or instructions and information do not comply with FAA policy and guidance. |
| 5. Procedures, policy or instructions and information do not comply with other documentation (e.g., manufacturer's data, Jeppesen's Charts, etc.). |
| 6. Procedures, policy or instructions and information unclear or incomplete. |
| 7. Documentation quality (e.g., unreadable or illegible). |
| 8. Procedures, policy or instructions and information inconsistent across Certificate Holder manuals (FOM – Flight Operations Manual to GMM – General Maintenance Manual, etc.). |
| 9. Procedures, policy or instructions and information inconsistent across media (e.g., paper, microfiche, electronic). |
| 10. Resource requirements incomplete (personnel, facilities, equipment, technical data). |
| 11. Other. |

SAI SECTION 2 – CONTROLS ATTRIBUTE

Objective: Controls are checks and restraints designed into a process to ensure a desired result. The questions in this section of the data collection tool are designed to assist the inspector in determining if checks and restraints are designed into the process to ensure the desired result is achieved. Controls should be written into the manual system to ensure that the most important manual policies, procedures or instructions and information will be complied with.

Controls may be in the form of "administrative controls" which are secondary or supplemental written procedures. Like written procedures, administrative controls also need to provide answers to the associated who, what, when, where and how type questions. Controls may also be in the form of "engineered controls" such as automated features or mechanical actions or devices (i.e., safety devices, warning devices, etc.).

Tasks

To meet this objective, the inspector must accomplish the following tasks:

- 1 Review the control questions below.
- 2 Review the Certificate Holder's policies, procedures, instructions and information to gain an understanding of the controls that it has documented.

Questions

To meet this objective, the inspector must answer the following questions:

2. Are the following controls built into the Designated Alteration Station (DAS) process:
 - 2.1 Is there a control in place to ensure that the Certificate Holder perform only DAS alterations on products covered by its certificate and ACO–approved manual?

| | |
|--|--------------------------------------|
| | <input type="checkbox"/> Yes |
| | <input type="checkbox"/> No, Explain |
 - 2.2 Is there a control in place to ensure that the Certificate Holder complies with any additional limitations prescribed by the Administrator (ACO)?

| | |
|--|--------------------------------------|
| | <input type="checkbox"/> Yes |
| | <input type="checkbox"/> No, Explain |
 - 2.3 Is there a control in place to ensure that the Certificate Holder, upon notification by the cognizant ACO, investigates a product and reports the findings, for which an STC was issued that did not meet the airworthiness requirements?

| | |
|--|--------------------------------------|
| | <input type="checkbox"/> Yes |
| | <input type="checkbox"/> No, Explain |
 - 2.4 Is there a control in place to ensure that the observed aircraft alterations comply with DAS technical data?

| | |
|--|--------------------------------------|
| | <input type="checkbox"/> Yes |
| | <input type="checkbox"/> No, Explain |
 - 2.5 Is there a control in place to ensure that the Certificate Holder accomplishes alterations within its Designated Alteration Station (DAS) authority?

| | |
|--|--------------------------------------|
| | <input type="checkbox"/> Yes |
| | <input type="checkbox"/> No, Explain |
 - 2.6 Does the Certificate Holder have a documented method for assessing the impact of any changes made to the controls in the Designated Alteration Station (DAS) process?

| | |
|--|--------------------------------------|
| | <input type="checkbox"/> Yes |
| | <input type="checkbox"/> No, Explain |

| SAI SECTION 2 – CONTROLS ATTRIBUTE –Drop Down Menu |
|---|
| 1. No controls specified. |
| 2. Documentation for the controls do not identify (who, what, when, where, how). |
| 3. Controls incomplete. |
| 4. Controls could be circumvented. |
| 5. Controls could be unenforceable. |
| 6. Resource requirements incomplete (personnel, facilities, equipment, technical data). |
| 7. Other. |

SAI SECTION 3 – PROCESS MEASUREMENT ATTRIBUTE

Objective: Process measurements are used by the Certificate Holder to measure and assess its processes to identify and correct problems or potential problems and to make improvements to the processes. The questions in this section of the data collection tool are designed to assist the inspector in determining if the Certificate Holder measures or assesses information to identify, analyze and document potential problems with the process. Process measurements are basically a Certificate Holder's internal evaluation or auditing of the most important policies, procedures or instructions and information associated with an element.

To prevent the duplication of work that would otherwise occur, Process Measurements are most commonly addressed through a combination of auditing features contained in both the Certificate Holder's Safety Program/Internal Evaluation Program (for Operations and Cabin Safety related issues) and the auditing function of the Continuous Analysis & Surveillance System (for Airworthiness or Maintenance/Inspection related issues). The Director of Safety and the Quality Assurance Department often work in conjunction to accomplish this function for the Certificate Holder. This approach simply requires amendment of the Safety Program/Internal Evaluation Program audit forms or checklists and the Continuous Analysis & Surveillance System audit forms or checklists to include the specific process measurements for each element.

Tasks

To meet this objective, the inspector must accomplish the following tasks:

- 1 Review the process measurement questions below.
- 2 Review the Certificate Holder's policies, procedures, instructions and information to gain an understanding of the process measurements that it has documented.

Questions

To meet this objective, the inspector must answer the following questions:

- 3 Does the Certificate Holder's Designated Alteration Station (DAS) process include the following process measurements:

| | |
|--|--|
| 3.1 Process measurements that would reveal when the Certificate Holder performed DAS alterations on anything other than products covered by its certificate and ACO-approved manual? | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
| 3.2 Process measurements that would reveal when the Certificate Holder failed to comply with any additional limitations prescribed by the Administrator (ACO)? | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
| 3.3 Process measurements that would reveal when the Certificate Holder failed, upon notification by the cognizant ACO, to investigate a product and report the findings, for which an STC was issued that did not meet the airworthiness requirements? | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
| 3.4 Process measurements that would reveal when aircraft alterations failed to comply with DAS technical data? | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
| 3.5 Does the Certificate Holder document its process measurement methods and results? | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
| 3.6 Does the organization that conducts the process measurements have direct access to the person with responsibility for the Designated Alteration Station (DAS) process? | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |

| SAI SECTION 3 – PROCESS MEASUREMENT ATTRIBUTE –Drop Down Menu |
|--|
| 1. No process measurements specified. |
| 2. Documentation for the process measurements does not identify (who, what, when, where, how). |
| 3. Inability to identify negative findings. |
| 4. No provisions for implementing corrective actions. |
| 5. Ineffective follow-up to determine effectiveness of corrective actions. |
| 6. Resources requirements (personnel, facilities, equipment, technical data). |
| 7. Other. |

SAI SECTION 4 – INTERFACES ATTRIBUTE

Objective: Interfaces are used by the Certificate Holder to identify and manage the interactions between processes. The questions in this section of the data collection tool are designed to assist the inspector in determining whether or not interactions between the procedures, policies or instructions and information associated with other independent processes within the Certificate Holder's organization are documented. Written procedures, policies or instructions and information that are interrelated and located in different manuals within the Certificate Holder's manual system need to be consistent and complement each other. For the interfaces to be effectively managed, it is not only important to identify what the interfaces are, but it is imperative to document the specific location of the interfaces within the Certificate Holder's manual system.

Tasks

To meet this objective, the inspector must accomplish the following tasks:

- 1 Review the interfaces associated with the Designated Alteration Station (DAS) process that have been identified along with the individual questions in the Procedures Section (1) of this data collection tool.
- 2 Review the Certificate Holder's policies, procedures, instructions and information to gain an understanding of the interfaces that it has documented.

Questions

To meet this objective, the inspector must answer the following questions:

NOTE: ALL EXPLANATIONS IN THE DROP DOWN MENU FOR "NO" ANSWERS MUST INCLUDE THE INDIVIDUAL QUESTION NUMBER FROM THE PROCEDURES SECTION (1) OF THIS DATA COLLECTION TOOL AND THE ELEMENT NUMBER(S) OF THE DISCREPANT INTERFACE(S) THAT WERE NOT ADDRESSED.

4. Does the Certificate Holder's manual:

- | | |
|--|--|
| 4.1 Properly address the interfaces that are identified along with the individual questions in the Procedures Section (1)? | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
| 4.2 Document a method for assessing the impact of any changes to the associated interfaces within the Designated Alteration Station (DAS) process? | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
| 4.3 List additional interfaces identified during the accomplishment of this SAI: | |

| SAI SECTION 4 – INTERFACES ATTRIBUTE –Drop Down Menu |
|---|
| 1. No interfaces specified. |
| 2. The following interfaces not identified within the Certificate Holder's manual system: |
| 3. Interfaces listed are inaccurate. |
| 4. Specific location of interfaces not identified within the manual system. |
| 5. Other |

SAI SECTION 5 – MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTE

Objective: The questions in this section of the data collection tool address the responsibility and authority of the process. They are designed to assist the inspector in determining if there is a clearly identifiable, qualified and knowledgeable person who is responsible for the process, is answerable for the quality of the process and has the authority to establish and modify the process. (The person with the authority may or may not be the person with the responsibility.)

Tasks

To meet this objective, the inspector must accomplish the following tasks:

- 1 Identify the person who has overall responsibility for the Designated Alteration Station (DAS) process.
- 2 Identify the person who has overall authority for the Designated Alteration Station (DAS) process.
- 3 Review the duties and responsibilities of the person(s), documented in the Certificate Holder's manual.
- 4 Review the appropriate organizational chart.

Questions

To meet this objective, the inspector must answer the following questions:

5. Are the following aspects of the Management Responsibility and Authority Attributes addressed in the Designated Alteration Station (DAS) process:
 - 5.1 Does the Certificate Holder's manual identify who is responsible for the quality of the Designated Alteration Station (DAS) process?

| | |
|--|---|
| | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title: <input style="width: 100%;" type="text"/> |
|--|---|
 - 5.2 Does the Certificate Holder's manual clearly identify who has authority to establish and modify the policies, procedures, instructions and information for the Designated Alteration Station (DAS) process?

| | |
|--|---|
| | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain Name/Title: <input style="width: 100%;" type="text"/> |
|--|---|
 - 5.3 Does the Certificate Holder's manual include the duties and responsibilities of those who manage the work required by the Designated Alteration Station (DAS) process?
SRRs: 121.135(b)(2)

| | |
|--|--|
| | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
|--|--|
 - 5.4 Does the Certificate Holder's manual include instructions and information for those who manage the work required by the Designated Alteration Station (DAS) process?
SRRs: 121.135(a)(1)

| | |
|--|--|
| | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
|--|--|
 - 5.5 Does the Certificate Holder's manual clearly and completely document the authority for this position?

| | |
|--|--|
| | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
|--|--|
 - 5.6 Does the Certificate Holder's manual clearly and completely document their qualification standards for the person having responsibility for the Designated Alteration Station (DAS) process?

| | |
|--|--|
| | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
|--|--|
 - 5.7 Does the Certificate Holder's manual clearly and completely document their qualification standards for the person having authority to establish and modify the Certificate Holder's policies, procedures, instructions and information for the Designated Alteration Station (DAS) process?

| | |
|--|--|
| | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
|--|--|

| | |
|--|--|
| 5.8 Does the Certificate Holder's manual clearly and completely document the procedures for delegation of authority for the Designated Alteration Station (DAS) process? | <input type="checkbox"/> Yes <input type="checkbox"/> No, Explain |
|--|--|

| SAI SECTION 5 – MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTE –Drop Down Menu |
|--|
| 1. Not documented. |
| 2. Documentation unclear. |
| 3. Documentation incomplete. |
| 4. Other. |