Nadcap Asia Symposium
2011

Rebekah Braun
PRI Senior Staff Engineer
31 October 2011
Agenda

- Nadcap Composite (COMP) Task Group
  - Preparing for the Audit
  - The Nadcap Audit
  - Checklist Review
  - Top NCRs and NCR response
  - Web Tools & Additional Information
The Nadcap Composite (COMP) Task Group

COMP Task Group

Chair

Vice Chair

Secretary

COMP Task Group Representatives (Subscribers and Suppliers)
PRI Composite Staff

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• Vice Chair – John Key – Bell Helicopter
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Composite Task Group

• The Composite Task Group is currently made up of 18 Subscribing companies that participate in the Task Group meetings.
## Composite Task Group

### Subscriber Members

<table>
<thead>
<tr>
<th>Company</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>EADS/Eurocopter</td>
<td>Achim Enzmann</td>
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<tr>
<td>SAFRAN Group</td>
<td>Marcel Francois</td>
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<tr>
<td>EADS/Eurocopter</td>
<td>Olivier Goupillon</td>
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<td>BAE Systems - (MAS)</td>
<td>Steve Grunshaw</td>
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<tr>
<td>The Boeing Company</td>
<td>Richard Hammond</td>
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<td>BAE Systems - (MAS)</td>
<td>Brett Hemingway</td>
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<td>Triumph Group, Inc.</td>
<td>Mark Jackson</td>
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<td>Textron/Bell Helicopter</td>
<td>John Key Jr.</td>
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<td>Honeywell Aerospace</td>
<td>Betty Kocsis</td>
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<td>Sonaca</td>
<td>Eric LeFort</td>
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<td>The Boeing Company</td>
<td>Frank Lennert</td>
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<td>The Boeing Company</td>
<td>Lance Loeks</td>
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<td>Goodrich Corp</td>
<td>William Macias</td>
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<td>Honeywell Aerospace</td>
<td>Leah Markowitz</td>
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<td>GE Aviation</td>
<td>Andreas Mastorakis</td>
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<td>Goodrich Corp</td>
<td>Angelina Mendoza</td>
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<td>The Boeing Company</td>
<td>Rick Ouellette</td>
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<td>Lockheed Martin</td>
<td>Keith Panuska</td>
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<tr>
<td>EADS/EADS-CASA</td>
<td>Alberto Portal</td>
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<td>Triumph Group, Inc.</td>
<td>Sally Spindor</td>
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<tr>
<td>Bombardier</td>
<td>Anne Stanley</td>
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<td>Bombardier</td>
<td>Frank Thomas</td>
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<tr>
<td>Spirit Aerosystems</td>
<td>Justin Walker</td>
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Nadcap Task Group Meetings

The Composite Task Group schedules three ‘face to face’ meetings during the year.

– Address issues relating to Composites
  • Checklists & Procedures, Consistency, Auditors, Metrics, Special Projects

– Locations vary (refer to www.pri-network.org/Nadcap/ for details on meeting locations)
  • Americas – Pittsburgh, PA, USA – Auditor Training
  • Europe
  • Asia
Nadcap - Accreditation

• The Nadcap Composite Task Group is responsible for the operation of the Composite accreditation program and currently utilize the following Nadcap checklists:
Nadcap Checklists

• AC7118 – Composite Part Manufacturing
  – Scopes of Accreditation
    • PAR – Prepreg/Adhesive Bonding, Resin Film Infusion
    • MB – Metal Bonding
    • CP – Core Processing
    • LRP – Liquid Resin Processing

• AC7122 and AC7122/1-AC7122/5 – Non Metallic Materials – Testing Laboratories
  – Scopes of Accreditation
    • AC7122-P – Part Manufacturers Captive Laboratories
    • AC7122/1 – Mechanical Testing
    • AC7122/2 – Physical Testing
    • AC7122/3 – Chemical Testing
    • AC7122/4 – Thermal Testing
    • AC7122/5 – Flammability Testing
Nadcap – Accreditation (cont.)

• The AC7122 and AC7122/1-AC7122/5 are checklist that are controlled by the Non Metallic Materials Testing Task Group.

• Prime customers will mandate AC7122-P.
  – For Suppliers mandated to AC7122-P, AC7118 Sections 10 and 23 will be Not Applicable and will not be included in the audit.
  – For Suppliers not mandated to AC7122-P, AC7118 Sections 10 and 23 will be included in the audit.
Nadcap eAuditNet Process

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

Diagram outlines the process flow from Suppliers to Audit Completed.
Satellite Facility Criteria

• Facility is within 25 miles/40 Kilometers radius distance from the main facility
• Facility uses the same Quality Manual and Procedures as the main facility
• The Quality Manager (day-to-day operational control)
• The satellite facility has an on site individual who is part of the Quality Function and reports directly to the Quality Manager
• The facility is owned by the same company
Operational Documents

- **NIP – Nadcap Internal Procedure**
  - Details specific procedures by which PRI/Nadcap Staff operates.

- **NTGOP – Nadcap Task Group Operating Procedure**
  - Defines the scope and general operating procedure for each specific Nadcap commodity program.

- **NOP – Nadcap Operating Procedure**
  - Documents detailing the specific procedures by which Nadcap operates.
Operational Documents
Additional

• Quality Manual – Performance Review Institute (PRI) Quality Process
  – PRI Quality System requirements

• AS7003 – Nadcap Program Requirements
  – Aerospace Standard which documents the requirements for implementing Nadcap industry consensus-based accreditation programs
Procedural Hierarchy

- AS7003
- NOP
- NTGOP
- NIP
- QUALITY MANUAL

Forms → Processes
Procedure Map Summary

- **NOP-009**: Cert Suspension and Withdrawal
- **NOP-007**: Audit Observers
- **NOP-006**: Advisory
- **NOP-008**: Merit
- **NOP-003**: Delegation
- **NOP-001**: Nadcap OP
- **NOP-002**: TG OP
- **NOP-004**: NMC Oversight
- **NIP 7-05**: Subscriber Agreement
- **NIP 7-06**: Post Audit
- **NIP 7-07**: ITAR/EAR
- **NIP 7-08**: Pilot Audit Process
- **NIP 7-01**: Pre-Audit
- **NIP 7-04**: Post Audit
- **NIP 7-03**: Pre-Audit
- **NIP 6-01**: Auditor Selection
- **NIP 8-01**: Continual Improvement
- **NOP-009**: TG Review
- **NOP-007**: PRI Audit Scheduled
- **NOP-001**: Audit Process
- **NOP-003**: Audit Review
- **NOP-004**: NMC Oversight
- **NOP-002**: Nadcap OP
- **NOP-009**: TG OP
- **NOP-007**: ITAR/EAR
- **NOP-009**: Nadcap OP
- **NOP-007**: NMC Oversight
Notable Procedures

• NOP 002 - General Task Group Operating Procedure
• NOP 006 – Supplier Advisory
• NOP 008 - Supplier Merit Program
• NOP 011 - Audit Failure Process
• NTGOP 001 - Nadcap Task Group Operating Procedure
• NTGOP 001, Appendix 14 - Additional Requirements for the Composite Task Group
• NIP 4-01 - Document Control Procedure

These are found at [www.eAuditNet.com](http://www.eAuditNet.com)
Resources > Documents > Nadcap Procedures and Forms
Checkpoint

Any Questions
Agenda

- **Nadcap Composite (COMP) Task Group**
- **Preparing for the Audit**
  - *The Nadcap Audit*
  - *Checklist Review*
  - *Top NCRs and NCR response*
- **Web Tools & Additional Information**
Six Months Prior to Your Scheduled Audit

• Download the required checklists
  – Consider including the checklists in your documentation control system as you would for customer specifications. These are, after all, requirements.
Nadcap Checklists

• AC7118 – Composite Part Manufacturing

• Include the following as necessary for AC7122-P
  – AC7122 – Non Metallic Materials Testing Laboratories
  – AC7122/1 – Mechanical Testing
  – AC7122/2 – Physical Testing
  – AC7122/3 – Chemical Testing
  – AC7122/4 – Thermal Testing
  – AC7122/5 – Flammability Testing
Six Months Prior to Your Scheduled Audit

• Select and train auditors on the audit checklist requirements and reporting.

• Create an audit plan
  – Split the audits by reviewing one checklist at a time over a period of two weeks
  – Include Job Audits
  – Involve everyone
Four Months Prior to Your Scheduled Audit

- Conduct audits and identify NCRs
  - Review audit checklists and ensure they are performed objectively against each checklist item. Record where evidence can be found against checklist questions.
    - Verbal verification (do not accept)
    - Assumptions (do not make)
    - Should there be an N/A on the checklist question or could the answer be No?
      - Obtain clarification/interpretation with PRI Staff Engineer
Four Months Prior to Your Scheduled Audit

- Involve all personnel that could be questioned or witnessed during the audit
  - Nervous/Apprehensive
- Actual practice and procedural requirements consistent
- Assign NCRs to suitable people
- 90 days prior to the Nadcap audit, review eAuditNet website to assure checklist is the latest version
Four Months Prior to Your Scheduled Audit

• Do a thorough Root Cause Corrective Analysis (RCCA)
  – Immediate corrective action for all items identified
  – Review other similar documentation and/or processes for further instances. For example, incorrect revision of customer specification.
  – Create a team to determine the root cause.
  – Carry out the “5 Why” analysis.
Four Months Prior to Your Scheduled Audit

• Create a plan for corrective actions, ensure corrective actions are flowed out to all areas that are affected.
  – Inspectors
  – Planners
  – Purchasing
  – Quality
  – Engineering
One Month Prior to Your Scheduled Audit

• Conduct a follow-up audit of NCRs and corrective actions
  – Review specific items identified and verify they have been corrected
  – Verify procedures/instructions are amended and relevant personnel are trained
    • Any additional procedural changes made
    • Are the requirements still satisfied
    • Are the requirements fully understood
  – Review new job packages to verify if they are correct
• Keep organized results of all audit activity for the Nadcap Auditor to review
One Month Prior to Your Scheduled Audit

- Send required documentation to the Nadcap Auditor
  - Quality Assurance/ Control Manual
  - List of customer specifications to which you are working
  - Applicable documented procedures pertaining to the processes being audited
  - A sample of “traveler” paperwork
  - A sample of a work instruction

- Documentation provided must be in English unless agreed between the auditor and the supplier. Note – responses to NCRs shall be in English

- All documentation will be destroyed or left with the supplier after the audit
Other Considerations

- Personnel availability
  - Able to assist when required
  - Vacation
  - Part time personnel
- Availability of Records
  - Calibration
  - Personnel records
  - Training
  - Qualification
  - Other documents
- Hardware availability for compliance
Prepare!

- Prepare, Prepare, Prepare!
- Leads to a successful audit
Checkpoint

Any Questions
Agenda

- *Nadcap Composite (COMP) Task Group*
- *Preparing for the Audit*
- **The Nadcap Audit**
- *Checklist Review*
- *Top NCRs and NCR response*
- *Web Tools & Additional Information*
Export Control

• Certain documentation, platforms, components, drawings, etc may reference Export Control. This presentation does not intend to address Export Control other than identifying:

  – Suppliers are responsible for maintaining Export Control and notifying PRI if Export Controlled hardware is processed at the facility (during the scheduling of the audit)

  – Nadcap Internal Procedure (NIP) 7-07 addresses Export Control with materials and information
The Audit: Opening Meeting

Purpose

- To provide all participants with the opportunity to anticipate and prepare for obstacles, or situations, that might interrupt the audit
- Assess the supplier’s readiness for the audit
- Communicate with senior representatives of the supplier who will not be actively involved with the audit, except for the daily briefing
- Review any safety/security issues
The Audit: Opening Meeting

• General introductions

• Confirm understanding of ITAR/EAR - auditor, data and reporting restrictions

• Clarify audit being performed
  – Composite Processing capabilities (scope of audit)
  – Customer base, Subscribers

• Agenda for the audit
  – Availability of personnel – any personnel away from work
  – Personnel working hours
Opening Meeting (cont.)

- Job Audits
  - Not intended to be a nervous experience
  - Will speak with personnel during the job audit
  - Trainees (if used) will also be asked to perform certain functions during the job audit
Opening Meeting (cont.)

• Nonconformance Reports (NCRs)
  – NCR Classifications (Major and Minor)
  – Supplier kept up to date on NCRs. Discussed at end of day
  – NCRs from previous audit. Objective evidence to show they are closed out
    • Verified during the audit
Opening Meeting (cont.)

- Miscellaneous
  - Procedural / personnel changes
  - Proprietary / Export Controlled documentation
  - Lunch times
  - Language
  - Brief tour of the facility
  - Scope Verification
Checklist Completion

• The Nadcap audit is like no other
  – Auditor requires compliance procedurally and in practice to the checklist requirements:
    • Documentation to show procedural coverage
    • Witness the inspector / processor working in accordance with the procedure and demonstrates (verbally) a sound knowledge of the requirements
  – Lack of objective evidence may result in an Nonconformance
  – Clear communication is imperative
Daily Briefing

• Purpose is to allow the supplier time to listen to the progress summary of the audits:

• NCRs
  – The supplier should be aware of NCRs or potential issues throughout the day
  – If Job Audits are still being witnessed, auditor may not indicate an issue until the end (to determine if systemic)
The Daily Briefing

• Intent is to promote discussion, not to address topics previously discussed or debated
• Allows the supplier to address any items of concern or documentation retrieval to prevent issuance of a nonconformance
• Confirm the agenda for the following day.
Job Audits
Task Group Expectations

• Per AC7118, paragraph 2.2.2.1
• At least 50% of the product job/compliance audits being demonstrated for composites shall be in-process utilizing actual production programs or demonstration parts during the on-site audit, unless otherwise approved by the task group. It is acceptable to utilize historical data to conduct paperwork audits for those jobs that are not in-process.
• In the event that demonstration parts are used to meet this 50% minimum, supplier merit may be impacted (i.e. merit removed or merit not granted).
Job Audits
Task Group Expectations (cont.)

• Following is the order of precedence for choosing job audits:
  – In-process jobs from a Nadcap Composites Task Group subscribing Prime.
  – Historical jobs from a Nadcap Composites Task Group subscribing Prime.
  – In-process job for an aerospace product. This may be needed to meet the 50% in-process job audit requirement.
  – In-process job for a demonstration aerospace product. This may be needed to meet the 50% in-process job audit requirement

• Following is a list of unacceptable job audits:
  – Historical jobs from an aerospace Prime that is not a subscribing member to the Nadcap Composites Task Group.
  – Any in-process or historical job audit for a non-aerospace product.

• As defined in the AC7118 Audit Handbook
  – Demonstration Part – Non production aerospace part that demonstrates compliance to the audit criteria within the scope of the AC7118
Job Audits (cont.)

- Personnel
  - Operator needs to feel comfortable, prevent errors
    - Get operators involved in the audit process (prior to Nadcap audit)
      - Better understanding and appreciation
    - Conduct regular oversight and discussions.
  - The auditor will explain the Process personally to the Operators
    - Operator will be asked to process as they would normally,
    - It is not auditors intent to change the process to allow errors
Job Audits (cont.)

• Personnel
  – Operators MUST communicate with the auditor. Prevents nonconformances
    • Explain the process as it is being done, let the auditor see what is taking place
    • Verify the auditor wishes to see a particular aspect of the process or if acceptable to continue
Job Audits (cont.)

• Personnel
  – If the operator requires clarification
    • Acceptable to review additional procedures
    • Operator required to work alone, but may ask clarification with internal personnel
  – If the operator has made a mistake, they are expected to fix it or contain the problem per the defined inspection process
Final Out Briefing

• Review all nonconformances/issues during the audit
  
  – Leave a copy of the NCR report – written or electronic
  
  – “0” NCRs requires feedback within 3 days from submittal of electronic audit report by the auditor
Final Out Briefing (cont.)

• Outline the process for addressing Nonconformances and utilizing eAuditNet
  – Initial response to findings is 21 days from submittal of electronic audit report by the auditor
    • Corrective action plan and objective evidence
  – For second, third and fourth (max) response cycles, 7 days is required
  – ‘Late’ days are accumulated when the response date is past due. Shall not exceed 30 cumulative late days for the audit report package
    • Late days affects the merit process (discussed later)
Final Out Briefing (cont.)

• Advise Supplier of RCCA Tutorial for corrective action help www.pri-network.org

• Review availability of key procedures on eAuditNet > Resources > Documents > Nadcap Procedures
  – Audit Process NIP 7-02
  – Merit Process NOP-008
  – Supplier Advisory NOP-006
  – Audit Failure NOP-011
  – Accreditation Process NOP-001
  – Audit Report Processing NIP 7-03

• Supplier Feedback Form
Checkpoint

Any Questions
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- Nadcap Composite (COMP) Task Group
- Preparing for the Audit
- The Nadcap Audit
- Checklist Review
- Top NCRs and NCR response
- Web Tools & Additional Information
Checklist Format

• The format for the process checklists have been kept the same as far as possible:
  – Scope
  – General Information
  – Materials and Equipment
  – Procedures
  – Process Controls
  – Job Audits
Checklist and Audit Handbook Review

AC7118 Rev B

AH7118 Rev B
Checkpoint

Any Questions
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Top 21 AC7118 Rev B Job Audit Paragraphs

% shown is not overall, it is the % of the Top 20
Top 20 Paragraphs – Grouped Topics

• Receiving and Pattern Cutting and Kitting
  – Material Handling and Storage
  – Specification Revision on Purchase Order
• Miscellaneous Bonding
  – Environmental conditions – CCA/EMA
  – Pot Life monitored and controlled
• Tool Preparation
  – Tool cleaning
  – Mold release application
  – Mold release contamination
• Machining Trimming and Drilling
  – Identification of shop aids, jigs templates
• Core Processing
  – Environmental conditions - CCA/EMA
  – Material Handling and Storage
• Lay-Up Laminating and Secondary Bonding
  – Debulks
  – Heating tools
  – Correct attire
• Cure Preparation
  – TC placement
  – Use of approved materials
  – Leak checks
• Cure
  – Cure parameters
Section Titles

- 3. Supplier Information
- 4. General Quality System Requirements
- 5. Material Control
- 6. Facilities and Equipment
- 7. Tooling
- 8. General Fabrication Procedures
- 9. Trimming and Drilling
- 10. Process Control/Re-Validation Testing
- 11. Job Audit Common Requirement
- 12. Job Audit for Receiving Quality Control
  - Prepreg
  - Adhesive
  - Core
  - Detail Parts
  - Dry Fiber and Fabric
  - Preforms and Braids
  - Resin
- 13. Job Audit for Tool Preparation
- 14. Job Audit for Pattern Cutting and Kitting
  - Manual Process
  - Numerical Controlled Process
- 15. Job Audit for Core Processing
- 16. Job Audit For Lay-up/Laminating and Secondary Bonding
- 17. Job Audit for Cure Preparation
- 18. Job Audit for Resin Preparation and Mixing
- 19. Job Audit for Liquid Resin Infusion
- 20. Job Audit for Cure
  - Autoclave
  - Oven
  - Heated Press or Press with Heated Tool
  - Stand Alone, Ambient or Heated Tool
- 21. Job Audit for Machining, Trimming, Drilling Operations
  - Manual Process
  - Numerical Controlled Process
- 22. Job Audit for Miscellaneous Bonding Operations
- 23. Job Audit for Process Control/Re-Validation Testing
  - Mechanicals
  - Physicals
  - Thermal/Analytical
AC7118 Rev B - Average NCRs Per Scope

Audit Scope

- CP
- LRP
- MB
- PAR
- PAR, CP
- PAR, LRP
- PAR, LRP, CP
- PAR, MB
- PAR, MB, CP
- PAR, MB, LRP, CP

Average NCRs Per Scope:
- CP: 1.6
- LRP: 2.8
- MB: 1.9
- PAR: 2.6
- PAR, CP: 5.0
- PAR, LRP: 0.4
- PAR, LRP, CP: 0.0
- PAR, MB: 3.4
- PAR, MB, CP: 4.0
- PAR, MB, LRP, CP: 5.7

Average Overall NCRs - Rev B: 5.0
Average NCRs per Consecutive Audit

Number of Consecutive Audits

- **Number of Audits**
  - 1: 246
  - 2: 170
  - 3: 125
  - 4: 58
  - 5: 10

- **NCR Average**
  - 1: 4.0
  - 2: 3.3
  - 3: 3.0
  - 4: 3.2
  - 5: 3.4

- **Average Major**
  - 1: 1.3
  - 2: 0.8
  - 3: 0.7
  - 4: 1.1
  - 5: 0.8

- **Average Total**
  - 1: 26.0
  - 2: 12.6
  - 3: 6.7
  - 4: 6.1
  - 5: 4.8

Graph showing the trend of NCRs and number of audits with consecutive audits.
Responding to NCRs

Five questions that suppliers must answer in an NCR:

1. Immediate corrective action taken (containment actions)
2. Root cause of nonconformance
3. Impact of all identified causes
4. Action Taken to Prevent Recurrence
5. Effectivity Date
Immediate Corrective Action

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

• Did you stop the problem from continuing?
  – Become compliant with the requirement

• Did you contain the problem found?
  – Were any other aspects (procedure, hardware, etc) affected by this NCR?
Root Cause

- Why did this occur?
  5 Whys, Fishbone

- Why was this not identified during the pre-audit using the Nadcap checklists?
- How was the question answered and what objective evidence was reviewed to consider the item as compliant?
- Why did the engineer not identify this issue? What involvement do they have in the system?
- The Root Cause is the last logical cause in the chain
  - Think you have it?
  - Go one more…..
Impact

- What impact did the nonconformance actually have?
  - Were parts or the integrity of the process affected in any way?
  - Contacting of customer – Failing to comply with customer requirements may result in need to contact customer for additional investigation or corrective action
  - Were parts shipped to customer?
Preventative Action

• What is the long term action to prevent recurrence?
  – Can only be addressed when the root cause is understood
  – Do not rush, consider the effectiveness, feasibility, suitability to the company, and the company's budget
Objective Evidence

- What information can you provide to demonstrate the RCCA process applied to the NCR?
  - If a procedure changed, clearly specify what the change was and show evidence to the Staff Engineer of the approved procedure (as applicable)
  - Potential for Impact Hardware investigations. Provide the investigation report, include photographs
  - Training/awareness of personnel. Provide evidence (sign off sheet)
  - Change or create a procedure? Implement a new system or method? Perform training / awareness, propose audits, new checklists, etc? SHOW IT.
Example – The Non Conformance

• Requirement
Paragraph 22.2.1 requires that miscellaneous bonding is performed in a CCA or EMA.

• Finding
Foam bonding in job audit 22 was performed in an area that is not designated as an EMA or CCA.
Note: Area meets basic EMA requirements
How **not** to respond to NCRs

- Immediate corrective action taken
  - Modified procedure

- Root Cause
  - We have been audited by many customers and Nadcap in the past. This has never been a problem.

- Impact to hardware
  - None
How not to respond to NCRs

- Action taken to prevent recurrence
  - Revised procedure

- Training
  - None

- Objective evidence
  - See attached revised procedure
How to respond to NCRs

• **Immediate Corrective Action Taken (Containment Actions):**
The area where foam bonding is performed was physically identified as an EMA and a change order was created to include this area as an EMA in our specification for CCA/EMA control requirements.

• **Root Cause of Nonconformance:**
Our specification for CCA / EMA requirements only describes the specific controls for these areas and did not define when and what processes these requirements are to be enforced.
How to respond to NCRs

• Impact of all Identified Causes and the Root Cause:
  Evaluation of the subject condition has determined that no resulting product impact has occurred. As noted during the audit, the area where this bonding operation is performed was found to be compliant to the requirements of an EMA area and therefore only proper identification as such is needed. Review of other EMA processes in the facility and found them to be perform in properly identified and defined EMA’s

• Action Taken to Prevent Recurrence:
  Our specification for CCA / EMA control requirements will be updated to add the revised CCA / EMA Diagram and include further provide clarification on processes requiring CCA or EMA control and identification. Training of relevant personnel. Periodic Internal oversight audits for compliance
How to respond to NCRs

- **Objective Evidence Attached:**
  
  A. Change order for specification and Description of changes in specification
  B. Example of Root Cause Analysis
  C. CCA / EMA diagram
  D. Training Record
  E. Oversight audit schedule

**Effectivity Date:** December 23, 2009
Final Points

• Got a problem or do not understand how to address an NCR?
  – Refer to the tutorials provided underneath the NCR posting on the supplier discussion screen. “Instructions on How to Respond to NCR”
  – Additionally, a Root Cause Corrective Action tutorial is available at:

• Problems – Call the Staff Engineer
Checkpoint

Any Questions
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Nadcap Meetings

• Nadcap has 3 meetings per year.
  – February
  – June/July
  – October – Auditor training is typically aligned with this meeting.

• Future Nadcap Meeting
  – San Diego, CA USA – February 20-24, 2012
    • Sheraton San Diego Hotel & Marina
    • Estrel Hotel & Conv. Ctr.
  – Pittsburgh, PA USA – October 22-26, 2012
    • Omni William Penn
  – Dallas, TX USA – February 18-22, 2013
    • Westin Park Central
Available Training

- Please visit www.pri-network.org for the following training material:
  - Prime Orientation and Tutorial
  - Supplier Orientation and Tutorial
  - Supplier Workshops
  - Nadcap Customer Support Initiative (NCSI)
  - Task Group Symposiums
  - Basic eAuditNet for Primes and Suppliers
PRI/eQuaLearn Trainings

eQuaLearn has two core tracks:

• General Quality understanding of principles, including:
  – Internal Auditing
  – Problem solving
  – PFMEA
  – Root Cause Corrective Action
  – Introduction to Aerospace Quality
  – Contract Review
  – SPC
  – AS9100 Rev C
PRI/eQuaLearn Program

eQuaLearn has two core tracks:

- General understanding of Nadcap and industry requirements
  - Nadcap Audit Preparations – NDT, Heat Treating, Chemical Processing, and Welding
  - Introduction to Pyrometry

- [www.eQuaLearn.com](http://www.eQuaLearn.com)
  - New website that contains details on eQuaLearn program
Composite Specific Training

- The Composite Task Group will be providing a free online presentation to help Suppliers understand the changes that have been made between the AC7118 Rev B and the soon to be released AC7118 Rev C.

- Three different sessions have been organized at various times for Composites Suppliers located in the America’s, Europe and Asia, and the topics addressed will include: AC7122-P, Compression Molding, Automatic Lay-up, Re-Structure of Section 16, Updated Job Audit Table and more. There will be extra time for questions and answers at the end of the presentation.
Composite Specific Training
Session 1 - Americas

• Presenters:
  – Rebekah Braun, PRI, Composite Staff Engineer
  – Kevin Dowling, Spirit Aerosystems (Task Group Chair)

• Date: Thursday, November 10, 2011
• Time: 11:00 am, Eastern Standard Time (New York, GMT-05:00)
Composite Specific Training
Session 2 - Asia

• Presenters:
  – Rebekah Braun, PRI, Composite Staff Engineer
  – Lance Loeks, The Boeing Company
  – Angelina Mendoza, Goodrich Corporation (Task Group Secretary)

• Date: Monday, November 14, 2011
• Time: 8:00 pm, Eastern Standard Time (New York, GMT-05:00)
Composite Specific Training
Session 3 - Europe

- Presenters:
  - Peter Atwell, AIRBUS
  - Rebekah Braun, PRI, Composite Staff Engineer
  - Severine Guitton, Composite Atlantic Limited (Task Group Supplier Support Committee Representative and Nadcap Management Council Supplier Representative)

- Date: Monday, November 14, 2011
- Time: 8:00 am, Eastern Standard Time (New York, GMT-05:00)
Composite Specific Training

• Details on the training session have been sent via email. If you have not received an invitation, please contact the Composite Task Group Staff Engineer
  – Rebekah Braun
    • rbraun@sae.org
    • +1.724.772.7116
Additional Useful Resources

- There are multiple documents and presentations located on eAuditNet – Resources – Public Documents – Composites that you can use to prepare for an audit and to stay up-to-date with the activities of the Composite Task Group
- Audit Information
  - EMA Clarification
  - AC7122-P Clarification
  - AC7118 Audit Handbook
- Meeting Presentations
  - Presentations from Nadcap meetings