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September 2017  
**eCATS 8D Supplier Response**  
Changes to support AS13000
Agenda

• What is changing
• Why are we changing
• AS13000 and where you will find it in an eCATS CAR
  - D0 - Implement Immediate Containment and Prepare for 8D
  - D1 - Form the Team
  - D2 - Define the Problem
  - D3 - Develop Containment Actions
  - D4 - Identify and Verify Root Causes
  - D5 - Identify Corrective Action
  - D6 - Implement Corrective Action
  - D7 - Define and Plan Preventive Action
  - D8 - Recognize the Team
What is Changing

• Pages changed
  - CAR Initiation
  - Finding/Event
  - Attachments
  - Team Activity
  - *Containment
  - *Respond to CAR
  - Effectiveness Review
    - * = Major changes
    - ! = Supplier Actions

• Pages not changed
  - Assign People
  - Product/Process Details
  - Approval Details
  - Follow up Review
  - Add/View Comments
Why Are We Changing

• May 2014 Aerospace Standard AS13000 Problem Solving Requirements for Suppliers was released.

• Customers are requiring that we comply to the new standard for corrective actions

• CAMP continues to be the Aero process for cause analysis and mistake proofing and has not changed.
D0 - Implement Immediate Containment and Prepare for 8D

- Where a symptom is observed and there is customer impact the supplier shall take immediate containment action to protect the customer.
- D0 shall be completed and returned to the customer within 2 days of the problem being identified unless otherwise agreed.
- Actions:
  - Define the symptom (this must be quantified).
  - Define and implement containment actions (sometimes called Emergency Response Actions).
  - Check that the containment action works (provide evidence).
  - Check if the symptom has been seen before.
  - Suspend all shipment of suspect nonconforming hardware.
  - Initiate is/is not chart as required by the customer.
D0 - Implement Immediate Containment and Prepare for 8D

Note: D0 and D3 are on the same page. D0 is the Containment Status. D3 is due as part of Waiting Owner Response.

You must provide an Action Taken or Reason Why Not

Click Add for additional rows

Record, assign, and set the due date each action to be taken for immediate product containment. Record the date the action was completed.

Mark Containment in Place and Effective when all actions are completed. 2 DAY GOAL

D3 is not required at this time
D1 - Form the Team

• The supplier shall form a cross-functional team of people who have the knowledge, skill, experience, time, authority and will to work the problem at pace right through to a satisfactory conclusion. At least one member of the team shall be appropriately trained in the application of the 8D methodology and shall be accountable for the application of this standard.

• Actions:
  - Identify a Champion for the team that can make sure that actions are taken and any road blocks are removed.
  - Identify a Team Leader that can focus and motivate the team.
  - Select team members.
  - Define the team goal.
  - Define the roles of the team members.
D1 - Form the Team

Auto populated from the Assignment page

New Team email: opens an email address to the team. You populate the body and send

New Team Meeting Section

Record initial meeting date.

Enter your team comments and click Add. Team comments are to be used at anytime in the process not just for the initial meeting.
D2 - Define the Problem

- The supplier shall define the nonconformance to the customer requirement by identifying and describing in quantifiable terms what is wrong. This statement is called the problem description.
- Actions:
  - Collect, and analyze data to find out “what is wrong with what.” Develop a problem statement by describing the problem in quantifiable terms. The description shall address:
    - Problem discovery point: where is the earliest point within the process where the problem can be observed?
    - Problem manifestation: what are the indications that a problem exists? It is best if the problem can be described in terms of customer experience.
    - Problem impact: what is the impact in terms of quality, reliability and productivity?
    - Problem focus: Can the investigation focus be narrowed to speed convergence to the root cause?
  - Record the process flow as appropriate.
  - Review the problem description with the customer and affected parties.
D2 - Define the Problem

Problem Boundary: Added to the bottom of the Finding/Event page, the rest of the page remains the same

- Count of parts produced between the earliest known occurrence and containment in place
- Of the population how many were affected?

Record the source of the problem, even your best guess

Has this happened before

Is this failure recorded in the (D)(P)FMEA?

Occurrence, Date first unit was built
Awareness, Date we found out about it
Shipment, Date first unit shipped.
D3 - Develop Containment Actions

- The supplier shall implement actions to immediately stop the symptoms from affecting the customer until the problem can be resolved permanently.
- **Actions:**
  - Select and implement the most effective containment action.
  - Work with the customer to determine the locations of affected product and the responsibilities, methods and timescale to contain that product.
  - Check that the containment action is effective. Read across to other affected product as appropriate.
  - Maintain records of containment as required by the customer.
  - Notify customer of resumption of shipping as agreed to by customer.
D3 - Develop Containment Actions

Note: DO and D3 are on the same page. D0 is the Containment Status. D3 is due as part of Waiting Owner Response.

D3 was the containment part of Specific Action / Containment on the Response page

You must provide an Action Taken or Reason Why Not

Click Add for additional rows

Record, action, assigned to, and enter the start date.

Record the effectiveness of the containment action, and the finish date

Mark Containment Close when all actions are competed
D4 - Identify and Verify Root Causes

• The supplier shall find the root cause by identifying potential causes and selecting the ones which explain the problem. The supplier shall find the generation points where the symptom was created and the escape points where the problem should have been detected and contained.

• Actions:
  - Update the problem definition if necessary.
  - Find the root causes of the problem, of the escape and of the quality management system.
  - Verify the root causes.
  - Verify the escape point(s) and establish why they were present.
D4 - Identify and Verify Root Causes

Record each cause type in a Why Made and Why Missed format

Record if the Cause was verified, how it was verified and the date of verification

If NFF or CID is set as the root cause this line will appear and the NFF or CID checklist will be required. Click the link to open the checklist.

Have all changes been documented in the FMEA? Who updated it and when?
D4 - Identify and Verify Root Causes
NFF and CID Checklists

Set if you're an OEM or Aftermarket

Yes/No's must be answered to sign off the response

Supplier Responsibility

Checklist complete will be required to sign off Implementation

The questions are different for OEM and Aftermarket

Assignment and Actions are required to complete the checklist

Attachments are recorded here and attached to the CAR
D4 - Identify and Verify Root Causes
NFF and CID Checklists

Supplier Responsibility

Example

Yes/No’s must be answered to sign off the response

Checklist complete will be required to sign off Implementation

Assignment and Actions are required to complete the checklist

Attachments are recorded here and attached to the CAR
D5 - Identify Corrective Action

• The supplier shall identify the corrective actions that permanently eliminate the root causes of both generation and escape.
• D5 shall be completed in a timely manner not to exceed 30 days of the problem being identified unless otherwise agreed.
• Actions:
  - Identify permanent corrective actions.
  - Verify that the corrective actions will be effective and do not cause further problems.
  - Define the actions required to fix the control system at the escape point so that further occurrences will be detected and not released.
D6 - Implement Corrective Action

• The supplier shall implement and test the corrective actions that fix the root causes and the quality control system at the escape point.

• Actions:
  - Plan the implementation of the corrective actions.
  - Implement the corrective actions that fix the root causes.
  - Check that the root causes are fixed and that the problem will not happen again.
  - Implement the corrective actions that fix the quality control system at the generation and escape point(s) ensuring that it will detect and not release the problem again.
  - As required, remove containment measures when it’s no longer detecting non-conformant products.
  - Update the appropriate quality documentation as required by the customer (such as PFMEA and the control plan).
  - Check that the corrective actions continue to be effective by monitoring through inclusion into the internal auditing program.
D5 - Identify Corrective Action
D6 - Implement Corrective Action

Removed the general action text box, all actions are separated into action rows

New Implementation plan. How will the action be completed

Capturing the date the action was completed

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**Specific Action / Containment:** Action(s) taken to correct the direct cause. (Corrects or improves the condition noted in the event, by changing the direct cause, or the direct cause and the effect.

<table>
<thead>
<tr>
<th>Delete</th>
<th>Action</th>
<th>Implementation Plan</th>
<th>Assign to</th>
<th>Promise Date</th>
<th>Complete</th>
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</table>

Verified No ○ Yes ○ Verification method/Date

Did you verify the action fixed the problem? The Method used, and the date

No changes to the implementation sign off
D7 - Define and Plan Preventive Action

• The supplier shall take systemic action to prevent recurrence of this problem and other similar problems and capture the lessons learned.

• NOTE: The team may not have the authority to implement systemic actions but can make recommendations to the Champion for implementation.

• The champion shall ensure that recommendations are appropriate to the scale of problem and have responsibility for implementation.

• Actions:
  - Identify further affected parties and opportunities for similar problems.
  - Implement and check actions to prevent further problems.
  - Make recommendations on systemic fixes.
  - Document the lessons learned in relation to the problem within the system so that the lessons are referred to, to maximize the value of the problem solving effort and prevent any similar problems.
  - Define and schedule actions to confirm the effectiveness of the corrective/preventive actions implemented.
D7 - Define and Plan Preventive Action

Did you verify the action fixed the problem? The Method used, and the date.

Capturing the date the action was completed.

When similar processes/items are identified you have the ability to issue a CAR for the issue from here.

Which of the following documents were revised?
- Quality awareness communication
- Design FMEA
- Process Flow Chart
- Process FMEA
- Process Control Plan
- Work Instructions
- Inspection standard – Receiving
- Inspection standard – Shipping
- PPAP resubmission
- Process Change Request
- Engineering Change Request
- Change Authorization
- Relevant QMS practices

What is being changed, by who, due when, and when completed.

Per CAMP, record the level of mistake proofing used.
Approvals and Follow up Review

• There are no changes to the SPOC, CAB, Lead, or Customer approvals.
  - Lead Approval is still used to measure the 30 day age metric.

• There are no changes to the Follow up Review
  - Follow up Acceptance is still used to measure the 90 day age metric.
D8 - Recognize the Team

- The supplier shall recognize the success of the team and formally close the project.
- Actions:
  - Document the lessons learned from the 8D process.
  - Maintain all problem solving records.
  - Recognize the team for their contribution and celebrate the achievements.
  - Close the project.
D8 - Recognize the Team

Capturing the lessons learned, include lessons from the team

Suggested recognition for a job well done. CAR
Closed email will communicate the recommendation.
8D Printout - PROBLEM SOLVING TEMPLATE

• COMMUNICATION
  - Reporting of 8D progress shall be communicated as agreed with the customer.
  - The supplier shall use the 8D form (see APPENDIX A) or equivalent content, as required by the customer.
8D Printout - PROBLEM SOLVING TEMPLATE
### 8D Printout - PROBLEM SOLVING TEMPLATE

#### 3. Develop containment actions

<table>
<thead>
<tr>
<th>#</th>
<th>Action</th>
<th>Resp.</th>
<th>Date Start</th>
<th>Metric</th>
<th>% Eff.</th>
<th>Part ID</th>
<th>Date Finish</th>
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<td>Read across action taken</td>
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#### 4. Identify and verify Root Causes

<table>
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<tr>
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<th>Cause source</th>
<th>Cause description</th>
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<th>Date</th>
<th>Verification method (attached)</th>
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<td>Please select</td>
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- Has Escape Point Causes been addressed?
  - Yes

- Can causes explain differences in FMEA NOT chart?
  - Yes

- Identified Causes in Process FMEA?
  - Yes

#### 5. Identify Corrective Action

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<th>Cause source</th>
<th>Selected Permanent Corrective Action(s)</th>
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<th>Date</th>
<th>Verification method (attached)</th>
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#### 6. Implement Corrective Action

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<th>Selected Permanent Corrective Action - PCA</th>
<th>PCA Implementation Plan</th>
<th>Team Member</th>
<th>Implementa</th>
<th>Customer concurrence</th>
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### 8D Printout - PROBLEM SOLVING TEMPLATE

#### D Define and plan preventive action

<table>
<thead>
<tr>
<th>7A</th>
<th>Selected Preventive Action - PA</th>
<th>PA Implementation Plan</th>
<th>Team Member</th>
<th>Target Date</th>
<th>Actual Date</th>
<th>PA Status</th>
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<td>Please select</td>
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<table>
<thead>
<tr>
<th>7B</th>
<th>List similar Processes / Items with the potential of the same defect</th>
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<tbody>
<tr>
<td></td>
<td>Beginning a new 8D report for each is highly recommended</td>
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<table>
<thead>
<tr>
<th>Process / Item</th>
<th>Responsible</th>
<th>8D #</th>
<th>Planned validation date</th>
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| 7C | Review and revise if necessary the following |
|    | Attach copies of the revised documents |

<table>
<thead>
<tr>
<th>#</th>
<th>Reviewed document</th>
<th>Nature of revision</th>
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<td></td>
<td>Quality awareness communication</td>
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<td>Design FMEA</td>
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<td>Process Flow Chart</td>
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<td>Process FMEA</td>
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<td>Process Control Plan</td>
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<td>Work Instructions</td>
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<td>Inspection standard – Receiving</td>
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<td>Inspection standard – Shipping</td>
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<td>PPAP resubmission</td>
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<td>Engineering Change Request</td>
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<td>Change Authorization</td>
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<td>Relevant QMS practices</td>
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<td>Read across action taken</td>
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<td>Discuss with your Quality specialist if document issuance is appropriate</td>
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#### D Recognize the team

<table>
<thead>
<tr>
<th>8A</th>
<th>Follow-up Meetings</th>
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<tbody>
<tr>
<td>Planned date</td>
<td>Actual date</td>
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<thead>
<tr>
<th>8B</th>
<th>Closure &amp; Sign-off</th>
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<table>
<thead>
<tr>
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<thead>
<tr>
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| When: | Where: | How: |