



# Counterfeit Parts: A Lockheed Martin perspective

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**Parts Standardization & Management  
Committee Conference**

**Deputy Director  
Procurement Quality  
LM Space Systems**

# Counterfeit Parts Agenda



- **Industry involvement in AIA and SAE:**
  - influencing the regulatory environment
- **SAE G-19 (AS5553) history/process/status/further work**
- **Aerospace Industries Association:**
  - Overview of proposed AIA CF IPT activity, tasks and policy recommendations
  - Proposed AIA CF IPT policy recommendations and other work products
- **Lockheed Martin actions**

**Positive engagement with industry associations**

# SAE G-19: Industry/Government Collaboration on Counterfeit EEE Part Control Spec



- **AS5553, Counterfeit Electronic Parts: Avoidance, Detection, Mitigation and Disposition, released April 2009**
  - 1<sup>st</sup> meeting Sept 2007, approx. 40 members
  - Requested by NASA HQ, supported by multiple industry primes and DOD military customer base
  - AS5553 scope:
    - DOD Prime Contractors and lower tiers who purchase parts for installation into the products they provide to external customers

# SAE G-19: AS5553 contents



- **Contains only 7 requirements**
  - **Maximize availability of authentic parts throughout product lifecycle (anticipate and manage obsolescence)**
  - **Establish preference to buy from OCMs or authorized distributors**
  - **Specify contract/PO quality requirements**
  - **Detect CF parts through incoming inspection**
  - **Detect, verify, control CF parts after initial Rec. Insp.**
  - **Control suspected or confirmed CF parts to prevent re-entry into supply chain**
  - **Report CF parts to customers, and other authorities, including use of GIDEP**

# SAE G-19: AS5553 status



- **During development**
  - Simplification of requirements
  - Elimination of prescriptive requirements
  - Allowance of broker purchases with risk mitigations
- **Bulk of document is appendices on industry best practices**
  - Were originally prescriptive requirements
  - Topics include design, procurement, inspection, test, etc.
- **Anticipate AS 5553 customer flowdown is imminent**
  - NASA HQ Letter sent to all NASA centers requiring flow to new contracts, evaluation to mod existing contracts

# AIA Counterfeit Parts IPT



- **Chartered Mid-2007**
  - Currently subordinate to Quality Assurance Council
  - Meets face-to-face quarterly
- **IPT Executive Committee**
  - Boeing (chair), BAE Systems, LM
- **Overall goal to engage industry and gov't**
  - Influence regulations and gov't policy
  - Create specs for CF control plans
  - Create training requirements, materials
  - Act as industry single point clearing house for information sharing, communication

# AIA Counterfeit Parts IPT



- **Policy task team charter**
  - Recommend changes to current US government acquisition and procurement policies to avoid introducing counterfeit parts and materials into aerospace, space and defense products.
- **Status as of April 1**
  - Supplier Selection- vetting underway
  - Counterfeit Component Case Reporting-vetting underway
  - Component Obsolescence –IPT approval pending
  - Counterfeit Component Disposition –IPT approval pending
  - Duties of Importers –In process; recommendation expected by ???

# AIA Counterfeit Parts IPT



- **Other activities**

- Requesting official AIA endorsement of AS5553
- Preparation of Counterfeit Parts Control Plan, est. July 2009 completion
- Evaluation and prep of CF part awareness and control training materials, and mechanical parts – in progress
- Review of proposed Ewaste regulation in Customs Reauthorization bill
- Endorsement to develop SAE AS 5553 compliance and verification checklist document
- Recommendation to establish 3d party registration system for AS5553 (Nadcap? AAQG?)



# CF Parts Industry activity



- **Other industry activity**
  - **Independent Distributors Electronics Association**
    - **IDEA Std 1010A, inspection standard**
    - **Promulgated as comprehensive detection training**
  - **ERAI (non-acronym)**
    - **Trade association for self reporting and policing counterfeit parts occurrences**
    - **Membership includes non-GIDEP reported incidents**
  - **Various other “entrepreneurial” approaches**
    - **Secure Safe Seal**
    - **3d party “certification” to AS5553, or other non-spec associated approaches**

# CF Parts Customer developments



- **Missile Defense Agency**
  - Impacted by several cases of CF EEE parts incorporated in product
  - Ongoing effort to establish trusted distributors list
- **Fallout potential from final DoC survey results and analysis**
  - Potential onerous spec generation
  - MAP, TOR, other prescriptive QMS reqts. Documents
  - Support for AS 5553

# CF Parts Lockheed Martin developments



- **LM Created a new Corporate Terms and Conditions Clause, January, 2009**
  - Imposes stringent liability on suppliers who provide counterfeit parts
- **LM intends to flow AS9120 and AS5553 proactively in advance of customer flowdowns**
  - Exploring retroactive imposition on existing contracts
- **LM Believes GIDEP to be a highly useful tool**
  - How to encourage further support?
- **Other developments**
  - Mechanical parts and materials more problematic
  - EEE supply base “looks” different