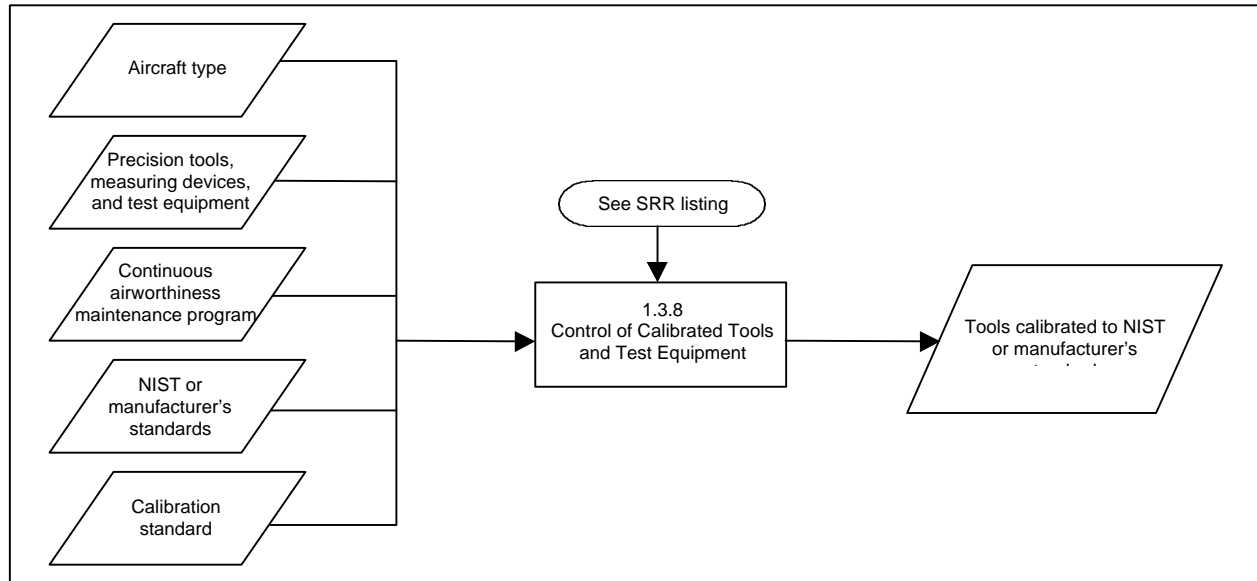


# Safety Attribute Inspection (SAI) Job Aid



## ELEMENT SUMMARY INFORMATION

**Element:** 1.3.8 Control of Calibrated Tools and Test Equipment

**Functional Statement:**

To ensure the calibration of precision tools, measuring devices, and test equipment.

**Inputs:**

- Aircraft Type
- Precision Tools, Measuring Devices, and Test Equipment
- Continuous Airworthiness Maintenance Program (CAMP)
- National Institute of Standards and Technology (NIST) or Manufacturer's Standards
- Calibration Standard

**Outputs:**

- Tools calibrated to NIST or manufacturer's standards.

**Performance Measures:**

- Tools being used are within the calibration time limitations.
- Calibration standards meet and are traceable to NIST or manufacturer's standards.
- Calibration level of accuracy and date of expiration are identified for all precision tools,

# Safety Attribute Inspection (SAI) Job Aid

measuring devices, and test equipment (including personally owned tools).

## **SRR:**

- 121.369 (b)

## **FAR and FAA Guidance:**

- 8300.10, Volume 2, Chapter 63 “Evaluate FAR Part 121/135.411(a)(2) Company Manual/ Revision”
- 8300.10, Volume 2, Chapter 64 “Evaluate Continuous Airworthiness Maintenance Program/ Revision”
- 8300.10, Volume 2, Chapter 74 “Evaluate FAR Parts 121 and 135...”
- 8300.10, Volume 2, Chapter 221 “Conduct Evaluation of Operator/Applicant’s Maintenance Facility”
- 8300.10, Volume 2, Chapter 236 “Evaluate Avionics Test Equipment”
- 8300.10, Volume 3, Chapter 2 “Conduct Spot Inspection of Operator’s Aircraft”
- 8300.10, Volume 3, Chapter 36 “Monitor Continuous Airworthiness Maintenance Program/ Revision”
- 8300.10, Volume 3, Chapter 131 “Inspect Operator’s Maintenance Facility”
- 8300.10, Volume 3, Chapter 144 “Inspect Avionics Test Equipment”
- AC (120-16C) - “as amended”
- AC (120-17C) - “as amended”

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## SRR SPECIFIC INFORMATION

<b>SRR</b>	<b>Intent</b>	<b>Inspectors</b>
<b>121.369 (b)</b>	To ensure the correct calibration of precision tools, measuring devices, and test equipment that will be used to accomplish the air carrier's maintenance and inspection programs.	<i>Certification:</i> Airworthiness <i>Surveillance:</i> Airworthiness

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**Objective:**

To determine if the air carrier's Control of Calibrated Tools and Test Equipment process includes safety attributes.

<b>1.3.8 Control of Calibrated Tools and Test Equipment</b>	
<b>SECTION 1 - RESPONSIBILITY ATTRIBUTE</b>	
<b>Objective:</b> To determine if there is a clearly identifiable, qualified, and knowledgeable person who is accountable for the quality of the Control of Calibrated Tools and Test Equipment process.	
<i>To meet this objective, the inspector will accomplish the following tasks:</i>	
1. Review a copy of the description in the manual that delineates the duties and responsibilities of the individual.	
2. Review a copy of the individual's resume or work experience.	
3. Review the appropriate organizational chart.	
4. Interview the individual.	
<i>To meet this objective, the inspector will determine and record answers to the following questions:</i>	
1. Is there a clearly identifiable person who is answerable for the quality of the the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <b>If yes, provide the name:</b> <input type="checkbox"/> NO <b>If no, explain:</b>
2. Does the individual understand the procedures attribute associated with the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO
3. Does the individual understand the controls attribute associated with the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO

# Safety Attribute Inspection (SAI) Job Aid

1.3.8 Control of Calibrated Tools and Test Equipment		
<b>SECTION 1 - RESPONSIBILITY ATTRIBUTE</b>		
4. Does the individual understand the interfaces attribute associated with the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
5. Does the individual understand the process measurements attribute associated with the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
6. Is the responsibility of this position clearly documented in the air carrier's Manual(s)?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
7. Are the qualification standards for this position appropriate and documented?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
8. Does the individual meet the qualification standards?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
9. Does the individual know that they have responsibility for the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
10. Does the individual know who has authority to establish and modify the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
11. Were all observations unrelated to the Control of Calibrated Tools and Test Equipment process satisfactory?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
12. Best practices/favorable comments:		

# Safety Attribute Inspection (SAI) Job Aid

<b>1.3.8 Control of Calibrated Tools and Test Equipment</b>		
<b>SECTION 2 - AUTHORITY ATTRIBUTE</b>		
<b>Objective:</b> To determine if there is a clearly identifiable, qualified, and knowledgeable person with the authority to establish and modify the Control of Calibrated Tools and Test Equipment process.		
<i>To meet this objective, the inspector will accomplish the following tasks:</i>		
1. Review a copy of the description in the Manual that delineates the duties and responsibilities of the individual.		
2. Review a copy of the individual's resume or work experience.		
3. Review the appropriate organizational chart.		
4. Interview the individual.		
<i>To meet this objective, the inspector will determine and record answers to the following questions:</i>		
1. Is there a clearly identifiable person who has authority to establish and modify the air carrier's policies for the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	<b>If yes, provide the name:</b> <b>If no, explain:</b>
2. Does the individual understand the procedures attribute associated with the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	<b>If no, explain:</b>
3. Does the individual understand the controls attribute associated with the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	<b>If no, explain:</b>
4. Does the individual understand the interfaces attribute associated with the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	<b>If no, explain:</b>

# Safety Attribute Inspection (SAI) Job Aid

1.3.8 Control of Calibrated Tools and Test Equipment		
<b>SECTION 2 - AUTHORITY ATTRIBUTE</b>		
5. Does the individual understand the process measurements attribute associated with the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
6. Is the authority of this position clearly documented in the air carrier's Manual(s)?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
7. Are the qualification standards for this position appropriate and documented?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
8. Does the individual meet the qualification standards?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
9. Does the individual know they have authority for the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
10. Does the individual know who has the responsibility for the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
11. Are the procedures for delegation of authority clearly documented for the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
12. Were all observations unrelated to the Control of Calibrated Tools and Test Equipment process satisfactory?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
13. Best practices/favorable comments:		

# Safety Attribute Inspection (SAI) Job Aid

<b>1.3.8 Control of Calibrated Tools and Test Equipment</b>		
<b>SECTION 3 - PROCEDURES ATTRIBUTE</b>		
<b>Objective:</b> To determine if the air carrier has documented procedures for accomplishing the Control of Calibrated Tools and Test Equipment process.		
<i>To meet this objective, the inspector will accomplish the following task:</i>		
1. Review the Manual(s) related to the Control of Calibrated Tools and Test Equipment process.		
<i>To meet this objective, the inspector will determine and record answers to the following questions:</i>		
1. Do written procedures exist to achieve the desired result of the Control of Calibrated Tools and Test Equipment process:		
1.1 <i>Do written procedures use a list to identify precision tools, measuring devices, and test equipment that must be calibrated? [SRR 121.369 (b)]</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<b>If no or N/A, explain:</b>
1.2 <i>Do written procedures identify and specify the calibration standard for each precision tool, measuring device, and test equipment, including the calibration interval? [SRR 121.369 (b)]</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<b>If no or N/A, explain:</b>
1.3 <i>Do written procedures require that a decal be applied to any device requiring periodic calibration which informs the user of its calibration status ) [SRR 121.369(b)]</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<b>If no or N/A, explain:</b>
1.4 <i>Do written procedures require that a decal stating “Calibrate or test prior to each use” is applied to any device requiring calibration but not on a schedule of calibration (e.g. micrometer) [SRR 121.369(b)]</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<b>If no or N/A, explain:</b>

# Safety Attribute Inspection (SAI) Job Aid

1.3.8 Control of Calibrated Tools and Test Equipment		
<b>SECTION 3 - PROCEDURES ATTRIBUTE</b>		
1.5 Do written procedures require the use of accurate “GO-NO-GO” devices when its use is specified by the manufacturers? [SRR 121.369 (b)]	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If no or N/A, explain:
1.6 Do written procedures include calibration of mechanics personal use tools? [SRR 121.369 (b)]	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If no or N/A, explain:
1.7 Do written procedures provide instructions for the proper storage and protection of the calibration standards and precision tools, measuring devices, and test equipment? [SRR 121.369 (b)]	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If no or N/A, explain:
1.8 Do written procedures identify a method for preventing the use of precision tools, measuring devices, test equipment, and calibration standards that are out of calibration? [SRR 121.369 (b)]	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If no or N/A, explain:
2. Do the procedures identify: who, what, where, when and how?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
3. Are the procedures in compliance with the FAR(s)?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
4. Do the procedures meet the intent of written FAA guidance?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
5. Does the air carrier have the resources to support the written procedures for the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
6. Do alternate procedures exist and do they provide an equivalent level of safety and achieve the same desired result for irregular conditions as the primary procedures (e.g., a manual system used as a result of equipment failure)?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:

# Safety Attribute Inspection (SAI) Job Aid

1.3.8 Control of Calibrated Tools and Test Equipment	
<b>SECTION 3 - PROCEDURES ATTRIBUTE</b>	
7. Are the procedures published in different manuals relating to the Control of Calibrated Tools and Test Equipment process consistent?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO
8. Does the air carrier have a documented process in their Manual(s) to assess the impacts of changing procedures for the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO
9. Were all observations unrelated to the Control of Calibrated Tools and Test Equipment process satisfactory?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> NO
10. Best practices/favorable comments:	

# Safety Attribute Inspection (SAI) Job Aid

<b>1.3.8 Control of Calibrated Tools and Test Equipment</b>	
<b>SECTION 4 – CONTROL ATTRIBUTE</b>	
<b>Objective:</b> To determine if checks and restraints are designed into the Control of Calibrated Tools and Test Equipment process to ensure a desired result is achieved.	
<i>To meet this objective, the inspector will accomplish the following task:</i>	
1. Review the Manual(s) related to the Control of Calibrated Tools and Test Equipment process.	
<i>To meet this objective, the inspector will determine and record answers to the following questions:</i>	
1. Are the following checks and restraints built into the Control of Calibrated Tools and Test Equipment process:	
1.1 <i>Does the Air Carrier have and maintain a list of precision tools, measuring devices, test equipment and the calibration standards that require calibration, the serial number or other means of identification.</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>Does the Air Carrier have a method for identifying and calibrating personal equipment (that requires calibration).</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>Does the Air Carrier require accuracy assessments for all “GO-NO-GO” devices prior to use?</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>Does the Air Carrier prohibit the use of un-calibrated personnel equipment?</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

1.3.8 Control of Calibrated Tools and Test Equipment		
<b>SECTION 4 – CONTROL ATTRIBUTE</b>		
1.5 •, Does the Air Carrier have a method to verify tools calibration prior to issuance?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If no or N/A, explain:
1.6 Does the Air Carrier document use a method for tracing the calibration standards back to NIST or the manufacturer's standards? [SRR 121.369 (b)]	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If no or N/A, explain:
1.7 Does the air carrier provide decals or placards stating:		
1.7.1 When the equipment was calibrated or the calibration due date;	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If no or N/A, explain:
1.7.2 Calibrate or test prior to each use”?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If no or N/A, explain:
2. Do the checks and restraints ensure the desired result is achieved for the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
3. Does the air carrier have a documented process in its Manual(s) to assess the impacts of changing the checks and restraints for the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
4. Does the air carrier have the resources to support the checks and restraints for the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
5. Were all observations unrelated to the Control of Calibrated Tools and Test Equipment process satisfactory?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
6. Best practices/favorable comments:		

# Safety Attribute Inspection (SAI) Job Aid

## 1.3.8 Control of Calibrated Tools and Test Equipment

### SECTION 5 - PROCESS MEASUREMENT ATTRIBUTE

**Objective:**

To determine if the air carrier measures and assesses its process for the Control of Calibrated Tools and Test Equipment process, to identify and correct problems or potential problems.

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

1. Review the Manual(s) related to the Control of Calibrated Tools and Test Equipment process.
2. Interview appropriate personnel.

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

1. Does the air carrier measure the Control of Calibrated Tools and Test Equipment process to indicate how well it is working?	<input type="checkbox"/> YES <b>If no, explain:</b> <input type="checkbox"/> No
2. Does the air carrier's Control of Calibrated Tools and Test Equipment process include the following process measurements?	
2.1 <i>The air carrier audits precision tools, measuring devices, test equipment, and the calibration standards to ensure that they are calibrated as required.</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> No <input type="checkbox"/> N/A
2.2 <i>The air carrier performs a minimum of an annual audit of the entire calibration program/system.</i>	<input type="checkbox"/> YES <b>If no or N/A, explain:</b> <input type="checkbox"/> No <input type="checkbox"/> N/A
2.3 <i>The air carrier performs random audits of personally owned precision tools for verification of compliance with calibration program.</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

1.3.8 Control of Calibrated Tools and Test Equipment		
<b>SECTION 5 - PROCESS MEASUREMENT ATTRIBUTE</b>		
2.4 <i>The air carrier performs an audit of maintenance providers' calibrated precision tools, measuring devices, and test equipment and calibration standards to ensure that they meet or exceed the air carrier's program requirements.</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If no or N/A, explain:
3. Does the air carrier document their process measurement methods and results?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
4. Do the process measurement methods appear to be effective?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
5. Does the air carrier use their process measurement results to improve their programs?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
6. Are the process measurement results accessible to the FAA?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
7. Does the organization that conducts the process measurement have direct access to the person with responsibility and the person with authority for the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
8. Does the air carrier have the resources to support the process measurement for the Control of Calibrated Tools and Test Equipment process?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
9. Were all observations unrelated to the Control of Calibrated Tools and Test Equipment process satisfactory?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
10. Best practices/favorable comments:		

# Safety Attribute Inspection (SAI) Job Aid

<b>1.3.8 Control of Calibrated Tools and Test Equipment</b>		
<b>SECTION 6 - INTERFACES ATTRIBUTE</b>		
<b>Objective:</b> To determine if the air carrier identifies and manages the interactions between the Control of Calibrated Tools and Test Equipment process and the other element processes within the air carrier organization.		
<i>To meet this objective, the inspector will accomplish the following task:</i>		
1. Review the Manual(s) related to the Control of Calibrated Tools and Test Equipment process.		
<i>To meet this objective, the inspector will determine and record answers to the following questions:</i>		
1. Are the following interfaces identified for the Control of Calibrated Tools and Test Equipment process:		
1.1 <i>Appropriate Operational Equipment (Element 1.1.2)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<b>If no or N/A, explain:</b>
1.2 <i>Maintenance Program (Element 1.3.1)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<b>If no or N/A, explain:</b>
1.3 <i>Inspection Program (Element 1.3.2)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<b>If no or N/A, explain:</b>
1.4 <i>Parts/Material Control/SUP (Element 1.3.10)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	<b>If no or N/A, explain:</b>

# Safety Attribute Inspection (SAI) Job Aid

1.3.8 Control of Calibrated Tools and Test Equipment		
<b>SECTION 6 - INTERFACES ATTRIBUTE</b>		
1.5 <i>Maintenance Training Program (Element 4.2.1)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If no or N/A, explain:
1.6 <i>Other programs approved by Operation Specification</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If no or N/A, explain:
1.7 <i>Continuing Analysis and Surveillance (CAS) Program (Element 1.3.11)</i>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	If no or N/A, explain:
2. Have any additional interfaces been identified?		
3. Are there procedures to ensure that interfaces occur?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
4. Are there controls to ensure that interfaces occur?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
5. Are the interfaces between the Control of Calibrated Tools and Test Equipment process and other processes treated consistently in the Manual(s)?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
6. Were all observations unrelated to the Control of Calibrated Tools and Test Equipment process satisfactory?	<input type="checkbox"/> YES <input type="checkbox"/> NO	If no, explain:
7. Best practices/favorable comments:		