

Safety Attribute Inspection (SAI) Data Collection Tool 3.1.7 De-Icing Program (OP)

ELEMENT SUMMARY INFORMATION

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

- To ensure that the Certificate Holder's approved De-Icing Program prevents an aircraft from taking off when frost, ice, or snow is adhering to the wings, control surfaces, propellers, engine inlets, or other critical surfaces of the aircraft.

Objective (FAA oversight responsibility):

- To determine if the Certificate Holder's De-Icing Program meets all applicable requirements of the Federal Aviation Regulations and FAA policy.
- To determine if the Certificate Holder's De-Icing Program incorporates the System Safety Attributes.
- To identify any shortfalls in the Certificate Holder's De-Icing Program.

SUPPLEMENTAL INFORMATION

Specific Regulatory Requirement(s) (SRRs):

- SRRs:
 - 119.43(b)
 - 119.43(b)(1)
 - 119.43(b)(2)
 - 119.43(c)
 - 121.135(a)(1)
 - 121.135(b)(1)
 - 121.135(b)(2)
 - 121.135(b)(3)
 - 121.603(a)
 - 121.629(a)
 - 121.629(b)
 - 121.629(c)
 - 121.629(c)(1)(i)
 - 121.629(c)(1)(iii)
 - 121.629(c)(1)(iv)
 - 121.629(c)(2)
 - 121.629(c)(2)(i)
 - 121.629(c)(2)(ii)
 - 121.629(c)(2)(iii)

121.629(c)(2)(iv)
121.629(c)(2)(v)
121.629(c)(2)(vi)
121.629(c)(2)(vii)
121.629(c)(3)
121.629(c)(3)(i)
121.629(c)(3)(ii)
121.629(c)(3)(iii)
121.629(c)(4)
121.629(d)
A023

Related CFR(s) & FAA Policy/Guidance:

- Related CFRs:
Intentionally left blank

- FAA Policy/Guidance:
AC 120-58
AC 120-60

SAI SECTION 1 – PROCEDURES ATTRIBUTE

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.).

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 De-Icing Program.
- 3 Review the Certificate Holder's manual to ensure that it contains policies, procedures, instructions and information necessary for the De-Icing Program.

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 De-Icing Program:

- | | |
|---|--|
| 1.1 Does the Certificate Holder's manual contain general policies for the De-Icing Program that comply with the specific regulatory requirements? SRRs: 121.135(b)(1); 121.629(a); 121.629(b); 121.629(d) | <input type="checkbox"/> Yes
<input type="checkbox"/> No, Explain |
|---|--|

Related Design JTIs:

- Check that the Certificate Holder's manual has a policy stating that no person may dispatch an aircraft, when in the opinion of the pilot in command icing conditions are expected or met that might adversely affect the safety of the flight.
Sources: 121.629(a); 121.135(b)(1)
Interfaces: 2.1.2-aw; 2.1.2-op; 3.1.13-op; 3.1.3-op; 3.1.4-op; 3.2.1-op; 4.2.3-op; 4.2.5-op; 4.2.6-op
- Check that the Certificate Holder's manual has a policy stating that no person may release an aircraft, when in the opinion of the pilot in command icing conditions are expected or met that might adversely affect the safety of the flight
Sources: 121.629(a); 121.135(b)(1)
Interfaces: 2.1.2-aw; 2.1.2-op; 3.1.13-op; 3.1.3-op; 3.1.4-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op
- Check that the Certificate Holder's manual has a policy stating that no person may dispatch an aircraft, when in the opinion of the aircraft dispatcher icing conditions are expected or met that might adversely affect the safety of the flight.

Sources: 121.629(a); 121.135(b)(1)

Interfaces: 2.1.2-aw; 2.1.2-op; 3.1.13-op; 3.1.3-op; 3.1.4-op; 3.2.1-op; 4.2.3-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's manual has a policy stating that no person may release an aircraft, when in the opinion of the person with authority to release the aircraft under supplemental operations, icing conditions are expected or met that might adversely affect the safety of the flight.

Sources: 121.629(a); 121.135(b)(1)

Interfaces: 2.1.2-aw; 2.1.2-op; 3.1.13-op; 3.1.3-op; 3.1.4-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's manual has a policy to ensure that no person may takeoff an aircraft when frost, ice, or snow is adhering to the wings, or when the takeoff would not be in compliance with paragraph (c) of this section.

Sources: 121.629(b); 121.135(b)(1)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 2.1.5-aw; 2.1.5-op; 3.1.13-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's manual has a policy to ensure that no person may takeoff an aircraft when frost, ice, or snow is adhering to the control surfaces, or when the takeoff would not be in compliance with paragraph (c) of this section.

Sources: 121.629(b); 121.135(b)(1)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 2.1.5-aw; 2.1.5-op; 3.1.13-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's manual has a policy to ensure that no person may takeoff an aircraft when frost, ice, or snow is adhering to the, propellers, or when the takeoff would not be in compliance with paragraph (c) of this section.

Sources: 121.629(b); 121.135(b)(1)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 2.1.5-aw; 2.1.5-op; 3.1.13-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's manual has a policy to ensure that no person may takeoff an aircraft when frost, ice, or snow is adhering to the engine inlets or when the takeoff would not be in compliance with paragraph (c) of this section.

Sources: 121.629(b); 121.135(b)(1)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 2.1.5-aw; 2.1.5-op; 3.1.13-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's manual has a policy to ensure that no person may takeoff an aircraft when frost, ice, or snow is adhering to other critical surfaces of the aircraft or when the takeoff would not be in compliance with paragraph (c) of this section.

Sources: 121.135(b)(1); 121.629(b)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.4-aw; 2.1.4-op; 2.1.5-aw; 2.1.5-op; 3.1.13-op; 3.2.1-op; 4.2.11-op; 4.2.3-op;

<p>4.2.5–op; 4.2.6–op</p> <ul style="list-style-type: none"> • Check that the Certificate Holder’s manual has a policy to ensure that no person may dispatch, release, or takeoff an aircraft any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft, unless the dispatch, release, and the takeoff comply with the approved ground deicing/anti–icing program in the operations specifications. <p><i>Sources:</i> 121.629(c) <i>Interfaces:</i> 2.1.1–aw; 2.1.1–op; 2.1.2–aw; 2.1.2–op; 2.1.4–aw; 2.1.4–op; 3.1.13–op; 3.1.4–op; 3.2.1–op; 4.2.3–op; 4.2.5–op</p>	
<p>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) Related CFRs: Intentionally left blank</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.3 Does the Certificate Holder’s manual contain the duties and responsibilities for personnel who will accomplish the De–icing Program? SRRs: 121.135(b)(2); 121.629(c)(2)(ii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder’s approved ground deicing/anti–icing program includes procedures that contain a detailed description of who is responsible for deciding that ground deicing/anti–icing operational procedures must be in effect. <p><i>Sources:</i> <i>Interfaces:</i> 2.1.1–aw; 2.1.1–op; 2.1.2–aw; 2.1.2–op; 2.1.4–aw; 2.1.4–op; 3.1.13–op; 3.1.3–op; 3.2.1–op; 4.2.11–op; 4.2.3–op; 4.2.5–op; 4.2.6–op; 7.1.4–op</p> <ul style="list-style-type: none"> • Check that the Certificate Holder’s approved ground deicing/anti–icing program includes a detailed description of the specific duties and responsibilities of each operational position or group responsible for getting the aircraft safely airborne while ground deicing/anti–icing operational procedures are in effect. <p><i>Sources:</i> 121.629(c)(1)(iv) <i>Interfaces:</i> 2.1.1–aw; 2.1.1–op; 2.1.2–aw; 2.1.2–op; 2.1.4–aw; 2.1.4–op; 3.1.13–op; 3.1.3–op; 3.2.1–op; 4.2.11–op; 4.2.3–op; 4.2.5–op; 4.2.6–op; 7.1.4–op</p> <ul style="list-style-type: none"> • Check that the Certificate Holder’s approved ground deicing/anti–icing program includes initial and annual recurrent ground training and testing for flight crewmembers concerning the specific requirements of the approved program and each person’s responsibilities and duties under the approved program, specifically covering the use of holdover times. <p><i>Sources:</i> 121.629(c)(2)(i) <i>Interfaces:</i> 2.1.1–aw; 2.1.1–op; 2.1.2–aw; 2.1.2–op; 4.2.3–op</p> <ul style="list-style-type: none"> • Check that the Certificate Holder’s approved ground deicing/anti–icing program includes initial and annual recurrent ground training and testing for flight crewmembers concerning the specific requirements of the approved program and each person’s responsibilities and duties under the approved program, specifically covering the aircraft 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

deicing/anti-icing procedures, including inspection and check procedures and responsibilities. The training must include both general procedures and the specific requirements (differences) of each make, model, series, and variant of aircraft.

Sources: 121.629(c)(2)(ii)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 4.2.3-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes initial and annual recurrent ground training and testing for flight crewmembers concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering communications procedures.

Sources: 121.629(c)(2)(iii)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 4.2.3-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes initial and annual recurrent ground training and testing for flight crewmembers concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering aircraft surface contamination (i.e., adherence of frost, ice, or snow) and critical area identification, and how contamination adversely affects aircraft performance and flight characteristics.

Sources: 121.629(c)(2)(iv)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 4.2.3-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes initial and annual recurrent ground training and testing for flight crewmembers concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the types and characteristics of deicing/anti-icing fluids.

Sources: 121.629(c)(2)(v)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 4.2.3-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes initial and annual recurrent ground training and testing for flight crewmembers concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering cold weather preflight inspection procedures.

Sources: 121.629(c)(2)(vi)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 4.2.3-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes initial and annual recurrent ground training and testing for flight crewmembers concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the techniques for recognizing contamination on the aircraft.

Sources: 121.629(c)(2)(vii)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 4.2.3-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g.,

aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the use of holdover times.

Sources: 121.629(c)(2)(i)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the aircraft deicing/anti-icing procedures, including inspection and check procedures and responsibilities. The training must include both general procedures and the specific requirements (differences) of each make, model, series, and variant of aircraft.

Sources: 121.629(c)(2)(ii)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering communications procedures.

Sources: 121.629(c)(2)(iii)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering aircraft surface contamination (i.e., adherence of frost, ice, or snow) and critical area identification, and how contamination adversely affects aircraft performance and flight characteristics.

Sources: 121.629(c)(2)(iv)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the types and characteristics of deicing/anti-icing fluids.

Sources: 121.629(c)(2)(v)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g.,

<p>aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering cold weather preflight inspection procedures.</p> <p><i>Sources:</i> 121.629(c)(2)(vi)</p> <p><i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op</p> <ul style="list-style-type: none"> • Check that the Certificate Holder's program includes aircraft deicing/anti-icing responsibilities. <p><i>Sources:</i> 121.629(c)(4)</p> <p><i>Interfaces:</i> All of 2.1</p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the techniques for recognizing contamination on the aircraft. <p><i>Sources:</i> 121.629(c)(2)(vii)</p> <p><i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op</p>	
<p>1.4 Does the Certificate Holder's manual include instructions and information for personnel to meet the requirements of the De-icing Program? SRRs: 121.135(a)(1)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's manual has instructions or information ensuring that no person will dispatch an aircraft, when in the opinion of the aircraft dispatcher icing conditions are expected or met that might adversely affect the safety of the flight <p><i>Sources:</i> 121.629(a); 121.135(a)(1)</p> <p><i>Interfaces:</i> 2.1.2-aw; 2.1.2-op; 3.1.13-op; 3.1.3-op; 3.1.4-op; 3.2.1-op; 4.2.3-op; 4.2.5-op; 4.2.6-op</p> <ul style="list-style-type: none"> • Check that the Certificate Holder's manual has instructions or information ensuring that no person will release an aircraft, when in the opinion of the person with authority to release the aircraft under supplemental operations, icing conditions are expected or met that might adversely affect the safety of the flight. <p><i>Sources:</i> 121.629(a); 121.135(a)(1)</p> <p><i>Interfaces:</i> 2.1.2-aw; 2.1.2-op; 3.1.13-op; 3.1.3-op; 3.1.4-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op</p> <ul style="list-style-type: none"> • Check that the Certificate Holder's manual has instructions and information to ensure that no person may takeoff an aircraft when frost, ice, or snow is adhering to the wings, or when the takeoff would not be in compliance with paragraph (c) of this section. <p><i>Sources:</i> 121.629(b); 121.135(a)(1)</p> <p><i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 2.1.5-aw; 2.1.5-op; 3.1.13-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op</p> <ul style="list-style-type: none"> • Check that the Certificate Holder's manual has instructions and information to ensure that no person may takeoff an aircraft when frost, 	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No, Explain</p>

ice, or snow is adhering to the control surfaces, or when the takeoff would not be in compliance with paragraph (c) of this section.

Sources: 121.629(b); 121.135(a)(1)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 2.1.5-aw; 2.1.5-op; 3.1.13-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's manual has instructions and information to ensure that no person may takeoff an aircraft when frost, ice, or snow is adhering to the, propellers, or when the takeoff would not be in compliance with paragraph (c) of this section.

Sources: 121.135(a)(1); 121.629(b)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 2.1.5-aw; 2.1.5-op; 3.1.13-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's manual has instructions and information to ensure that no person may takeoff an aircraft when frost, ice, or snow is adhering to the engine inlets or when the takeoff would not be in compliance with paragraph (c) of this section.

Sources: 121.629(b); 121.135(a)(1)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 2.1.5-aw; 2.1.5-op; 3.1.13-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's manual has instructions and information to ensure that no person may takeoff an aircraft when frost, ice, or snow is adhering to other critical surfaces of the aircraft or when the takeoff would not be in compliance with paragraph (c) of this section.

Sources: 121.629(b); 121.135(a)(1)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 2.1.5-aw; 2.1.5-op; 3.1.13-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes procedures that contain a detailed description of how the Certificate Holder determines that conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft.

Sources: 121.629(c)(1)(i)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 3.1.13-op; 3.1.3-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes procedures that contain a detailed description of how the Certificate Holder determines that conditions are such that ground deicing/anti-icing operational procedures must be in effect.

Sources: 121.629(c)(1)(i)

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 3.1.13-op; 3.1.3-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op; 7.1.4-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes procedures that contain a detailed description of who is responsible for deciding that ground deicing/anti-icing operational

procedures must be in effect.

Sources:

Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 3.1.13-op; 3.1.3-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op; 7.1.4-op

- Check that the Certificate Holder's approved ground deicing/anti-icing program includes a detailed description of the procedures for implementing ground deicing/anti-icing operational procedures
Sources: 121.629(c)(1)(iii)
Interfaces: 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 3.1.13-op; 3.1.3-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op
- Check that the Certificate Holder's approved ground deicing/anti-icing program includes the Certificate Holder's holdover timetables.
Sources: 121.629(c)(3)
Interfaces: All of 2.1
- Check that the Certificate Holder's approved ground deicing/anti-icing program includes the Certificate Holder's procedures for the use of the holdover timetables by the Certificate Holder's personnel.
Sources: 121.629(c)(3)
Interfaces: All of 2.1; 3.1.3-op; 4.2.3-op
- Check that the Certificate Holder's program includes procedures for flight crewmembers to increase or decrease the determined holdover time in changing conditions.
Sources: 121.629(c)(3)
Interfaces: All of 2.1; 3.1.3-op; 4.2.3-op
- Check that the Certificate Holder's program provides that takeoff after exceeding any maximum holdover time in the Certificate Holder's holdover timetable is permitted only when at least one of the following conditions exists: (i) A pretakeoff contamination check, as defined in paragraph (c)(4) of this section, determines that the wings, control surfaces, and other critical surfaces, as defined in the Certificate Holder's program are free of frost, ice, or snow. (ii) It is otherwise determined by an alternate procedure approved by the Administrator in accordance with the Certificate Holder's approved program that the wings, control surfaces, and other critical surfaces, as defined in the Certificate Holder's program, are free of frost, ice, or snow. (iii) The wings, control surfaces, and other critical surfaces are redeiced and a new holdover time is determined.
Sources: 121.629(c)(3)(i); 121.629(c)(3)(ii); 121.629(c)(3)(iii)
Interfaces: All of 2.1; 3.1.3-op; 4.2.1-aw; 4.2.3-op; 4.2.6-op
- Check that the Certificate Holder's program includes aircraft deicing/anti-icing procedures.
Sources: 121.629(c)(4)
Interfaces: All of 2.1
- Check that the Certificate Holder's program includes pretakeoff check procedures.
Sources: 121.629(c)(4)
Interfaces: All of 2.1
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<p>Check that the Certificate Holder's program includes pretakeoff contamination check procedures. <i>Sources:</i> 121.629(c)(4) <i>Interfaces:</i> All of 2.1</p>	
<p>1.5 Does the Certificate Holder's proposed/approved De-Icing Program include a detailed description of: SRRs: 121.629(c)</p>	
<p>1.5.1 How to determine when frost, ice, or snow may reasonably be expected to adhere to an aircraft and that ground de-icing operational procedures must be in effect and used? SRRs: 121.629(c)(1)(i)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes procedures that contain a detailed description of how the Certificate Holder determines that conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft. <p><i>Sources:</i> 121.629(c)(1)(i) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 3.1.13-op; 3.1.3-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.5.2 Who is responsible for deciding when the ground de-icing procedures are in effect? SRRs: 121.629(c)(1)(i)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes procedures that contain a detailed description of who is responsible for deciding that ground deicing/anti-icing operational procedures must be in effect. <p><i>Sources:</i> <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 3.1.13-op; 3.1.3-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op; 7.1.4-op</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.5.3 The operational procedures for how the ground De-Icing Program is implemented? SRRs: 121.629(c)(1)(iii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes a detailed description of the procedures for implementing ground deicing/anti-icing operational procedures <p><i>Sources:</i> 121.629(c)(1)(iii) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 3.1.13-op; 3.1.3-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.5.4 The specific duties and responsibilities of each operational position or group responsible for getting the aircraft safely airborne while ground</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<p>deicing operations procedures are in effect? SRRs: 121.629(c)(1)(iv)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes a detailed description of the specific duties and responsibilities of each operational position or group responsible for getting the aircraft safely airborne while ground deicing/anti-icing operational procedures are in effect. <p><i>Sources:</i> 121.629(c)(1)(iv) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 2.1.4-aw; 2.1.4-op; 3.1.13-op; 3.1.3-op; 3.2.1-op; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op; 7.1.4-op</p>	
<p>1.6 Does the flight crewmember, and all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel), initial ground training and testing qualification standards specifically cover the following areas: SRRs: 121.629(c)(2)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes initial and annual recurrent ground training and testing for flight crewmembers concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the use of holdover times. <p><i>Sources:</i> 121.629(c)(2)(i) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 4.2.3-op</p>	
<p>1.6.1 The use of holdover times? SRRs: 121.629(c)(2)(i)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the use of holdover times. <p><i>Sources:</i> 121.629(c)(2)(i) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.6.2 Aircraft deicing/anti-icing procedures? SRRs: 121.629(c)(2)(ii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the aircraft deicing/anti-icing procedures, including 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<p>inspection and check procedures and responsibilities. The training must include both general procedures and the specific requirements (differences) of each make, model, series, and variant of aircraft. <i>Sources:</i> 121.629(c)(2)(ii) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op</p>	
<p>1.6.3 Inspection and check procedures and responsibilities? SRRs: 121.629(c)(2)(ii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the aircraft deicing/anti-icing procedures, including inspection and check procedures and responsibilities. The training must include both general procedures and the specific requirements (differences) of each make, model, series, and variant of aircraft. <i>Sources:</i> 121.629(c)(2)(ii) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.6.4 Individual responsibilities? SRRs: 121.629(c)(2)(ii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the aircraft deicing/anti-icing procedures, including inspection and check procedures and responsibilities. The training must include both general procedures and the specific requirements (differences) of each make, model, series, and variant of aircraft. <i>Sources:</i> 121.629(c)(2)(ii) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.6.5 Communications procedures? SRRs: 121.629(c)(2)(iii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering communications procedures. <i>Sources:</i> 121.629(c)(2)(iii) 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<p><i>Interfaces:</i> 2.1.1–aw; 2.1.1–op; 2.1.2–aw; 2.1.2–op; 3.1.13–op; 4.2.1–aw; 4.2.11–op; 4.2.5–op; 4.2.6–op</p>	
<p>1.6.6 Aircraft surface contamination (i.e., adherence of frost, ice, or snow) and critical area identification? SRRs: 121.629(c)(2)(iv)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering aircraft surface contamination (i.e., adherence of frost, ice, or snow) and critical area identification, and how contamination adversely affects aircraft performance and flight characteristics. <p><i>Sources:</i> 121.629(c)(2)(iv) <i>Interfaces:</i> 2.1.1–aw; 2.1.1–op; 2.1.2–aw; 2.1.2–op; 3.1.13–op; 4.2.1–aw; 4.2.11–op; 4.2.5–op; 4.2.6–op</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.6.7 How contamination adversely affects aircraft performance and flight characteristics? SRRs: 121.629(c)(2)(iv)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering aircraft surface contamination (i.e., adherence of frost, ice, or snow) and critical area identification, and how contamination adversely affects aircraft performance and flight characteristics. <p><i>Sources:</i> 121.629(c)(2)(iv) <i>Interfaces:</i> 2.1.1–aw; 2.1.1–op; 2.1.2–aw; 2.1.2–op; 3.1.13–op; 4.2.1–aw; 4.2.11–op; 4.2.5–op; 4.2.6–op</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.6.8 Types and characteristics of de-icing/anti-icing fluids? SRRs: 121.629(c)(2)(v)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the types and characteristics of deicing/anti-icing fluids. <p><i>Sources:</i> 121.629(c)(2)(v) <i>Interfaces:</i> 2.1.1–aw; 2.1.1–op; 2.1.2–aw; 2.1.2–op; 3.1.13–op; 4.2.1–aw; 4.2.11–op; 4.2.5–op; 4.2.6–op</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.6.9 Cold weather preflight inspection procedures? SRRs: 121.629(c)(2)(vi)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering cold weather preflight inspection procedures. <p><i>Sources:</i> 121.629(c)(2)(vi) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op</p>	
<p>1.6.10 Techniques for recognizing contamination on the aircraft? SRRs: 121.629(c)(2)(vii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the techniques for recognizing contamination on the aircraft. <p><i>Sources:</i> 121.629(c)(2)(vii) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.7 Does the flight crewmember's and all other affected personnel's (e.g., aircraft dispatchers, ground crews, contract personnel) annual recurrent ground training and testing qualification standards contain the specific requirements of the approved program, each person's duties and responsibilities and does it specifically cover the following areas: SRRs: 121.629(c)(2)</p>	
<p>1.7.1 The use of holdover times? SRRs: 121.629(c)(2)(i)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes the Certificate Holder's procedures for the use of the holdover timetables by the Certificate Holder's personnel. <p><i>Sources:</i> 121.629(c)(3) <i>Interfaces:</i> All of 2.1; 3.1.3-op; 4.2.3-op</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.7.2 Aircraft deicing procedures? SRRs: 121.629(c)(2)(ii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's program includes aircraft deicing/anti-icing procedures. <p><i>Sources:</i> 121.629(c)(4) <i>Interfaces:</i> All of 2.1</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<p>1.7.3 Inspection and check procedures and responsibilities? SRRs: 121.629(c)(2)(ii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the aircraft deicing/anti-icing procedures, including inspection and check procedures and responsibilities. The training must include both general procedures and the specific requirements (differences) of each make, model, series, and variant of aircraft. <i>Sources:</i> 121.629(c)(2)(ii) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.7.4 Individual responsibilities? SRRs: 121.629(c)(2)(ii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the aircraft deicing/anti-icing procedures, including inspection and check procedures and responsibilities. The training must include both general procedures and the specific requirements (differences) of each make, model, series, and variant of aircraft. <i>Sources:</i> 121.629(c)(2)(ii) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.7.5 Communications procedures? SRRs: 121.629(c)(2)(iii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering communications procedures. <i>Sources:</i> 121.629(c)(2)(iii) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.7.6 Aircraft surface contamination (i.e., adherence of frost, ice, or snow) and critical area identification? SRRs: 121.629(c)(2)(iv)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering aircraft surface contamination (i.e., adherence of frost, ice, or snow) and critical area identification, and how contamination adversely affects aircraft performance and flight characteristics. <p><i>Sources:</i> 121.629(c)(2)(iv) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op</p>	
<p>1.7.7 How contamination adversely affects aircraft performance and flight characteristics? SRRs: 121.629(c)(2)(iv)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering aircraft surface contamination (i.e., adherence of frost, ice, or snow) and critical area identification, and how contamination adversely affects aircraft performance and flight characteristics. <p><i>Sources:</i> 121.629(c)(2)(iv) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.7.8 Types and characteristics of deicing/anti-icing fluids? SRRs: 121.629(c)(2)(v)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's responsibilities and duties under the approved program, specifically covering the types and characteristics of deicing/anti-icing fluids. <p><i>Sources:</i> 121.629(c)(2)(v) <i>Interfaces:</i> 2.1.1-aw; 2.1.1-op; 2.1.2-aw; 2.1.2-op; 3.1.13-op; 4.2.1-aw; 4.2.11-op; 4.2.5-op; 4.2.6-op</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.7.9 Cold weather preflight inspection procedures? SRRs: 121.629(c)(2)(vi)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person's 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<p>responsibilities and duties under the approved program, specifically covering cold weather preflight inspection procedures. <i>Sources:</i> 121.629(c)(2)(vi) <i>Interfaces:</i> 2.1.1–aw; 2.1.1–op; 2.1.2–aw; 2.1.2–op; 3.1.13–op; 4.2.1–aw; 4.2.11–op; 4.2.5–op; 4.2.6–op</p>	
<p>1.7.10 Techniques for recognizing contamination on the aircraft? SRRs: 121.629(c)(2)(vii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder’s approved ground deicing/anti-icing program includes qualification for all other affected personnel (e.g., aircraft dispatchers, ground crews, contract personnel) concerning the specific requirements of the approved program and each person’s responsibilities and duties under the approved program, specifically covering the techniques for recognizing contamination on the aircraft. <i>Sources:</i> 121.629(c)(2)(vii) <i>Interfaces:</i> 2.1.1–aw; 2.1.1–op; 2.1.2–aw; 2.1.2–op; 3.1.13–op; 4.2.1–aw; 4.2.11–op; 4.2.5–op; 4.2.6–op 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.8 If the Certificate Holder conducts domestic or flag operations, does the aircraft dispatcher provide the pilot in command with airport information on the conditions that will require aircraft de-icing prior to take off?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
<p>1.9 If the Certificate Holder conducts supplemental operations, is the pilot in command provided the information on conditions that will require the airplane to be de-iced prior to take off? SRRs: 121.603(a); 121.629(a)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder’s manual has instructions or information ensuring that no person will release an aircraft, when in the opinion of the person with authority to release the aircraft under supplemental operations, icing conditions are expected or met that might adversely affect the safety of the flight. <i>Sources:</i> 121.629(a); 121.135(a)(1) <i>Interfaces:</i> 2.1.2–aw; 2.1.2–op; 3.1.13–op; 3.1.3–op; 3.1.4–op; 3.2.1–op; 4.2.11–op; 4.2.3–op; 4.2.5–op; 4.2.6–op 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
<p>1.10 Does the Certificate Holder have procedures to use the approved ground de-icing holdover timetables? SRRs: 121.629(c)(3)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder’s approved ground deicing/anti-icing program includes the Certificate Holder’s holdover timetables. <i>Sources:</i> 121.629(c)(3) <i>Interfaces:</i> All of 2.1 • Check that the Certificate Holder’s approved ground deicing/anti-icing program includes the Certificate Holder’s procedures for the use of the holdover timetables by the Certificate Holder’s personnel. 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<p><i>Sources:</i> 121.629(c)(3) <i>Interfaces:</i> All of 2.1; 3.1.3–op; 4.2.3–op</p>	
<p>1.11 Does the approved ground De–Icing Program determine when the holdover time begins, when the final application of deicing commences and expires, and when the de–icing/anti–icing fluid applied to the aircraft loses its effectiveness? SRRs: 121.629(c)(3)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No, Explain</p>
<p>1.12 Are the Certificate Holder’s De–Icing Program holdover times supported by data acceptable to the Administrator? SRRs: 121.629(c)(3)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No, Explain</p>
<p>1.13 Does the Certificate Holder’s manual include procedures for flight crewmembers to increase or decrease the determined holdover time in changing conditions? SRRs: 121.629(c)(3)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder’s program includes procedures for flight crewmembers to increase or decrease the determined holdover time in changing conditions. <p><i>Sources:</i> 121.629(c)(3) <i>Interfaces:</i> All of 2.1; 3.1.3–op; 4.2.3–op</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No, Explain</p>
<p>1.14 Does the Certificate Holder’s De–Icing Program ensure that takeoff after exceeding any maximum holdover time in the Certificate Holder’s holdover timetable is permitted only when at least one of the following conditions exist:</p>	
<p>1.14.1 An outside Pre–takeoff Contamination Check is conducted within five minutes prior to the beginning of the takeoff roll to determine that the wings, control surfaces, and other critical surfaces are free of frost, ice, and snow? SRRs: 121.629(c)(3)(i)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder’s program provides that takeoff after exceeding any maximum holdover time in the Certificate Holder’s holdover timetable is permitted only when at least one of the following conditions exists: (i) A pretakeoff contamination check, as defined in paragraph (c)(4) of this section, determines that the wings, control surfaces, and other critical surfaces, as defined in the Certificate Holder’s program are free of frost, ice, or snow. (ii) It is otherwise determined by an alternate procedure approved by the Administrator in accordance with the Certificate Holder’s approved program that the wings, control surfaces, and other critical surfaces, as defined in the Certificate Holder’s program, are free of frost, ice, or snow. (iii) The wings, control surfaces, and other critical surfaces are redeiced and a new holdover time is determined. <p><i>Sources:</i> 121.629(c)(3)(i); 121.629(c)(3)(ii); 121.629(c)(3)(iii) <i>Interfaces:</i> All of 2.1; 3.1.3–op; 4.2.1–aw; 4.2.3–op; 4.2.6–op</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No, Explain</p>
<p>1.14.2 If the Certificate Holder has an approved alternate procedure, do they ensure that the wings, control surfaces, and other critical surfaces are</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No, Explain</p>

<p>free of frost, ice, or snow? SRRs: 121.629(c)(3)(ii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's program provides that takeoff after exceeding any maximum holdover time in the Certificate Holder's holdover timetable is permitted only when at least one of the following conditions exists: (i) A pretakeoff contamination check, as defined in paragraph (c)(4) of this section, determines that the wings, control surfaces, and other critical surfaces, as defined in the Certificate Holder's program are free of frost, ice, or snow. (ii) It is otherwise determined by an alternate procedure approved by the Administrator in accordance with the Certificate Holder's approved program that the wings, control surfaces, and other critical surfaces, as defined in the Certificate Holder's program, are free of frost, ice, or snow. (iii) The wings, control surfaces, and other critical surfaces are re-deiced and a new holdover time is determined. <p><i>Sources:</i> 121.629(c)(3)(i); 121.629(c)(3)(ii); 121.629(c)(3)(iii) <i>Interfaces:</i> All of 2.1; 3.1.3-op; 4.2.1-aw; 4.2.3-op; 4.2.6-op</p>	<input type="checkbox"/> Not Applicable
<p>1.14.3 The wings, control surfaces, and other critical surfaces are re-deiced and a new holdover time established? SRRs: 121.629(c)(3)(iii)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's program provides that takeoff after exceeding any maximum holdover time in the Certificate Holder's holdover timetable is permitted only when at least one of the following conditions exists: (i) A pretakeoff contamination check, as defined in paragraph (c)(4) of this section, determines that the wings, control surfaces, and other critical surfaces, as defined in the Certificate Holder's program are free of frost, ice, or snow. (ii) It is otherwise determined by an alternate procedure approved by the Administrator in accordance with the Certificate Holder's approved program that the wings, control surfaces, and other critical surfaces, as defined in the Certificate Holder's program, are free of frost, ice, or snow. (iii) The wings, control surfaces, and other critical surfaces are re-deiced and a new holdover time is determined. <p><i>Sources:</i> 121.629(c)(3)(i); 121.629(c)(3)(ii); 121.629(c)(3)(iii) <i>Interfaces:</i> All of 2.1; 3.1.3-op; 4.2.1-aw; 4.2.3-op; 4.2.6-op</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.15 Does the Certificate Holder's manual define a check of the aircraft's wings or representative aircraft surfaces for frost, ice, or snow within the aircraft's holdover time as a Pretakeoff Check? SRRs: 121.629(d)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's program includes pretakeoff check procedures. <p><i>Sources:</i> 121.629(c)(4) <i>Interfaces:</i> All of 2.1</p> <ul style="list-style-type: none"> • 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<p>Check that the Certificate Holder's program includes pretakeoff check responsibilities. <i>Sources:</i> 121.629(c)(4) <i>Interfaces:</i> All of 2.1</p>	
<p>1.16 Does the Certificate Holder's manual define a check to ensure the wings, control surfaces, and other critical surfaces, as defined in the Certificate Holder's program, are free of frost, ice, and snow and that the check is conducted from outside the aircraft (unless the program specifies otherwise) within five minutes prior to beginning takeoff as a Pretakeoff Contamination Check? SRRs: 121.629(c)(4)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder's program includes pretakeoff contamination check procedures. <i>Sources:</i> 121.629(c)(4) <i>Interfaces:</i> All of 2.1 • Check that the Certificate Holder's program includes pretakeoff contamination check responsibilities. <i>Sources:</i> 121.629(c)(4) <i>Interfaces:</i> All of 2.1 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.17 If the Certificate Holder does not have an approved De-Icing Program, do they have approval in their operations specifications to conduct a Pretakeoff Check within five minutes prior to takeoff any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft? SRRs: 121.629(d)</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • If the Certificate Holder operates under this section without a program as required in paragraph (c) of this section, check that it includes in its operations specifications a requirement that, any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft, no aircraft will takeoff unless it has been checked to ensure that the wings, control surfaces, and other critical surfaces are free of frost, ice, and snow. <i>Sources:</i> 121.629(d) <i>Interfaces:</i> All of 2.1; 3.1.13-op; 3.2.1-op; 4.2.1-aw; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op • If the Certificate Holder operates under this section without a program as required in paragraph (c) of this section, check that it includes in its operations specifications a requirement that, any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft, no aircraft will takeoff unless it has been checked to ensure that the wings, control surfaces, and other critical surfaces are free of frost, ice, and snow. This check must be accomplished from outside the aircraft. <i>Sources:</i> 121.629(d) <i>Interfaces:</i> All of 2.1; 3.1.13-op; 3.2.1-op; 4.2.1-aw; 4.2.11-op; 4.2.3-op; 4.2.5-op; 4.2.6-op 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable

<ul style="list-style-type: none"> • If the Certificate Holder to operates under this section without a program as required in paragraph (c) of this section, check that it includes in its operations specifications a requirement that, any time conditions are such that frost, ice, or snow may reasonably be expected to adhere to the aircraft, no aircraft will takeoff unless it has been checked to ensure that the wings, control surfaces, and other critical surfaces are free of frost, ice, and snow. The check must occur within five minutes prior to beginning takeoff. Sources: 121.629(d) Interfaces: All of 2.1; 3.1.13–op; 3.2.1–op; 4.2.1–aw; 4.2.11–op; 4.2.3–op; 4.2.5–op; 4.2.6–op 	
<p>1.18 Does the Certificate Holder's manual contain the required references to, or excerpts from, Operations Specification paragraph A023? SRRs: 119.43(b); A023</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.19 If the Certificate Holder's manual includes excerpts from its operations specifications, are the excerpts clearly identified as part of the operations specifications? SRRs: 119.43(b)(1); A023</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain <input type="checkbox"/> Not Applicable
<p>1.20 Does the Certificate Holder's manual require compliance with Operations Specifications paragraph A023? SRRs: 119.43(b)(2)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.21 Does the Certificate Holder's manual contain a method for keeping all persons used in its operations informed of the provisions of Operations Specifications paragraph A023? SRRs: 119.43(c); A023</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.22 Does the Certificate Holder's De-Icing Program comply with the related requirements of 14 CFR 121.105?</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder conducting domestic or flag operations has procedures to ensure that competent personnel and adequate facilities and equipment to conduct operations in icing conditions at such points along the Certificate Holder's route as are necessary for the proper servicing, maintenance, and preventive maintenance of deicing/anti-icing equipment. Sources: 121.105 Interfaces: 2.1.4–aw; 2.1.4–op; 4.2.6–op; 5.1.1–aw; 5.1.5–op 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.23 Does the Certificate Holder's De-Icing Program comply with the related requirements of 14 CFR 121.123?</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • Check that the Certificate Holder conducting supplemental operations has procedures to ensure that competent personnel and adequate facilities and equipment to conduct operations in icing conditions are available for the proper servicing, maintenance, and preventive maintenance of deicing/anti-icing equipment. Sources: 121.123 Interfaces: 2.1.4–aw; 2.1.4–op; 4.2.6–op; 5.1.1–aw; 5.1.5–op 	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain

<p>1.24 Does the Certificate Holder's De-Icing program comply with the guidance contained in AC 120.58?</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • If the Certificate Holder utilizes military deicing fluids, check that they have procedures to incorporate The U.S. Department of Defense military specifications, "Anti-Icing and Deicing/Defrosting Fluids." These documents specify the following types of FPDs: • MIL-A-4823C Type I – standard • MIL-A-4823C Type II – standard with inhibitor • MIL-A-4823D Type I (propylene glycol base) • MIL-A-4823D Type II (ethylene and propylene glycol mix) (a) Military Types I and II fluids are essentially the same, except that Military Type II fluids contain a fire inhibitor. Military Types I and II fluids are unrelated to SAE and ISO Types I and II fluids. Military Type I and Type II fluids are both "Deicing" fluids only. No holdover times are available. <p>Sources: AC-120-58 Interfaces: All of 2.1</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
<p>1.25 Does the Certificate Holder's De-Icing Program comply with the guidance contained in AC 120.60?</p> <p><i>Related Design JTIs:</i></p> <ul style="list-style-type: none"> • If the Certificate Holder operates without an approved ground deicing/anti-icing program, check to ensure it has approved procedures and properly trained personnel for conducting an "outside-the-aircraft check". <p>Sources: AC-120-60, Paragraph 11 Interfaces: All of 2.1; 4.2.1-aw; 4.2.3-op; 4.2.6-op</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 De-Icing Program:

- | | |
|--|--|
| 2.1 Are the identified controls effective in ensuring that the Certificate Holder's aircraft wings, control surfaces, propellers, engine inlets, or other critical surfaces are free of frost, ice, or snow prior to departing the final checkpoint? | <input type="checkbox"/> Yes
<input type="checkbox"/> No, Explain |
| 2.2 Are the identified controls effective in ensuring that the Certificate Holder's aircraft wings, control surfaces, propellers, engine inlets, or other critical surfaces are free of frost, ice, or snow at takeoff? | <input type="checkbox"/> Yes
<input type="checkbox"/> No, Explain |
| 2.3 Does the Certificate Holder have a documented method for assessing the impact of any changes made to the controls in the De-Icing program? | <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 De-Icing Program include the following process measurements:

3.1 Process measurements that would reveal when the Certificate Holder's aircraft wings, control surfaces, propellers, engine inlets, or other critical surfaces failed to be free of frost, ice, or snow at the final checkpoint?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.2 Process measurements that would reveal when the Certificate Holder's aircraft wings, control surfaces, propellers, engine inlets, or other critical surfaces failed to be free of frost, ice, or snow at takeoff?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.3 Does the Certificate Holder document their process measurement methods and results?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
3.4 Does the organization that conducts the process measurements have direct access to the person with responsibility for the De-Icing program?	<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 De-Icing Program 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 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 De-Icing Program? | <input type="checkbox"/> Yes
<input type="checkbox"/> No, Explain |
| 4.3 List additional interfaces identified during the accomplishment of this SAI. | |

<i>SAI SECTION 4 – INTERFACES ATTRIBUTE –Drop Down Menu</i>
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 De-Icing Program.
- 2 Identify the person who has overall authority for the De-Icing Program.
- 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 Attribute addressed in the De-Icing Program:

5.1 Does the Certificate Holder's manual clearly identify who is responsible for the quality of the De-Icing Program?	<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 De-Icing Program?	<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 De-Icing Program? 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 De-Icing Program? 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 De-Icing Program?	<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 the authority to establish and modify the Certificate Holder's policies, procedures, instructions and information for the De-Icing Program?	<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 De-Icing Program?	<input type="checkbox"/> Yes <input type="checkbox"/> No, Explain
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**SAI SECTION 5 – MANAGEMENT RESPONSIBILITY & AUTHORITY ATTRIBUTE
–Drop Down Menu**

1. Not documented.

2. Documentation unclear.

3. Documentation incomplete.

4. Other.