

#### **NAVAIR DMSMS Team**

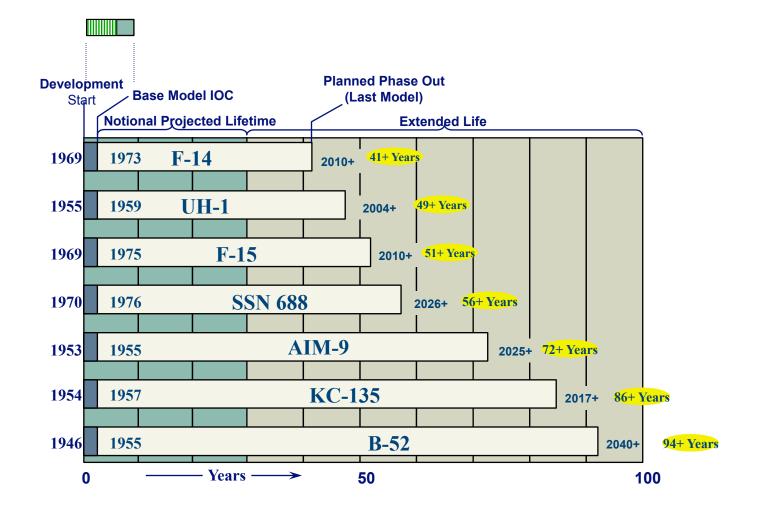
#### Counterfeiting It's Worse Than You Think!

Ric Loeslein AIR 6.7.1.6 NAVAIR DMSMS Team Lead 301-342-2179 <u>George.Loeslein@navy.mil</u>

NIST Product Authentication Information Management Workshop February 17-18, 2009

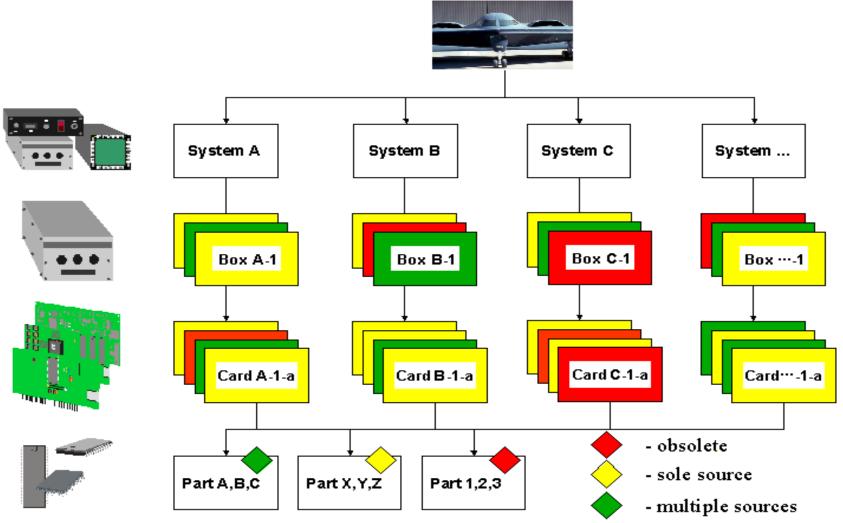


### Weapon System Life Cycle





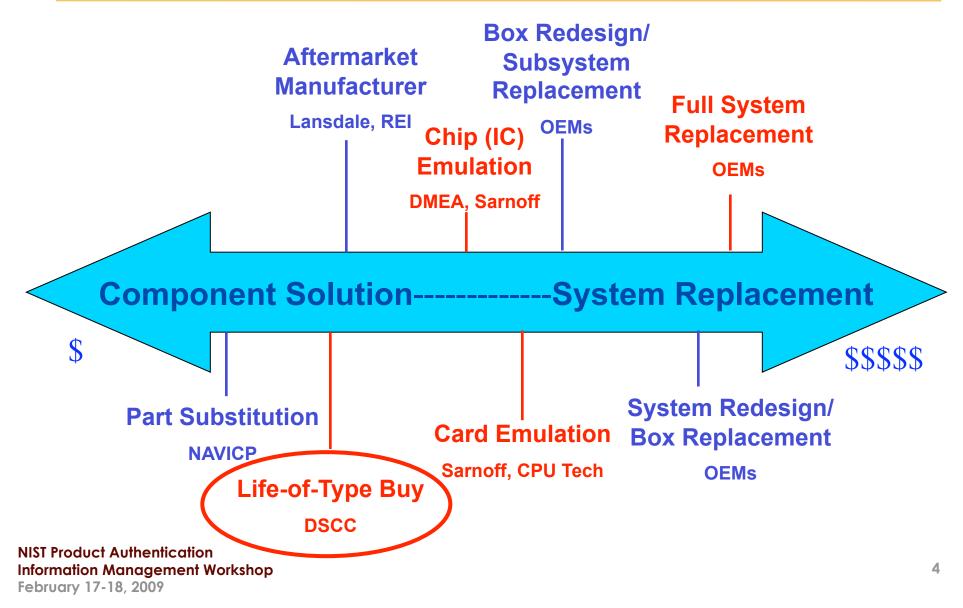
### **Sustainment Challenges**



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### **DMSMS Mitigating Options**





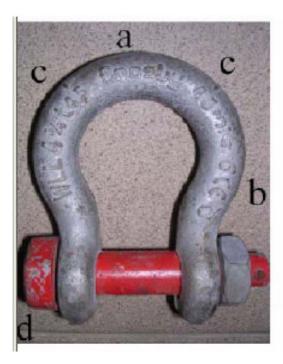
### **Counterfeit Electronics**

- Broad Definition
- FAR Input
- The definition of counterfeit components should focus on imitations and unauthorized copies or replicas of an OEMs product that have been deliberately misrepresented or deceptively made to appear to be a genuine OEM product. The definition should include:
  - An unauthorized copy
  - A product that is misrepresented to conform to original OEM design, model, and/or performance standards
  - A "used" OEM product sold as "new"
  - A product with false markings and/or documentation



#### **Its Not Just Electronic Parts**

#### **Counterfeit Crosby Shackle**





Counterfeit Crosby Shackle found in Europe. Not yet seen at DOE facilities as of early 2006. The one on the left is authentic and the one on the right is counterfeit. Note the spelling of "Crosby" on the left (authentic) with the first letter capitalized and the rest in lower-case letters. a) Crosby name embossed per Crosby logo, b) should see CE mark, c) 45-degree angle markings, d) pin stamped on head with traceable ID number.

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### **Department of Commerce Study**

- NAVAIR funded an impact study
- Expect results in May 2009
- Help provide the next step
  - Best practices
  - FAR/DLA revisions
  - PM recommendations
  - OEM recommendations
  - Training recommendations

#### IMPACT



- Programs & OEMs mitigating DMSMS with a "Life of Type" buy are encountering counterfeit items
  - Forces unfunded/unplanned engineering changes
- Testing protocols must be implemented





- Procurement from an Authorized Source
  - OEMs and their Authorized Distributors are the preferred source of the supply.
  - There should be no restriction/limit to competition to only OEMs and their approved sellers.
- <u>Manufacturer's/Authorized Distributor's Certification</u>
- Supply Chain Traceability



#### **Best Practices**

#### If Source is Independent Broker-Establish a Quality Testing Program

- Component test program visual / electrical / destructive
- Funds in escrow

#### • Notification:

- Impoundment/Quarantine
- Seller cost liability
- Reporting to other buyers and criminal investigative authorities
- Federal criminal penalties associated with falsification



#### **Best Practices**

#### GIDEP Participation

• Require participation and reporting of "suspicious components"

#### More PROACTIVE DMSMS:

- Team with OEM
- Monitor BOMs
- Predict product end dates
- Plan for After Market or Emulation Support for non re-design
   alternatives



### **DLA / DSCC Recommendations**

- Establish and maintain a list of trusted, qualified Independent Distributors and Brokers for product support whose product does not require testing.
- Revise automatic bidding process for FSC 5961-5962
- Test & verify



#### **OEM Recommendations**

• Adhere to Best Practices

#### • Team with Government Sponsor / Customer



### **Training Recommendations**

#### • Awareness

- DAU Course
- Presenting at Conferences
- Individual Program Managers
- OEMs
- Reporting Protocol



### Who Ya Gonna Call?

54% of Distributors
75% of Board Assemblers, and
52% of Prime/Sub Contractors
DO NOT KNOW what authorities to contact when they encounter counterfeits.

74% of distributors tell customers to contact their firm if they encounter a counterfeit product.

61% of OCMs,

Top Authorities Contacted (As a Percent of Total Companies)	
None at all	44%
GIDEP	14%
State/Local Authorities	9%
СВР	8%
DLA	8%
FBI	7%
FAA	6%
Department of Transportation	4%



### **FBI Reporting Process**

- Send email to: cyber\_crime\_fraud\_unit@ic.fbi.gov
- Include:
  - Name/POC for complaint call back
  - Name, address, phone number of suspected supplier company
  - Type of part (aircraft, vehicle, vessel, mechanical or electronic) and destination of the part
  - Name of expert witness to determine product authenticity



## **FBI: Investigative Information**

- Why is the part bad
- Consequences of the part being used
- Copies of all paperwork associated with the part and a POC for each stage (Chain of Custody requirement for criminal prosecution)
- Source of the parts, including subcontractors
- Keep all original paperwork, including yellow tags, and parts
- If possible, **DO NOT RETURN** the parts,
  - Prevents suspected parts from re-interring the supply chain and tipping off the supplier



## **Reporting Process (Continued)**

- Number of purchases of suspect, counterfeit or inferior parts from the supplier company?
- Length of time suspect company has been in business
- Has a complaint been entered into GIDEP or reported to another Law Enforcement database or agency?
- If a report has been filed with a Law Enforcement agency, please provide POC information for FBI follow-up



#### **FAR Change**

- NAVAIR Inputs
  - There should be no restriction/limit to competition to only OEMs and their approved resellers. While OEMs and their Authorized Distributors are the preferred source of supply, limiting contracts to only OEMs or OEM authorized suppliers would significantly impact fleet operations and support.



### FAR Change

- NAVAIR Inputs
  - Payment for these products subjected to this testing program shall be placed in escrow pending the successful testing.
  - If the product fails testing it will be impounded and reported to federal law enforcement (FBI) and GIDEP.
  - Purchasing authority may establish and maintain a list of trusted, qualified Independent Distributors and Brokers for product support whose product does not require testing.



### FAR Change

#### NAVAIR Inputs

• The scope of this FAR be expanded to include electrical components, FSCs 5905 Resistors, 5910 Capacitors, 5915 Filters and Networks, 5920 Fuses, Arrestors, Absorbers and Protectors, 5925 Circuit Breakers, 5930 Switches, 5935 Connectors, Electrical, 5940 Lugs, Terminals, Terminal Strips, 5945 Relays, Solenoids, 5950 Coils, Transformers, 5955 Oscillators, Piezoelectric Crystals, 5960 Electron Tubes and Associated Hardware, 5961 Semiconductor Devices and Associated Hardware, 5962 Microcircuit, Electronic, 5963 Electronic Module, 5965 Headsets, Handsets, Microphones, Speakers, 5970 Electrical Insulators and Insulating Materials, 5975 Electric Hardware Supplies, 5977 Elect Contact Brushes, Electrodes, 5980 Optoelectronic Devices and Assoc Hardware, 5985 Antennas, Waveguides, Related Equipment, 5990 Synchros and Resolvers, 5995 Cable, Cord, Wire Assemblies; Communications Equipment, 5996 Amplifiers, 5998 Electrical, Electronic Assemblies; Boards, Cards, Assoc Hardware, 5999 Miscellaneous Electrical and Electronic Components shall be purchased from the OCM or their authorized distributors.



#### **Next Steps**

- SAE AS5553 comply
- AIA Counterfeit IPT-mwilliams@aia.org
- Report to FBI and GIDEP
- Work with industry and government to develop and implement best practices



# **Questions**?

