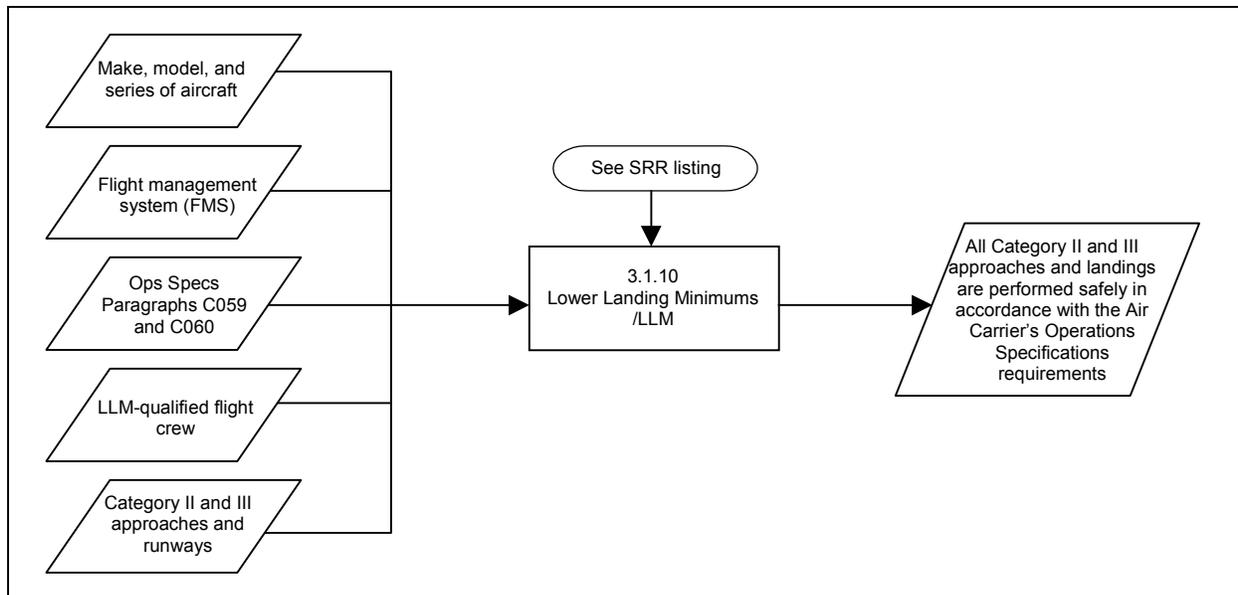


# Safety Attribute Inspection (SAI) Job Aid



## ELEMENT SUMMARY INFORMATION

**Element:** 3.1.10 Lower Landing Minimums (LLM)

**Purpose of this Element** (Air Carrier's responsibility): To safely land the aircraft at the authorized lower landing minimums (LLM).

**Objective** (FAA responsibility): To determine if the Air Carrier conducts LLM operations in accordance with its procedures.

### Inputs:

- Make, Model, and Series of Aircraft
- Flight Management System (FMS)
- Operations Specifications Paragraphs C059 and C060
- LLM-Qualified Flight Crew
- Category II and Category III Approaches and Runways

### Outputs:

- All Category II and Category III approaches and landings are performed safely in accordance with the Air Carrier's Operations Specifications requirements

### Performance Measures:

- The Air Carrier complies with the provisions of its Operations Specifications.
- The Air Carrier's LLM operations meet or exceed the standards contained in AC 120-28 and AC 120-29, as amended.

# Safety Attribute Inspection (SAI) Job Aid

## SRR:

- 91.189 (g) Category II and III operations: General operating rules.
- 121.579 (b) Minimum altitudes for use of autopilot.
- 121.375 Maintenance and preventive maintenance training program.

## Other CFRs and/or FAA Guidance: FAA Order 8300.10, Volume 2, Chapter 3 “Evaluate Landing Minimum Maintenance/ Inspection Program”

- FAA Order 8400.8 “Approval of CAT II and CAT III Facilities”
- FAA Order 8400.10, Volume 3, Chapter 1, Section 5, Paragraph 181 “CAT III Instrument Approach and Landing Operations”
- FAA Order 8400.10, Volume 3, Chapter 2, Section 3, Paragraph 379 “Airman’s Specific Training Modules”
- FAA Order 8400.10, Volume 3, Chapter 2, Section 7, Paragraph 537 “Part 121 Basic Checking Module”
- FAA Order 8400.10, Volume 3, Chapter 2, Section 8, Paragraph 567 “General: Special Training”
- Refer to appropriate Advisory Circulars

# Safety Attribute Inspection (SAI) Job Aid

## SRR SPECIFIC INFORMATION

<b>SRR</b>	<b>Intent</b>	<b>Inspectors</b>
<b>91.189 (g)</b>	The Air Carrier is prohibited from operating CAT II and CAT III unless they have Operations Specifications authorizing them, and they operate in accordance with those specifications.	<i>Certification: Operations</i> <i>Surveillance: ASI</i>
<b>121.579 (b)</b>	To specify the minimum altitude at which an autopilot may be used during approaches.	<i>Certification: Operations</i> <i>Surveillance: ASI</i>
<b>121.375</b>	TBD	<i>Certification: Maintenance</i> <i>Surveillance: ASI</i>

# Safety Attribute Inspection (SAI) Job Aid

## 3.1.10 Lower Landing Minimums (LLM)

### **SECTION 1 - RESPONSIBILITY ATTRIBUTE**

**Objective:** To determine if there is a clearly identifiable, qualified, and knowledgeable person who is accountable for the quality of the LLM process.

*To meet this objective, the inspector will accomplish the following tasks:*

1. Identify the person who is responsible for the quality of the Lower Landing Minimums (LLM) process.
2. Review the description in the Manual that delineates the duties and responsibilities of the person.
3. Evaluate the person's qualifications and work experience (or resume', if appropriate).
4. Review the appropriate organizational chart.
5. Discuss the Lower Landing Minimums (LLM) process with the person.

*To meet this objective, the inspector will determine and record answers to the following questions:*

1. Is there a clearly identifiable person who is answerable for the quality of the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If yes, provide the name: <input type="checkbox"/> NO If no, explain:
2. Does the person understand the procedures associated with the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
3. Does the person understand the controls associated with the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
4. Does the person understand the interfaces associated with the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
5. Does the person understand the process measurements associated with the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
6. Is the responsibility of this position clearly documented in the air carrier's Manual(s)?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
7. Are the qualification standards for this position clearly documented?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
7a Are the qualification standards for this position appropriate for the duties that are assigned?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
8. Does the person meet the qualification standards?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
9. Does the person acknowledge that he/she has responsibility for the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
10. Does the person know who has authority to establish and modify the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO

# Safety Attribute Inspection (SAI) Job Aid

## 3.1.10 Lower Landing Minimums (LLM)

### SECTION 2 – AUTHORITY ATTRIBUTE

**Objective:** To determine if there is a clearly identifiable, qualified, and knowledgeable person with the authority to establish and modify the LLM process.

*To meet this objective, the inspector will accomplish the following tasks:*

1. Identify the person who has the authority to establish or modify the Lower Landing Minimums (LLM) process.
2. Review the description in the Manual that delineates the duties and responsibilities of the person.
3. Evaluate the person’s qualifications and work experience (or resume’, if appropriate).
4. Review the appropriate organizational chart.
5. Discuss the Lower Landing Minimums (LLM) process with the person.

*To meet this objective, the inspector will determine and record answers to the following questions:*

1. Is there a clearly identifiable person who has authority to establish and modify the air carrier’s policies for the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If yes, provide the name: <input type="checkbox"/> NO If no, explain:
2. Does the person understand the procedures associated with the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
3. Does the person understand the controls associated with the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
4. Does the person understand the interfaces associated with the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
5. Does the person understand the process measurements associated with the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
6. Is the authority of this position clearly documented in the air carrier’s Manual(s)?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
7. Are the qualification standards for this position clearly documented?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
7a Are the qualification standards for this position appropriate for the duties that are assigned?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
8. Does the person meet the qualification standards?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
9. Does the person acknowledge that he/she has authority for the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
10. Does the individual know who has the responsibility for the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO
11. Are the procedures for delegation of authority clearly documented for the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES If no, explain: <input type="checkbox"/> NO

# Safety Attribute Inspection (SAI) Job Aid

## 3.1.10 Lower Landing Minimums (LLM)

### SECTION 3 – PROCEDURES ATTRIBUTE

**Objective:** To determine if the air carrier has documented procedures for accomplishing the LLM process.

*To meet this objective, the inspector will accomplish the following tasks:*

1. Review the documented instructions and information related to the Lower Landing Minimums (LLM) process to ensure that they contain who, what, where, when, and how.
2. Review the FAA Guidance and Specific Regulatory Requirements (SRR) included in the supplemental information section of this SAI.
3. Discuss the Lower Landing Minimums (LLM) process with appropriate personnel to gain an understanding of the procedures.
4. Observe the Lower Landing Minimums (LLM) process to gain an understanding of the procedures.

*To meet this objective, the inspector will determine and record answers to the following questions:*

1. Do written procedures exist to achieve the desired result of the Lower Landing Minimums (LLM) process:

1.1 Does the Air Carrier have written procedures that require maintenance personnel to use the instructions and information contained in the LLM Maintenance Document?	<input type="checkbox"/> YES	<b>If no or N/A, explain:</b>
	<input type="checkbox"/> NO	
	<input type="checkbox"/> N/A	
1.2 Does the Air Carrier have written procedures for taking maintenance action when system failures or abnormalities required flight crew intervention on approach?	<input type="checkbox"/> YES	<b>If no or N/A, explain:</b>
	<input type="checkbox"/> NO	
	<input type="checkbox"/> N/A	
1.3 Does the Air Carrier have written procedures that require the Air Carrier to use an LLM training curriculum to train persons who perform LLM maintenance?[ SRR 121.375]	<input type="checkbox"/> YES	<b>If no or N/A, explain:</b>
	<input type="checkbox"/> NO	
	<input type="checkbox"/> N/A	
1.4 Does the Air Carrier have written procedures that require maintenance to notify the flight crew when an aircraft is determined to be non-LLM capable for dispatch?	<input type="checkbox"/> YES	<b>If no or N/A, explain:</b>
	<input type="checkbox"/> NO	
	<input type="checkbox"/> N/A	
1.5 Does the Air Carrier have written procedures that provide detailed instructions and information for use by persons performing LLM maintenance?	<input type="checkbox"/> YES	<b>If no or N/A, explain:</b>
	<input type="checkbox"/> NO	
	<input type="checkbox"/> N/A	
1.6 Does the Air Carrier have written procedures that provide a method for notifying the CHDO immediately following any failure or abnormality as described in AC 120-28C, Paragraph 14?	<input type="checkbox"/> YES	<b>If no or N/A, explain:</b>
	<input type="checkbox"/> NO	
	<input type="checkbox"/> N/A	
1.7 Does the Air Carrier have written procedures that require distinguishing of Category II and III parts from standard aircraft parts?	<input type="checkbox"/> YES	<b>If no or N/A, explain:</b>
	<input type="checkbox"/> NO	
	<input type="checkbox"/> N/A	
2. Do the procedures identify: who, what, where, when and how?	<input type="checkbox"/> YES	<b>If no, explain:</b>
	<input type="checkbox"/> NO	

# Safety Attribute Inspection (SAI) Job Aid

## 3.1.10 Lower Landing Minimums (LLM)

### **SECTION 3 – PROCEDURES ATTRIBUTE**

3. Are the procedures in compliance with the CFR(s)?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO
4. Do the procedures conform to other written guidance (E.g., Operations Specifications, FAA Orders, Airworthiness Directives, Advisory Circulars, Handbook Bulletins, Directives, and Manufacturer’s Recommendations)?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO
5. Does the air carrier have the resources to support the written procedures for the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO
6. If alternate procedures exist for use during irregular conditions, do they achieve the same desired results as the primary procedures so that an equivalent level of safety is maintained? (E.g., a manual system used as a result of equipment failure).	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A, <b>No alternate procedures exist for this element</b>
7. Are the procedures published in different manuals relating to the Lower Landing Minimums (LLM) process consistent?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO
8. Does the air carrier have a documented method for assessing the impacts of procedural changes to the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO

# Safety Attribute Inspection (SAI) Job Aid

## 3.1.10 Lower Landing Minimums (LLM)

### SECTION 4 – CONTROL ATTRIBUTE

**Objective:** To determine if checks and restraints are designed into the LLM process to ensure a desired result is achieved.

*To meet this objective, the inspector will accomplish the following tasks:*

1. Review the documented instructions and information related to the Lower Landing Minimums (LLM) process.
2. Review the FAA Guidance and Specific Regulatory Requirements (SRR) included in the supplemental information section of this SAI
3. Discuss the Lower Landing Minimums (LLM) process with appropriate personnel to gain an understanding of the controls.
4. Observe the Lower Landing Minimums (LLM) process to gain an understanding of the controls.

*To meet this objective, the inspector will determine and record answers to the following questions:*

1. Are the following checks and restraints built into the Lower Landing Minimums (LLM) process:

<i>1.1 Does the Air Carrier have and maintain a LLM Maintenance Document that meets or exceeds the standards contained in AC 120-28C and AC 120-29?</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
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<i>1.2 Does the Air Carrier have and maintain a method for tracking LLM systems errors?</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
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<i>1.3 Does the Air Carrier perform an Autoland System Periodic Check of each LLM aircraft in accordance with the manufacturer’s recommendation or at an interval approved by the FAA?</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
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<i>1.4 Does the Air Carrier have and maintain a training curriculum for LLM? [SRR 121.375]</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
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2. Do the checks and restraints ensure the desired result is achieved for the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO
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3. Does the air carrier have a documented method for assessing the impacts of any changes made to checks and restraints in the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO
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4. Does the air carrier have the resources to support the checks and restraints for the Lower Landing Minimums (LLM) process?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO
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# Safety Attribute Inspection (SAI) Job Aid

## 3.1.10 Lower Landing Minimums (LLM)

### SECTION 5 - PROCESS MEASUREMENT ATTRIBUTE

**Objective:** To determine if the air carrier measures and assesses the LLM process, to identify and correct problems or potential problems.

*To meet this objective, the inspector will accomplish the following tasks:*

1. Review the documented instructions and information related to the Lower Landing Minimums (LLM) process.
2. Discuss the Lower Landing Minimums (LLM) process with appropriate personnel to gain an understanding of the process measures.
3. Observe the Lower Landing Minimums (LLM) process to gain an understanding of the process measures.

*To meet this objective, the inspector will determine and record answers to the following questions:*

1. <Deleted>

2. Does the air carrier's Lower Landing Minimums (LLM) process include the following process measurements?

2.1 *The Air Carrier immediately notifies the CHDO of any system failures or abnormalities as specified in AC 12028C, Paragraph 14.*  YES **If no or N/A, explain:**  
 NO  
 N/A

2.2 *The Air Carrier audits the LLM process to ensure that it complies with the Operations Specifications. [FAR 91.189(g)]*  YES **If no or N/A, explain:**  
 NO  
 N/A

2.3 *The Air Carrier audits the LLM process to ensure that maintenance personnel are using the LLM Maintenance Document.*  YES **If no or N/A, explain:**  
 NO  
 N/A

2.4 *The Air Carrier audits the LLM Maintenance Document to ensure that it meets or exceeds the standards included in AC 120-28C and AC 120-29.*  YES **If no or N/A, explain:**  
 NO  
 N/A

3. Does the air carrier document their process measurement methods and results?  YES **If no, explain:**  
 NO

4. Are the air carrier's process measurement methods effective?  YES **If no, explain:**  
 NO

5. Does the air carrier use their process measurement results to improve their programs?  YES **If no, explain:**  
 NO

6. Are the process measurement results accessible to the FAA?  YES **If no, explain:**  
 NO

7. Does the organization that conducts the process measurement have direct access to the person with responsibility for the Lower Landing Minimums (LLM) process?  YES **If no, explain:**  
 NO

8. Does the air carrier have the resources to support the process measurement for the Lower Landing Minimums (LLM) process?  YES **If no, explain:**  
 NO

# Safety Attribute Inspection (SAI) Job Aid

## 3.1.10 Lower Landing Minimums (LLM)

### SECTION 6 – INTERFACES ATTRIBUTE

**Objective:** To determine if the air carrier identifies and manages the interactions between the LLM process and the other element processes within the air carrier organization.

*To meet this objective, the inspector will accomplish the following tasks:*

1. Review the documented instructions and information related to the Lower Landing Minimums (LLM) process.
2. Discuss the Lower Landing Minimums (LLM) process with appropriate personnel to gain an understanding of the interfaces.
3. Observe the Lower Landing Minimums (LLM) process to gain an understanding of the interfaces.

*To meet this objective, the inspector will determine and record answers to the following questions:*

1. Are the following interfaces identified for the Lower Landing Minimums (LLM) process:

1.1 <i>Appropriate Operational Equipment (Element 1.1.2)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.2 <i>Airworthiness Release or Log Book Entry (Element 1.2.1)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.3 <i>Major Repairs and Alterations (Element 1.2.2)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.4 <i>Maintenance Log/Recording Requirements (Element 1.2.3)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.5 <i>Maintenance Program (Element 1.3.1)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.6 <i>Inspection Program (Element 1.3.2)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.7 <i>MEL/CDL/Deferred Maintenance (Element 1.3.5)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.8 <i>Outsource Organization (Element 1.3.7)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.9 <i>Control of Calibrated Tools and Test Equipment (Element 1.3.8)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A

# Safety Attribute Inspection (SAI) Job Aid

## 3.1.10 Lower Landing Minimums (LLM)

### SECTION 6 – INTERFACES ATTRIBUTE

1.10 <i>Parts/Material Control/SUP (Element 1.3.10)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.11 <i>Continuous Analysis and Surveillance (CAS) (Element 1.3.11)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.12 <i>GMM/Equivalent (Element 1.3.14)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.13 <i>Other Programs Approved by Operations Specifications</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.14 <Deleted>	
1.15 <i>Airman Duties/Flight Deck Procedures (Element 3.1.3)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.16 <i>Maintenance Training Program (Element 4.2.1)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.17 <i>RII Training Requirements (Element 4.2.2)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.18 <i>Training of Crewmember (Element 4.2.3)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.19 <i>Training of Dispatcher (Element 4.2.5)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.20 <i>Outsource Crewmember Training (Element 4.2.9)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.21 <i>Director of Maintenance (Element 7.1.1)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.22 <i>Chief Inspector (Element 7.1.2)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.23 <i>Director of Safety (Element 7.1.3)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A

# Safety Attribute Inspection (SAI) Job Aid

## 3.1.10 Lower Landing Minimums (LLM)

### SECTION 6 – INTERFACES ATTRIBUTE

1.24 <i>Manual Currency (Element 2.1.1)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.25 <i>Content Consistency Across Manuals (Element 2.1.2)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.26 <i>(Manual) Distribution (Element 2.1.3)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
1.27 <i>(Manual) Availability (Element 2.1.4)</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> NO <input type="checkbox"/> N/A
2. List any additional interfaces identified:	
3. Are there written procedures for the use of air carrier personnel in the application of these interfaces?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO
4. Are there controls to ensure that interfaces occur?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO
5. Are the interfaces between the Lower Landing Minimums (LLM) process and other processes treated consistently in the Manual(s)?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO