

The background of the slide features the NASA logo, which consists of a blue circular field with a white orbital path and a red swoosh. The word "NASA" is written in large, grey, serif capital letters across the center of the logo. The entire logo is set against a black background with small white stars.

# NASA FAR Supplement (NFS) for Counterfeit Electronic Part Detection and Avoidance

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# Agenda



Summary and  
Reason for  
Policy Update



Timeline



Differences  
Between DFARS  
and NFS



Case – NFS  
2017-N010



Language



Contractor  
Responsibility



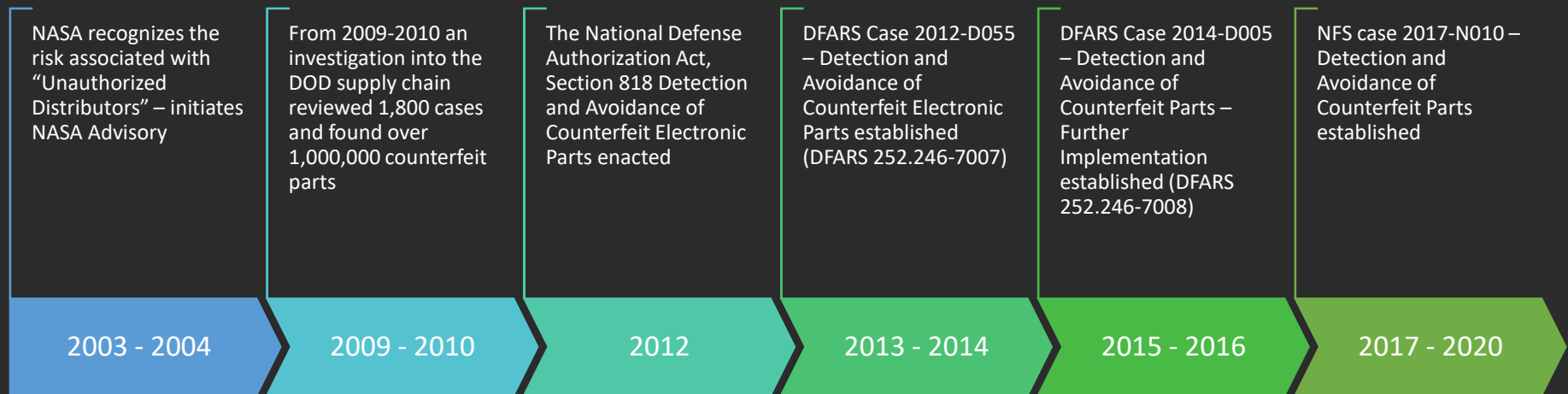
Implementation



Questions  
Concerns

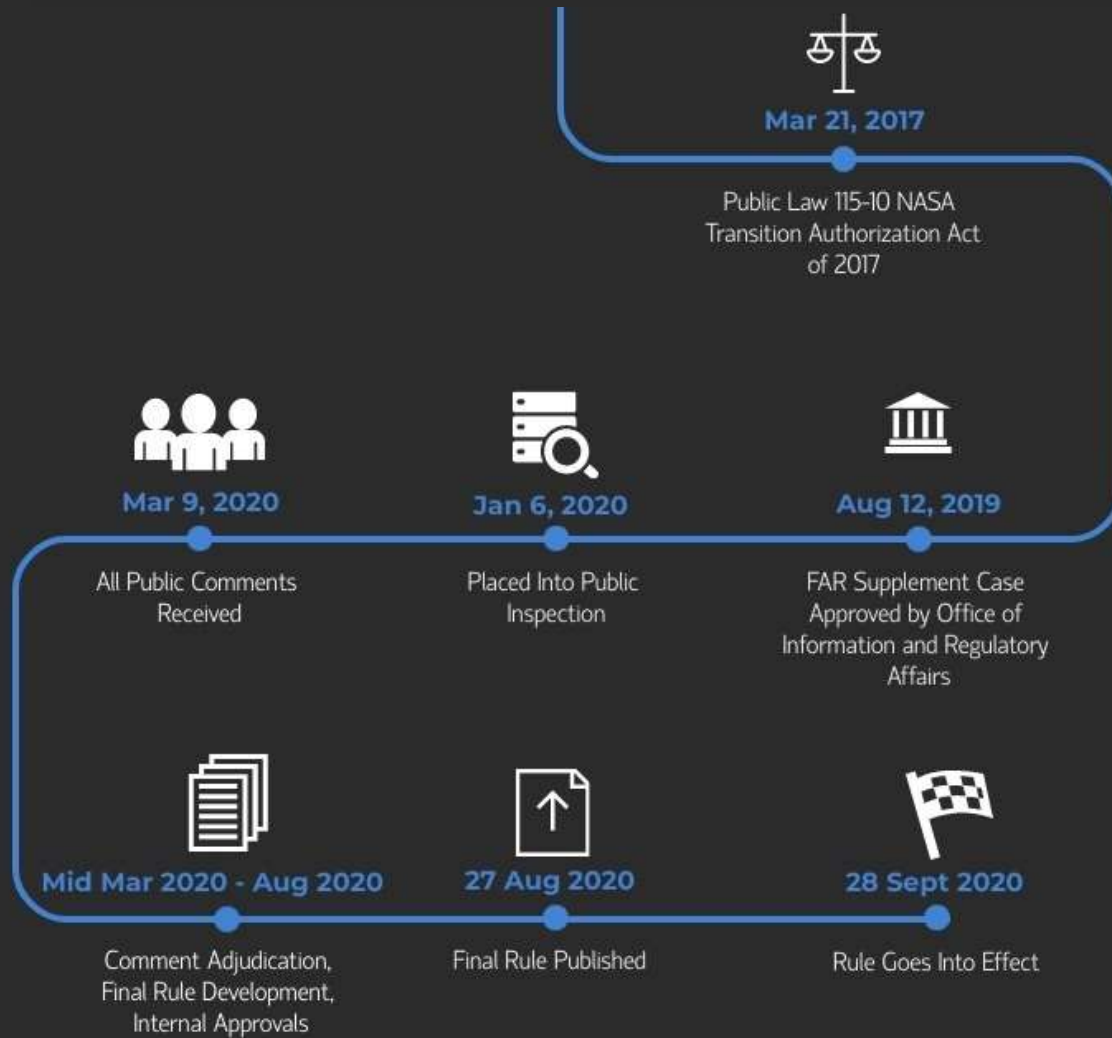


# How Did We Get Here?





# NFS Case 2017-N010 Timeline





# Key Differences Between DFARS and NFS



Definitions of “Electronic Part”



Counterfeit Electronic Part Detection and Avoidance System Requirements / Criteria



Corrective Action



Notification



GIDEP



Scope: Applies to electronic parts when its' presence in the NASA supply chain poses a danger to United States government astronauts, crew, and other personnel and a risk to the agency overall.

## NFS Case 2017-N010

- Defines Electronic Part, Counterfeit Electronic Part, Suspect Counterfeit Electronic Part. (1846.7001)
- Contractual requirement criteria for counterfeit avoidance (1846.7003)
- Purchases must be made from OEM and establishes contingency criteria (1846.7002)
- Associated Costs (1831.205-70)
- Applicability to commercial item purchases and those under SAT (1812.301)



Electronic Part: A discrete electronic component, including a microcircuit, transistor, capacitor, resistor, or diode, that is intended for use in a *safety or mission critical application*.

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Counterfeit Electronic Part: means an **unlawful or unauthorized reproduction**, substitution, or alteration that has been knowingly mismarked, misidentified, or otherwise misrepresented to be an authentic, unmodified electronic part from the original manufacturer, or a source with the express written authority of the original manufacturer or current design activity, including an authorized aftermarket manufacturer. Unlawful or unauthorized substitution includes used electronic parts represented as new, or the false identification of grade, serial number, lot number, date code, or performance characteristics.

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Suspect Counterfeit: An item for which credible evidence (including but not limited to, visual inspection or testing) provides reasonable doubt that the item is authentic.

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Safety Critical: A product whose failure, malfunction, or absence could cause a catastrophic or safety-critical failure resulting in the loss of or serious damage to the craft/vehicle/facility, loss of mission, an unacceptable risk of personal injury, or loss of life.

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Mission-Critical: A critical item or critical process whose failure would result in failure of a mission to meet Level 1 requirements. Mission-critical items or processes may be identified using system design and reliability analyses such as a failure modes and effects analysis (FMEA).

# Definitions



# 1846.7003 Contract Clause Language

For acquisitions with **covered contractors** as defined in section 1846.7001, use the clause at 1852.246-74, Contractor Counterfeit Electronic Part Detection and Avoidance, in solicitations and contracts, when procuring—

- (a) **Electronic parts**;
- (b) End items, components, parts, or assemblies containing electronic parts; or
- (c) Services, if the covered contractor will supply electronic parts or components, parts, or assemblies containing electronic parts as part of the service.

Covered Contractor: a contractor that supplies an electronic part, or a product that contains an electronic part, to NASA.





1852.246-74

## Sources of Electronics Parts

In accordance with section 823(c)(3), the NASA Transition Authorization Act of 2017 (Pub. L. 115-10), the covered contractor shall—

(1) Obtain electronic parts that are in production by the original manufacturer or an authorized aftermarket manufacturer or currently available in stock from—

(i) The original manufacturers of the parts;

(ii) Their authorized dealers; or

(iii) Suppliers who obtain such parts exclusively from the original manufacturers of the parts or their authorized dealers;

(2) If electronic parts are not in production or currently available in stock from suppliers as stated in paragraph (b) of this clause, the covered contractor shall obtain electronic parts from **NASA identified suppliers** or contractor-approved suppliers for which—

(i) The covered contractor assumes responsibility for the authenticity of parts; and

(ii) The covered contractor performs inspection, testing and authentication of parts; and

(iii) The covered contractor obtains traceability information for the electronic parts (e.g., data code, lot code, serial number) and provides this information to the contracting officer upon request; and

(iv) The selection of contractor-approved suppliers is subject to review and audit by the contracting officer



1852.246-74

## Notification

The covered contractor, including subcontractors, shall notify the NASA contracting officer in writing not later than 30 calendar days after the date the covered contractor becomes aware, or has reason to suspect, that any end item, component, part or material contained in supplies purchased by NASA, or purchased by a covered contractor or subcontractor for delivery to, or on behalf of, NASA, contains a counterfeit electronic part or suspect counterfeit electronic part.



1852.246-74

Costs related to counterfeit electronic parts and suspect counterfeit electronic parts.

The costs of counterfeit electronic parts and suspect counterfeit electronic parts and the costs of rework or corrective action that may be required to remedy the use or inclusion of such parts are unallowable, unless—

- (1) The covered contractor has a system to detect and avoid counterfeit electronic parts and suspect counterfeit electronic parts that has been reviewed and approved by NASA or the Department of Defense pursuant to **48 U.S.C. 244.303**
- (2) The covered contractor, including a subcontractor, notifies the applicable NASA contracting officer in writing in accordance with paragraph (c) of this clause; or
- (3) The counterfeit electronic parts or suspect counterfeit electronic parts were provided to the covered contractor as Government property in accordance with part 45 of the Federal Acquisition Regulation.



# Counterfeit Electronic Part Detection and Avoidance System Criteria (DFARS 252.246- 7007)

1. Training of personnel.
2. Inspection and testing of electronic parts, including criteria for acceptance and rejection.
3. Processes to abolish counterfeit parts proliferation.
4. Risk-based processes that enable tracking of electronic parts from the original manufacturer to product acceptance by the Government, ...IAW paragraph (c) of the clause at 252.246-7008
5. Use of suppliers IAW 252.246-7008.
6. Reporting and quarantining of counterfeit electronic parts and suspect counterfeit electronic parts.
7. Methodologies to identify suspect counterfeit electronic parts and to rapidly determine if a suspect counterfeit electronic part is, in fact, counterfeit.
8. Design, operation, and maintenance of systems to detect and avoid counterfeit electronic parts and suspect counterfeit electronic parts.
9. Flow down of counterfeit detection and avoidance requirements.
10. Process for keeping continually informed of current counterfeiting information and trends.
11. Process for screening the Government-Industry Data Exchange Program (GIDEP) reports and other credible sources of counterfeiting information.
12. Control of obsolete electronic parts.



1812.301

Solicitation  
Provisions and  
Contract Clauses  
for the Acquisition  
of Commercial  
Items Language

(f)(i) The following clauses are authorized for use in acquisitions of commercial items when required by the clause prescription:

1852.246-74, Counterfeit Electronic Part  
Detection and Avoidance



# Contractor Responsibilities



Obtain electronic parts that are in production by OEM or follow contingency criteria



Report - to the contracting officer - counterfeit or suspect counterfeit parts



Flow down contract requirements to subcontractors



Corrective Action



# Regulatory Flexibility Act and Impact to NASA Contractors



Federal Agencies must consider the impact of regulations on small businesses



This NFS only applies to Covered Contractors



## Reporting

Report if the following conditions are present in the supply chain:

- Counterfeit
- Suspect counterfeit



Questions?

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