



***Mr. Thomas Leahy, Deputy Director  
Engineering and Product Support  
NAVICP Code 07A, 215-697-2859, [thomas.leahy@navy.mil](mailto:thomas.leahy@navy.mil)***

# *Naval Inventory Control Point*

## *Mission:*

*To provide program and supply support for the weapons systems that keep our Naval forces mission ready*

## ***Organic Partners***

***NAVAIR - NADEPs & Lakehurst***

***NAVSEA - NUWC Keyport***

# *Naval Inventory Control Point*

## **Using the Organic Capability**

- *Standard Repair Agreements*
- *Partnership PBLs*
- *Engineering Investigations*
- *Logistics Engineering Change Proposals*

## **Obstacles to accomplishing our Mission**

- *Fewer Sources*
- *Faulty Parts*
- *Late Delivery*
- *Obsolescence*
- *Contract Default*
- *Contractor Bankruptcy*

# NAVICP / NADEP Initiatives

## F/A-18 Landing Gear



### NADEP Jacksonville / NADEP North Island Partnership Solution:

- Determined to be repaired organically as part of the maintenance plan
- Workload requirements negotiated each year
- Option to pursue commercial repair only if organic depots unable to meet demand
- Complies with Title 10

### NAVICP Vehicle:

- Standard Repair Agreement

## Auxiliary Power Unit



### NADEP Cherry Point Partnership Solution:

- NADEP Cherry Point provides the “touch labor” to repair the units
- OEM provides management and engineering services
- Reliability improvements avg of 30%
- Fill rate was 70% - now near 90%
- Guaranteed Deliveries in 2 days (IPG 1)

### NAVICP Vehicle:

- Partnership PBL between NAVICP-P, NADEP Cherry Point, and Honeywell

# NAVICP / NADEP Initiatives

## *AV-8B 30kVA Variable Speed Constant Frequency Generator*

### **Problem:**

- Many Failures
- Unknown Cause for Failure

### **NADEP Cherry Point Partnership**

#### **Solution:**

- NADEP Cherry Point traced the failures to a manufacturing issue on a controller board
- NADEP Cherry Point identified a method of repairing the board
- NAVICP funded the OEM to make the recommended repairs

### **NAVICP Vehicle:**

- Engineering Investigation

## *AN/APS-115 Antenna Feed Redesign*

### **Problem:**

- Poor Operation
- Many Failures
- Expensive Repairs



### **NADEP Jacksonville Partnership**

#### **Solution:**

- Redesign antenna feed assembly
- Huge increase in MTBF
- Makes more parts of the antenna serviceable by the fleet

### **NAVICP Vehicle:**

- LECP with a return on investment within 3 years

# NAVICP / NAVSEA

## NUWC Keyport Initiatives

### EA-6B Prowler Tailpipe Repair



#### Problem:

- OEM Filed for Bankruptcy
- Urgent Fleet Requirements (Backorders)

#### Keyport Partnership Solution:

- Secured Navy Tooling & Technology from Defunct Vendor Prior to Auction
- Teamed with NAVICP, NADEP JAX FST, NAVAIR, & Dayton T. Brown Engineering
- Developed Repair, Assembly & Inspection/Certification Processes

#### NAVICP Vehicle:

- Project Orders, Organic PBL

### F/A-18 Hornet Rate Sensor Assembly Gyro



#### Problem:

- \$20K Replacement Cost (Repairable)
- OEM No Bid Twice on Repair

#### Keyport Partnership Solution:

- “Surgical COTS Insertion”
  - Form/Fit/Function “Drop In” Replacement Minimizes System & Logistics Impact
  - COTS Technology & Custom Interface
- \$5.2K Replacement Cost (Consumable)
  - 15,000 hours MTBF

#### NAVICP Vehicle:

- LECP with 5 Yr. ROI on 700 unit buy

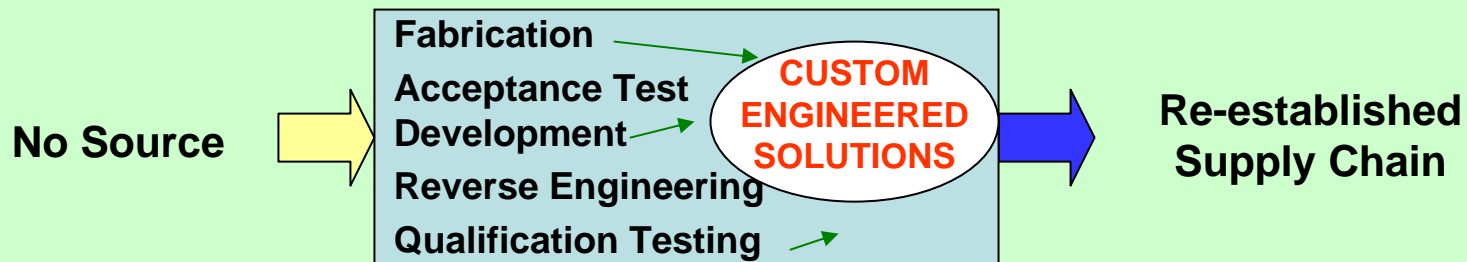
# NAVICP / NAVAIR / NAVSEA NADEPs / Keyport Initiatives

## Obstacle: Fewer Sources

- Caused by infrequent demand for material
- Limited or inaccurate technical documentation
- No incentive to maintain supply support
- Emergent Demands (Aircraft on Ground)

## Solution

- Custom Engineered Solutions
- Flexible Tooling and Manufacturing at NADEPs, LKE and Keyport
- Partner with FSTs to determine and perform acceptance testing



# NAVICP / NAVSEA *NUWC Keyport Initiatives*

## **Obstacle: Obsolescence**

- Component suppliers no longer produce the parts
- OEMs then “NO BID” the repair contracts
- OEMs submit unsolicited and costly re-design proposals

## **Solution**

- Find the part
- Partner with Keyport to find substitute parts
- Partner with NADEP FSTs and Keyport to define and perform qualification testing
- Use a tool that identifies and tracks obsolescence

**OMIS - Obsolescence Management Information System**



- **Provides NAVICP with an obsolescence health assessment and forecast**
- **Tracks obsolescence cases**
- **Facilitates synergy between platforms**
- **Facilitates analysis of alternate solutions**
- **Identifies life-cycle impacts**
- **Facilitates budget and POA&M development**

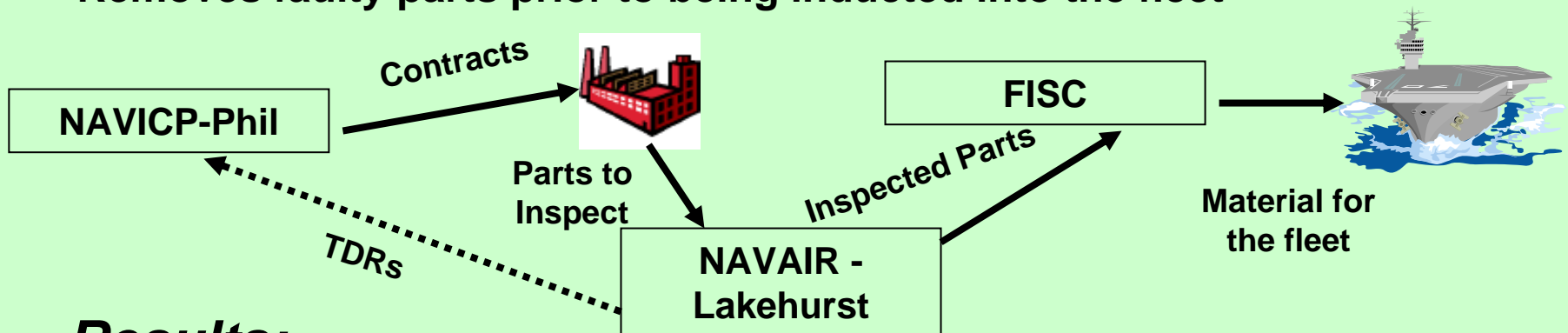
# NAVICP / NAVAIR *Lakehurst Initiatives*

## Obstacle: Faulty Parts

- Faulty Aircraft Launch and Recovery Critical Safety Items

## Solution

- NAVAIR Lakehurst Prototype Manufacturing Division
- Developed a Material Receipt and Inspection (MRI) Program
- Removes faulty parts prior to being inducted into the fleet



## Results:

- 100% inspection of 380 Critical Safety Items
- No Parts Quality Deficiency Reports from the fleet

# NAVICP / NAVAIR *Lakehurst Initiatives*

## Contractor Default

- Contractor produced 80 S-3 holdback bars – all failed inspection

## Solution:

- NAVICP issued order to NAVAIR Lakehurst Prototype & Manufacturing Division to manufacture 20 holdback bars

Element seated  
properly



## Results:

- Supply chain maintained until new contractor brought online
- Quality parts to the fleet

# *NAVICP Using Organic Capabilities*

## **Summary:**

- *Many obstacles in providing parts to the fleet*
- *NAVICP-Philadelphia teams with other Navy organizations*
  - NADEPs and FSTs*
  - NUWC Keyport*
  - NAVAIR Lakehurst*
- *NAVICP-Philadelphia is using PBLs for future support*
  - Organic and Partnership PBLs are areas of opportunity for maintenance activities*
- *Always looking for innovative ways to meet our mission*

# BACKUP SLIDES

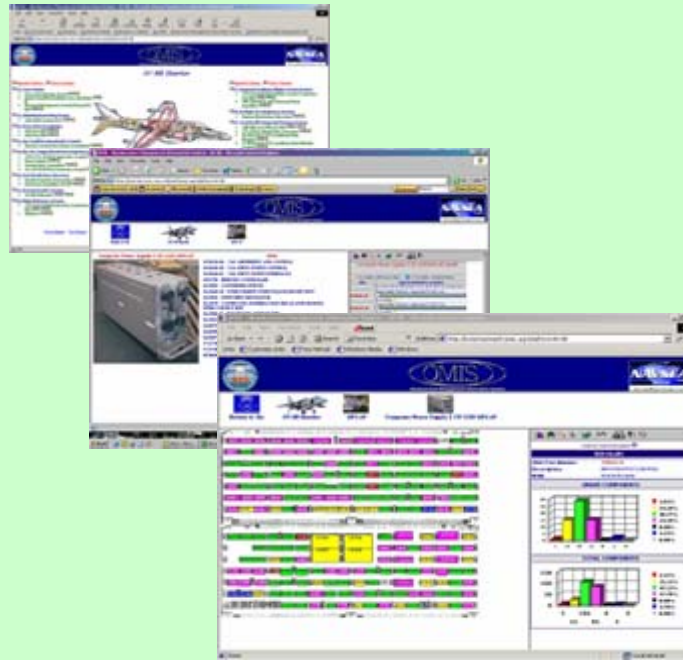
# NAVICP / NAVSEA Keyport Partnership In Obsolescence Management

## NAVICP Contribution

- Platform/System Configuration, Logistics and Usage Data
- 339 Screening and Evaluation
- Resolution Option Evaluation
- LOT Buy Calculations
- Resolution Funding Champion
- Set Program Priorities with Program Offices
- Recommends Changes to the Obsolescence Management Software

## System Security

- Designed to Support PBLs
- Password Control Protects Proprietary Information and Data Rights
- NMCJ Approved Legacy Application



## Keyport Contribution

- Web-Based Obsolescence Health Analysis and Forecast
  - Scalable from Platform to Card, including COTS and Legacy
- Source Research
- Alternative Identification
- Case Tracking
  - Research & Tracking Tools
  - Synergy between Platforms and Applications
  - Generic Component Part Number Search and Status
- “What-If” based Analysis of Alternatives and Costs
- Lifecycle Impact, Budget and POM Building Tools
- Cost Avoidance Tracking
- Alternate Part Qualification
- Reengineering Mitigation

# Faulty Part Examples



Terminals, Poured Type  
1-7/16" Diameter Cable  
p/n 421404-1 Rev L

Problem: Magnetic  
Particle Inspection  
Indicates **cracks**.....



Using Organic NAVAIR Lakehurst to develop unique solutions to improve Critical Safety Item Management

## Aircraft Launch and Recovery Equipment (ALRE)

### What's Complete

**Oct 2000** ... Return coded 645 items from DLA

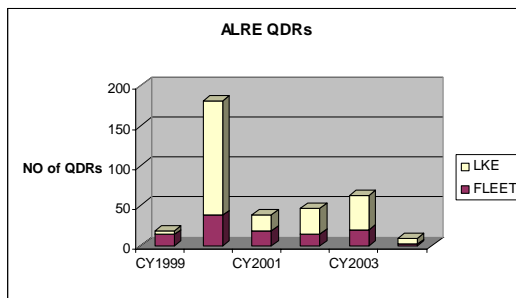
**Jan 2001** ... NAVAIR (LKE) / NAVICP MOA establishes Material Receipt Inspection (MRI) Program

**May 2001** ... Implement MRI, 100% inspection of roughly 380 CSI items (< 2% of ALRE parts)

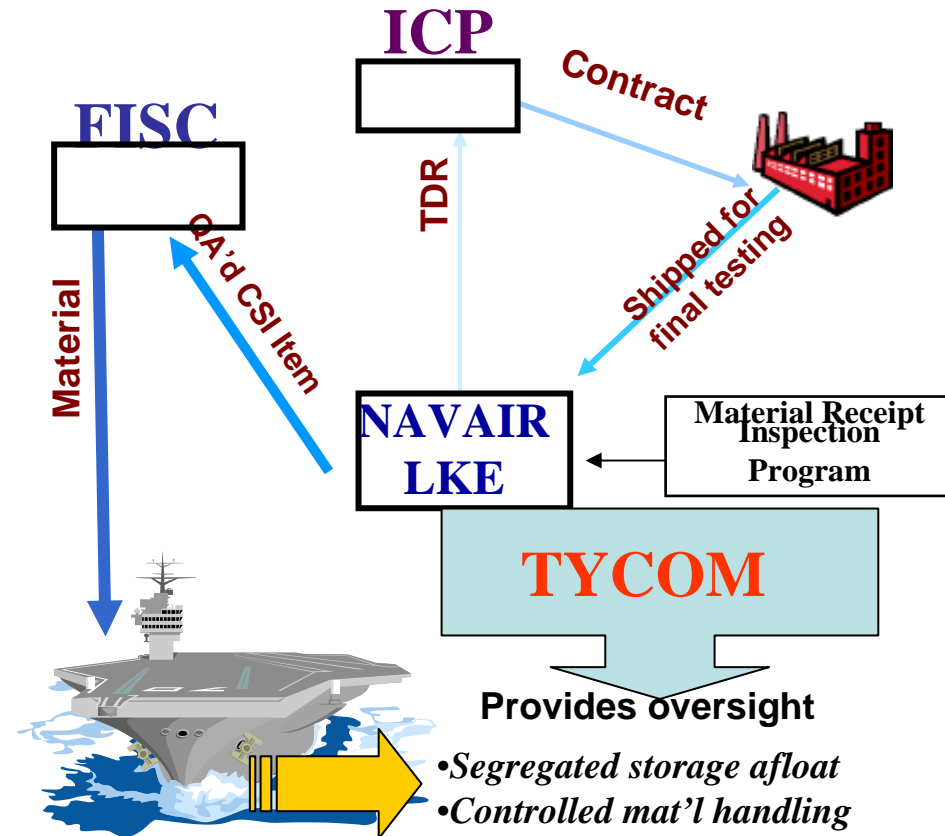
**Oct 2001** ... Issued policy restricting field procurement

**Feb 2002** ... AIR / SEA approve cross-functional Flight Safe concept

**RESULTS:**  
zero fleet PQDRs on critical parts



### MRI Process Flow





- 80 S3 Holdbacks contract issued to a Small Business
- 80 rejected at inspection
- pwo issued to NAVAIR LKE to manufacture 20
- NAVICP issues sole source to a different vendor
- NAVAIR LKE delivers 20
- NAVICP's second vendor is 10 months late

Having an Organic source at NAVAIR LKE allows NAVICP to issue more contracts to unproven small businesses



**ALRE FLIGHT SAFE Examples**



80 Holdbacks inspected – 80 Holdbacks rejected

What would the fleet do with this?

NAVAIR LKE is the Safety net for NAVICP