Compliance with Aerospace Quality Assurance Standard AS9100

JAXA/ESA/NASA

Trilateral Safety and Mission Assurance Meeting

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Office of Safety and Mission Assurance

United States Federal Acquisition Regulations (FAR) Part 46, Quality Assurance

Contract quality requirements: Requirements in the contract relating to the quality of the product and those contract clauses prescribing inspection, and other quality controls incumbent on the contractor, to assure that the product conforms to the contractual requirements.

The extent of quality assurance is based upon the complexity and criticality of the contract item.

Government contract quality assurance: The various functions, including inspection, performed by the Government to determine whether a contractor has fulfilled the contract obligations.

The Government is required to perform "all actions necessary" to verify whether supplies conform to contract quality requirements.

NASA Quality Roadmap

Quality System Requirements for Activities Performing Work					
	AS9100	AS9003	FAR Inspection Clause(s)	ISO 9001	Quality Clauses (ARP 9009)
Critical and Complex Work	X				X
Critical / Not Complex Work		X			X
Non-Critical Work			X		X
Engineering and Quality Assurance Support Services				X	

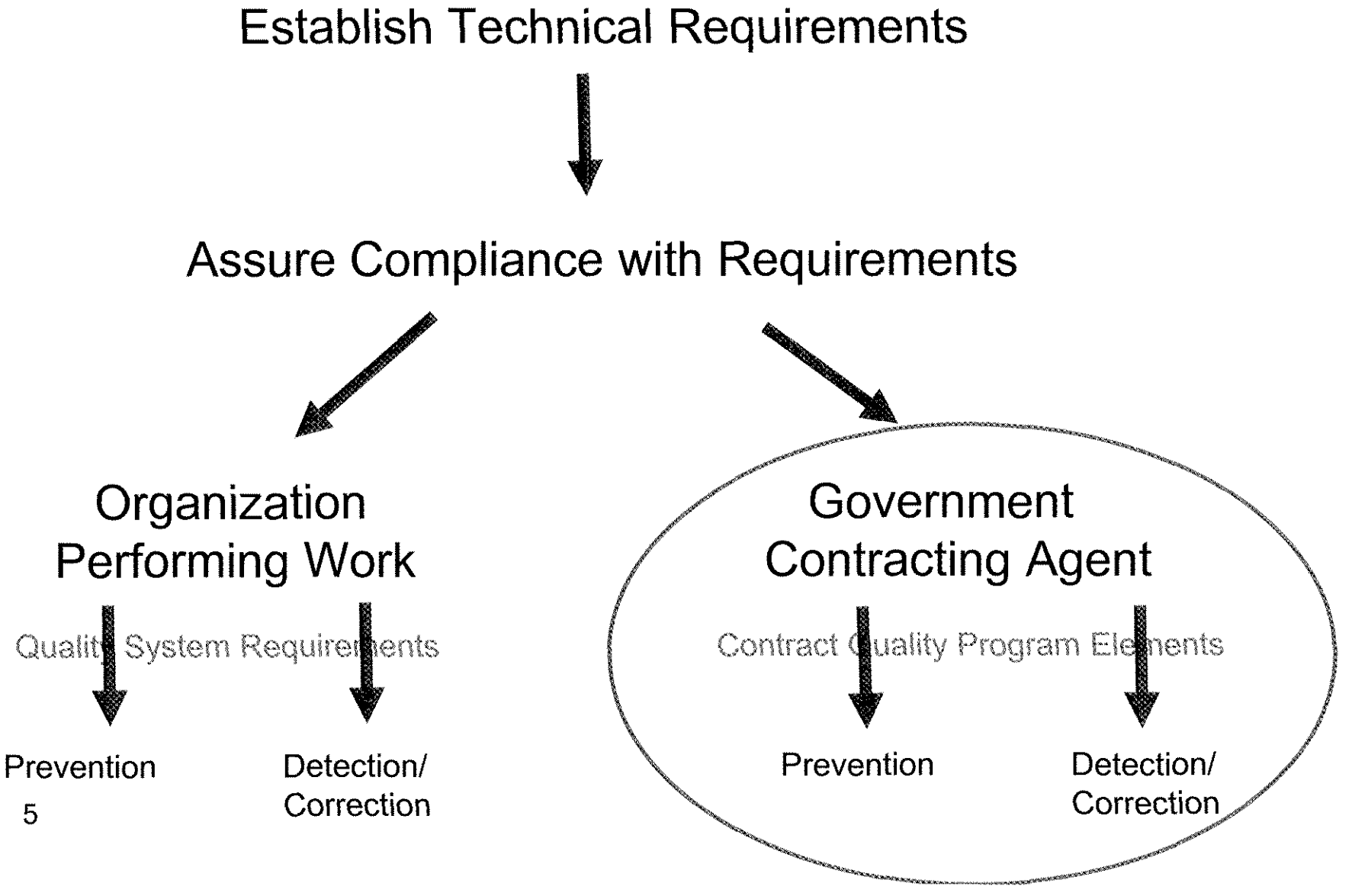
AS9003 Inspection and Test Quality Management System

- Management Responsibility
- Quality System
- Contract Review
- Design Control
- Document & Data Control
- Purchasing
- Process Control
- Training
- Servicing
- Corrective Action
- Control of Customer Supplied Product
- Product Identification and Traceability
- Inspection and Testing
- Control of Nonconforming Product
- Handling, Storage, Packaging, Preservation and Delivery
- Control of Quality Records
- Internal Quality Assessment
- Statistical Techniques

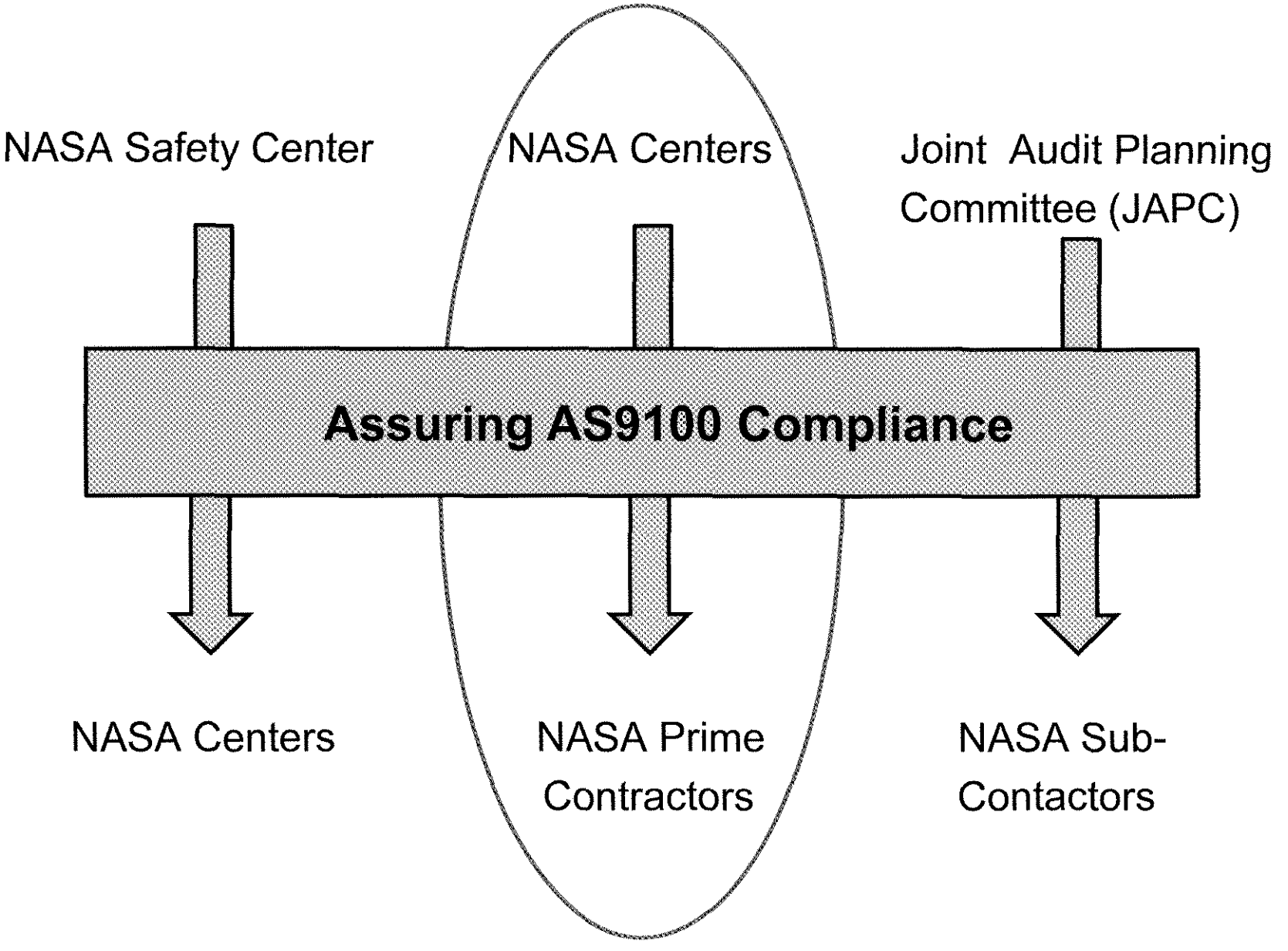
Noncomplex Product

A hardware item whose conformance of key characteristics can be wholly established through measurement, inspection, and/or test of the end item

NASA Quality Roadmap



Government Oversight Responsibilities



NASA Procedural Requirements

COMPLIANCE IS MANDATORY

NPR 8735.2A
Effective Date: August 02, 2006
Expiration Date: August 02, 2011

Request Notification of Change (NASA Only)

Subject: Management of Government Quality Assurance Functions for NASA Contracts

Responsible Office: Office of Safety and Mission Assurance

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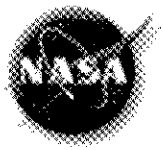
Quality System Evaluation

2.5.1 The contractor's quality system shall be reviewed to ensure compliance with invoked quality program requirements.

Quality system evaluation may be conducted as a single audit or as a combination of discrete audits that collectively cover all required quality system elements.

2.5.2 The frequency of quality system audits shall be based on the contracted organization's quality history, but no less than once every two years.



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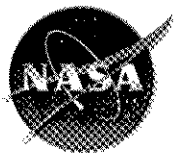

NPR 8735.2A
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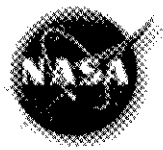
Risk-Based Auditing

2.5.3 The following quality system elements shall be reviewed where applicable and where invoked upon the contractor:

a. Control of documents.
b. Control of records.
c. Configuration management.
d. Personnel training, qualifications, and compe
e. Design and development control.
f. Purchasing: Supplier evaluation/selection; pu
technical/quality requirements; verification of
g. Production control and process control.
h. Product identification, traceability, and identif
i. Preservation of product and foreign object pr
j. Calibration and control of monitoring, measuring, and test devices.
k. Monitoring and measurement: Internal audit; monitoring and measurement of processes; monitoring and measurement of product.
l. Control of nonconforming product.
m. Quality data analysis/trending.
n. Corrective action.
o. Control of Government Furnished Property.
p. Other quality program elements considered to represent unacceptable risk.

"Quality system audit attribute selection shall be based on the importance of the (AS9100) attribute toward achieving product conformity."



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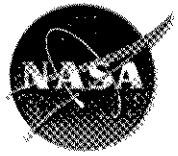

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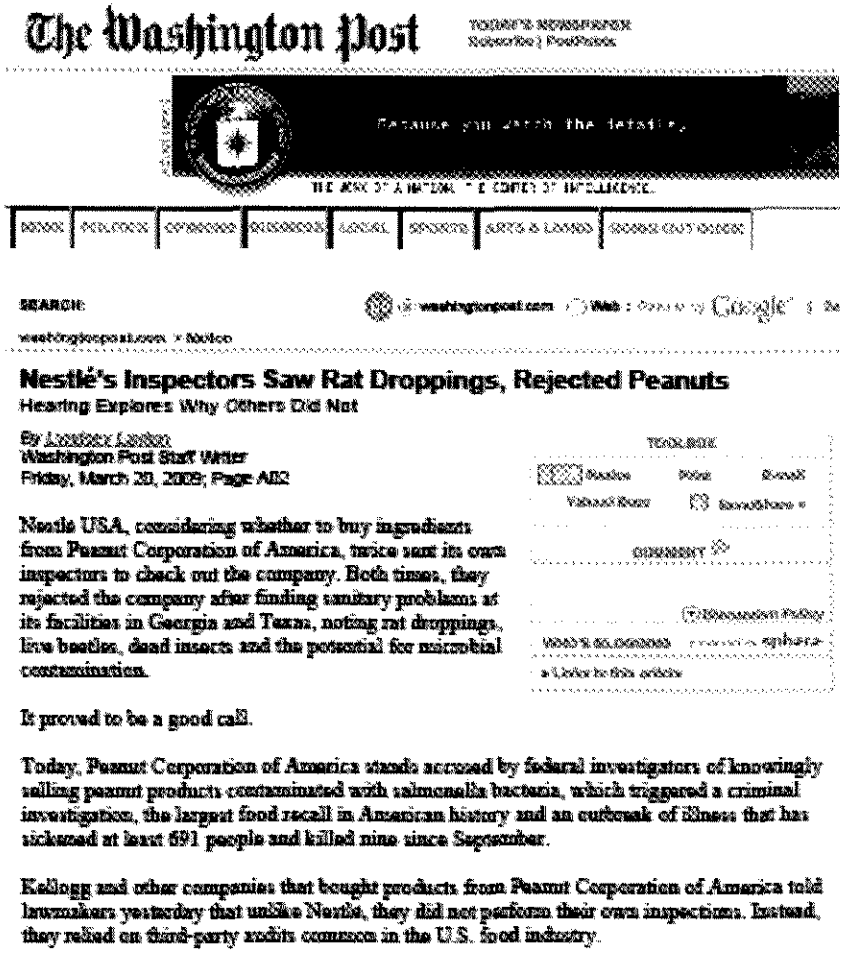
Assuring Quality System Effectiveness

2.5.6 Quality system auditing shall include product sampling, where applicable, to validate quality system effectiveness.

2.5.6.1 Product sampling shall be based on the criticality, complexity, and maturity of the product, personnel safety considerations, and the supplier's past quality performance related to the product.

Third Party vs Second Party Oversight

NASA Endorses third party certification in accordance with AS9104 to augment, **but not replace**, Governmental oversight to assure contractor quality system compliance.



The Washington Post

Nestlé's Inspectors Saw Rat Droppings, Rejected Peanuts

Hearing Explores Why Others Did Not

By Lyndsey Layton
Washington Post Staff Writer
Friday, March 28, 2009; Page A02

Nestle USA, considering whether to buy ingredients from Peanut Corporation of America, twice sent its own inspectors to check out the company. Both times, they rejected the company after finding sanitary problems at its facilities in Georgia and Texas, noting rat droppings, live beetles, dead insects and the potential for microbial contamination.

It proved to be a good call.

Today, Peanut Corporation of America stands accused by federal investigators of knowingly selling peanut products contaminated with salmonella bacteria, which triggered a criminal investigation, the largest food recall in American history and an outbreak of illness that has sickened at least 691 people and killed nine since September.

Kellogg and other companies that bought products from Peanut Corporation of America told lawmakers yesterday that unlike Nestle, they did not perform their own inspections. Instead, they relied on third-party audits common in the U.S. food industry.