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Monthly Newsletter:

JUN 2025



48 CFR 240 Part 3

What Aerospace Companies Need to Know



Overview: 48 CFR 240 sets forth new cybersecurity and procurement standards for aerospace firms contracting with the U.S. government.

Key Compliance Requirements:

1. Cybersecurity Maturity Model Certification (CMMC) Alignment – Companies must meet the required cybersecurity maturity level based on their contract classification.
2. Controlled Unclassified Information (CUI) Protection – Stricter data handling policies for CUI, with encryption and access control mandates.
3. Incident Reporting Protocols – Firms must report cyber incidents within 72 hours of detection.
4. Supply Chain Risk Management (SCRM) – Enhanced due diligence requirements for subcontractors and third-party vendors.

Compliance Strategies:

- Implement CMMC-compliant cybersecurity frameworks.
- Conduct regular security assessments and penetration testing.
- Establish a rapid response protocol for cyber incident reporting.



**Having issues with 48 CFR 240?
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NCR vs CAR

Non-conformances

A **Nonconformance Report (NCR)** documents instances where a product, process, or service does not meet specified requirements. It serves as a formal record of deviations from established standards, detailing identification, description, containment, and documentation of the issue. NCRs do not necessarily require an effectivity date unless the nonconformance impacts ongoing production or service delivery, in which case documenting effectivity ensures proper tracking and resolution.

A **Corrective Action Request (CAR)**, on the other hand, is initiated to eliminate the root cause of a nonconformance and prevent recurrence. CARs involve problem statements, root cause analysis, corrective action plans, implementation, verification, and documentation. Since CARs aim to resolve systemic issues, they typically require a **completion date** to ensure timely resolution and effectiveness verification. Effectivity documentation may be necessary when corrective actions involve procedural changes, training, or modifications to existing processes.

In summary, **NCRs may need effectivity documentation if they impact ongoing operations, while CARs require a timeline for completion to ensure corrective measures are implemented and verified.** If a nonconformance leads to a corrective action, both elements may be necessary to track resolution effectively.



**Having issues with NCRs vs CARs ?
Let CDS Advanced Quality Solutions help!**





PPAPs MSA (#6)

MSA, or **Measurement Systems Analysis**, in the IAQG PPAP process is all about ensuring that the tools and methods used to measure parts or processes are accurate and reliable.

Why It Matters: Imagine you're using a ruler to measure something, but the ruler itself is slightly off. That would lead to incorrect measurements, right? MSA helps make sure the "ruler" (or any measuring tool) is accurate and consistent.

What It Involves:

Checking Accuracy: Are the measurements correct? For example, if a part is supposed to be 10mm, does the tool consistently show 10mm?

Checking Repeatability: If the same person measures the same thing multiple times, do they get the same result?

Checking Reproducibility: If different people use the same tool to measure the same thing, do they get the same result?

The Goal: To ensure that the measurement system (tools, methods, and people) is reliable so that decisions based on those measurements are trustworthy.

It's like making sure your thermometer gives the right temperature every time, no matter who uses it or how often.

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APQP (Part 4)



Phase 3 – Process design and development. In the third phase of APQP, the focus is to ensure the comprehensive development of an effective manufacturing system.

Activities	Deliverables	Outputs
- Complete source selection and establish a supply chain risk management plan - Create a process flow diagram - Conduct Process Failure Mode and Effects Analysis (PFMEA) on the proposed process(es) and identify process KCs - Update the process based on the PFMEA risk mitigation plans, focusing on process KCs - Create the <u>control plan</u> including results of the PFMEA and KCs identification - Create process manufacturing instructions and documentation - Evaluate production readiness	Process flow diagram* - Floor plan layout Production preparation plan - Operator staffing and training plan (Human Resources) PFMEA* Process KCs Control plan* Preliminary capacity assessment Work station documentation Measurement Systems Analysis (MSA) Plan - Supply Chain Risk Management Plan Material handling, packaging, labelling, and part marking approvals* Production Readiness Review (PRR) results	- Production Readiness Review (PRR) - Completion of Applicable Activities/Deliverables

"Bold" text indicates requirements defined in this standard. *PPAP Req.



**Do you need help with APQP?
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PPAP's PFD, PFMEA, & CP (#3, 4, &5)



Process Flow Diagram: This is like a map showing the steps involved in making a product. It starts from raw materials and goes all the way to the finished product. Each step is laid out clearly, so everyone understands the process and can spot potential issues.

PFMEA (Process Failure Modes and Effects Analysis): This is a fancy way of saying "let's figure out what might go wrong and how bad it could be." Engineers analyze each step in the process to identify where failures could happen, how they might affect the product, and what can be done to prevent them. Think of it as looking for weak links in a chain.

Control Plan: After identifying potential issues with the PFMEA, the control plan comes in. It's a detailed checklist of things to monitor during production to ensure everything runs smoothly and meets quality standards. It tells workers what to check, how to check it, and how often.

All three work together to make sure the manufacturing process is efficient, reliable, and produces high-quality products. Want to dive deeper into any one of these?



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