Introduction to Nadcap/PRI

Copyright Information

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Goals

- Educate individuals unfamiliar with the Nadcap process:
  - Nadcap – How it works
  - Tools and resources available

- Increase awareness of expectations and requirements in order to:
  - Reduce the average number of nonconformances (NCR’s)
  - Reduce cycle time (time from audit to accreditation)
  - Increase number of Suppliers on Merit program

Contents

- Nadcap Defined
- Nadcap Organizational Structure
- What is a Nadcap Audit?
- Nadcap Procedures
- Audit Process
- Preparation Steps
- ITAR/EAR
- During and After the Audit
- NCR Responses/RCCA
- Supplier Advisory
- Supplier Merit
- Failure Process
- Additional Information
- Nadcap Meeting Information
- Websites
Agenda

- Introduction to PRI and Nadcap
- The Nadcap Audit Process
- Preparation Steps
- During the Audit / Post Audit
- Web Tools & Additional Information

PRI is a **not-for-profit** affiliate of SAE International
PRI administers the Nadcap special processes accreditation program and PRI Registrar on behalf of its Subscribing Members and industry

Nadcap created by aerospace Original Equipment Manufacturers (OEMs or Primes) to provide **supply chain oversight** and ensure **regulatory compliance**
Nadcap uses audit management software created and maintained in-house by PRI Informatics Solutions (eAuditNet)

Complementary programs, tools, and professional development services created by PRI to support Nadcap
Nadcap Defined

The leading, worldwide cooperative program of major companies designed to manage a cost effective consensus approach to special processes and products and provide continual improvement within the aerospace industry.

PRI/Nadcap Organizational Structure

PRI Board of Directors

Nadcap Management Council (NMC)

Administrative Staff

Supplier Support Committee

TASK GROUPS
- Aero Structure Assemblies
- Aerospace Quality Systems (AQS) - AC7004
- Chemical Processing
- Coatings
- Composites
- Conventional Machining as a Special Process
- Elastomer Seals
- Electronics
- Fluid Distribution Systems
- Heat Treating
- Materials Testing Laboratories
- Metallic Materials Manufacturing
- Measurement & Inspection
- Non Metallic Materials Manufacturing
- Non Metallic Materials Testing
- Nonconventional Machining
- Nondestructive Testing
- Sealants
- Surface Enhancement
- Welding
Supplier Support Committee (SSC)

Mission: Our goal is to represent the Supplier community and work with the Nadcap Management Council (NMC) to enhance the effectiveness and economical value of the Nadcap program for the mutual benefit of Suppliers and Subscribers.

SSC Programs/Activities:
- **Mentoring Program** - Dedicated to assisting those Suppliers who are new to the process and/or those needing assistance with navigating through the Nadcap system by providing names and contact information of experienced Nadcap Suppliers. If you would like to work with a Mentor, please send an email to NadcapSSC@p-r-i.org.
- **Supplier Survey** – Biennial Customer feedback survey
- **SSC Task Group Representatives** - Act as a liaison between the SSC and the Task Group and can advise you on Task Group related inquires.

Nadcap Supplier Support Meeting:
The SSC sponsors several face-to-face sessions at the Nadcap meetings. The Supplier Orientation & Tutorial provides an overview of the Nadcap program, presented by a Supplier; the SSC meeting is a forum for discussion and report-out on important issues for Suppliers; and there is also an informal Question & Answer session where you can meet PRI Staff. Check the meeting agenda for details.

If you would like to receive any additional information on SSC activities, please email NadcapSSC@p-r-i.org.
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- Introduction to PRI and Nadcap
- **What is a Nadcap Audit?**
- The Nadcap Audit Process
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What is a Nadcap Audit?

- A thorough assessment for compliance to a Nadcap checklist and Customer requirements
  - Conducted by an expert in the commodity
    - Auditors are chosen by the Task Group

- Audit is not a Quality Systems (QS) Audit!
  - Technical audit focused on the specific commodity requirements
    - QS related aspects only specific to the commodity e.g. review of calibration requirements for NDT equipment
General Focus Audit

Calibration:
When measurement traceability is a requirement, or is considered by the organization to be an essential part of providing confidence in the validity of measurement results, measuring equipment shall be:
  a. calibrated or verified, or both, at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards;
when no such standards exist, the basis used for calibration or verification shall be retained as documented information...

(reference 91000 7.1.5.2)

Composites

Heat Treating

NDT

Technical Focus Audit

Calibration:
Are mechanical testing machines calibrated per ASTM E4, ISO 7500-1, or equivalent/customer requirements?

Are the Control, Monitoring and/or Recording Instruments used on furnace X calibrated and meets the requirements of AMS2750?”

Does the procedure specify the number of points to be checked for each instrument and reference to the accuracy required and the range to be checked?

Composites

Heat Treating

NDT

Checklists
Job Audit

- A job audit is a step by step review of the special process on actual hardware evaluating how the customer requirements are met, using the Nadcap checklists.
  - Each special process family will have a certain number of job audits to be witnessed. Each Task Group has their own requirements, be sure to review the audit checklist for specific details
- Schedule the Nadcap audit when able to perform as many of the job audits as possible
  - Work with the scheduling department (internal and PRI)
  - Can affect scope of the accreditation
  - Paper audits may be used but only when absolutely necessary and as agreed by the Task Group

NOTE: If clarification is needed, contact the Staff Engineer

Relationship Between Audit Documents

Industry Standards & Prime Requirements

AC7XXX AUDIT CRITERIA + Job Audits

AUDIT HANDBOOK (if available)

Clarify Instructions and Prime (Customer) specification requirements

Obtain and download the audit checklist and audit handbook PRIOR to your audit!
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Nadcap Documents

- **PD 1100 – Nadcap Program Requirements**
  - The requirements for implementing the Nadcap industry consensus-based accreditation program

- **OP – Operating Procedures**
  - Documents detailing the specific procedures by which Nadcap operates. These documents are administered by PRI, and are approved by the Nadcap Management Council.
  - Example: Audit Failure, Merit, Supplier Advisories, etc

- **IMAPP – Industry Managed Accreditation Program Procedure**
  - Document detailing specific procedures by which PRI/Nadcap Staff operates. These documents are in accordance with Operating Procedures and administered and approved by PRI.
  - Example: Balloting, record retention, internal audit, etc

- **Forms**
  - Forms used to gather or transmit information. These are referenced within the Operating Procedures and administered and approved by PRI.
  - Example: s-frms (Scheduling – preliminary questionnaires)
  - t-frms (Task Group – advisory response form, audit checklist template)
Quality System Approval

- Before receiving a Nadcap special process accreditation, the company quality system must be approved:
- Nadcap recognized quality systems approvals:
  - 9100 and 9110 quality system approvals performed by approved registrars - listed in the IAQG OASIS database (www.iaqg.org/oasis).
    Some Product groups require 9100
  - ISO/IEC 17025 for testing laboratories (AC7101), must cover the Nadcap scope of accreditation and be from an approved ILAC accreditation body
- If you have neither of these, you will need a Nadcap AQS audit to AC7004 or AC7006 (labs) to support the special process accreditation
- Refer to PD 1100 and OP 1104

Quality System Approval (Cont’d)

- Suppliers scheduling an initial Nadcap audit shall provide PRI a recognized quality system certification valid through the last day of the scheduled process audit prior to the time the audit is entered into eAuditNet or an AC7004 assessment audit shall be scheduled, unless the TG requires more than AC7004
- For reaccreditation audits, where no existing recognized quality system approval exists, Suppliers shall have two options:
  - a minimum of 90 days prior to the audit start date schedule an assessment to AC7004, unless TG requires more than AC7004
  - provide PRI a valid Quality System accreditation certificate no later than 60 days following the end of the Nadcap audit
- Suppliers failing to provide a valid quality system accreditation certificate to PRI by this date shall have the process audit automatically failed without further notice
Nadcap Audit Process – Nadcap Accreditation

1. Suppliers
2. Request Audit
3. PRI Audit Scheduled
4. Auditor Assigned
5. PRI Technical Staff Review
6. PRI Technical Staff Review
7. Task Group Approval
8. Audit Completed
9. Accreditation

Begin the Process: Initial Steps

- Go to eAuditNet (www.eAuditNet.com)
- Click on “Get Quote” button
  - If you are an existing user, you can log in and go through the steps to request a quote
  - If you are a new user, you will need to register in the system and then go through the steps to request a quote
- Schedule Audit
- Prepare!
Automatic Scheduling

- When the Task Group grants Nadcap accreditation for a company, eAuditNet is updated and the accreditation is listed on the online Qualified Manufacturers List (QML)

- At the same time, the next Nadcap accreditation audit (reaccreditation) for the same commodity will be automatically scheduled by eAuditNet. 85% of audits are auto-scheduled!

- Please verify the dates and contact the Scheduling Department within 21 days of any changes. – **IMPORTANT**, a reminder will **NOT** be sent

Automatic Scheduling – More Details

- When an audit is auto-scheduled, it may be necessary to accept the Supplier Agreement and designate if there is ITAR and/or EAR (EC-LR/Restricted) work involved
  - Log onto eAuditNet, click on Supplier Audits. Under “Agreements Accepted” a list of audits where agreements are not accepted will appear. Click on “Accept Agreement” and complete the acceptance
  - Under ITAR/EAR, select “Specify” for the audit which needs the Export Control Status designating and indicate ITAR/ and or EAR (EC-LR/Restricted) status accordingly

- The designation of the ITAR/EAR status must be completed prior to every audit. **REMINDERS WILL BE SENT!**
Export Controlled* Materials and Information

- The US government has determined that certain **products**, **processes** and **technical information** must be controlled.
- The documents which control this are:
  - ITAR – International Traffic in Arms Regulation
  - EAR – Export Administration Regulations
- Exports can occur by seeing or discussing controlled material in addition to obtaining copies of the material

*Throughout this presentation reference to “restricted items”, refers to materials, products, technical data, software, and technology which require licensing or to which other restrictions apply as per the ITAR or EAR regulations.

Export Controlled Materials & Information

- The Nadcap process uses both Unrestricted and Restricted personnel (Auditors and Staff Engineers) on Nadcap audits
- Unrestricted auditors are either US citizens or green card holders
  - US citizen auditors (Unrestricted) are allowed access to EC-LR materials anywhere in the world without a license
- Restricted auditors are all others
  - Restricted auditors are not allowed access to EC-LR/Restricted materials anywhere in the world unless they are listed on a license
- Suppliers must know the status of the PRI personnel & keep any Export Controlled material away from Restricted/Unlicensed personnel
  - Auditor status can be found in eAuditNet next to Auditors name for assigned audit
  - The status of the Audit Report Reviewer is located on the Audit Summary page and can be seen once the audit is assigned
Supplier Responsibilities

- Determine whether you have material, products, technology or information which requires a license or is otherwise restricted by the ITAR or EAR.

- Contact your customers to be certain.

- If you have product, information or any other materials restricted by the ITAR or EAR, you must indicate such by answering the ITAR/EAR question “YES” after accepting the supplier agreement when the audit is scheduled. This alerts PRI Scheduling as to whether ITAR/EAR controlled work exists – and guides the assignment of the auditor.

Supplier Responsibilities (Cont.)

- General information on Export Control can be found in eAuditNet (Public Documents) and on the Supplier page of the Nadcap website (www.p-r-i.org)

- Suppliers cannot post or reveal any technical details on EC-LR/Restricted parts in response to any findings in eAuditNet including attachments
  - eAuditNet contains a warning notice for audits identified as ITAR/EAR, when suppliers respond to findings (see next screen)
Supplier Responsibilities (Cont.)

- Beginning March 16, 2015, all program participants are asked to forward all restricted data which must be sent to any unrestricted PRI representative in association with a Nadcap audit to the following email address: restricteddata@p-r-i.org

- In the subject line of the email message, the following information must be included:
  - Audit Number
  - Intended PRI recipient and/or Nadcap Commodity-

- Failure to adhere to this procedure could result in the sender’s audit data being lost and/or a delay in audit processing time.

- For general information on export control regulations, please visit the following web pages:
  - https://www.pmddtc.state.gov/
  - http://www.bis.doc.gov/
Best Practices for Nadcap Success

• Strengthen your internal audit program – Use the Nadcap checklists! Include Job Audits every time. Understand the interpretation and expectations
  – Download the Nadcap checklist and perform a thorough and complete self-audit
    • Record, by question, where in the system the requirement is documented
    • Record, by question, where the objective evidence of compliance is in the system
    • If you cannot write down where in the system the documentation is located and what you will show the auditor – the checklist answer is No!
    • Perform a full set of Nadcap job audits

• Confirm all personnel understand the role they play in making the audit successful

• For reaccreditation audits - Review all NCR’s (Majors / Minors) from the previous audit to ensure corrections taken are sustaining

• Use the tools available on www.eAuditNet.com
  • Tutorials where available
  • Audit Handbooks where available
  • Checklists
PRI Staff Engineer

- The PRI Task Group Staff Engineer has commodity specific knowledge and expertise
  - Review audit report packages. Make recommendations for accreditation to the commodity Task Group
  - Qualified auditors – Understand the process
  - Work intimately with the commodity Task Groups – Understand requirements, interpretations and expectations
  - When necessary, use their expertise before and after your audit

Staff Engineer Advice

- It is the companies’ responsibility to ensure all requirements are met
  - Do not shift responsibility to others for non compliances or assume everything is acceptable because it was believed to be acceptable in the past
  - Understand the interpretation of the requirements and/or Task Group expectation. Contact the Staff Engineer if uncertain

- Ensure compliance throughout all of the company documents
- Auditor will check for complete compliance
More Staff Engineer Advice

- Conflict between the checklist - comply with the customer requirement or pick the most stringent? If uncertain, contact customer or PRI

- Multiple customer requirements will require a more robust system

- The specification is the requirement. Procedures must meet all requirements in the specification, with supporting evidence as required by the checklists

Information available on-line

- www.eAuditNet.com
  - Resources/Documents/Public Documents
    - Change of address sheet (t-frm-11)
    - eAuditNet Supplier Guide & Pre & Post-Audit Tutorials
    - Audit Handbooks
    - Miscellaneous Task Group reference and training documents such as Task Group Meeting / Symposium presentations, Rolling Action Item List (RAIL), Pyrometry Reference Guide, etc
  - Nadcap Procedures and Forms
  - Checklists
- www.p-r-i.org
  - Nadcap, Supplier Info
    - SSC page – Purpose, mentoring, what happens at SSC meetings and more
    - PRI/Nadcap - Supplier Perspective
    - eAuditNet – For Suppliers
    - Professional Development – eQuaLearn Training Courses

Check both sites often – updates made frequently


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**Scope Verification**

- At the beginning of the opening / introduction meeting (in-briefing), the auditor will log onto eAuditNet.com and request the supplier representative review the scope of the audits to ensure accuracy and make any changes accordingly prior to the audit commencing
  - Electronic ‘sign-off’ process
  - Once the audit begins, generally no changes can be made to the scope of accreditation
- The auditor does not determine the scope, that is the responsibility of the company. If uncertain, verify with your customer
Daily Briefings

• At the end of every audit day, the auditor should conduct a daily briefing to summarize the progress and review any non conformance reports (NCR) generated during the day
  – Inform key company personnel (if required)
  – Promotes open communication between the company and auditor
  – Allows the company time to obtain further clarification or objective evidence that may invalidate the NCR
    • Purpose is not to excessively debate or argue about an issue with the auditor. Problems occur, contact appropriate Staff Engineer
  – Review any outstanding items that needed to be addressed to answer a checklist questions
  – Discuss the next days agenda to ensure personnel are available
  – Minimize time necessary at the final out-briefing

Exit Meeting

• An out-briefing or exit interview with Supplier Management personnel shall be conducted to:
  – review non-conformances
  – obtain commitments for corrective actions
  – explain the other aspects of the Nadcap process
    • Schedule top management to attend
    • Make certain the company understands any NCR’s written – ask questions if you do not understand - this is your chance to ensure the finding will be written clearly
Exit Meeting

- Review the accreditation process requirements and expectations before the auditor leaves
  - Highlight key Nadcap procedures to review
  - NCR Corrective Action outline, response time frames
  - eAuditNet process
  - Supplier Feedback
- Open communication between the Supplier and Auditor is important. Again, if problems occur, contact the appropriate Staff Engineer

NCR Classifications

Major Nonconformance:
- The absence of, or systemic breakdown of, the Process Control and/or Quality Management system Or
- Any non-conformance where the effect impacts or has the potential to impact the integrity of the product

Examples: incorrect process parameters, missing inspections or processing steps, failure to record required data, missed or out of tolerance calibration; result from failure to implement a corrective action from the previous audit

Minor Nonconformance:
- Any single system failure or lapse in conformance with the applicable standard or audit criteria

Examples: paperwork oversights, minor changes to procedures for clarification

Refer to Resources – Procedures and Forms – Operating Procedures - OP 1103 in www.eAuditNet.com
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**After the Auditor Leaves**

- **Feedback is invaluable to the process – Nadcap is a cooperative program**
  - When a company submits their NCR responses (within 21 calendar days) they are prompted to complete the Supplier Feedback online questionnaire
    - When there are 0 NCRs, the company is required to complete the Supplier Feedback within three business days
  - Complaints must be submitted in writing and will be addressed independently of the audit review process

- **There is an appeals process for NCRs, Staff Engineer decisions, and Task Group decisions**
  - Refer to OP 1113 for further details
Between Audit & Accreditation

1. Supplier Submits Corrective Action Responses
2. Staff Review of Supplier Corrective Action Responses
   - Additional Information Requested
     - Yes
       - Additional Information Requested
       - No
         - 3. Task Group Review of Audit Package
           - No
             - 4. Accreditation
           - Yes
             - Additional Information Requested
2. Staff Review of Supplier Corrective Action Responses
   - Yes
   - No
   - 3. Task Group Review of Audit Package
     - No
       - 4. Accreditation
     - Yes
       - Additional Information Requested
NCR Review

- NCR responses are closed when the company meets the expectation of the commodity Task Group
  - The Task Group expects a complete and thorough assessment of the NCR by the supplier

- Provide objective evidence
  - Procedure changes, control check log sheets, calibration certificates, immediate and long term training, etc

- Immediate corrective action is not the action taken to prevent recurrence

- Failure to close NCR’s delays accreditation, adding cycle rounds and days
Supplier Advisory

• The purpose of the Nadcap Supplier Advisory is to notify Nadcap Subscribers of issues with conformance of products, services, or quality systems of Nadcap Suppliers

• Three types of Supplier Advisories exist
  – Type P – Potential for Product Impact
  – Type C – Confirmed Product Impact
  – Type F – Failed Audit

• Supplier Advisories are located and controlled in eAuditNet

Supplier Advisory (Cont’d)

• The Supplier has seven (7) calendar days from issuance of a Nadcap Supplier Advisory (type P or C only) to provide a response. The Supplier response shall include at a minimum the following elements: a positive statement regarding the investigation of the potential or confirmed product impact; a confirmation that all customers have been notified; and a statement of rationale based on the Supplier’s investigation as to the impact to the product. Form t-frm-06 may be used to develop an appropriate response. Responses will be noted under the actual advisory located in eAuditNet. Note: Contractual requirements for Customer notification earlier than seven (7) calendar days may apply.

• Nadcap accreditation may be suspended or withdrawn as a result (Task Group approval needed)

• May affect other commodity accreditations held

• If believed to be systemic and affecting the Quality Systems approval, the AQS Task Group will review and where necessary notify the applicable Certification Body (CB)

• Refer to OP 1109 for more information
NCR Response Submittals

- Auditor submits the audit within 3 business days from the last day of the audit
- Staff Engineers have 3 calendar days to perform ITAR review
- Initial responses are due within 21 calendar days from the date the Staff Engineer completes ITAR review and puts into Supplier review status
  - Submit in eAuditNet, in accordance with Requirements for Corrective Action Response
- For completeness of the audit report, additional information or clarifications may be requested by the Staff Engineer

Response Requirements

Help available:

www.eAuditNet.com
  - A link to Response Requirements is attached to the NCR
  - The link is located right above the Supplier Response box

Also: www.p-r-i.org/nadcap.com
  - Supplier Info – Post Audit Assistance

Also: www.eQuaLearn.com to register for RCCA training
Corrective Action Response Requirements

Reply to your NCR in the Supplier Discussion for each NCR in the format below and addressing each item in the ‘Your Reply’ section of the eAuditNet Supplier response forum for each NCR

- Immediate Corrective Action Taken (Containment Actions)
- Root Cause of Nonconformance
- Impact of all Identified Causes and the Root Cause
- Action Taken to Prevent Recurrence
- Objective Evidence is required on ALL findings
- Effectivity Date
Example – The Non Conformance

Requirements: AMS-QQ-P-416, Type 1, Cl. 3 - paragraph 4.6.2 – Adhesion Testing
Sampling plan AMS-QQ-P-416, Table 4

Identified Nonconformance:

a) Router requires an adhesion bend test. Supplier bent test coupons to about a 60° angle and reviewed for adhesion failures.

Specification requires a bend to fracture test.

b) Sampling plan for visual examination did not meet the AMS-QQ-P-416, Table 4 requirement.

Immediate Corrective Action

Define Immediate Corrective Action Taken

What action was taken following the issue being discovered during the audit?

– Did you stop the problem from continuing?
– Did you contain the problem found?
– Did you notify Customers of suspect parts/hardware?
– Did you review other parts/processes/documents affected?

These actions address the immediate or direct cause of the NCR only
Immediate Corrective Action (Cont’d)

Define Immediate Corrective Action Taken:

Example of an Unacceptable Immediate Corrective Action:
The procedure was modified

Example of an Acceptable Immediate Corrective Action:
- Receiver instructed to use the Test Matrix (F-751-001) to verify correct flow down of testing requirements
- Receiver and QC personnel trained on the use of the Test Matrix (F-751-001)
- Verification of testing flow down to job traveller added to the PO Review Checklist (F-722-002)
- All travelers are being revised to this format (emailed separately due to ITAR). New software beta testing to begin Weds, 04/11/2013 with detailed inspection requirements, including sampling plan based on specifications, directly as part of job traveler.

Root Cause

Define Root Cause of the Nonconformance:

Investigate all causes contributing to the nonconformance using fish bone diagrams, 5-why analysis or similar tools. The root cause will be the last logical cause in the chain

Think you got it? Try one more!

Only the identified Root Cause should be included in the response (Do not write a thesis). Supplemental information to support the cause analysis may be included as objective evidence if necessary
Define Root Cause of the Nonconformance:

**Example of an Unacceptable Root Cause:**
We have been audited by many customers in the past. This has never been a problem and our requirements have been found to be acceptable.

**Example of an Acceptable Root Cause:**
Internal procedure MAP-722-001, did not require the use of the test matrix to flow down testing requirements.
PO review was not required to verify proper flow down of testing requirements.

Impact of Identified Causes

Define the Impact of all Identified Causes and the Root Cause:

What impact did the nonconformance actually have?

- Consider
  
  - Were any other parts / processes affected?
  
  - Were any affected parts shipped to the customer?
  
  - Was the customer contacted?
Impact of Identified Causes (Cont’d)

Define the Impact:

Impact to Hardware:

Example of an Unacceptable Impact Statement:
No Impact

Example of an Acceptable Impact Statement:
Specification violation – potential impact. Notification sent to customers for all jobs plated in the last six months. Copies of notification letters attached.

Actions Taken to Prevent Recurrence

Define the Actions Taken to Prevent Recurrence: What are the steps taken to prevent this problem from occurring again?

- What is the long term action to prevent recurrence?

- Can only be addressed when the true root cause is known

- Do not rush, consider the effectiveness, feasibility, suitability to the company, and the company's budget

- Remember, non-sustaining Corrective Actions (CA) become MAJOR findings. By not addressing CA’s adequately there is a potential for a non-sustaining finding on the next audit. This will affect your Supplier Merit
Actions Taken to Prevent Recurrence (Cont’d)

Define the Action Taken to Prevent Recurrence:

Example of an Unacceptable Action Taken:
The procedure was revised

Example of an Acceptable Action Taken:
- Internal procedure MAP-722-001, revised to require use of test matrix to flow down testing requirements on traveler. PO Review Checklist (F-722-002) revised to include verification of testing flow down against the test matrix.
- Procedure MAP-021-001 has been revised to call out both the bend to fracture and sampling plan requirements.
- All personnel have been trained to revised form and procedures.
- The test matrix also points to the specific locations in MAP-021-001 for the sampling plan requirements. The new software going into beta testing the week of 4/16/2013 allows specific sampling plans for each specification.
- Follow-up internal audits will be performed to ensure the correct use of the form and that the software is adequate for out needs.

Objective Evidence

Define and Attach Objective Evidence:

- What information can be provided to demonstrate the RCCA process applied to the NCR?
  - Objective evidence is required for Major & Minor NCR’s except minor NCR’s accepted (not closed) onsite by the auditor
  - Note: It is expected that the supplier clearly define the root cause corrective action taken. If a procedure is changed, clearly specify what the change was

- Don’t forget to identify the specific actions taken to resolve the nonconformance(s), (e.g., exact text of procedure change, text of stamp to be ordered, etc.)
  - Objective evidence should be attached electronically in www.eAuditNet.com
  - Contact the Staff Engineer with any questions

- If you change or create a procedure, implement a new system or method, perform training, propose audits, develop new checklists - SHOW THIS. It may prevent another review cycle

REMEMBER: Do not attach information that discloses Export Controlled details.
Objective Evidence (Cont’d)

Define and Attach Objective Evidence:

Objective Evidence:

Example of Unacceptable Objective Evidence:
See attached revised procedure

Example of Acceptable Objective Evidence:
- Revised F-722-002 PO Review Checklist
- Training record to F-722-002
- Revised MAP-722-001 Order Entry/Receiving Instructions
- Training record to updated procedures
- Notification Letters NCR2- File containing copies of all notification letters delivered. (via email)
- Affected Customers.xlsx - Table containing list of all affected customers and related POs. (via email)

Corrective Action Response Requirements (Cont’d)

Effectivity Date:

When will the corrective actions be completely implemented?

(Accreditation generally cannot be issued until after this date.)
Key Points to Consider

- Supply all the necessary objective evidence, e.g. copy of revised procedure, procedure approval, copy of revised process control log, evidence of training, etc

- Respond directly in eAuditNet
  - Word documents / NCR templates / other attachments containing the RCCA response is not acceptable. Provide the response directly in eAuditNet. Attachments are for objective evidence only

- Address every aspect of the Root Cause Corrective Action (RCCA):
  - Immediate corrective action taken
  - Root cause
  - Impact to hardware
  - Action taken to prevent recurrence
  - Objective evidence

- Provide information within the defined time frame

Corrective Action – More details

- Call the Staff Engineer!
  - If you need clarification on a request for more information, a phone call may save you an additional review cycle
  - If you will not be able to meet the procedural time frames for responses...extensions can not be granted but communication about WHY a date is missed is important
If Your Response is Not Accepted

- You have 7 calendar days to respond to the Staff Engineer request for additional information.

- If the Staff Engineer details a specific request:
  - Review and comply with the entire request. Your response will not be accepted until all items are addressed.
  - Only address what is being asked from the Staff Engineer. Do not resend the whole RCCA response.

- In the event of a generic rejection, i.e., “Readdress Root Cause”
  - Review the Requirements for Submittal of Corrective Action Responses and make certain you are complying with these requirements.

- Call the Staff Engineer for clarification.

Response Due Dates

- Response extensions are not given, however the company is allowed a limited number of cumulative late days that can be used through the life of the audit report package. Late days typically used:
  - Allow a more thorough response to be provided
  - Key personnel on vacation or sick
  - Awaiting equipment installation, calibrations, etc
  - Training of personnel
  - After 30 late days, audits are processed per OP 1110 (Audit Failure)
  - Per OP 1111 (Merit Program)
    - 18 month accreditation cannot be achieved if more than 14 cumulative late days
    - 24 month accreditation cannot be achieved if more than 7 cumulative late days
How to Avoid Repetitive NCR’s!

- Involve all personnel that will have the responsibility to fix, implement and monitor the corrective actions.

- Issue notifications throughout all company departments when policies/procedures are changed as a result of corrective action responses.

- Ensure that more than one person within the company is totally familiar with past and present Nadcap audits and NCR’s.

- Create a process to ensure Corrective Actions for all NCR’s - major or minor - have been implemented and are monitored, as part of the internal audit process. Management involvement and monitoring is mandatory! (9100)

- Do not attempt quick fixes - even for minor non conformances. If quick fixes are accomplished there should be a process within the company on how these are accomplished and what the limitations are.

Common Findings

- Job Audits
  - Customer flowdown
  - Lack of shop discipline – inform your personnel!
  - Lack of documentation/Objective evidence
  - Data transfers

- Processes requiring approvals not approved (i.e., NDT Techniques or other frozen process)

- Specification compliance (i.e., frozen process doesn’t meet specification or AMS 2750 compliance)

- Parts cleaning not in accordance with requirements

- Testing including periodic
Common Findings

Common findings refers to Non Conformance Reports (NCR’s)

- **AQS** (Aerospace Quality System)
  - Purchase orders not containing all the necessary information
  - Calibration issues (certificates, methods used, etc)
  - Lack of document control (wrong revision levels)
  - Lack of follow-up on corrective actions
  - Internal audits not being performed per schedule

- **CP** (Chemical Processing)
  - Shop paperwork missing information (part, test piece requirements, etc.)
  - Solution Analysis (log sheet, reviews)
  - Process non-conformances (operator compliance issues; solutions not at correct temperature when processing, plating current is not equal to the required current, paint is not mixed for required time, etc.)

- **COMP & NMMT** (Composites and Non-Metallic Materials Testing)
  (Data available on eAuditNet via Meeting presentation folder) Top nonconformances by checklist paragraph are included in the Staff Report that is posted on eAuditNet after each Nadcap meeting under the Composite and Non Metallic Materials specific Meeting Presentations folder.

- **AC7118**
  - 11.3.2 Are documented work instructions available to the operator and does the procedure(s) accurately reflect the manufacturing process? (Including the proper sequence)
  - 12a-g.2.1 Do the specification/drawing/design requirements and revision on the purchase order match the received material?

- **AC7122**
  - 1.3 - The laboratory has facilities capable of meeting the applicable temperature and humidity requirements.
  - 24.1 - Each page of the test report is numbered "page __ of __", and has unique identification traceable to the job and laboratory identification

- **AC7122/1**
  - 2.1 - Temperature and humidity requirements are observed.
  - 2.2 - The relative humidity is less than 60% (except for in-process testing of raw material manufacturers)
Common Findings

- CMSP (Conventional Machining as a Special Process)
  - Not detailing the coolant nozzle layout and positioning
  - Not sufficiently detailing the procedure for cutting fluid maintenance
  - Not proceduralizing all items which the checklists explicitly requires
  - Not ensuring the correct tool is in use
  - Not detailing the equipment the part is to run on

- FLU (Fluids)
  - Procedure does not address requirements, Non-Compliance to procedure requirements, Failure to record required data
  - Lack of Auditing and Control of Sub-Contractors
  - Documentation incomplete, errors, operations not signed off
  - Calibration Issues, equipment not in calibration system, out of tolerance conditions not evaluated, expired calibrations, scope of outside calibration services
  - Inadequate purchase order review, flow down of purchase order requirements
Common Findings

- **HT (Heat Treating)**
  (Data available on eAuditNet – Public Documents / Heat Treating / Data folder)
  - System Accuracy Tests (SAT’s) performed on temperature control and recording devices
  - Calibration records demonstrating conformance to AMS2750
  - Calibration frequency and accuracies of equipment and thermocouples
  - Non-Sustaining (Repeat) findings

- **MTL (Materials Test Lab)**
  - Missing Detailed Written Procedures
  - Equipment Calibration and traceability (Weigh scales, micrometers, reference standards, Hardness Standards, Mechanical testing Alignment, etc.)
  - Internal Audits / Corrective Action system

- **NDT (Non Destructive Testing)**
  (Data available on eAuditNet – Public Documents / NDT / Data folder)
  - Level 2/Level 3 practical exams (Does the candidate document the results of what was detected? Is a check sheet used by the responsible level 3 or delegate?, etc.)
  - Records for the training, qualification and certification of NDT personnel
  - Penetrant system performance test not done in conjunction with photo
Common Findings

- **SEALS (Elastomer Seals)**
  - Calibration Issues: Post cure oven calibration does not address 9 thermocouples and range of use
  - Records/Procedures/Work Instructions: Not following procedure, procedure does not address, record retrieval, inadequate work instructions
  - Calibration Related: Equipment not in the calibration system
  - Operator Training: Operators not trained effectively on the operations being performed
  - Material Identity: Material not properly identified and protected from contamination

- **SLT (Sealants)**
  - Calibration Issues: Expired calibration, Missing calibration labels, equipment not in system, out of tolerance condition not evaluated, instrument identified as reference only but used for product acceptance, Calibration Lab not 17025 or on the suppliers approved vendors list
  - Internal Procedures: does not address, procedures not being followed, lack of a written procedure. Not working to latest document revisions
  - Weight for tack free test not in calibration system
  - Chart Recorders, not calibrated, pens not working, charts not changed
  - Viscometer Calibration does not address the range of use

- **WLD (Welding)**
  (Data available on eAuditNet -Public Documents / Weld / Supplier info)
  - Has the supplier demonstrated compliance to the welding schedule?
  - Does the welding schedule address all customer requirements?
  - Is the welder/operator qualification complete and up to date for the work being performed?
  - Does the supplier have a documented welder qualification procedure?
  - Are pre-weld preparations defined and in accordance with customer requirements
OP 1106 Accreditation Term

- Supplier term of accreditation begins in conjunction with the audit date, not the issue date of the certificate.
- Accreditation terms are tied to the Nadcap quarterly cycles
- Reference OP 1106 (available on www.eAuditNet.com)

<table>
<thead>
<tr>
<th>Audit Month</th>
<th>Accreditation Expiration</th>
</tr>
</thead>
<tbody>
<tr>
<td>September, October, November</td>
<td>January 31</td>
</tr>
<tr>
<td>December, January, February</td>
<td>April 30</td>
</tr>
<tr>
<td>March, April, May</td>
<td>July 31</td>
</tr>
<tr>
<td>June, July, August</td>
<td>October 31</td>
</tr>
</tbody>
</table>

OP 1110 Failure Process

- Modes of Failure:
  - A - Supplier stops audit
  - B - Excessive number of findings
  - C - Severity of findings
  - D - Too many review cycles to complete
  - E - Nonresponsiveness by Supplier
- Criteria are not automatic failure points (except Mode A)
- Only 2% of all audits conducted in 2018 resulted in failure
- Specific criteria determined by Task Group and listed in OP 1110 Annex A
OP 1110 Failure Process Criteria Examples – Modes B & C

Criteria is reviewed annually by the Task Groups.

Please see eAuditNet for the current criteria located in OP 1110.

### OP 1110 Failure Process Criteria

- If an audit meets criteria:
  - Per OP 1110, PRI Staff notifies the Commodity Task Group via Audit Failure Ballot. Task Group will review and determine if the audit review process should be stopped and the audit is failed

- If an audit is failed:
  - Risk Mitigation activities will begin (once the option is chosen)
    - The audit NCRs are still work, but accreditation is not granted
    - If risk mitigation is stopped, Supplier must appeal to start the risk mitigation process again
    - If risk mitigation is not done, re-entry audit cannot be scheduled for 24 months
  - Company must demonstrate corrective actions to the auditor on site at the time of the new audit
OP 1111 Supplier Merit

- The Supplier Merit Program awards reduced scope and/or extended frequency between audits to Suppliers based on length of participation as a Nadcap Accredited Supplier, number and severity of recorded non-conformances, and Supplier cycle time.

- A supplier undergoes a minimum of three audits (one initial and two reaccreditation audits) before 18 month accreditation may be considered.

- Following two audits with an 18 month frequency, 24 month extended frequency may be considered.

- Each Task Group shall reach consensus on supplier’s eligibility for participation in the Supplier Merit program.

- Supplier merit is visible on the QML.

### Supplier Merit Table

<table>
<thead>
<tr>
<th></th>
<th>18-Month Criteria</th>
<th>24-Month Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of audits</td>
<td>2nd Reaccred Audit</td>
<td>2 Consecutive 18-month accreditations</td>
</tr>
<tr>
<td>No Non-Sustaining Corrective Action</td>
<td>Current and 1 previous audit</td>
<td>Current and 1 previous audit</td>
</tr>
<tr>
<td>No Verification Corrective Action (VCA) Audits</td>
<td>Current and 1 previous audit</td>
<td>Current and 1 previous audit</td>
</tr>
<tr>
<td>No Product Escapes or Type P/C Supplier Advisories*</td>
<td>Current and 1 previous audit</td>
<td>Current and 1 previous audit</td>
</tr>
<tr>
<td>Cumulative Supplier Delinquency</td>
<td>No more than 14 Days</td>
<td>No more than 7 Days</td>
</tr>
<tr>
<td>Number of Findings</td>
<td>No more than 50% of Major NCRs and 60% of total NCRs per failure threshold (Mode B)</td>
<td>No Major NCRs</td>
</tr>
<tr>
<td>Other</td>
<td>Any justifiable reason identified by Task Group</td>
<td>Any justifiable reason identified by Task Group</td>
</tr>
</tbody>
</table>

*Supplier Advisories – ref OP 1109
Type P = Potential Impact, Type C = Confirmed Product Impact
Be sure to check OP 1111 for the current criteria.
Agenda

- Introduction to PRI and Nadcap
- The Nadcap Audit Process
- Preparation Steps
- During the Audit
- Post Audit Information
- Web Tools & Additional Information

Pre-Assessment Audit

- Companies can schedule a pre-assessment audit using a Nadcap auditor BEFORE the actual Nadcap audit
- All the data from the audit will be left with the company
- The only findings which will be sent to Primes are findings which may have significant potential for impact to hardware
- Contact PRI Scheduling and/or review OP 1108 for more details
Using eAuditNet Effectively

- Keep email address current to ensure you receive important emails related to your audit

- If there is a change in company information, complete t-frm-11. eAuditNet under Resources / Documents / Procedures and Forms / Nadcap Controlled Forms / tfrms

- Do not reply to automated emails received from eAuditNet – there are contacts listed in the email

- For eAuditNet Support, refer to the Public Documents section for User Guides or contact the Help Desk at +1 724 772 8679 or via email at eAuditNetsupport@p-r-i.org
SSC Meeting Information

- Operates independently of the Task Groups – focus on overall issues common to suppliers – not technical or Task Group specific

- Attend the Supplier Support Committee (SSC) meeting to learn about ongoing projects

- Get involved – Join the SSC! Volunteers Needed!
Nadcap Meeting Information

- Available at www.p-r-i.org
- Minutes & Agendas
  - Keep up with Task Group activities
  - Participate in Task Group decisions
- Plan to attend Open Meeting – Suppliers are always welcome
- Closed meeting times for User Members only are necessary to discuss proprietary supplier company accreditation issues such as appeals, findings, etc
Important Websites

www.p-r-i.org
www.eAuditNet.com
www.eQuaLearn.com
www.eQuaLified.org

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Thank You!

- We can only continue improving this course with your feedback.
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