

# **Joint Cadmium Alternatives Team Overview**

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# Cadmium Alternatives Efforts

## **“High Strength Steel Joint Test Protocol for Validation of Alternatives to Low Hydrogen Embrittlement Cadmium for High Strength Steel Landing Gear and Component Applications” dated July 2003**

- 7 primary and 4 repair coatings evaluated (including 3 baseline coatings)
- Phase I tests completed in Oct. 2005
- Test results review and downselect vote Nov./Dec. 2005
- Sponsors: NAVAIR / AFRL / ESTCP

# Cadmium Alternatives Efforts

## Primary Coatings

- Depots IVD Aluminum
- F-35 Alumiplate
- C-17 Sputtered Aluminum
- CH-46 ZnNi
- S53 High Strength Stainless Steel
- LHE ZnNi
- CVD Aluminum
- Sputter Aluminum improvements
- Electrolytic Plasma Processing

## Repair Coatings

- Brush SnZn and ZnNi
- ZRC “zinc rich” Cold Galvanizing
- Aluminum Kinetic Metallization

# Cadmium Alternatives Efforts

- **Fasteners**

- NAVSEA Ground Support Equipment
- Army Missile Systems
- Marine Expeditionary Fighting Vehicle

- **Electrical Connectors**

- Joint Strike Fighter – Lockheed Martin
- SAE Committee AE 8C1

# Cadmium Alternatives Efforts

## Potential upcoming efforts

- Updated Cost Benefit Analysis for Cadmium and Cadmium Alternatives - JGPP
- JCAT Information Exchange – JGPP website

**Welcome!**