Safety Attribute Inspection (SAI) Data Collection Tool 1.2.3 Maintenance Log / Recording Requirements (AW)

ELEMENT SUMMARY INFORMATION

Purpose of this Element (certificate holder's responsibility):

To provide policy, procedures, instructions, and information necessary for the
preservation, retrieval, and recording of any reported or observed failure or malfunction,
and all mechanical irregularities.

Objective (FAA oversight):

- To determine if the certificate holder's Maintenance Log/Recording Requirements process meets all applicable requirements of Title 14 of the Code of Federal Regulations (14 CFR) and FAA policies.
- To determine if the certificate holder's Maintenance Log/Recording Requirements process incorporates the safety attributes.
- To identify any shortfalls in the certificate holder's Maintenance Log/Recording Requirements process.

Specific Instructions:

Intentionally left blank

SUPPLEMENTAL INFORMATION

Specific Regulatory Requirements (SRRs):

- SRRs:
 - 121.135(a)(1)
 - 121.135(b)(1)
 - 121.135(b)(2)
 - 121.135(b)(3)
 - 121.369(c)
 - 121.369(c)(1)
 - 121.369(c)(2)
 - 121.369(c)(3)
 - 121.374(h)(1)
 - 121.374(h)(1)(i)
 - 121.374(h)(1)(ii)
 - 121.374(h)(1)(iii)
 - 121.374(h)(1)(iv)
 - 121.374(h)(1)(v)
 - 121.374(h)(1)(vi)
 - 121.374(h)(1)(vii)
 - 121.374(h)(2)
 - 121.380(a)(1)
 - 121.563
 - 121.701(a)
 - 121.701(b)
 - 121.709(a)
 - 43.2(a)(1)

- SRRs:
 - 43.2(a)(2)
 - 43.9(a)
 - 43.9(a)(1)
 - 43.9(a)(3)
 - 43.9(a)(4)

Related CFRs & FAA Policy/Guidance:

- Related CFRs: Intentionally left blank
- FAA Policy/Guidance: Intentionally Left Blank

SAI Section 1 - Procedures Attribute

Objective: Procedures, instructions, and information are

documented methods for accomplishing a process. The certificate holder's policies should establish their compliance posture. Policies may be stand-alone statements, or they may be imbedded within procedures, instructions, or information regarding a particular regulatory requirement. The questions in this section of the data collection tool (DCT) are designed to assist the inspector in determining if the certificate holder has documented or prescribed methods of accomplishing the process requirements that provide answers to the associated questions regarding who, what, when, where, and how. This section 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.).

aata	, 0.0.7.
Tasks	
	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the information listed in the Supplemental Information section of this DCT.
2.	Review the duties and responsibilities for management and other personnel identified by the certificate holder who accomplish the Maintenance Log/Recording Requirements process.
3.	Review the certificate holder's Maintenance Log/Recording Requirements process to ensure it contains the policies, procedures, instructions and information necessary for personnel to perform their duties and responsibilities with a high degree of safety.

Quest	tions	
	To meet this objective, the inspector must answer the following questions:	
1.	Does the certificate holder's Maintenance Log/Recording Requirements process meet the specific regulatory and FAA policy requirements:	
1.1.	Does the certificate holder's Maintenance Log/Recording Requirements process contain procedures for keeping adequate copies of the airplane's maintenance log for a reported or observed failure or malfunction of an airframe, engine, propeller, or appliance that is critical to the safety of flight, in a place in the aircraft readily accessible to each flight crewmember? SRRs: 121.701(b) Related Design JTIs: 1. Check that the Certificate Holder's manual has an approved procedure for keeping adequate copies of the record required in paragraph (a) of this section in the airplane in a place readily accessible to each flight crewmember. Sources: 121.701(b) Interfaces: 1.3.1(AW); 1.3.2(AW); 1.3.5(AW); 1.3.14(AW)	☐ Yes ☐ No, Explain
1.2.	Does the certificate holder s Maintenance Log/Recording Requirements process include instructions and information necessary for each person who maintains, performs preventive maintenance, or alters an aircraft, aircraft engine, propeller, appliance, or component part, to make an entry in the maintenance record of that equipment that contains: SRRs: 121.135(a)(1); 43.9(a)	
1.2.1	A description (or reference to data acceptable to the Administrator) of work	Yes

	performed?	☐ No, Explain
	SRRs: 43.9(a)(1)	
1.2.2	The date of completion of the work performed?	☐ Yes ☐ No, Explain
1.2.3	The name of the person performing the work if other than the person who approved it for return to service? SRRs: 43.9(a)(3)	☐ Yes ☐ No, Explain
1.2.4	The signature, certificate number, and kind of certificate held by the person approving the work? SRRs: 43.9(a)(4)	Yes No, Explain
1.3.	Does the certificate holder's manual set forth a suitable system (which may include a coded system) that provides for preservation and retrieval of information in a manner that provides: SRRs: 121.369(c)	
1.3.1	A description (or reference to data acceptable to the Administrator) of the work performed? SRRs: 121.369(c)(1) Related Design JTIs: 1. Check that the Certificate Holder's manual includes instructions or information on a suitable system (which may include a coded system) that provides for preservation and retrieval of information in a manner acceptable to the Administrator and that provides: A description (or reference to data acceptable to the Administrator) of the work performed Sources: 121.135(b)(26); 121.369(c)(1) Interfaces: 1.3.1(AW); 1.3.2(AW); 1.3.5(AW); 1.3.14(AW)	☐ Yes ☐ No, Explain
1.3.2	The name of the person performing the work if the work is performed by a person outside the certificate holder's organization? SRRs: 121.369(c)(2) Related Design JTIs: 1. Check that the Certificate Holder's manual includes instructions or information on a suitable system (which may include a coded system) that provides for preservation and retrieval of information in a manner acceptable to the Administrator and that provides: The name of the person performing the work if the work is performed by a person outside the organization of the certificate holder Sources: 121.135(b)(26); 121.369(c)(2) Interfaces: 1.3.1(AW); 1.3.2(AW); 1.3.5(AW); 1.3.14(AW)	☐ Yes ☐ No, Explain
1.3.3	 The name or other positive identification of the individual approving the work? SRRs: 121.369(c)(3) Related Design JTIs: 1. Check that the Certificate Holder's manual includes instructions or information on a suitable system (which may include a coded system) that provides for preservation and retrieval of information in a manner acceptable to the Administrator and that provides: The name or other positive identification of the individual approving the work. 	☐ Yes ☐ No, Explain

	Sources: 121.135(b)(26); 121.369(c)(3)	
	Interfaces: 1.3.1(AW); 1.3.2(AW); 1.3.5(AW); 1.3.14(AW)	
1.4.	Does the certificate holder document ETOPS information, instructions, and procedures for reporting, within 96 hours of an occurrence, to its certificate holding district office (CHDO): SRRs: 121.374(h)(1)	
1.4.1	In Flight Shut Downs (IFSD), except planned IFSDs performed for flight training? SRRs: 121.374(h)(1)(i)	☐ Yes ☐ No, Explain ☐ Not Applicable
1.4.2	Diversions and turnbacks for failures, malfunctions, or defects associated with any airplane or engine system? SRRs: 121.374(h)(1)(ii)	☐ Yes ☐ No, Explain ☐ Not Applicable
1.4.3	Un-commanded power or thrust changes or surges? SRRs: 121.374(h)(1)(iii)	☐ Yes ☐ No, Explain ☐ Not Applicable
1.4.4	Inability to control the engine or obtain desired power or thrust? SRRs: 121.374(h)(1)(iv)	☐ Yes ☐ No, Explain ☐ Not Applicable
1.4.5	Inadvertent fuel loss or unavailability, or uncorrectable fuel imbalance in flight? SRRs: 121.374(h)(1)(v)	☐ Yes ☐ No, Explain ☐ Not Applicable
1.4.6	Failures, malfunctions or defects associated with ETOPS Significant Systems?	☐ Yes
	SRRs: 121.374(h)(1)(vi)	☐ No, Explain ☐ Not Applicable
1.4.7	Any event that would jeopardize the safe flight and landing of the airplane on an ETOPS flight? SRRs: 121.374(h)(1)(vii)	☐ Yes ☐ No, Explain ☐ Not Applicable
1.5.	Does the certificate holder specify it must investigate the cause of each event and submit findings and a description of corrective action to its CHDO? SRRs: 121.374(h)(2)	☐ Yes ☐ No, Explain ☐ Not Applicable
1.6.	Does the certificate holder specify the report must include the information specified in 14 CFR1.703(e) and the corrective action must be acceptable to its CHDO? SRRs: 121.374(h)(2)	☐ Yes ☐ No, Explain ☐ Not Applicable
1.7.	Does the certificate holder specify within 30 days of exceeding In Flight Shut Down rates, the certificate holder will submit a report of investigation and any necessary corrective action taken to its CHDO? SRRs: 121.374(h)(2)	Yes No, Explain Not Applicable
2.	Does the certificate holder's manual contain general policies for the Maintenance Log/Recording Requirements process that comply with the SRRs?	Yes No, Explain
	SRRs: 121.135(b)(1); 121.380(a)(1); 121.563; 121.701(a); 121.701(b); 121.709(a); 43.2(a)(1); 43.2(a)(2)	
	Related Design JTIs:	
	 Check that the Certificate Holder's manual contains a general policy regarding each person who takes action in the case of a reported or observed failure or malfunction of an airframe, engine, propeller, or 	

		appliance that is critical to the safety of flight shall make, or have made, a record of that action in the airplane's maintenance log. Sources: 121.135(b)(1); 121.701(a) Interfaces: 1.3.1(AW); 1.3.2(AW); 1.3.5(AW); 1.3.14(AW)	
3.	Regulat attribute	e certificate holder's manual reference the appropriate Federal Aviation ions listed in the Supplemental Information section of this safety inspection (SAI)? (21.135(b)(3)	☐ Yes ☐ No, Explain
4.	personn process	e certificate holder's manual contain the duties and responsibilities for lel who will accomplish the Maintenance Log/Recording Requirements? 121.135(b)(2)	Yes No, Explain
5.	personn Require SRRs: 1 Related 1.	e certificate holder's manual include instructions and information for let to meet the requirements of the Maintenance Log/Recording ments process? 21.135(a)(1) Design JTIs: Check that the Certificate Holder's manual includes instructions and information necessary to allow personnel concerned to perform the duty and responsibility each person who takes action in the case of a reported or observed failure or malfunction of an airframe that is critical to the safety of flight shall make, or have made, a record of that action in the airplane's maintenance log. Sources: 121.135(a)(1); 121.701(a) Interfaces: 1.3.1(AW); 1.3.2(AW); 1.3.5(AW); 1.3.14(AW) Check that the Certificate Holder's manual includes instructions and information necessary to allow personnel concerned to perform the duty and responsibility each person who takes action in the case of a reported or observed failure or malfunction of an engine that is critical to the safety of flight shall make, or have made, a record of that action in the airplane's maintenance log. Sources: 121.135(a)(1); 121.701(a) Interfaces: 1.3.1(AW); 1.3.2(AW); 1.3.5(AW); 1.3.14(AW) Check that the Certificate Holder's manual includes instructions and information necessary to allow personnel concerned to perform the duty and responsibility each person who takes action in the case of a reported or observed failure or malfunction of an propeller that is critical to the safety of flight shall make, or have made, a record of that action in the airplane's maintenance log. Sources: 121.135(a)(1); 121.701(a) Interfaces: 1.3.1(AW); 1.3.2(AW); 1.3.5(AW); 1.3.14(AW) Check that the Certificate Holder's manual includes instructions and information necessary to allow personnel concerned to perform the duty and responsibility each person who takes action in the case of a reported or observed failure or malfunction of an appliance that is critical to the safety of flight shall make, or have made, a record of that action in the airplane's maintenance log. Sources: 121.135(a)(1); 121	Yes No, Explain
	5.	Check that the certificate holder's manual includes instructions and	

information necessary to ensure the pilot in command enters all mechanical irregularities, occurring during a flight, are entered in the maintenance log of the airplane at the end of the flight.

Sources: 121.135(a)(1); 121.563

Interfaces: 1.3.1(AW); 1.3.2(AW); 1.3.5(AW); 1.3.14(AW)

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
questi restra writter	ctive: Controls are checks and restraints designed into a process to ensure a desired result. The ions in this section of the DCT are designed to assist the inspector in determining if checks and ints are designed into the process to ensure the desired result is achieved. Controls should be in into the system to ensure that the most important policies, procedures, or instructions and nation will be followed.
proced regard	ols may be in the form of administrative controls, which are secondary or supplemental written dures. Like written procedures, administrative controls also need to provide answers to questions ding who, what, when, where, and how. Controls may also be in the form of engineered controls, as automated features or mechanical actions or devices (i.e., safety devices, warning devices, etc.).
Tasks	s
-	To meet this objective, the inspector must accomplish the following tasks:
1.	Review the control questions below.
	Review the certificate holder's policies, procedures, instructions, and information to gain an understanding of the controls that it has documented.

Que	Questions		
	To meet this objective, the inspector must answer the following questions:		
1.	Are the following controls built into the Maintenance Log/Recording Requirements process:		
1.1.	Is there a control or controls in place to ensure that the certificate holder provides adequate copies of the aircraft maintenance log in a place readily accessible to each flight crewmember?	Yes No, Explain	
1.2.	Is there a control or controls in place to ensure that each person who takes action in the case of a reported or observed failure or malfunction will make, or have made, a record of that action in the airplane's maintenance log?	Yes No, Explain	
1.3.	Is there a control or controls in place to ensure that all required aircraft maintenance log entries were made?	☐ Yes ☐ No, Explain	
2.	Does the certificate holder have a documented method for assessing the impact of any changes made to the controls in the Maintenance Log/Recording Requirements process?	Yes 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 DCT 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 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, 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 and Surveillance System (for airworthiness or maintenance/inspection related issues). The director of safety and the quality assurance department often work together to accomplish this function for the certificate holder. This approach requires amendment of the safety program/internal evaluation program audit forms or checklists and the Continuous Analysis and 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.

Que	Questions		
	To meet this objective, the inspector must answer the following questions:		
1.	Does the certificate holder's Maintenance Log/Recording Requirement process include the following process measurements:		
1.1.	Is there a process measurement or process measurements that would identify if the certificate holder failed to provide adequate copies of the aircraft maintenance log in a place readily accessible to each flight crewmember?	☐ Yes ☐ No, Explain	
1.2.	Is there a process measurement or process measurements that would identify if the certificate holder failed to ensure that each person who took action in the case of a reported or observed failure or malfunction made, or had made, a record of that action in the airplane's maintenance log?	Yes No, Explain	
1.3.	Is there a process measurement or process measurements that would identify if the certificate holder failed to ensure that all required aircraft maintenance log entries were made?	Yes No, Explain	
2.	Is there a process measurement or process measurements that would reveal if the certificate holder s policy, procedures, instructions, and information were not followed?	Yes No, Explain	
3.	Does the certificate holder document its process measurement results?	☐ Yes ☐ No, Explain	

4.	Does the certificate holder use its process measurement results to improve its programs?	☐ Yes ☐ No, Explain
5.	Does the organization that conducts the process measurements have direct access to the person with responsibility for the Maintenance Log/Recording Requirement process?	Yes 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 DCT are designed to assist the inspector in determining whether or not interactions between the policies, procedures, or instructions and information associated with other independent processes within the certificate holder's organization are documented. Written policies, procedures, or instructions and information that are interrelated and located in different areas within the certificate holder's system must be consistent and complement each other. For the interfaces to be effectively managed, the certificate holder's system should identify and document the interfaces.

inter	interfaces.	
Tasks		
	To meet this objective, the inspector must accomplish the following tasks:	
1.	Review the interfaces associated with the Maintenance Log/Recording Requirements process that have been identified along with the individual questions in section 1, Procedures, of this DCT.	
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: The design job task items (JTIs) displayed with the questions in section 1, Procedures, of this DCT identify potential interfaces (by element number) for this element.			
1.	Does the certificate holder's system properly address the interfaces that are identified along with the questions in section 1, Procedures, of this DCT?	☐ Yes ☐ No, Explain		
2.	Does the certificate holder document a method for assessing the impact of any changes to the associated interfaces within the Maintenance Log/Recording Requirements process?	☐ Yes ☐ No, Explain		

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 Attributes

Objective: The questions in this section 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.)

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 Maintenance Log/Recording Requirements process.			
2.	Identify the person who has overall authority for the Maintenance Log/Recording Requirements 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:			
1.	Does the certificate holder clearly identify who is responsible for the quality of the Maintenance Log/Recording Requirements process?	Yes No, Explain Name/Title:		
2.	Does the certificate holder clearly identify who has authority to establish and modify the policies, procedures, instructions, and information for the Maintenance Log/Recording Requirements process?	Yes No, Explain Name/Title:		
3.	Does the certificate holder s manual include the duties and responsibilities of those who manage the work required by the Maintenance Log/Recording Requirements process? SRRs: 121.135(b)(2)	☐ Yes ☐ No, Explain		
4.	Does the certificate holder s manual include instructions and information for those who manage the work required by the Maintenance Log/Recording Requirements process? SRRs: 121.135(a)(1)	☐ Yes ☐ No, Explain		
5.	Does the certificate holder clearly and completely document the responsibility for this position?	☐ Yes ☐ No, Explain		
6.	Does the certificate holder clearly and completely document the authority for this position?	Yes No, Explain		
7.	Does the certificate holder clearly and completely document its qualification standards for the person having responsibility for the Maintenance Log/Recording Requirements process?	☐ Yes ☐ No, Explain		
8.	Does the certificate holder clearly and completely document its qualification standards for the person having authority to establish and modify the certificate holder's policies, procedures, instructions, and information for the Maintenance Log/Recording Requirements process?	☐ Yes ☐ No, Explain		

9.	Does the certificate holder clearly and completely document the procedures for delegation of authority for the Maintenance Log/Recording Requirements process?	Yes No, Explain
----	--	-----------------

SAI Section 5 - Management Responsibility & Authority Attributes Drop-Down Menu

- 1. Not documented.
- 2. Documentation unclear.
- 3. Documentation incomplete.
- 4. Other.