

## Capstone Introduction

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Up until this point of training, you have learned about the concepts in Root Cause Analysis (RCA). In many instances, you have interacted with training scenarios to recognize, identify, and make associations between these concepts and case studies like seat belts, tent liners, and obsolete specifications.

The purpose of a Capstone is to tie these concepts, associations, and training goals together into a single case study, for a single defect, and a single Root Cause Analysis. This Capstone begins with surveillance and ends with an evaluation of an Acme Company Corrective Action Plan (CAP).

Along the way, you will be asked to click on links that will take you to DCMA references used in the field every day by your contemporaries. These links serve to remind you that you are governed by DCMA instructions and guidelines, and that this training is just a beginning to your qualification as a Quality Assurance Specialist.



## Surveillance Planning Reading Assignment

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You are responsible for implementing the surveillance plan for a new company in your geographic area named Acme Company. Your First Level Supervisor (FLS) has tasked you to become familiar with surveillance planning. Review the paragraph titled GCQA Surveillance Plan Considerations in DCMA-INST 309, then answer your First Level Supervisor's questions on the next pages.

[Click here to access DCMA-INST 309.](#)



DEPARTMENT OF DEFENSE  
Defense Contract Management Agency

# INSTRUCTION

## Government Contract Quality Assurance (GCQA) Surveillance Planning

DCMA-INST 309  
January 27, 2014

Quality Assurance Directorate  
OPR: DCMA-QA

**NOTE:** This publication incorporates new requirements and clarifications, and meets the Agency new policy format requirements. Chapters 1 and 2, Appendices, and Glossary were added in accordance with (IAW) the new policy format. Chapter 3 Procedures, remains without the following additions:

**Long Description**

The title page header of a DCMA Instruction 309 is displayed. The header says "DEPARTMENT OF DEFENSE, Defense Contract Management Agency, INSTRUCTION, Government Contract Quality Assurance (GCQA) Surveillance Planning, Quality Assurance Directorate, OPR: DCMA-QA DCMA-INST 309, January 27, 2014."

## Surveillance Planning Knowledge Review 1

[View CR](#) [Submit CR](#)

How should you start your quality assurance surveillance planning for Acme Company?

- With a detailed contract technical review
- With a meeting of supplier's management
- With a tour of the supplier's facilities
- With a memorandum of agreement

Check Answer

According to paragraph 3.1.1 of DCMA-INST 309, surveillance planning starts **with a detailed contract technical review**.



## Surveillance Planning Knowledge Review 2

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According to the requirements for surveillance planning, what DCMA Instruction establishes policy for First Article and Production Lot Testing?

DCMA-INST 301

DCMA-INST 302

DCMA-INST 303

DCMA-INST 304

Check Answer

The correct answer is **DCMA-INST 302** titled First Article and Production Lot Testing.

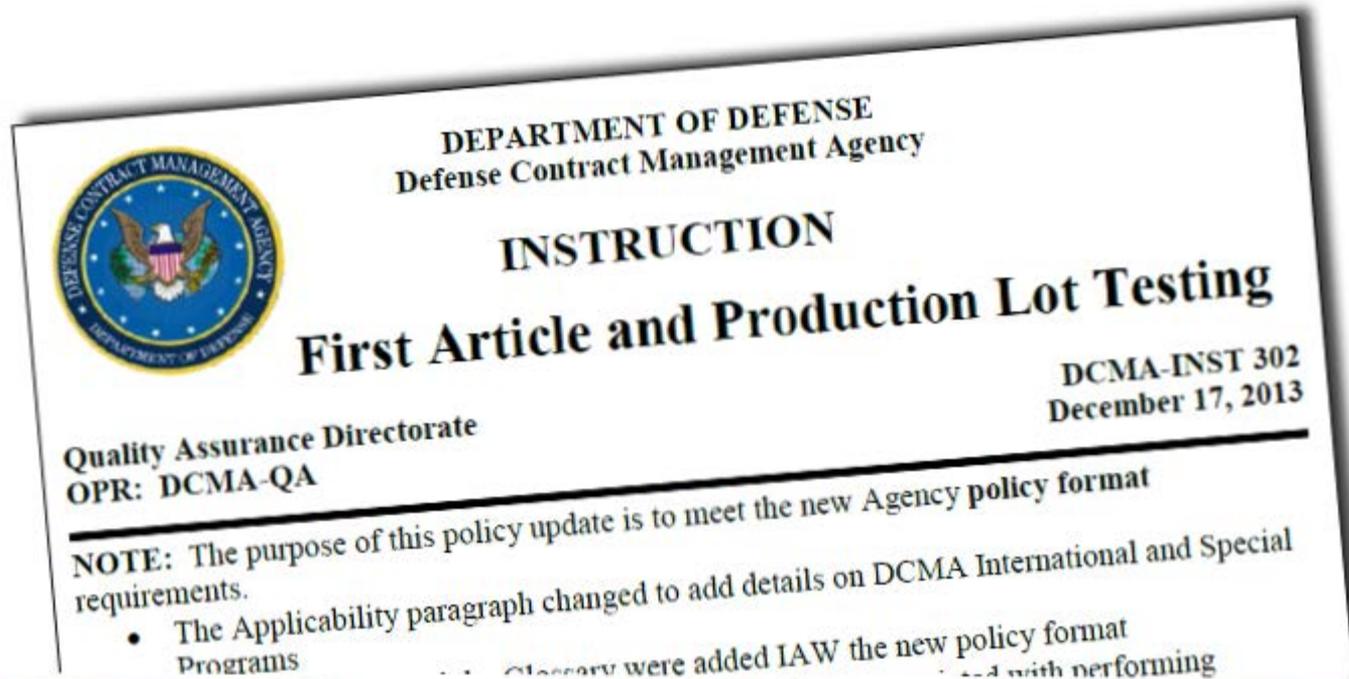


## First Article and Production Lot Testing Reading Assignment

[View CR](#) [Submit CR](#)

Your First Level Supervisor (FLS) has tasked you to become familiar with first article and production lot testing. Review the paragraphs titled Contractor Testing and Government Testing of DCMA INST 302 to learn the difference between test requirements.

[Click here to access DCMA-INST 302 titled First Article and Production Lot Testing.](#)



The image shows a document titled "INSTRUCTION First Article and Production Lot Testing" from the Department of Defense Defense Contract Management Agency. The document is dated December 17, 2013, and is identified as DCMA-INST 302. It is issued by the Quality Assurance Directorate, OPR: DCMA-QA. A note states that the purpose of the policy update is to meet the new Agency policy format requirements. A bullet point indicates that the Applicability paragraph has been changed to add details on DCMA International and Special Programs. The document also mentions that Glossary were added IAW the new policy format and that it was updated with performing.

DEPARTMENT OF DEFENSE  
Defense Contract Management Agency

**INSTRUCTION**  
**First Article and Production Lot Testing**

DCMA-INST 302  
December 17, 2013

Quality Assurance Directorate  
OPR: DCMA-QA

**NOTE:** The purpose of this policy update is to meet the new Agency policy format requirements.

- The Applicability paragraph changed to add details on DCMA International and Special Programs

Glossary were added IAW the new policy format  
updated with performing

**Long Description**

The title page header of a DCMA Instruction 302 is displayed. The header says "Department of Defense, Defense Contract Management Agency, Instruction, First Article and Production Lot Testing, Quality Assurance Directorate, DCMA-INST 302, December 17, 2013."

## Contract Excerpt Reading Assignment

[View CR](#) [Submit CR](#)

This graphic contains an excerpt from FAR 52.209-4 – First Article Approval -- Government Testing, which is included in the contract for the U.S.A.F. Flightline Hydraulic Lift. The contract also specifies in Section B that the inspection point of the first article is at origin. This gives the QAS the responsibility to perform the test since the organization to which the QAS is assigned has been given this authority by contract. Read the information in paragraphs (a) and (b) below, then answer your First Level Supervisor's questions on the next pages.

- (a) The contractor shall deliver six (6) unit(s) of the USAF Flightline Hydraulic Lift within 30 calendar days from the date of this contract to the government at the place of manufacturing Acme Company, 4016 Cleveland Ave, Saint Louis, MO 63110 for first article tests. The shipping documentation shall contain this contract number and the Lot/Item identification. The characteristics that the first article must meet and the testing requirements are specified elsewhere in this contract.
- (b) Within 30 calendar days after the government receives the first article, the contracting officer shall notify the contractor, in writing, of the conditional approval, approval, or disapproval of the first article. The notice of conditional approval or approval shall not relieve the contractor from complying with all requirements of the specifications and all other terms and conditions of this contract. A notice of conditional approval shall state any further action required of the contractor. A notice of disapproval shall cite reasons for the disapproval.

**Long Description**

A document is displayed with two paragraphs in view. Paragraph A says "The contractor shall deliver six (6) units of the USAF Flightline Hydraulic Lift within 30 calendar days from the date of this contract to the government at the place of manufacturing, Acme Company, 4016 Cleveland Avenue, Saint Louis, Missouri 63110 for first article tests. The shipping documentation shall contain this contract number and the Lot Item identification. The characteristics that the first article must meet and the testing requirements are specified elsewhere in this contract." Paragraph B says "Within 30 calendar days after the government receives the first article, the contracting officer shall notify the contractor, in writing, of the conditional approval, approval, or disapproval of the first article. The notice of conditional approval or approval shall not relieve the contractor from complying with all requirements of the specifications and all other terms and conditions of this contract. A notice of conditional approval shall state any further action required of the contractor. A notice of disapproval shall cite reasons for the disapproval."

### First Article and Production Lot Testing Knowledge Review 1

[View CR](#) [Submit CR](#)

Based on the information in the contract excerpt, what type of testing are you going to perform on the U.S.A.F. Flightline Hydraulic Lift?

- Production Lot Testing
- First Article Testing

Check Answer

The correct answer is that the contract excerpt specifies **First Article Testing**.



## First Article and Production Lot Testing Knowledge Review 2

[View CR](#) [Submit CR](#)

You arrive at Acme Company for the test. You are escorted to the assembly lab and find six hydraulic lifts. The foreman walks up to you and offers you a test report, complete with his initials and an envelope addressed to the Procuring Contract Officer (PCO).

Based on the information in the guidelines for first article and production lot testing, what do you do?

- Accept the report, safety check the lifts, and leave the lab
- Review the report, inform the supplier that the contract requires the Government to perform the inspection / witness via FAR 52.209-4, and proceed to conduct the inspection / witness testing of the lifts
- Accept the report, stuff the envelope, and leave the lab

Check Answer

The correct answer is that you should **review the report, inform the supplier that the contract requires the Government to perform the inspection / witness via FAR 52.209-4, and proceed to conduct the inspection / witness testing of the lifts**. The supplier will generally provide the results of their own FAT to support their claim that the supplies conform to contract requirements.



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## First Article Test Drawings, Specification and Changes

First article testing is very comprehensive and beyond the scope of this training. You should focus on the information provided in the tabs. Click on each tab and see if you can find the noncompliance that leads to root cause analysis.

**Drawing Set #1**

**Drawing Set #2**

**Design Specification**

**Engineering Deficiency Report**

## **Popup Content**

### **Drawing Set 1**

Image only

### **Long Description**

An Acme technical drawing is displayed of the pump in the U.S.A.F Flightline Hydraulic Lift. The drawing has a caption that says, "The pump in the U.S.A.F Flightline Hydraulic Lift is installed in the main body of the lift and is accessed from behind the control panel. The pump produces up to 70 pounds per square inch (p.s.i.) of pressure to lift the scissor assembly."

### **Drawing Set 2**

Image only

### **Long Description**

An Acme technical drawing is displayed of the couplers used in the U.S.A.F Flightline Hydraulic Lift. The drawing has a caption that says, "Hydraulic fluid traverses the motor housing inside the main body of the lift and provides a continuous flow of pressurized fluid not to exceed 70 p.s.i. Couplers are used at one foot intervals to facilitate maintenance (remove and repair) in the limited space available in the main body of the lift."

### **Drawing Specification**

Image only

### **Long Description**

An Acme document is displayed entitled "U.S.A.F Flightline Hydraulic Lift Description Specification Work

Statement". Paragraph 4.2 of the document is displayed. Paragraph 4.2 says, "Caution labels for the flightline lift main body hydraulic pump operating pressure shall be printed in accordance with the label design specification N5265P-001, Rev B, Para 3.27." A note, not in the document, is displayed that says, "Paragraph 4.2 is an excerpt from the Description Specification Work statement and requires the labels applied to the Hydraulic Pump operating pressure to be designed in accordance with standards as per spec N5265P-001 below." Then, paragraph 3.2.7 is displayed, which is entitled "Hydraulic Pump caution labels". Paragraph 3.2.7 contains a graphic of a yellow caution symbol that says "Hydraulic operating pressure must not exceed 70 p.s.i."

### **Engineering Deficiency Report**

Image Only

### **Long Description**

An Acme document is displayed entitled "USAF Flightline Hydraulic Lift Engineering Deficiency Report 2014-14B". The first paragraph is entitled "Reason for design change", and it says "During testing on the Engineering Design Model (EDM) of the U.S.A.F. Flightline Hydraulic Lift, mechanical engineers measured fluid pressure across the hydraulic lines in the main body of the lift, which had reached a maximum of 71 p.s.i. The pump was designed for a maximum of 70 p.s.i." The second paragraph is entitled "Impact of Change", and it says "All technical manuals, training, and warning labels shall be changed to read 67 to 71 p.s.i." The document has a section entitled "Change Approval" where it is signed off by Joe Devlin from Acme Engineering, Meg Regrets from Acme Configuration Management, and Don Checker from the Government.

### First Article Test Drawings, Specification and Changes Knowledge Review

[View CR](#) [Submit CR](#)

Compare the information you gathered in the previous tabbed frames to the illustration. This is your view of a coupler.

Based on your comparison, have you witnessed a noncompliance?

- No, the label on the coupler meets specifications.
- Yes, the label on the coupler is not compliant.

Check Answer

The correct answer is **Yes**. The Engineering Deficiency Report (EDR) requires label design to change to 67 to 71 p.s.i. as authorized by the stakeholder signature on the report.



**Long Description**

One of the couplers for the U.S.A.F Flightline Hydraulic Lift is shown. There is a yellow caution label on the coupler that says "CAUTION! HYDRAULIC OPERATING PRESSURE MUST NOT EXCEED 70 P.S.I".

## Capstone Tag-Up 1

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I hope you found the noncompliance.

The Engineering Deficiency Report is an authorized change to the original specifications for the hydraulic lift. This typically means the supplier (Acme Company) is responsible for implementing the change across all applicable domains and product assemblies.

This even includes the labels that protect the U.S.A.F. mechanic from applying too little or too much torque to the coupler bolts.

Other suppliers may not use the same terminology as Acme Company. EDRs may be called Configuration Management Change Requests or Technical Engineering Changes.

But this training is not about surveillance and finding the noncompliance. That scene helps us set up the next logical step in the Quality Assurance process.

It is time for you to participate in the Corrective Action Process.



## Corrective Action Process Reading Assignment

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Your First Level Supervisor (FLS) tells you to take the next step in the noncompliance. He directs you to DCMA-INST 1201 and advises you to read four paragraphs that start with the one titled Identifying and Addressing Contractual Noncompliance(s). Next, your First Level Supervisor will ask you questions on those paragraphs.

[Click here to access DCMA-INST 1201 titled Corrective Action Process.](#)



DEPARTMENT OF DEFENSE  
Defense Contract Management Agency

# INSTRUCTION IMMEDIATE POLICY CHANGE

Multifunctional Instruction

Lead Component: Quality Assurance Directorate

DCMA-INST 1201 (IPC-1)  
September 23, 2013

**I. POLICY.** This Immediate Policy Change (IPC) implements changes to DCMA-INST 1201, "Corrective Action Process," December 4, 2012.

**I. PURPOSE.** This IPC issue to 1201...

**Long Description**

The title page header of a DCMA Instruction 1201 is displayed. The header says "Department of Defense, Defense Contract Management Agency, Instruction, Corrective Action Process, Quality Assurance Directorate, DCMA-INST 1201 (IPC-1), September 23, 2013."

## Corrective Action Process Knowledge Review 1

[View CR](#) [Submit CR](#)

Which of the four paragraphs in DCMA-INST 1201 prevents you from issuing a Letter of Concern to Acme Company for their noncompliant labels?

- GENERATING A CAR
- CONTRACTOR IDENTIFIED NONCOMPLIANCE
- IDENTIFYING AND ADDRESSING CONTRACTUAL NONCOMPLIANCE(S)
- CONTRACTOR BUSINESS SYSTEMS RULE
- CUSTOMER IDENTIFIED NONCOMPLIANCE

Check Answer

The correct answer is **the paragraph titled IDENTIFYING AND ADDRESSING CONTRACTUAL NONCOMPLIANCE(S).**



## Corrective Action Process Knowledge Review 2

[View CR](#) [Submit CR](#)

What is your next step?

- Initiate the Corrective Action Response
- Draft the Letter of Non-Compliance
- Write the Corrective Action Request

Check Answer

The correct answer is to **write the Corrective Action Request.**



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## Well-Defined Problem Case Study

Before you begin the process for writing the Corrective Action Request, you receive an email from Acme Company. Read the email below, then answer the questions on the following frames.

The screenshot shows an email client interface. On the left is a navigation pane with folders: Inbox, Drafts, Sent, Follow Up, All Documents, Junk, Trash, Chat History, Views, Inbox By, Folders, and Archive. The main pane shows an email from 'Acme Company' with the subject 'FAT for USAF Hydraulic Lift'. The email header includes a globe icon, the subject 'FAT for USAF Hydraulic Lift', and the sender 'From: Acme Company Business' and recipient 'To: DCMA Capstone Student'. The email body text reads: 'DCMA Capstone Student, Acme Company has defined the subject line problem. The employee responsible for configuration management failed to maintain up-to-date change records. We are aware of the serious nature of this problem.'

D

**Long Description**

A computer monitor displays an email inbox. An email message has been opened. The subject line is "FAT for U.S.A.F. Hydraulic Lift". The sender is "Acme Company Business". The recipient is "DCMA Capstone Student". The message text reads "DCMA Capstone Student. Acme Company has defined the subject line problem. The employee responsible for configuration management failed to maintain up-to-date change records. We are aware of the serious nature of this problem."

## Well-Defined Problem Knowledge Review 1

[View CR](#) [Submit CR](#)

The problem described by Acme Company in their email is poorly-defined. What are the two things to look for when checking to ensure a supplier has a well-defined problem?  
(Select the two that apply)

- It focuses on the gap between what is and what should be.
- It states the effect - what is wrong, not why it is wrong.
- It is written as an essay with substantial arguments.
- It specifies the names and titles of personnel causing the problem.
- It is written as an essay with substantial arguments.

Check Answer

A well-defined problem **focuses on the gap and states the effect**. A well-defined problem is also measurable, describes the pain, and highlights the significance of effects.



## Well-Defined Problem Knowledge Review 2

[View CR](#) [Submit CR](#)

What is your next step?

- Ignore the email and write a Corrective Action Response
- Acknowledge the email and issue a Corrective Action Request
- Answer the email with a Corrective Action Response
- Answer the email with a Letter of Non-Compliance

Check Answer

The correct answer is to **acknowledge the email and issue a Corrective Action Request**. DCMA deals with a lot of suppliers, some of which might not know the DCMA process. It would be unprofessional to ignore the email or to respond to the supplier in an unprofessional manner. You might respond to the email with, "Thank you for the update, however, DCMA policy requires the issuance of a CAR for all contractual noncompliances."



## Corrective Action Request Decision

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It is time to write the Corrective Action Request (CAR). You are seated at your desk at the DCMA Office. You have your notes from the First Article Test performed at Acme Company. Here's a bulletized list from your notes on the test of hydraulic lifts:

- The Caution Label for the Coupler Bolts was incorrect.
- The labels read 65 to 70 FT-LBS.
- The labels should read 67 to 71 FT-LBS.
- The labels were wrong on all six lifts.
- Engineering Deficiency Report 2014-14B not implemented.
- Labels are cosmetic - must ensure correct torque applied.

**How do you write a CAR? (Select the correct method below.)**

Open  
Microsoft  
Word to the  
CAR template

Open  
Microsoft  
Excel to the  
CAR template

Open the  
DCMA eTools  
to the CAR  
function



Corrective Action Request Decision Branch 1

[View CR](#) [Submit CR](#)

Unfortunately, Microsoft programs are not used to write a CAR. They may be useful for organizing your thoughts or drafting text.

**Try Again**



Corrective Action Request Decision Branch 2

[View CR](#) [Submit CR](#)

Unfortunately, Microsoft programs are not used to write a CAR. They may be useful for organizing your thoughts into rows or columns.

**Try Again**



### Corrective Action Request Decision Branch 3

[View CR](#) [Submit CR](#)

Yes, the CAR function in the eTool is the only approved DCMA means to write a CAR. However, this training tool cannot replicate the functions of the eTool. A Microsoft Word file will be used for training purposes only.

Click the Next button to continue.



[View CR](#) [Submit CR](#)

### Corrective Action Request Knowledge Review 1

The table used to determine the level of CAR you are about to write is in DCMA-INST 1201. Use the hyperlink below to open the instruction and compare your field notes to the definitions of CAR levels.

[Click here to access DCMA-INST 1201 titled Corrective Action Process.](#)

Based on your analysis, what level CAR are you writing for the Acme Company non-compliance:

- Level I
- Level II
- Level III
- Level IV

Check Answer

The correct answer is **Level II**, based on the systemic nature of the problem.

The screenshot shows the DCMA eTools interface. At the top, there is a header with the DCMA logo and the text "eTools Welcome". Below the header, there are two tabs: "Workload" and "Search Record". The main content area is titled "Workloads" and contains a table with three tabs: "My Open Records", "My Drafts", and "For". The "My Open Records" tab is active, showing a table with the following structure:

Select	Record	Level
	CAR	I
		II
		III
		IV

**Long Description**

A computer monitor displays the DCMA eTools website to the "Workloads" page. In the "My Open Records" tab, an entry has been created that says "CAR" in the "Record" column to indicate it is a record of type CAR. For that same record, a drop-down menu is currently opened in the "Level" column. The options in the "Level" drop-down menu are I, II, III, and IV, which are the Roman numerals for 1, 2, 3, and 4, respectively.

## Corrective Action Request Decision

[View CR](#) [Submit CR](#)

Review the settings you have made in the CAR eTool simulation below. You are provided six options to select to define the scope of the Acme Company response to this CAR. If necessary, study the requirements for these options in DCMA-INST 1201, then answer the question on the next frame.

[Click here to access DCMA-INST 1201 titled Corrective Action Process.](#)

### CAR Information

THE WRITTEN RESPONSE MUST CITE THE CAR REFERENCE NUMBER IDENTIFIED ABOVE AND SHALL INCLUDE THE FOLLOWING

- No  Yes Root cause of the non-compliance(s)
- No  Yes Action taken to correct the non-compliance(s)
- No  Yes Action taken to correct and prevent recurrence of the root cause of the non-compliance(s)
- No  Yes Action taken to determine if other process(es) and/or product(s) is/are affected by the non-compliance(s) and the action taken regarding susceptible process(es) or Product(s).
- No  Yes Action taken to correct the weaknesses which allowed a non-compliant product to be presented to the Government for acceptance.
- No  Yes Target date(s) for implementation of corrective action(s)

### **Long Description**

A computer monitor displays the "CAR Information" section of the CAR eTool. The "CAR Information" section says, "The written response must cite the CAR reference number identified above and shall include the following." Then a list is displayed. Each item in the list has a "No" radio button and a "Yes" radio button beside it. The first list item is "Root cause of the non-compliance(s)", and its "Yes" radio button is selected. The second list item is "Action taken to correct the non-compliance(s)", and its "Yes" radio button is selected. The third list item is "Action taken to correct and prevent recurrence of the root cause of the non-compliance(s)", and its "Yes" radio button is selected. The fourth list item is "Action taken to determine if other process(es) and/or product(s) is/are affected by the non-compliance(s) and the action taken regarding susceptible process(es) or Product(s)", but its "No" radio button is selected. The fifth list item is "Action taken to correct the weaknesses which allowed a non-compliant product to be presented to the Government for acceptance", and its "Yes" radio button is selected. The last list item is "Target date(s) for implementation of corrective action(s)", and its "Yes" radio button is selected.

## Corrective Action Request Knowledge Review 2

Have you selected all of the appropriate request options in the CAR?

Yes

No

Check Answer

*That is correct.*

The correct answer is **No** because the fourth Yes button from the top should be selected as an option to include in your CAR. You do want Acme Company to list the actions they take to determine if other processes were affected by this non-compliance.

### CAR Information

THE WRITTEN RESPONSE MUST CITE THE CAR REFERENCE NUMBER IDENTIFIER AND SHALL INCLUDE THE FOLLOWING

- No  Yes Root cause of the non-compliance(s)
- No  Yes Action taken to correct the non-compliance(s)
- No  Yes Action taken to correct and prevent recurrence of the root cause of the non-compliance(s)
- No  Yes Action taken to determine if other process(es) and/or product(s) is/are affected by the non-compliance(s) and the action taken regarding susceptible processes
- No  Yes Action taken to correct the weaknesses which allowed a non-compliance to occur and presented to the Government for acceptance.
- No  Yes Target date(s) for implementation of corrective action(s)

## **Long Description**

The same graphic from the previous page is displayed. It is a computer monitor displaying the "CAR Information" section of the CAR eTool. The "CAR Information" section says, "The written response must cite the CAR reference number identified above and shall include the following." Then a list is displayed. Each item in the list has a "No" radio button and a "Yes" radio button beside it. The first list item is "Root cause of the non-compliance(s)", and its "Yes" radio button is selected. The second list item is "Action taken to correct the non-compliance(s)", and its "Yes" radio button is selected. The third list item is "Action taken to correct and prevent recurrence of the root cause of the non-compliance(s)", and its "Yes" radio button is selected. The fourth list item is "Action taken to determine if other process(es) and/or product(s) is/are affected by the non-compliance(s) and the action taken regarding susceptible process(es) or Product(s)", but its "No" radio button is selected. The fifth list item is "Action taken to correct the weaknesses which allowed a non-compliant product to be presented to the Government for acceptance", and its "Yes" radio button is selected. The last list item is "Target date(s) for implementation of corrective action(s)", and its "Yes" radio button is selected.

## Corrective Action Request Acme Company

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A paper-based version of the CAR is presented here for training purposes only. Remember, the CAR eTool is the only authorized and approved method of writing a CAR in DCMA.

Access this CAR by clicking on the hyperlink below.

Study the information provided.

It is the foundation for our measurement of Acme Company and their performance of root cause analysis.

[Click here to access the Corrective Action Request used for this training.](#)



DEFENSE CONTRACT MANAGEMENT AGENCY  
FOR TRAINING PURPOSES ONLY  
3901 A Avenue, Building 10500  
Fort Lee, VA 23801-1809

### Corrective Action Request

TO: Acme Company  
4016 Cleveland Ave  
Saint Louis, MO. 63110

FROM: DCMA TRAINING  
3901 A AVENUE  
FORT LEE, VA. 23801

CAR REFERENCE NUMBER: 23801      DATE: TRAINING DATE

CONTRACT NUMBER(S): W16P7T04CX905

PROGRAM NAME(S): USAF FLIGHTLINE HYDRAULIC LIFT

DELIVERY ORDER(S): 1Q-FY2015 THRU 2Q-FY2015

CAR SHORT TITLE: INCORRECT TORQUE REQUIREMENTS ON COUPLER BOLT CAUTION LABELS FOR HYDRAULIC FEED LINES

CORRECTIVE ACTION REQUEST - C...

CHECK BOX	LEVEL	DESCRIPTION
<input type="checkbox"/>	I	Non-compliance that is minor and promptly corrected
<input checked="" type="checkbox"/>	II	Contractual non-compliance that is not promptly corrected
<input type="checkbox"/>	III	Serious contractual non-compliance that is not promptly corrected
<input type="checkbox"/>	IV	Unacceptable contractual non-compliance that is not promptly corrected
<input type="checkbox"/>	IV	Note to Supplier: All Level II – IV CARs are treated as Customer Complaints.
<input type="checkbox"/>	NONE	If this block is checked, the non-compliance is identified as a recurring issue.



## Capstone Tag-Up 2

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I hope you noticed the level of detail in the Corrective Action Request.

The Contract Requirements are very specific. They point Acme Company to the exact paragraph in the contract where it specifies the labels are to be printed in accordance with a different design specification.

The level of detail for which you ask from your suppliers in their response must be present in your DCMA request.

The Description of the Non-Compliance was very detailed as well. You are making a formal communication to a supplier that they have not complied with contract requirements. In your description, tell them exactly what was wrong.

You will forward your Corrective Action Request directly from the CAR eTool. There are other options for transmittal; however, CARs must always be generated in the eTool.

For the purposes of this training, you have been invited to attend the Failure Review Board at Acme Company. You will witness them in the early stages of Root Cause Analysis.



## Acme Company Failure Review Board

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Do not get accustomed to attending the Failure Review Boards of your suppliers. It is rare. As part of your contract technical review, you may find an option to attend specific supplier meetings. Notice the attendees for Acme Company below. Jim has assembled them to brainstorm and list the events that lead up to the noncompliance. The purpose of the meeting is to create a comprehensive list of causal factors. These are events that are root causes, contributing causes, or presumptive causes.

# Acme Company Failure Review Board

**WAS**

**SHOULD BE**

**! CAUTION**

COUPLER BOLTS MUST BE TORQUED  
TO 65 TO 70 FT. LBS.

**! CAUTION**

COUPLER BOLTS MUST BE TORQUED  
TO ~~65~~ TO ~~70~~ FT. LBS. **67 to 71**



## **Long Description**

The Acme Company failure review board members from throughout this course are assembled again. They, including you, are looking at a document. On the left of the document is the caution statement from the couplers that says "CAUTION! COUPLE BOLTS MUST BE TORQUED TO 65 TO 70 FT. LBS." Above this caution statement is the word "Was". On the right of the document is the same caution statement, except this time, the caution statement has been redlined. 65 and 70 have been crossed out, and 67 and 71 have been inserted in their place. This redlined caution statement is under the header "Should Be".

[View CR](#) [Submit CR](#)

## Employee Brainstorming Session - Causal Factors

Each Acme Company employee has provided their recollection of events from their perspective. This is brainstorming. These sessions may help managers arrive at a list of Causal Factors. This is a good place to start a root cause analysis. Click on each tab and read what each employee had to say about their role in the noncompliance. You may keep your own running list on a separate piece of paper if you wish to make a future comparison.

**Jim**

**Pat**

**Deb**

**Kim**

**Meg**

**Bob**

## **Popup Content**

### **Jim**

I am Jim. I am the manager and overall responsible for the noncompliance.  
I was notified of the noncompliance at the First Article Inspection.  
I remember getting an email from Bob at Facilities about a power surge.  
I don't remember the dates from his email.  
I also remembers getting distracted by corporate and not acting on the warning.  
I have empowered the work force at Acme Company to act independently.  
I am surprised the word about the power surge did not get out to the company.  
I remember the power surge happening and wished I would have acted on the email.

### **Pat**

I am Pat. I am the decal maker. I use a high end graphics computer and a special printer.  
I get my print orders from Kim.  
I used Design Spec N5265P-001, Revision B.  
I am passive in this process. I just follow the work order.

### **Deb**

I am Deb. I work in the Quality Assurance Department.  
I was at the original failed test. The pump outputs up to 71 foot pounds of pressure.  
I was notified of the Engineering and U.S.A.F. desire to change the torque requirements.  
I tasked Meg to follow the progress of the change to the torque requirements.  
I use a build sheet to inspect our products. It is adapted to fit the product design specs.  
I checked my Inbox on the day I inspected the hydraulic lifts and the labels.  
I check my Inbox for change notifications from CM. There was no change notice.

**Kim**

I am Kim. I am the Task Lead on the manufacture of Hydraulic Lifts.  
I checked my Inbox to make sure there were no change notifications from CM.  
I did not find a change notice.  
I do this right before I issue the work order to perform Quality Checks.  
I do it for Pat, too. I issue the work order for Pat to make the decals.  
I affix the labels to the lifts as well, in accordance with the latest design specification.

**Meg**

I am Meg. I work as the Configuration Manager on the contract.  
I was at the EDR Board and witnessed the approval of the design change.  
I copied EDR 2014.14B to the Acme Company CM Computer.  
I witnessed the CM Computer failure during the power surge.  
I now know that EDR 2014,14B was lost during the power surge.  
I am responsible for distributing design changes from the CM computer.  
I cannot distribute changes cause by EDRs if the CM computer is down.

**Bob**

I am Bob. I work at Facilities.  
I got an email about the power surge a week before it happened.  
I forwarded the email to Jim.  
I got a call to investigate a problem with the CM computer.  
I found the power strip did not have surge protection installed.  
I sent the CM computer off for repairs – that's SOP.

## Employee Brainstorming Log

[View CR](#) [Submit CR](#)

Acme Company has transferred their brainstorming meeting notes into a list of Causal Factors. If you kept your own list of events as you read each employee account of events, then you can compare them to the log illustrated here.

Next, you will be asked a question about these Causal Factors.

[Click here to access the Acme Company Brainstorming Log of Causal Factors.](#)

# Acme Company

## CAUSAL FACTORS – CAR 23801

Name	Event List Chronology from End to Beginning
Jim	Notified of Noncompliance at First Article Inspection
Kim	Affixed Labels per Drawings to Six Lifts for Delivery
Pat	Used Design Spec N5265P-001, Revision B
Meg	Missed EDR 2014.14B - Change to Label
Deb	Inspected Labels using build sheet to Rev B of Design Spec
Deb	Checked Inbox for Change to Design and Schedule
Kim	Issued Work Order to Print Labels from Rev B
Kim	Issued Work Order for Quality Control Check
Kim	Checked Inbox for Change to Design and Schedule
Meg	Missed sending Design Change to Lead / Quality Inbox
Bob	Sent CM Computer Off to Repair = 5 days
Meg	Lost Label Design Change in Damaged CM Computer
Bob	Determined CM Computer lacked Surge Protection
Meg	Witnessed CM Computer Failure in Power Spike
All	Witnessed Power Spike on Local Grids Scheduled
Jim	Disregarded Bob's Power Company Warning
Bob	Warned Jim a Week Ago about Power Company Plans
Meg	Copied EDR 2014.14B to CM Computer
Meg	Witnessed approval of EDR 2014.14B at Meeting
Deb	Tasked Meg to Follow Change to Torque Progress
Deb	Notified by Engineer/USAF Request to Change Torque
Deb	Attended Failed Test of Lift and Hydraulic Fluid L



## Employee Brainstorming Log Knowledge Review

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Which of the following factors in the Brainstorming Log is most likely a presumptive cause?

- Deb - Witnessed approval of EDR 2014.14B at Meeting
- Bob - Sent CM Computer Off to Repair = 5 days
- Deb - Inspected Labels using Rev B of Design Spec
- Jim - Disregarded Bob's Power Company Warning

Check Answer

The correct answer is the log entry that **Jim disregarded Bob's power company warning**. A presumptive cause is one that needs to be validated. Perhaps a visit to Jim's email history could validate that he disregarded the warning.



## Diagram Selection

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Based on the results of its brainstorming session, Acme Company has a good idea what the problem is and a great list of causal factors. But Jim the Manager wants to ensure the entire non-compliance is diagrammed to help him identify the chain of events that led up to the defect. He intends to use the principles of 5 Whys to lead the discussion.

**Considering the list of causal factors, what diagram would you use?  
(Select the correct diagram below.)**

**Ishikawa  
Fishbone  
Diagram**

**Event  
Sequence  
Diagram**

**Tree Diagram**



Diagram Selection Branch 1

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The Ishikawa Fishbone Diagram is best used when your factors can be categorized into Manpower, Methods, Materials, Machinery and Environment. While it is an acceptable choice, Jim's decision to use the 5 Whys is better suited for another diagram.

**Try Again**



Diagram Selection Branch 2

[View CR](#) [Submit CR](#)

The Event Sequence Diagram is a great choice to use with causal factors, but Jim intends to use the principles of 5 Whys. There is a better choice.

**Try Again**



Diagram Selection Branch 3

[View CR](#) [Submit CR](#)

Yes, the Tree Diagram presents the best choice for Jim's decision to direct the discussion with the 5 Whys principle.



## The Five Whys

[View CR](#) [Submit CR](#)

Follow Jim and his staff as they walk through the principle of 5 Why's.



The Five Whys, Cont.

[View CR](#) [Submit CR](#)

JIM: Kim, **why** did you affix labels that were not compliant with the contract design specification?

KIM: I did not know the labels were noncompliant when I got them from Pat.

Jim

Pat

Deb

Kim

Meg

Bob

You

Manager

Decal Maker

Quality

Task Lead

CM Manager

Facilities

DCMA

**Long Description**

The Failure review board members are assembled. The Manager Jim asks Kim, the Task Lead, a question. He says "Kim, why did you affix labels that were not compliant with the contract design specification?" Kim, the Task Lead, replies, "I did not know the labels were noncompliant when I got them from Pat."

[View CR](#) [Submit CR](#)

### The Five Whys, Cont.

JIM: Pat, **why** did you give noncompliant labels to Kim?

PAT: I didn't know they were noncompliant, either. I used Design Spec N5265P-001, Revision B because that was what my work order from Kim instructed me to print them to.

KIM: Jim, I gave Pat the work order to print, but first I checked my inbox for changes to the label design and schedule. There were no changes from Meg posted, so I issued the Rev B print work order to Pat and the Rev B Quality Control work order to Deb.

Jim

Pat

Deb

Kim

Meg

Bob

You

Manager

Decal Maker

Quality

Task Lead

CM Manager

Facilities

DCMA

### **Long Description**

The Failure review board members continue to discuss. The Manager Jim asks Pat, the Decal Maker, a question. He says "Pat, why did you give noncompliant labels to Kim?" Pat, replies, "I didn't know they were noncompliant, either. I used Design Spec N5265P-001, Revision B because that was what my work order from Kim instructed me to print them to." Kim, the Task Lead, adds, "Jim, I gave Pat the work order to print, but first I checked my inbox for changes to the label design and schedule. There were no changes from Meg posted, so I issued the Rev B print work order to Pat and the Rev B Quality Control work order to Deb."

[View CR](#) [Submit CR](#)

### The Five Whys, Cont.

JIM: Meg, **why** didn't you post the change from revision B to revision C?

MEG: I missed sending the design change for the labels because the CM computer was down.

Jim

Pat

Deb

Kim

Meg

Bob

You

Manager

Decal Maker

Quality

Task Lead

CM Manager

Facilities

DCMA

**Long Description**

The Failure review board members continue to discuss. The Manager Jim asks Meg, the CM Manager, a question. He says "Meg, why didn't you post the change from revision B to revision C?" Meg, replies, "I missed sending the design change for the labels because the CM computer was down."

The Five Whys, Cont.

[View CR](#) [Submit CR](#)

JIM: **Why** was the CM computer down?

MEG: Because the computer shut down when a power spike happened.

BOB: Jim, the engineering changes to the labels were lost on the computer when it shutdown. When I inspected the damaged CM computer, I determined it lacked surge protection. There was nothing standing between the power spike and the circuitry.

Jim

Pat

Deb

Kim

Meg

Bob

You

Manager

Decal Maker

Quality

Task Lead

CM Manager

Facilities

DCMA

**Long Description**

The Failure review board members continue to discuss. The Manager Jim asks the team "Why was the CM computer down?" Meg, the CM Manager replies, "Because the computer shut down when a power spike happened." Bob from Facilities adds, "Jim, the engineering changes to the labels were lost on the computer when it shutdown. When I inspected the damaged CM computer, I determined it lacked surge protection. There was nothing standing between the power spike and the circuitry."

The Five Whys, Cont.

[View CR](#) [Submit CR](#)

JIM: **Why** wasn't there surge protection on the CM computer?

BOB: Because our facility procedures do not require surge protectors on computer equipment. For some reason, all of the company's computers had a surge protector except the CM computer. We will revise our procedures to include the requirement to have a surge protector for all computer equipment.



**Long Description**

The Failure review board members continue to discuss. The Manager Jim asks Bob from Facilities, "Why wasn't there surge protection on the CM computer?" Bob replies, "Because our facility procedures do not require surge protectors on computer equipment. For some reason, all of the company's computers had a surge protector except the CM computer. We will revise our procedures to include the requirement to have a surge protector for all computer equipment."

[View CR](#) [Submit CR](#)

## The Five Whys, Cont.

JIM: And **why** didn't we know about power spike?

BOB: We knew about the power spike a week ago and I forwarded you the email from the power company.

DEB: One CM Computer is not enough!

KIM: The workflow was perfect up to the surge. We knew about the change. It was lost because we had only one computer and no backup process.

Jim

Pat

Deb

Kim

Meg

Bob

You

Manager

Decal Maker

Quality

Task Lead

CM Manager

Facilities

DCMA

### **Long Description**

The Failure review board members continue to discuss. The Manager Jim asks the team "And why didn't we know about the power spike?" Bob from Facilities answers, "We knew about the power spike a week ago and I forwarded you the email from the power company". Deb from Quality adds, "One CM Computer is not enough!" Kim, the Task Lead, concludes the conversation by stating, "The workflow was perfect up to the surge. We knew about the change. It was lost because we had only one computer and no backup process."

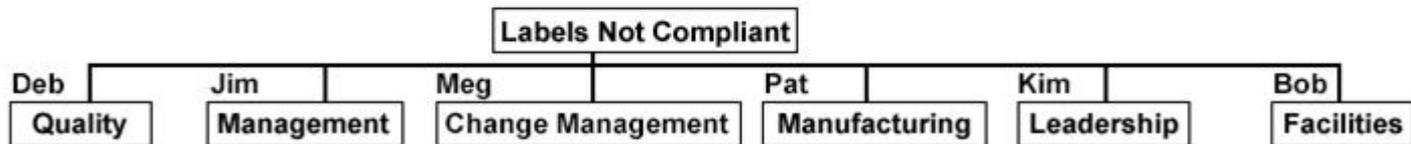
## Tree Diagram

[View CR](#) [Submit CR](#)

You are still at the Acme Company Failure Review Board, and Jim has instructed his staff to start a Tree Diagram. They start by listing the effect (Labels Not Compliant) at the top of the tree. Then they connect six branches. Read the branches now and be prepared to help them add their causal factors from their brainstorming session to the diagram.

# Acme Company Failure Review Board

Method: Tree Diagram



**Long Description**

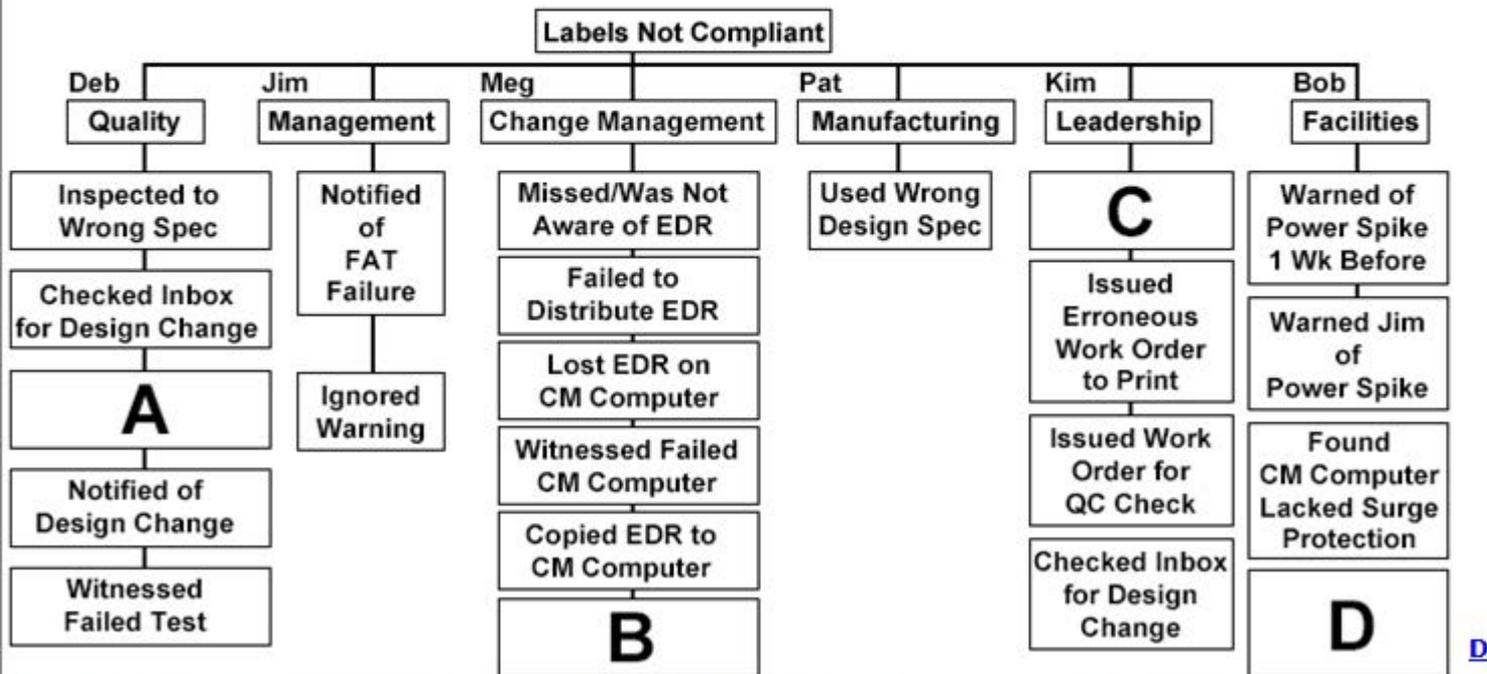
The failure review board members are all looking at the incomplete tree diagram. The top of the tree says "Labels Not Compliant". The first branch of the tree says "Deb, Quality". The second branch of the tree says "Jim, Management". The third branch of the tree says "Meg, Change Management". The fourth branch of the tree says "Pat, Manufacturing". The fifth branch of the tree says "Kim, Leadership". The last branch of the tree says "Bob, Facilities".

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Tree Diagram, Cont.

The Tree Diagram is only partially complete. There is information on the Causal Factor Log that did not get transcribed onto their diagram. Open the Brainstorming Log and compare the list to the items on this Tree Diagram. Next, you will answer a few questions about the missing information.

[Click here to access the Acme Company Brainstorming Log of Causal Factors.](#)



## Long Description

The tree diagram from the previous page has been augmented. The first main branch "Deb, Quality" continues to branch to "Inspected to Wrong Spec", then to "Checked Inbox for Design Change", then to a blank branch labeled with the letter "A", then to "Notified of Design Change", and then finally to "Witnessed Failed Test". The second main branch "Jim, Management" continues to branch to "Notified of FAT Failure" and then to "Ignored Warning". The third main branch "Meg, Change Management" continues to branch to "Missed or Was Not Aware of EDR", then to "Failed to Distribute EDR", then to "Lost EDR on CM Computer", then to "Witnessed Failed CM Computer", then to "Copied EDR to CM Computer", and then finally to a blank branch labeled with the letter "B". The fourth main branch "Pat, Manufacturing" continues to branch to "Used Wrong Design Spec". The fifth main branch "Kim, Leadership" continues to branch to a blank branch labeled with the letter "C", then to "Issued Erroneous Work Order to Print", then to "Issued Work Order for QC Check", then finally to "Checked Inbox for Design Change". The sixth and final main branch "Bob, Facilities" continues to branch to "Warned of Power Spike One Week Before", then to "Warned Jim of Power Spike", then to "Found CM Computer Lacked Surge Protection", then finally to a blank branch labeled with the letter "D".

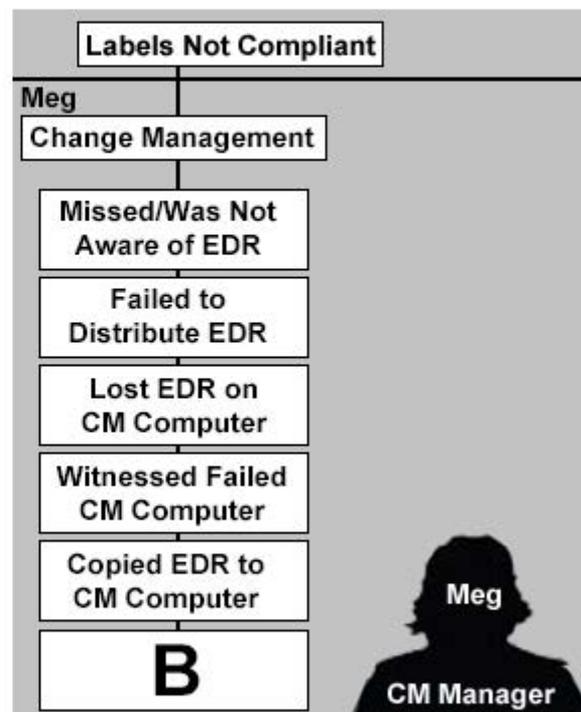
### Tree Diagram Knowledge Review 1

Which item from the Brainstorming Log belongs in the empty rectangle labeled B on the Tree Diagram?

- Affixed Wrong Labels
- Sent CM Computer Off for Repair
- Delegated Change to Meg
- Witnessed EDR Approval

Check Answer

The correct answer is **Witnessed EDR Approval** because this is an item on the Brainstorming Log that is attributed to Meg and is missing. It belongs on her branch of the Tree Diagram.



**Long Description**

Deb's branch of the tree "Quality" is displayed. As a reminder, "Change Management" further branches to "Inspected to Wrong Spec", then to "Checked Inbox for Design Change", then to a blank branch labeled with the letter "A", then to "Notified of Design Change", and then finally to "Witnessed Failed Test".

## Tree Diagram Knowledge Review 2

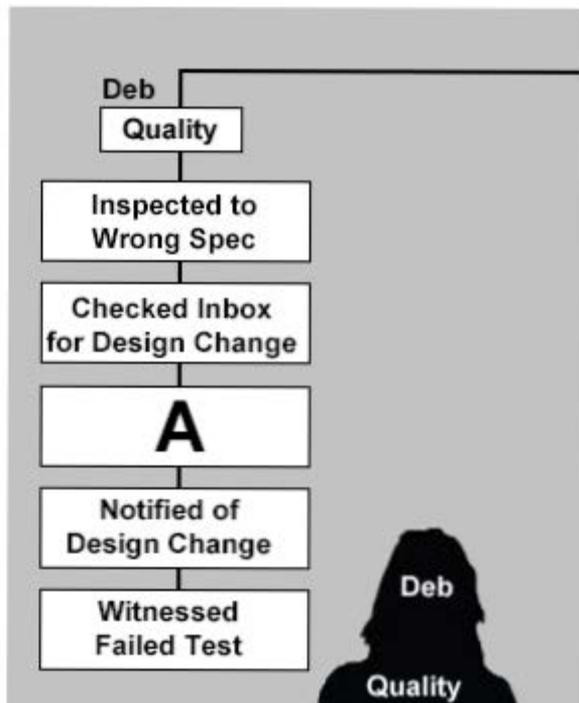
[View CR](#) [Submit CR](#)

Which item from the Brainstorming Log belongs in the empty rectangle labeled A on the Tree Diagram?

- Affixed Wrong Labels
- Sent CM Computer Off for Repair
- Delegated Change to Meg
- Witnessed EDR Approval

Check Answer

The correct answer is **Delegated Change to Meg** because this is an item on the Brainstorming Log that is attributed to Deb and is missing. It belongs on her branch of the Tree Diagram

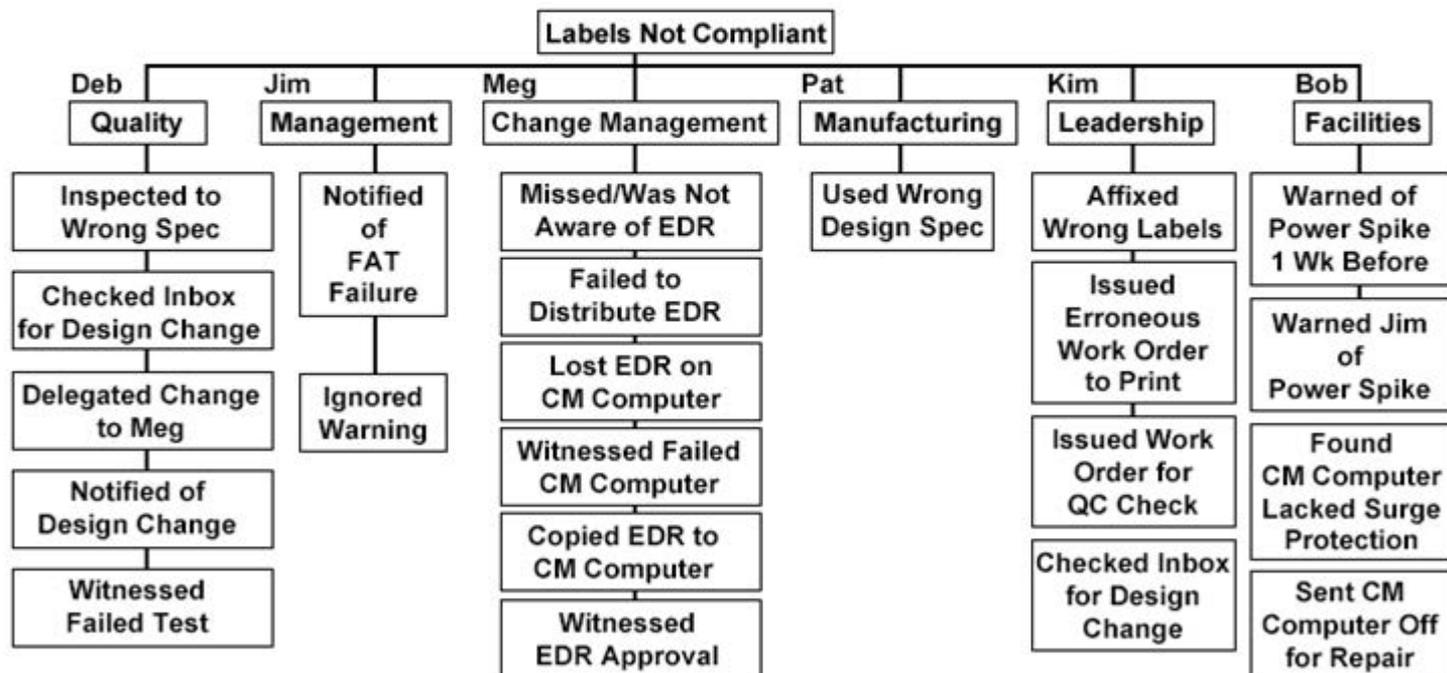


**Long Description**

Meg's branch of the tree "Change Management" is displayed. As a reminder, "Change Management" further branches to "Missed or Was Not Aware of EDR", then to "Failed to Distribute EDR", then to "Lost EDR on CM Computer", then to "Witnessed Failed CM Computer", then to "Copied EDR to CM Computer", and then finally to a blank branch labeled with the letter "B".

## Tree Diagram Completion

The complete Tree Diagram is illustrated below. All of the items from the Causal Factor Brainstorming Log are now correctly branched and the root cause of their problem is on this chart. Jim the Manager has directed his team to take this diagram and determine the presumptive, contributing and root cause of the non-compliance.



D

## **Long Description**

The tree diagram from the previous page now has all the blank branches filled in. The first main branch "Deb, Quality" continues to branch to "Inspected to Wrong Spec", then to "Checked Inbox for Design Change", then to "Delegated Change to Meg", then to "Notified of Design Change", and then finally to "Witnessed Failed Test". The second main branch "Jim, Management" continues to branch to "Notified of FAT Failure" and then to "Ignored Warning". The third main branch "Meg, Change Management" continues to branch to "Missed or Was Not Aware of EDR", then to "Failed to Distribute EDR", then to "Lost EDR on CM Computer", then to "Witnessed Failed CM Computer", then to "Copied EDR to CM Computer", and then finally to a "Witnessed EDR Approval". The fourth main branch "Pat, Manufacturing" continues to branch to "Used Wrong Design Spec". The fifth main branch "Kim, Leadership" continues to branch to "Affixed Wrong Labels", then to "Issued Erroneous Work Order to Print", then to "Issued Work Order for QC Check", then finally to "Checked Inbox for Design Change". The sixth and final main branch "Bob, Facilities" continues to branch to "Warned of Power Spike One Week Before", then to "Warned Jim of Power Spike", then to "Found CM Computer Lacked Surge Protection", then finally to "Sent CM Computer Off for Repair".

## Capstone References

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Up to this point in the Capstone, you have become familiar with the following official DCMA documents: Access this CAR by clicking on the hyperlink below.

DCMA-INST 309, GCQA Surveillance Planning ([Click here to access](#))

DCMA-INST 302, First Article and Production Lot Testing ([Click here to access](#))

DCMA-INST 1201, Corrective Action Process ([Click here to access](#))

These documents have been provided as training aids and add context:

Corrective Action Request (CAR), U.S.A.F Flightline Hydraulic Lift Decals ([Click here to access](#))

Acme Company Brainstorming Session. Causal Factor Chart ([Click here to access](#))

Acme Company Failure Review Board, Tree Diagram ([Click here to access](#))

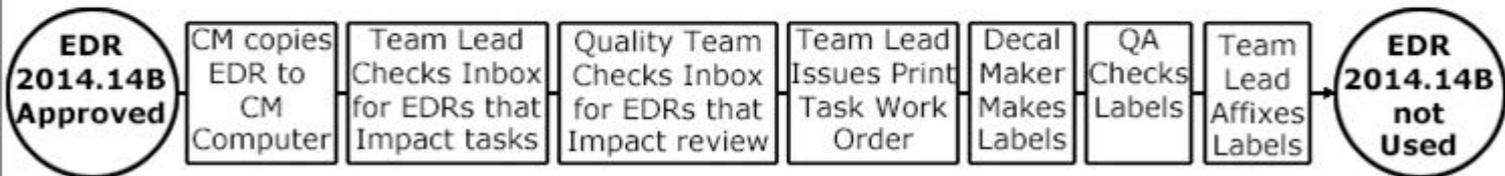
## Event Sequence Diagram

[View CR](#) [Submit CR](#)

You are still at the Acme Company Failure Review Board, and Jim has instructed his staff to list the sequence of events as they should have occurred. These are represented by the Event Sequence/Timeline in the graphic below. Read it and be prepared to help the team add their factors from their Tree Diagram.

[Click here to open the Acme Company Failure Review Board, Tree Diagram.](#)

# Acme Company Failure Review Board



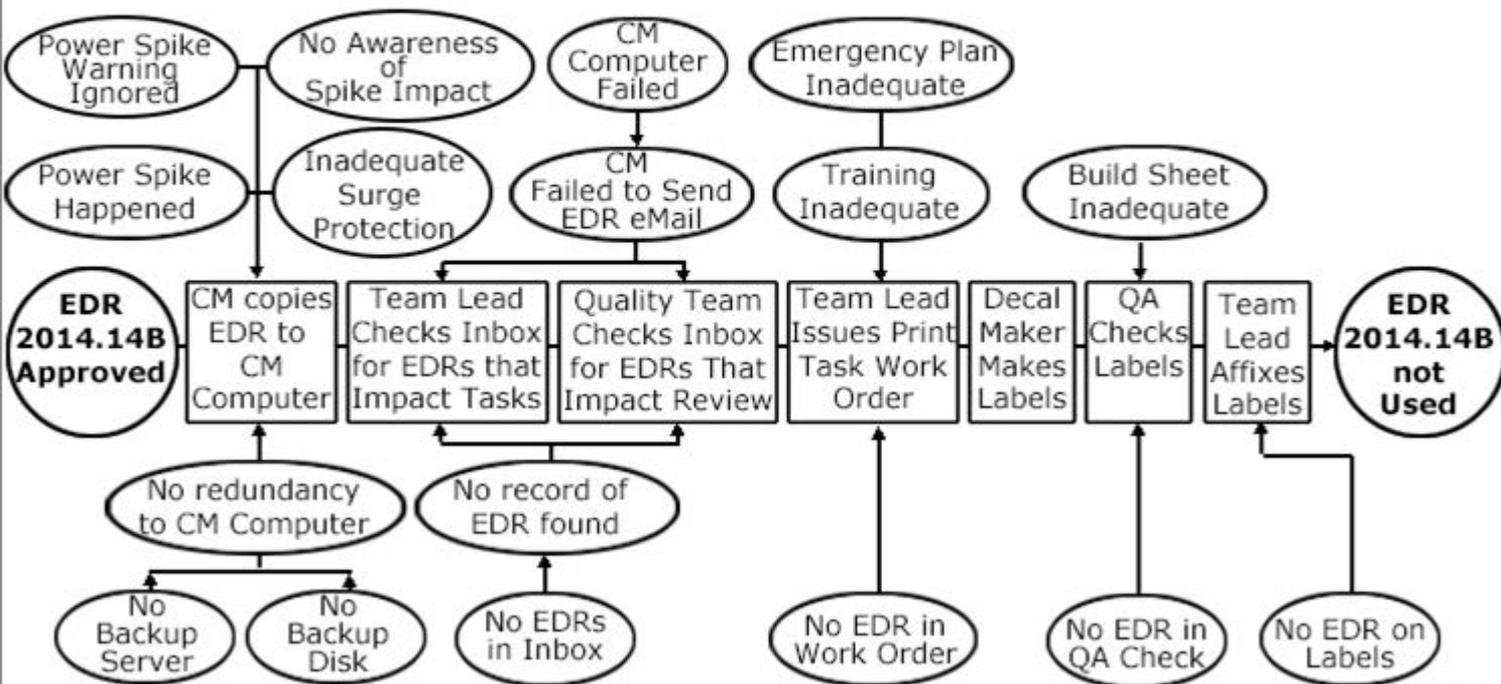
## **Long Description**

An Event Sequence Timeline is shown that is so far only a sequence of primary events. The start event circle is labeled "EDR 2014.14B Approved". The first primary event rectangle says "CM Copies EDR to CM Computer". The second primary event rectangle says "Team Lead Checks Inbox for EDRs that impact tasks". The third primary event rectangle says "Quality Team Checks Inbox for EDRs that impact review". The fourth primary event rectangle says "Team Lead Issues Print Task Work Order". The fifth primary event rectangle says "Decal Maker Makes Labels". The sixth primary event rectangle says "QA Checks Labels". The seventh and final primary event rectangle says "Team Lead Affixes Labels". Finally, the end event circle says "EDR 2014.14B not used".

[View CR](#) [Submit CR](#)

**Event Sequence Diagram, Cont.**

The Acme Company team has completed their Event Sequence Diagram for the non-compliance. But Jim the Manager insists that some of the causes are not drawn with the proper shapes. Study the diagram with emphasis on the factors that appear above the rectangles, than answer the question on the next frame.



D

## **Long Description**

The Event Sequence Timeline from the previous page now has been augmented with various causes, all of which are depicted by plain ovals. The first primary event rectangle "CM copies EDR to CM Computer" is now being pointed to by plain ovals labeled "Power Spike Happened", "Power Spike Warning Ignored", "No Awareness of Spike Impact", "Inadequate Surge Protection", "No redundancy to CM Computer", "No Backup Server", and "No Backup Disk". The second and third primary event rectangles "Team Lead Checks Inbox for EDRs that Impact Tasks" and "Quality Team Checks Inbox for EDRs that Impact Review", are both being pointed to by plain ovals labeled "CM Failed to Send EDR eMail", "CM Computer Failed", "No Record of EDR found", and "No EDRs in Inbox". The fourth primary event rectangle "Team Lead Issues Print Task Work Order" is being pointed to by plain ovals labeled "Training Inadequate", "Emergency Plan Inadequate", and "No EDR in Work Order". The fifth primary event rectangle "Decal Maker Makes Labels" does not have any causes pointing to it. The sixth primary event rectangle "QA Checks Labels" is being pointed to by "Build Sheet Inadequate" and "No EDR in QA Check". The seventh and final primary event rectangle "Team Lead Affixes Labels" is being pointed to by a plain oval labeled "No EDR on Labels".

Event Sequence Diagram Knowledge Review 1

[View CR](#) [Submit CR](#)

Which group of causes are presumptive and need to be verified?  
(Select all that apply)

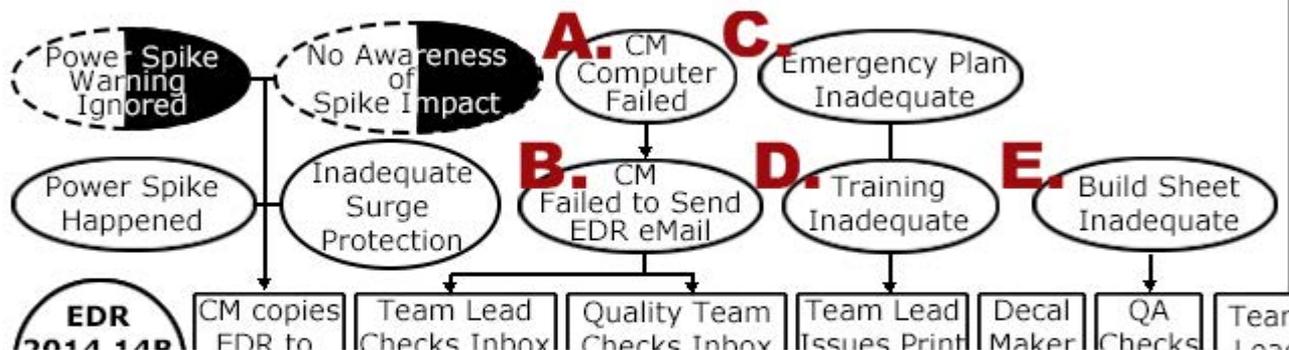
A

B

C

D

E



Check Answer

The correct answers are **C, D, and E**. A and B are verified at this point in analysis. C, D, and E are presumptions and therefore, their shapes should change to match the one for Power Spike Warning Ignored.

[D](#)

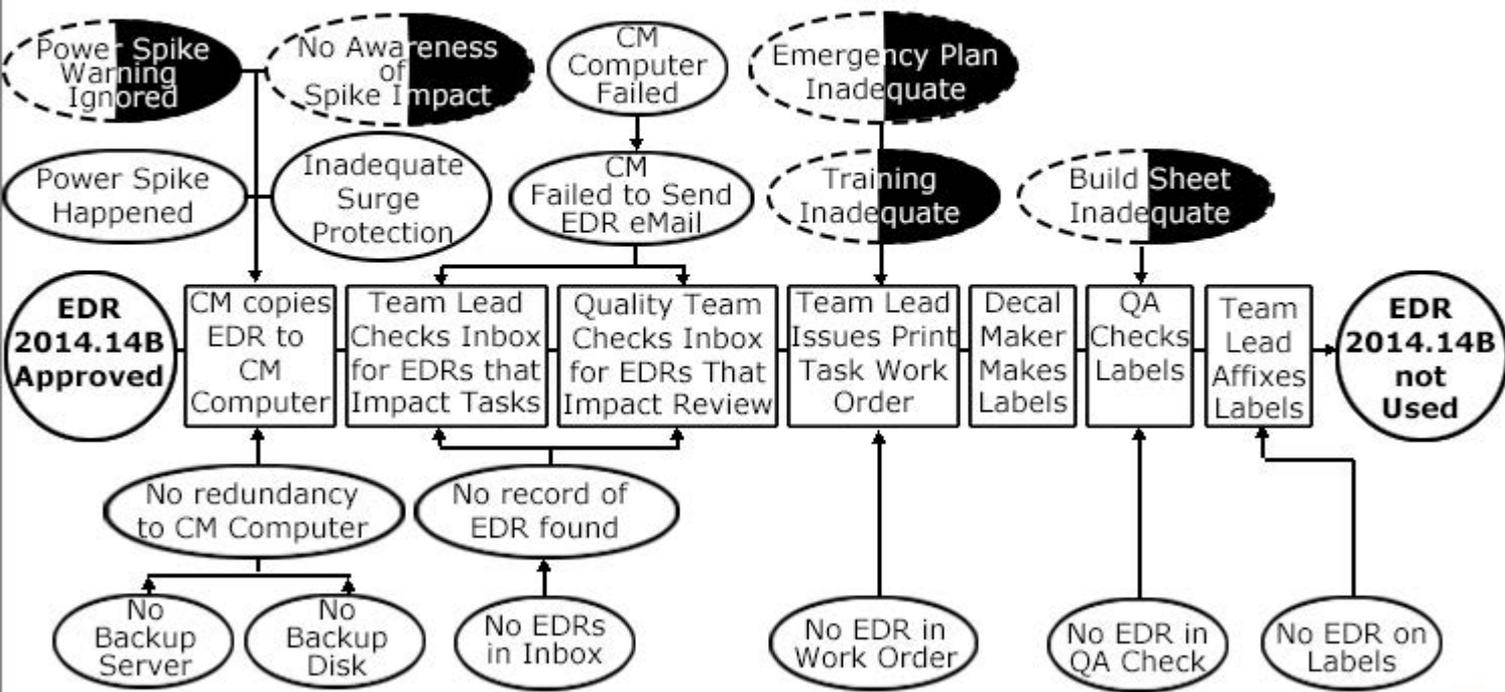
### **Long Description**

A portion of the Event Sequence Timeline from the previous page is shown. Except now, the plain ovals that say "Power Spike Warning Ignored" and "No Awareness of Spike Impact" are now half-shaded dashed ovals. There is a big red letter "A" next to the plain oval "CM Computer Failed". There is a big red letter "B" next to the plain oval "CM Failed to Send EDR eMail". There is a big red letter "C" next to the plain oval "Emergency Plan Inadequate". There is a big red letter "D" next to the plain oval "Training Inadequate". Lastly, there is a big red letter "E" next to the plain oval "Checklist Inadequate".

[View CR](#) [Submit CR](#)

Event Sequence Diagram, Cont.

The Event Sequence Diagram now accounts for the presumptive causes. Review the remaining causes, then answer the question on the next frame.



D

**Long Description**

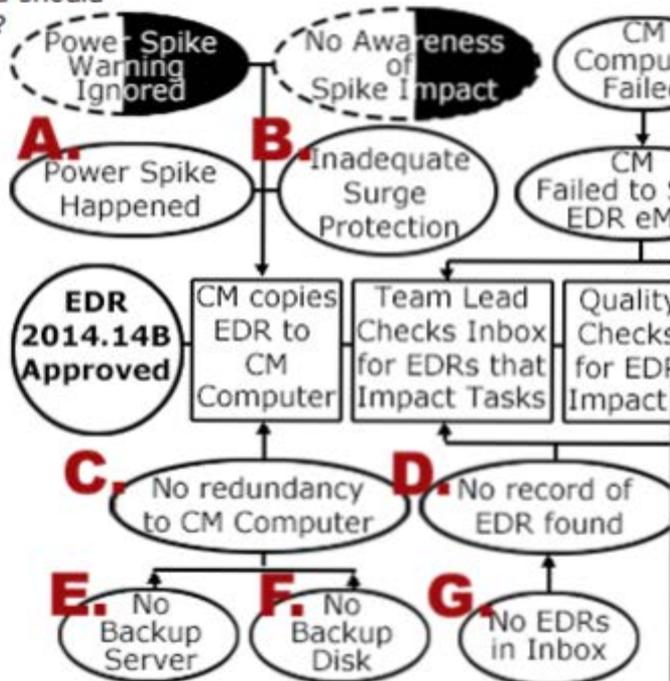
The full Event Sequence Timeline from the previous pages is shown. Except now, the several of the plain ovals are now half-shaded dashed ovals. Those ovals are "Power Spike Warning Ignored", "No Awareness of Spike Impact", "Emergency Plan Inadequate", "Training Inadequate", "No Awareness of Spike Impact", and "Build Sheet Inadequate".

Event Sequence Diagram Knowledge Review 2

[View CR](#) [Submit CR](#)

Which group of causes contribute to the noncompliance and should be considered in the Acme Company Corrective Action Plan? (Select all that apply)

- A
- B
- C
- D
- E
- F
- G



Check Answer

The correct answers are **All** of the Lettered Causes, **A through G**. Each of these factors should be considered in the Acme Company Corrective Action Plan.

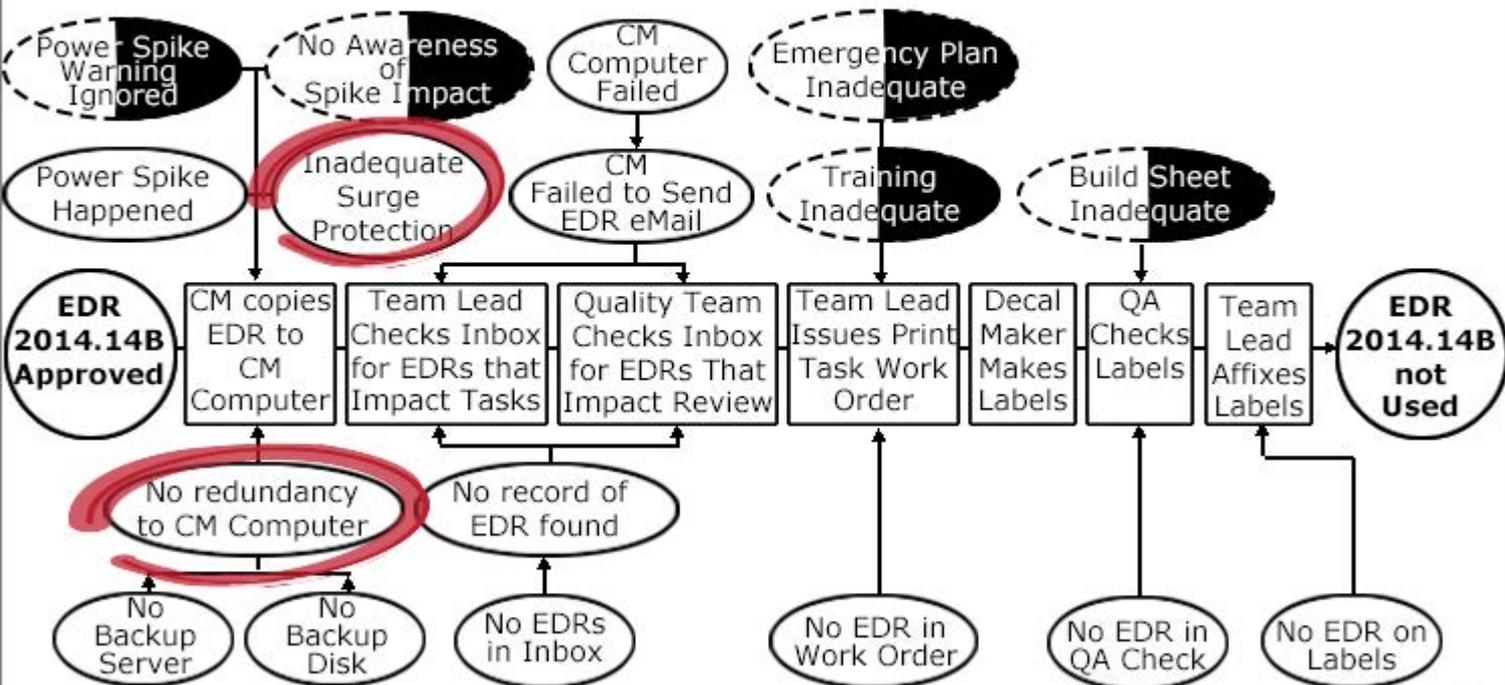
### **Long Description**

A portion of the Event Sequence Timeline from the previous page is shown. There is a big red letter "A" next to the plain oval "Power Spike Happened". There is a big red letter "B" next to the plain oval "Inadequate Surge Protection". There is a big red letter "C" next to the plain oval "No redundancy to CM Computer". There is a big red letter "D" next to the plain oval "No record of EDR found". There is a big red letter "E" next to the plain oval "No Backup Server". There is a big red letter "F" next to the plain oval "No Backup Disk". Lastly, there is a big red letter "G" next to the plain oval "No EDRs in Inbox".

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**Event Sequence Diagram - Root Cause**

Review the diagram below for presumptive causes (dashed oval lines), contributing causes (solid oval lines), and root causes (circled). The two root causes of their problem are that there was no redundancy to the Configuration Management computer and it had inadequate surge protection. Answer the question on the next frame.



D

**Long Description**

The full Event Sequence Timeline from the previous pages is depicted here, except now, a big red circle has been drawn around the plain oval "No Redundancy to CM Computer" and "Inadequate Surge Protection".

### Root Cause Knowledge Review

[View CR](#) [Submit CR](#)

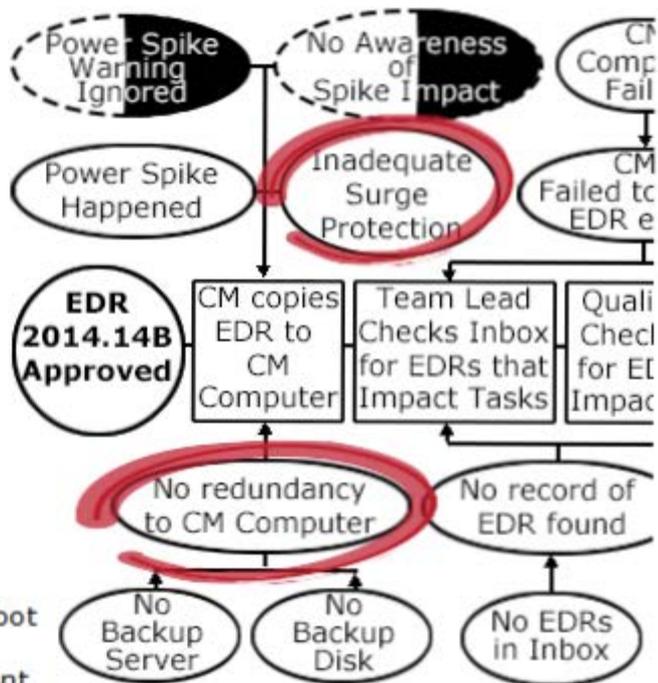
Has Acme Company found their root cause?

Yes

No

Check Answer

The correct answer is **Yes**. They have found two root causes. Root Cause is defined as the most basic reason for a problem, which, if corrected, will prevent recurrence of that problem.



**Long Description**

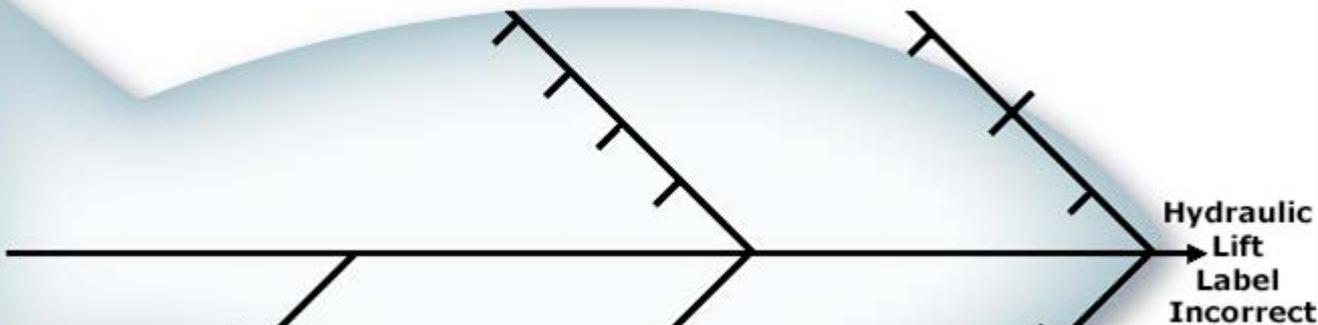
The same Event Sequence Timeline from the previous pages is depicted here. The plain ovals "No Redundancy to CM Computer" and "Inadequate Surge Protection" are still circled in red.

## Ishikawa Fishbone Diagram

[View CR](#) [Submit CR](#)

We will now look at a Fishbone Diagram for the same defect.

### Acme Company Failure Review Board



**Long Description**

A Fishbone Diagram is shown that is so far only a sequence of blank "fishbones". The event at the far right is labeled "Hydraulic Lift Label Incorrect."

### Ishikawa Fishbone Diagram - Manpower

Which issues from the list below are related to manpower (Select the four that apply).

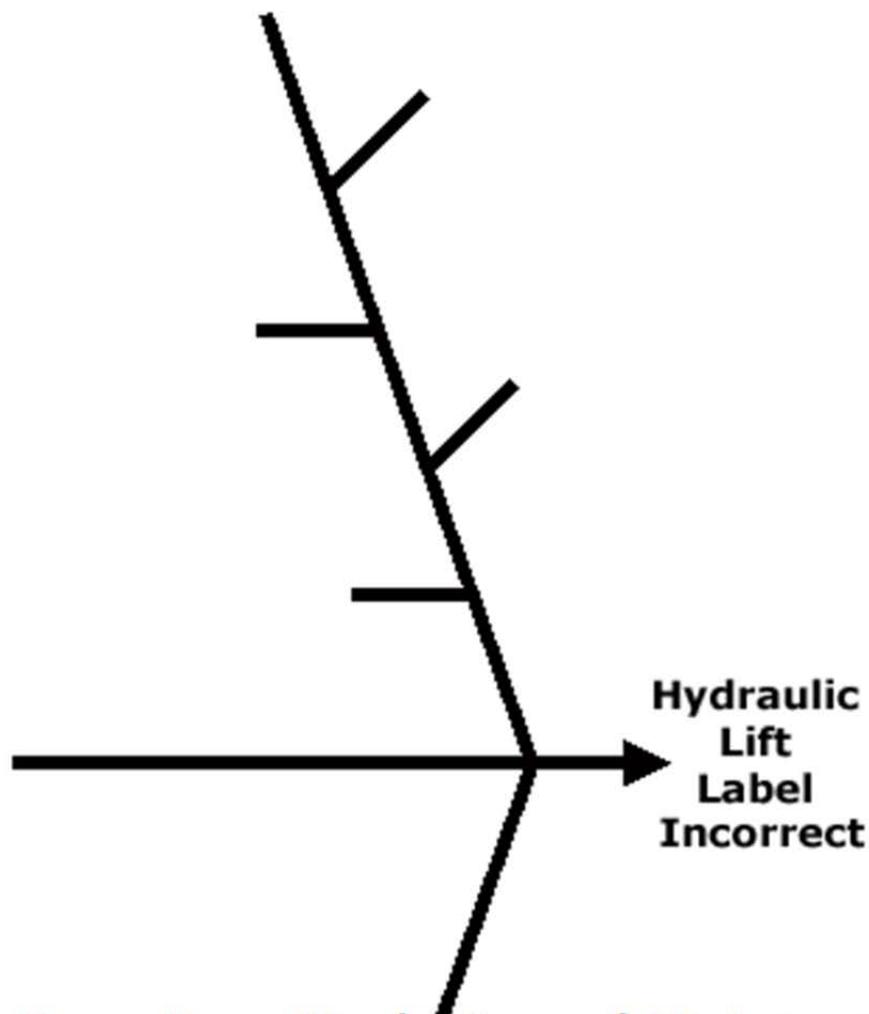
- No EDR Available
- CM Failure to Send EDR Notifications
- No Awareness of Power Surge Impact
- Emergency Plan Not Adequate
- Power Surge Warning Ignored
- Training Not Adequate
- Build Sheet Not Adequate

Check Answer

*That is correct.*

The correct answers are **Training Not Adequate, Power Surge Warning Ignored, No Awareness of Power Surge Impact, and CM Failure to Send EDR Notifications**. These issues should be added to the Manpower part of the Fishbone Diagram.

MANPOWER



**Long Description**

A portion of the Fishbone Diagram is displayed, specifically a fishbone labeled "Manpower". The cause at the far right is still labeled "Hydraulic Lift Label Incorrect".

### Ishikawa Fishbone Diagram - Machinery

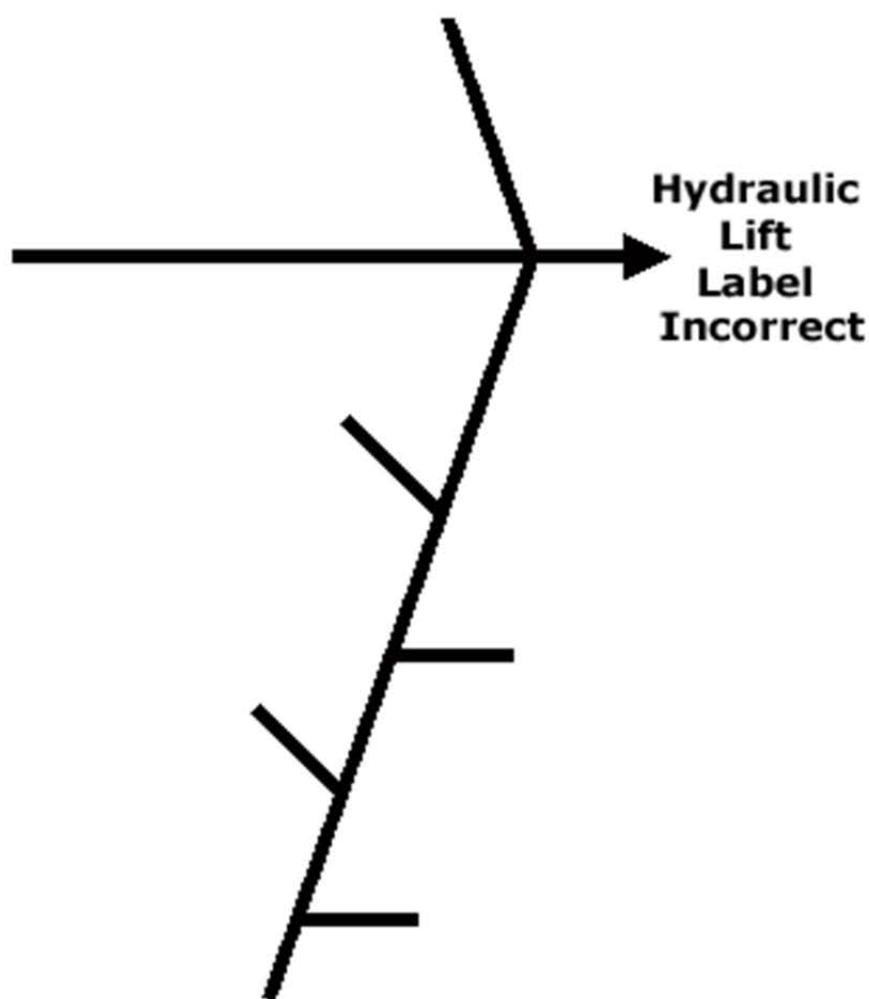
Which issues from the list below are related to machinery (Select the four that apply).

- CM Computer Failed
- No Backup Server
- Inadequate Surge Protection
- No Backup Disk
- Power Spike Happened
- No Redundancy to CM Computer

Check Answer

*That is correct.*

The correct answers are **Inadequate Surge Protection, CM Computer Failed, No Backup Server, and No Redundancy to CM Computer.** These issues should be added to the Machinery part of the Fishbone Diagram



**Long Description**

A portion of the Fishbone Diagram is displayed, specifically a fishbone labeled "Machinery". The cause at the far right is still labeled "Hydraulic Lift Label Incorrect".

### Ishikawa Fishbone Diagram - Method

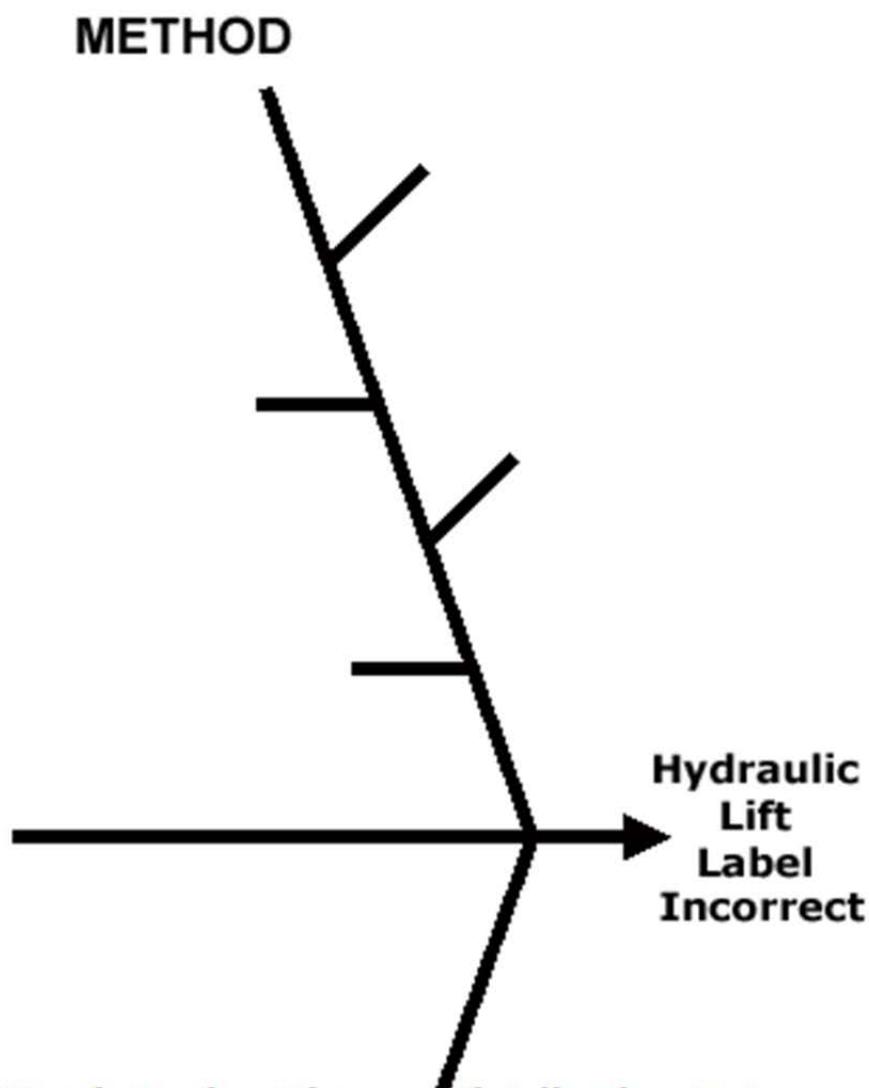
Which issues from the list below are related to method (Select the four that apply).

- Power Spike Happened
- Incorrect Design Spec Used
- Design Change Distribution Not Adequate
- Emergency Plan Not Adequate
- Build Sheet Not Adequate
- No Surge Protection
- No Backup Disk

Check Answer

*That is correct.*

The correct answers are **Incorrect Design Spec Used, Design Change Distribution Not Adequate, Build Sheet Not Adequate, and Emergency Plan Not Adequate.** These issues should be added to the Method part of the Fishbone Diagram



**Long Description**

A portion of the Fishbone Diagram is displayed, specifically a fishbone labeled "Method". The cause at the far right is still labeled "Hydraulic Lift Label Incorrect".

### Ishikawa Fishbone Diagram - Material

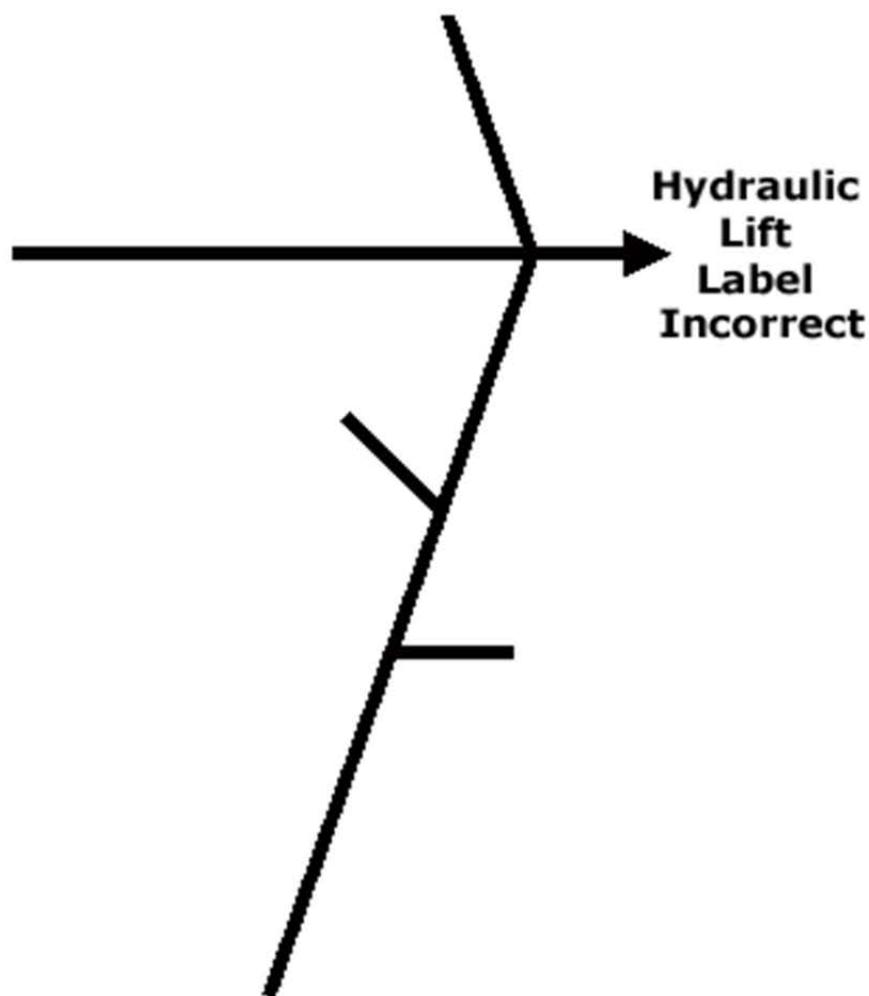
Which issues from the list below are related to material? (Select the two that apply.)

- Power Spike Happened
- No Surge Protection
- No Backup Disk
- No Backup Server
- No EDR Available
- Print Work Order Incorrect
- No Redundancy to CM Computer

Check Answer

*That is correct.*

The correct answers are **Print Work Order Incorrect** and **No EDR Available**. These issues should be added to the Material part of the Fishbone Diagram.



**MATERIAL**

**Long Description**

A portion of the Fishbone Diagram is displayed, specifically a fishbone labeled "Material". The cause at the far right is still labeled "Hydraulic Lift Label Incorrect".

### Ishikawa Fishbone Diagram - Environment

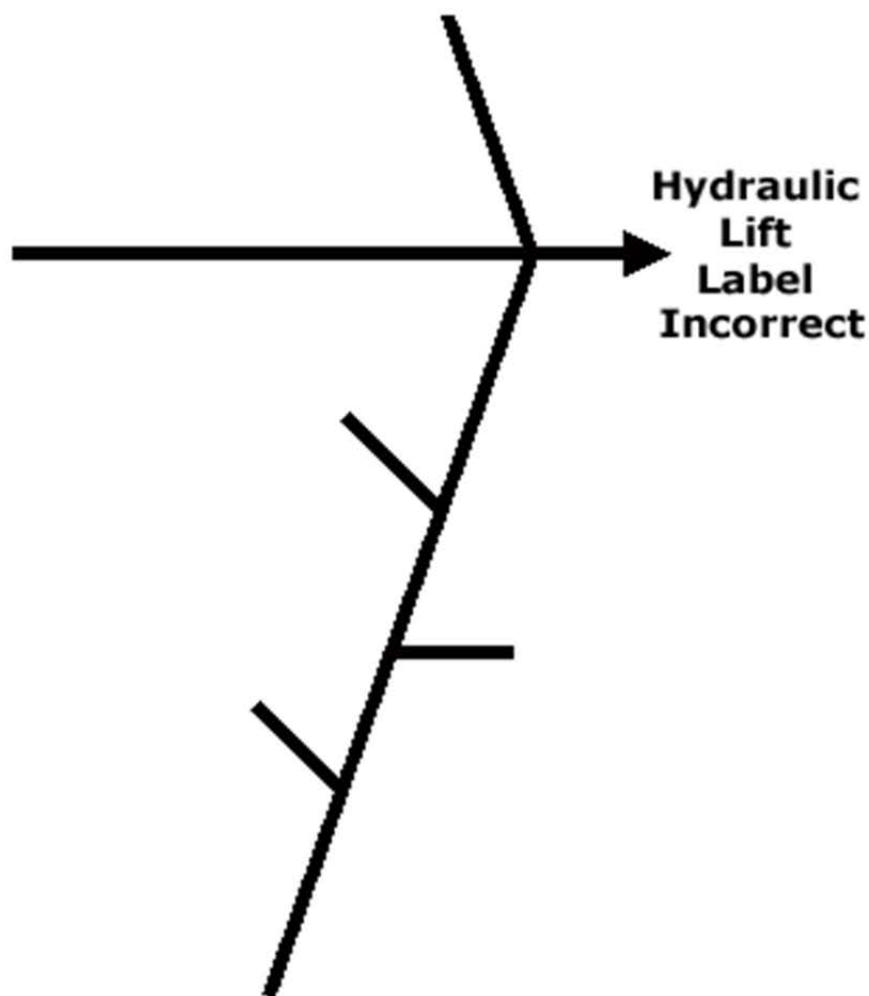
Which issues from the list below are related to environment? (Select the three that apply.)

- No Backup Disk
- No Backup Server
- Print Work Order Incorrect
- No Redundancy to CM Computer
- No EDR Available
- Power Spike Happened
- No Surge Protection

Check Answer

*That is correct.*

The correct answers are **Power Spike Happened, No Surge Protection, and No Backup Disk.** These issues should be added to the Environment part of the Fishbone Diagram



**Long Description**

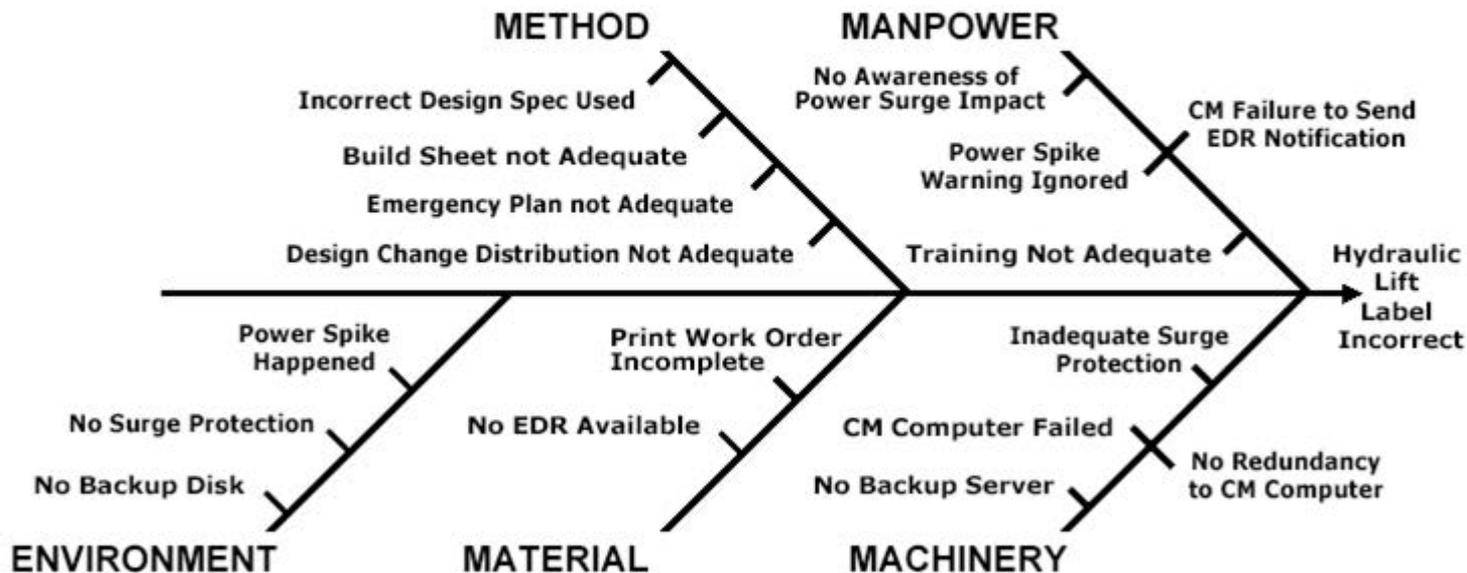
A portion of the Fishbone Diagram is displayed, specifically a fishbone labeled "Environment". The cause at the far right is still labeled "Hydraulic Lift Label Incorrect".

[View CR](#) [Submit CR](#)

### Ishikawa Fishbone Diagram - Complete

The complete Ishikawa Fishbone Diagram for this defect is illustrated below.

[Click here to open the Ishikawa Fishbone Diagram Training Aid](#)



D

**Long Description**

The Fishbone Diagram from before is displayed, only this time is filled out. Click to open the full diagram.

### Capstone Tag-Up 3

[View CR](#) [Submit CR](#)

It is possible that you arrived at a different root cause than the one revealed by Acme Company.

Maybe there was a disclosure in the brainstorming session that caught your eye? Or perhaps, you disagreed slightly with branches on the Tree Diagram, or shapes on the Event Sequence Diagram?

It is possible.

If this exercise proves one thing, it is that the purpose of root cause analysis is to solve a problem. The analysis is a means to that end.

In the case of Acme Company and the labels on the hydraulic lift, the end is to explore corrective actions and respond to the DCMA Corrective Action Request (CAR). They want to prevent the non-compliance from happening again.

Responses to CARs may vary in style, format, and content. But they must account for the requirements you entered into your CAR.

Acme Company has chosen to respond with a Corrective Action Plan (CAP).



## Corrective Action Plan

[View CR](#) [Submit CR](#)

Acme Company has transferred its root and contributing causes from the Event Sequence Diagram to its formal response to your Corrective Action Request (CAR) 23801.

Acme Company's response to the CAR is accessed from the hyperlink below. Read the response.

Your job is to examine the document for accuracy and determine its effectiveness.

Start by checking that all the response requirements in the CAR are addressed in Acme Company's response. Next, you will be asked a series of questions about this comparison.

[Click here to access the DCMA CAR.](#)

[Click here to access Acme Company's response to the CAR.](#)

# Acme Company

TRAINING DATE

Acme Company  
4016 Cleveland Ave  
Saint Louis, MO. 63110

DCMA TRAINING  
3901 A AVENUE  
FORT LEE, VA. 2380

SUBJ: **Response to CAR 23801**

To Whom It May Concern,

This is in response to: **CAR #23801.**

CAR CLASSIFICATION: **LEVEL II**

CONTRACT NUMBER(S): **W16P7T04CX905**

PROGRAM NAME(S): **USAF FLIGHTLINE HYDRAULIC LIFT**

DELIVERY ORDER(S): **1Q-FY2015 THRU 2Q-FY2015**

CAR SHORT TITLE: **INCORRECT TORQUE RE  
COUPLER BOLT CAUTION  
HYDRAULIC FEED LINE  
HYDRAULIC LIFT  
EQUIPMENT DECALS  
APPLICATION ON THE  
STATE THE PROPER  
COUPLER BOLTS.**

PROBLEM DEFINITION: **PROPER TORQUE  
TO  
OR  
MENT (CM)**

ROOT CAUSE: **INADEQUATE SURGE PROTECTION AND  
REDUNDANCY IN THE ACME COMPANY  
CONFIGURATION MANAGEMENT PROCESS  
OR EQUIPMENT - CM WAS A SINGLE POINT OF  
FAILURE.**



## CAP Requirements

[View CR](#) [Submit CR](#)

A requirement (1 of 6) from your CAR is displayed on the simulated computer screen below. Compare this requirement to the expanded text excerpt from the CAP. In this case, Acme Company has met the CAR requirement by listing the root cause of the noncompliance in its response to the CAR.

### Acme CAR Response



#### ROOT CAUSE:

INADEQUATE SURGE PROTECTION, AND NO REDUNDANCY IN THE ACME COMPANY CONFIGURATION MANAGEMENT (CM) PROCESS OR EQUIPMENT – CM WAS A SINGLE POINT OF FAILURE.

No  Yes Root cause of the non-compliance(s)

### **Long Description**

The Acme Response to CAR is displayed in the background. A portion of the CAP has been zoomed in. The portion says "Root Cause: Inadequate surge protection, and no redundancy in the Acme Company configuration management (CM) process or equipment - CM was a single point of failure". Beneath the CAP is a computer monitor displaying one of the line items from the CAR Requirements. The line item is "Root cause of the non-compliance(s)".

## CAP - Verifying a Root Cause

[View CR](#) [Submit CR](#)

These are the steps to verify a root cause:

- Cross-check all facts for consistency (witnesses, evidence, engineering and analytic information)
- Cross-check all analyses using verified facts (change, event, and causal factor analysis)
- Resolve inconsistencies and discrepancies
- Use trials and simulations to check your conclusions

These steps were published in a Job Aid in the lessons that led up to this Capstone.

[Click here to access the Job Aid titled Determine Causes of Events.](#)



## CMQ220 Root Cause Analysis

### Job Aid – Determine Causes of Events

**INTRODUCTION:** This job aid is a suggested series of four tasks to perform when you are faced with a problem and want to draw conclusions about the Root Cause.

With your data organized using one or more analysis tools, you should be able to draw conclusions about the root cause and produce the expected product—a clear description of the causes of the event including the primary or root cause and contributing causes. The process you use to determine the root and contributing causes typically includes the following tasks:

- Hypothesize or formulate presumptive causes
- Test/validate presumptive causes (an internal reasoning process)
- Separate root causes from contributing (secondary or peripheral) causes
- Verify root causes (an external checking process)

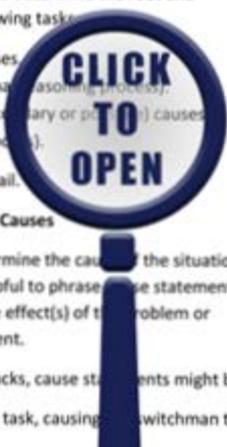
Look at each of these tasks in a little more detail.

#### 1. Hypothesize or Formulate Presumptive Causes

As you investigate problems, try to determine the cause of the situation. In order to separate all the causes, it is helpful to phrase cause statements that clearly show both the cause and the effect(s) of the problem or problems inherent in the situation or event.

Using an example of a switch on train tracks, cause statements might be:

- Insufficient time was allotted for the task, causing the switchman to overlook key elements of the task.



**CAP - Verifying a Root Cause, Cont.**

[View CR](#) [Submit CR](#)

Retrace your steps through the Capstone events that led up to this point. Think in terms of the steps to verify a root cause:

- You were present and witnessed the noncompliance during the FAT. You wrote the CAR.
- You were present at the Failure Review Board and witnessed engineering and analytic information in the brainstorming session.
- You were present when Acme Company charted their causal factors on a Tree Diagram, and you watched them create an Event Sequence Diagram.

Now, answer the question on the next frame.



## Corrective Action Request

### 23801

TO: Acme Company

FROM: [Redacted]

CAR REFERENCE: **Acme Company**

CONTRACT NUMBER: **CAUSAL FACTORS**

PROGRAM NAME: **- CAR 23801**

DELIVERY ORDER: [Redacted]

CAR NUMBER: [Redacted]

Name: **Event List Chronology from End to Beginning**

Jim	Notified of Noncompliance at First Article Inspection
Kim	Affixed Labels
Pat	Used Design S
Meg	Missed EDR 2
Deb	Inspected Labels
Deb	Checked Inbo
Kim	Issued Work O
Kim	Issued Work O
Kim	Checked Inbo
Meg	Missed sendin
Bob	Estimated CM
Meg	Lost Label Des
Bob	Determined CM
Meg	Witnessed CM
Al	Witnessed Po
Jim	Disregarded B
Bob	Warned Jim a
Meg	Copied EDR 2

CHECK BOX

## ACME COMPANY

### Response to CAR 23801

To Whom It May Concern,

This CAP is in response to CAR #23801.

CAR CLASSIFICATION: **LEVEL 8**

CONTRACT NUMBER(S): **WSPY140005**

PROGRAM NAME(S): **SNAP FLIGHTLINE HYDRAULIC LIFT**

DELIVERY ORDER(S): **SNYF0015 THRU 24 FY08S**

CAR SHEET TITLE: **INCORRECT TORQUE REQUIREMENTS ON COUPLER BOX 3 CAUTION LABELS FOR HYDRAULIC FEED LINES**

PROBLEM DEFINITION: **EQUIPMENT DECALS MANUFACTURED FOR APPLICATION ON THE HYDRAULIC LIFT FAILED TO STATE THE PROPER TORQUE REQUIREMENTS FOR COUPLER BOLTS.**

ROOT CAUSE: **NO REDUNDANCY IN THE ACME COMPANY CONFIGURATION MANAGEMENT (CM) PROCESS OR EQUIPMENT - OR WAS A SINGLE POINT OF FAILURE.**

Acme Company has taken steps to prevent the noncompliance from recurring. Refer to the Corrective Action Matrix for a list of contributing causes, root actions to correct and the dates to implement.

### CAP Requirements Knowledge Review 1

[View CR](#) [Submit CR](#)

Based on all of the information provided, can you verify Acme Company's root cause?

Yes

No

Check Answer



The correct answer is **No**. Up to this point, this has basically been a "desktop evaluation" of the supplier's RCA process and CAR responses. In order to verify the supplier's stated "root cause", you need to determine the effectiveness of the corrective actions the supplier implemented to assure the nonconformance does not recur.

CAP Requirements, Cont.

[View CR](#) [Submit CR](#)

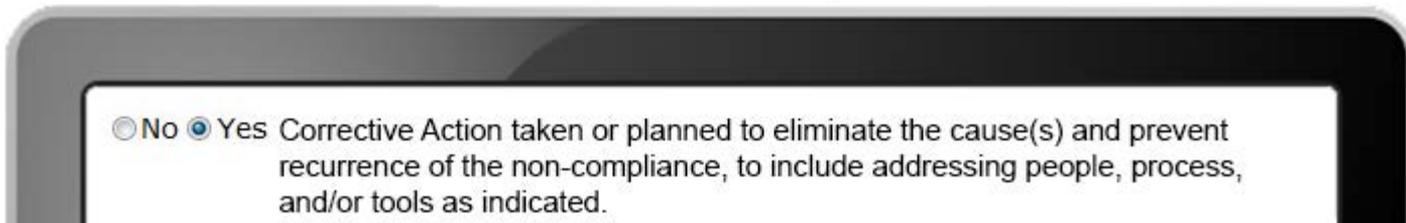
Another requirement (3 of 6) from the CAR is displayed on the simulated computer screen below. Compare this requirement to the CAP matrix in Acme Company's response to the CAR. Then, answer the question on the next frame.

[Click here to access Acme Company's response to the CAR.](#) Navigate to the CAP matrix on page 2.

### ACME CAR Response

Final status of the non-compliance Corrective Action taken or planned to eliminate the cause(s) and prevent recurrence of the non-compliance, to include addressing people, process, and/or tools as indicated and (caption below) for implementation of planned action.

Non-Compliance	Corrective Action	Implementation Status
1. Failure to follow the correct procedure for the use of the equipment.	Revised procedure for the use of the equipment. Training provided to all operators.	Completed
2. Inadequate training for the operators.	Revised training program. Additional training provided to all operators.	Completed
3. Inadequate maintenance of the equipment.	Revised maintenance schedule. Additional maintenance provided to all equipment.	Completed
4. Inadequate inspection of the equipment.	Revised inspection schedule. Additional inspection provided to all equipment.	Completed
5. Inadequate documentation of the equipment.	Revised documentation procedure. Additional documentation provided to all equipment.	Completed
6. Inadequate communication of the equipment.	Revised communication procedure. Additional communication provided to all equipment.	Completed
7. Inadequate safety of the equipment.	Revised safety procedure. Additional safety provided to all equipment.	Completed
8. Inadequate quality of the equipment.	Revised quality procedure. Additional quality provided to all equipment.	Completed
9. Inadequate cost of the equipment.	Revised cost procedure. Additional cost provided to all equipment.	Completed
10. Inadequate reliability of the equipment.	Revised reliability procedure. Additional reliability provided to all equipment.	Completed



**Long Description**

The Acme CAR Response is displayed in the background. Beneath the CAR Response is a computer monitor displaying one of the line items from the CAR Requirements. The line item is "Corrective Action taken or planned to eliminate the cause(s) and prevent recurrence of the non-compliance, to include addressing people, process, and/or tools as indicated".

## CAP Requirements Knowledge Review 2

[View CR](#) [Submit CR](#)

Based on all of the information provided, has Acme Company met the requirement to list the corrective action taken or planned to eliminate the cause(s) and prevent recurrence of the noncompliance, to include addressing people, process, and/or tools as indicated?

Yes

No

Check Answer



The correct answer is **Yes**, but only for training purposes. They met the requirement when they listed the corrective actions in the CAP matrix. Like the verification of the root cause, there is more analysis ahead before you can determine the effectiveness of their corrective actions.

[View CR](#) [Submit CR](#)

## Evaluating Contributing Causes for Accuracy and Effectiveness

Review this list of checkpoints, then answer the series of questions on the next frames.

- Check to ensure the response is written at a level consistent with that required by your list of supplier stakeholders.
- Check to ensure the descriptions of the causes are related to their corrective actions and have a relationship to the root cause of the problem.
- Check the accuracy of all artifacts against program, design, and contractual requirements.
- Check the accuracy of all artifacts by comparing them to all listed causes.
- Check to ensure that operators and maintenance personnel followed authorized procedures.
- Check to ensure that responses are verified with metrics or other supplier provided data.

Root cause of the non-compliance(s); Corrective Action taken or planned to eliminate the cause(s) and prevent recurrence of the non-compliance, to include addressing people, process, and/or tools as indicated; and Target date(s) for implementation of planned actions:

Description of Cause	Corrective Action	Implement Date
Root Cause: (1) Inadequate surge protection, and (2) No redundancy in the Acme Company Configuration Management (CM) process or equipment – CM was a single point of failure.	(1) Install surge protection. (2) Added backup to daily CM checklist, installed CM backup server, and have two CM computers.	Completed
Contributing Cause: No backup server – Critical EDR lost with no backup.	Installed CM backup server – server saved to disk nightly.	Completed
Contributing Cause: No Record of EDR available to send to QA and Task Lead.	Established backup policy and add CM backup computer. Implemented this redundancy across all Acme departments.	Completed
Contributing Cause: Power Spike and subsequent surge crashed CM computer.	Installed secondary CM computer.	Completed
Contributing Cause: CM Manager failed to send EDR notifications.	Training will be held to reinforce casualty prevention.	Completed
Contributing Cause: EDRs did not arrive in the Inbox of QA and Team Lead.	Redundant EDR notification process added to CM Manager now notified.	Completed
Contributing Cause: Management failed to prioritize power surge notification.	Facilities added department heads to utility notification. Facilities will quarterly perform random surge protector inspections.	Completed
Contributing Cause: Emergency Plan did not create proper levels of awareness.	Plan modified to include power surge checklist.	Completed



### Corrective Actions Knowledge Review 1

[View CR](#) [Submit CR](#)

Analyze the information from the CAP below. Focus on whether the cause and action have a relationship with the root cause. Select the answer that is most consistent with your analysis.

- The action is related. Because the company had no means of backing up their CM process, the EDR was not factored into the manufacture of the decal.
  
- The action is not related. There is no relationship between this cause/action and the root cause of the problem. Acme Company must re-visit this CAP.

Description of Cause	Corrective Action	Implement Date
Contributing Cause: No backup server – Critical EDR lost with no backup.	Installed CM backup server – server saved to disk nightly.	Completed

Check Answer

Based on the information provided, the first answer is correct. **Acme Company did list a cause/action that is related to the root cause.**

D

**Long Description**

One entry of the CAP is displayed. In the "Description of Cause" column is the text "Contributing Cause: No backup server - Critical EDR Lost with no backup." In the "Corrective Action" column is the text "Installed CM backup server - server saved to disk nightly. Facilities will ensure power surge protection of all backup equipment." In the "Implement Date" column is the text "Completed".

Corrective Actions Knowledge Review 2

[View CR](#) [Submit CR](#)

Analyze the information from the CAP below. Focus on whether Acme Company missed an opportunity to apply an action to other processes. Select the answer that is most consistent with your analysis.

- This action was enough. They fixed the problem with the CM computer by installing a secondary computer.
- There is not enough information. They should look at other processes besides CM and determine if they need backup computers as well.

Description of Cause	Corrective Action	Implement Date
Contributing Cause: Power Spike and subsuqent surge crashed CM computer.	Installed secondary CM computer.	Completed
Contributing Cause: CM Manager failed to send EDR notifications.	Training will be held to reinforce casualty procedures.	2Q-2015

Check Answer

Based on the information provided, the second answer is correct. **One of the elements of an effective corrective action is to apply the correction to other processes if necessary.**

## **Long Description**

Two more entries of the CAP are displayed. The first entry is as follows. In the "Description of Cause" column is the text "Contributing Cause: Power Spike and subsequent surge crashed CM Computer." In the "Corrective Action" column is the text "Installed secondary CM computer." In the "Implement Date" column is the text "Completed". The second entry is as follows. In the "Contributing Cause: Description of Cause" column is the text "CM Manager failed to send EDR notifications." In the "Corrective Action" column is the text "Training will be held to reinforce casualty procedures." In the "Implement Date" column is the text "2Q - 2015".

### Corrective Actions Knowledge Review 3

[View CR](#) [Submit CR](#)

Analyze the information from the CAP below. Focus on whether Acme Company missed an opportunity to apply an action to other processes. Select the answer that is most consistent with your analysis.

- This action was enough. They fixed the problem with the CM computer by installing a secondary computer.
  
- They did not miss an opportunity. They found other processes besides CM and implemented this redundancy. They just did not list the other processes impacted by the action.

Description of Cause	Corrective Action	Implement Date
Contributing Cause: No Record of EDR available to send to QA and Task Lead.	Established backup policy and add CM backup computer. Implemented this redundancy across all Acme departments.	Completed

Check Answer

Based on the information provided, **they did not miss an opportunity**. Acme company implemented the corrective action across all Acme departments.

D

**Long Description**

Another entry of the CAP is displayed. In the "Description of Cause" column is the text "Contributing Cause: No record of EDR available to send to QA and Task Lead." In the "Corrective Action" column is the text "Established backup policy and add CM backup computer. Implemented this redundancy across all Acme departments." In the "Implement Date" column is the text "Completed".

## CAR Decision

[View CR](#) [Submit CR](#)

All of the requirements (6 of 6) from the CAR are displayed on the simulated computer screen below.

[Click here to access Acme Company's response to the CAR.](#) Ensure each of the required items are accounted for. Then answer the question on the next frame.

### CAR Information

THE WRITTEN RESPONSE MUST CITE THE CAR REFERENCE NUMBER IDENTIFIED ABOVE AND SHALL INCLUDE THE FOLLOWING

- No  Yes Root cause of the non-compliance(s)
- No  Yes Action(s) taken to correct the specific non-compliance
- No  Yes Corrective Action taken or planned to eliminate the cause(s) and prevent recurrence of the non-compliance, to include addressing people, process, and/or tools as indicated
- No  Yes Determination of whether other processes are affected by the identified root cause(s) / Determination of whether other products/services are affected by the identified root cause(s), including product already delivered to customer
- No  Yes Action taken to correct the weakness which allowed deficient products/services to be provided to the government for acceptance
- No  Yes Target date(s) for implementation of planned actions

D

### **Long Description**

A computer monitor displays the "CAR Information" section of the CAR eTool. The "CAR Information" section says, "The written response must cite the CAR reference number identified above and shall include the following." Then a list is displayed. Each item in the list has a "No" radio button and a "Yes" radio button beside it. Every "Yes" radio button is selected. The first list item is "Root cause of the non-compliance(s)", and its "Yes" radio button is selected. The second list item is "Action(s) taken to correct the specific non-compliance". The third list item is "Corrective Action taken or planned to eliminate the cause(s) and prevent recurrence of the non-compliance, to include addressing people, process, and/or tools as indicated". The fourth list item is "Determination of whether other processes are affected by the identified root cause(s) / Determination of whether other products/services are affected by the identified root cause(s), including product already delivered to customer". The fifth list item is "Action taken to correct the weaknesses which allowed a deficient products/services to be provided to government for acceptance". The last list item is "Target date(s) for implementation of planned actions".

### CAP Requirements Knowledge Review 3

[View CR](#) [Submit CR](#)

Based on all of the information provided, has Acme Company met all of the requirements (6 of 6) in the Corrective Action Request (CAR)?

Yes

No

Check Answer



The correct answer is **No**. There is an important piece of information missing from Acme Company's response to the CAR. The missing piece will be discussed on the next page.



**Long Description**

The DCMA CAR is displayed in the background. A portion of the CAR has been zoomed in. The portion is an excerpt that reads "Deficiency Report (EDR) 2014-14B. Although this nonconformance appears to be a cosmetic issue, the supplier must assure to the government that the correct torque was applied in accordance with EDR 2014-14B." Beneath the CAR is a computer monitor displaying the DCMA eTools welcome screen.

### Corrective Actions Knowledge Review 4

[View CR](#) [Submit CR](#)

Should you reject this response to your Corrective Action Request?

Yes

No

Check Answer



The correct answer is **Yes**. Acme Company's response to the CAR only addresses the root cause of the non-compliance, but it does not address the non-compliance itself.

#### Capstone Tag-Up 4

[View CR](#) [Submit CR](#)

You may have come to your own conclusions about the response to your CAR. But based on the limited information, a rejection is the most-likely outcome. The requirement was pretty explicit in the CAR.

[Click here to access Acme Company's response to the CAR, but now with the missing information added.](#)

You will see that a paragraph has been added to page 3 of Acme Company's CAR response. The paragraph is entitled "Action(s) taken to correct the specific non-compliance".

Will things be different when you get to the field?

I hope so.

I hope all of your suppliers respond to your CARs on time with sufficient information to evaluate their corrective actions.



## Module Completion

You have completed the content for this lesson.

At this point you should have completed all of the lessons in this course.

Please complete the Module Survey so you may receive credit for this course.

If you have closed or hidden the Table of Contents, click the Show TOC button at the top in the Atlas navigation bar.