



Aerospace Industry: Challenges and Combating Counterfeit Parts

Kirsten M. Koepsel

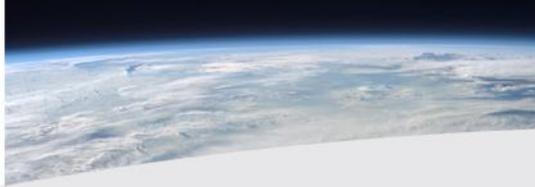
Director of Legal Affairs & Tax, AIA

May 12, 2011



Definition from AIA white paper

- **Definition:**
 - Counterfeit product or part: A product produced or altered to resemble a product without authority or right to do so, with the intent to mislead or defraud by passing the imitation as original or genuine. (as defined in the AIA Counterfeit Parts Integrated Project Team)
 - Counterfeiting: manufacturing and distribution of products bearing counterfeit marks



- Conduit fittings
- Circuit breakers
- Control relays
- Control switches
- Extension cords
- Dry-cell and cell-phone batteries
- Industrial automation software
- Motors
- Welding electrodes
- Microchips
- Automotive parts including brake pads

What has been counterfeited?

- Electrical connectors
- Electrical receptacles
- Fuses
- Ground-fault circuit interrupters
- Ground rods
- High voltage surge arrestors
- Lamps (light bulbs) and lamp ballasts
- Smoke alarms
- Wire and cable
- Electrical cords
- Aerospace related product
- Ball bearings



What is the issue for aerospace?

- Long life cycle products
- Diminishing manufacturing sources and material shortages (DMSMS)
 - Aerospace and defense products generally designed for a long life cycle
- Parts obsolescence
 - Electronic life cycle is short
- Unanticipated demand for newer developed products



What is the issue for aerospace?

- Examples of Life Cycles of Aircraft
 - DC-3 In service date Dec. 1935
Retirement date not determined
 - B-52 In service date Feb. 1955
Retirement date 2040
 - B737 In service date Feb. 1968
Retirement date not determined
 - F-16 In service date Aug. 1978
Retirement date not determined
 - Space shuttle In service date Apr. 1981
Retirement date 2011



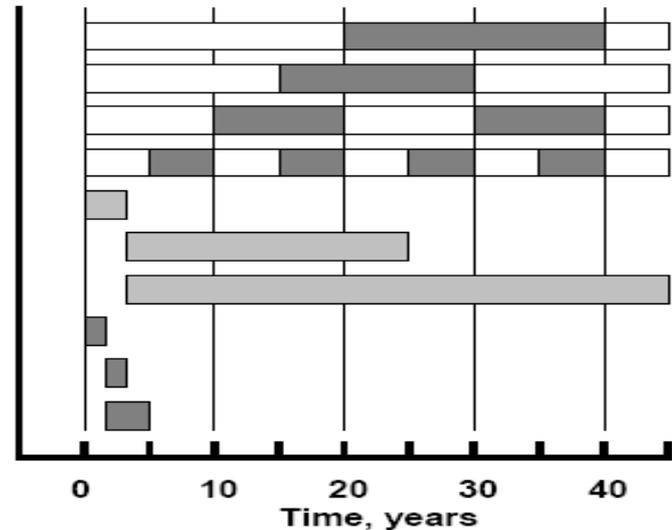
Challenges

- Time line of computer, aircraft and systems architecture development

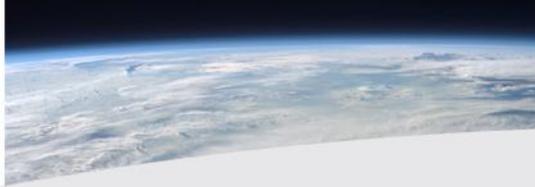
Technology element: System architecture
Software
Mfg. processes
Piece parts

Airplanes: Design
Production
Service

Computers: Design
Production
Service

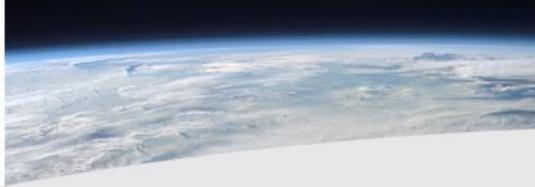


From “Combating Electronic Component Obsolescence by Using Common Processes for Defense and Commercial Aerospace Electronics” http://www.dsp.dla.mil/app_ui/content/documents/ndia_article.pdf



Procurement and Supplier Selection

- Procurement policies and selection of suppliers – use to reduce risk in the supply chain
- Defense Logistics Agency for certain items has established a Qualified Suppliers List for Distributors (QSLD) for certain items – avoiding automated ordering
- SAE AS5553, “Counterfeit Electronic Parts; Avoidance, Detection, Mitigation, and Disposition” developed by a joint industry/government group
- Aerospace products can be regulated under both Department of Defense and the Federal Aviation Administration
 - Different procurement rules: FAA has own set of federal regulations that differ from the rest of the USG
 - Voluntary Industry Distributor Accreditation Program: 3rd party accreditation of distributors



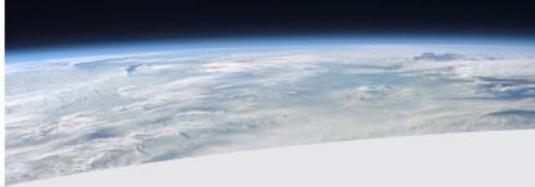
Reporting Suspect Counterfeit Product

- Not the same as reporting to law enforcement
- If a company is aware that that an counterfeit item has been discovered, reporting it to the rest of industry is beneficial
- If have a USG contract, can be a member of the Government Industry Data Exchange Program (GIDEP)
 - From their website: “a cooperative activity between government and industry participants seeking to reduce or eliminate expenditures of resources by sharing technical information essential during research, design, development, production and operational phases of the life cycle of systems, facilities and equipment.”
- FAA has a reporting mechanism: Suspect Unapproved Parts (SUPs) Program



Disposition of counterfeit product

- Proper disposition of known or suspected counterfeit parts will prevent their reintroduction into the supply chain
- But – is the buyer required to pay for the parts if counterfeit and not return to the source
- If counterfeits are returned, the part can then be re-sold and can re-enter the supply chain at someone else's facility
- Returning product can/could allow counterfeiters to learn that their attempts were detected
- FAA has guidelines regarding disposition of aircraft parts basically mutilation



Other issues to consider for aerospace

- Component obsolescence – develop a proactive approach
- Counterfeit parts control plan – outlines the processes a company will use to mitigate the risk, disposition and the reporting of counterfeit parts
- Standards for mechanical parts and materials
- Training internally and throughout the supply chain
- Duties of importers
 - Should importers be required to accurately report the authenticity of their imported goods
 - CBP have statutory authority to consult trademark holders for assistance in determining whether or not imported goods are authentic



For further information

■ Contact:

Kirsten M. Koepsel, JD, LLM

Director, Legal Affairs & Tax

Aerospace Industries Association

1000 Wilson Blvd., Suite 1700

Arlington, VA 22209

(p): 703.358.1044

kirsten.koepsel@aia-aerospace.org

www.aia-aerospace.org