AMCOM Corrosion Program Overview
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Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18
Corrosion Prevention and Control (CPC)

Annual Corrosion Cost for Aviation and Missile Weapon Systems Is $1.4B

- The Army Corrosion Prevention and Control Program Addresses the Congressional Directives, DoD Policies, GAO Recommendations, and Army Regulations.

- CPC Provides Solutions to the Army’s Current Corrosion Related Problems, Reduces Future Burdens by Enhancing Maintenance Procedures, Improves System Designs, and Promotes Corrosion Control Awareness Throughout the Maintenance Community.

- Corrosion Control Is Addressed on Every Level From Initial System Design to Equipment Operation and Maintenance.

- The CPC Program Will Increase Readiness & Safety, Decrease Maintenance Burden, and Reduce Maintenance Costs.

Current Operational Awareness  
Future Operational Influence & Planning
Plan ➔ Equip ➔ Train ➔ Deploy ➔ Sustain ➔ Reconstitute/Recoup
AMCOM Corrosion Prevention Strategy

SUSTAINMENT
(Identify Corrosion Issues)
- CPC Service Centers
- CPC / NDT Training
- TM Updates
- Equipment Assessments
- RESET / Preset
- CPC SOPs / Guides

RESEARCH & DEVELOPMENT
(Develop Corrosion Solutions)
- Dem/Val New Technologies
- Lessons Learned
- R&D Projects

ACQUISITION
(Implement Corrosion Solutions)
- Contract Language
- CPC Plans
- 1st Unit Equip
- Material Fielding Plan

Focused Funding Strategy Is Key
AMCOM Corrosion Program

SUSTAINMENT

- Provide Immediate Near-Term Solutions & Implementation
  - Depots / AVCRADS
  - RESET
  - Field Maintenance
- Corrosion Maintenance / Procedures (TM, SOP, etc.)
- Corrosion Prevention and Control (CPC)/NDT Training
- CPC Sustainment Technology
  - Corrosion Repair Kits; Dehumidification; Corrosion Preventive Compounds; Protective Covers, etc.)
AMCOM Corrosion Program

“Identifying Corrosion Issues”
**AMCOM Corrosion Program**

**Corrosion Prevention and Control Center of Excellence (CPC CoE)**

- **Standard Maintainers’ Class**
  - Technician’s Class
  - On Site - Worldwide

- **Maintenance Managers’ Class**
  - All 151A “Walking Warrant” Classes at Ft Eustis
  - All AMMC/ANCOC Classes at Ft Rucker

- **Advanced Non-commissioned Officers’ Course (ANOC) at Ft Rucker**
  - AMCOM Logistics Assistance Representatives (LAR-U)
  - All ANCOC Classes (Ft Rucker)

- **Corrosion Monitor Class**
  - Army Requirements
  - Vendor and PM Presentations

**100+ Sites/Over 3928 Students Trained in FY10**
AMCOM Corrosion Program

Non-Destructive Test Center of Excellence (NDT CoE)

8  FORMAL TRAINING CLASSES (NGB)
   Per NGR 750-410, 32-80 hour blocks

16  TECHNICAL ASSIST VISITS (NG & AC)
    Pre-Deployment/Task Qualification/NDT Assessments

6  SUPPLEMENTAL – USAALS/Ft. Rucker
    Managerial Briefings for Warrant Officer 151A & 15K briefings
AMCOM Corrosion Program

NON-DESTRUCTIVETESTING PLATFORM SUPPORT:

CH-47 AFT Landing Gear
MH-47 AFT Slider Shaft
AH-64 Curvic Coupling
UH-60 Tail Rotor Gearbox
AMCOM Corrosion Program

**Tail Rotor Gearbox Output Bevel Gear**

- Evaluator and Inspection Kits Procured/Distributed
- Personnel Are Being Trained and Individually Task Qualified
- ASAM to Be Released Within 30 - 60 Days
AILING AGPUs
AMCOM Corrosion Program

Packaging & Storage Issues

Water in Containers
AMCOM Corrosion Program

SENSORS/MONITORING

- Corrosion, Corrosivity, Wetness, Humidity, Temperature, Coating Degradation, Environment
- Inside and Outside Locations
- Data Analysis/Remote Monitoring
- Storage, Transportation, and Deployment
AMCOM Corrosion Program

TECHNOLOGIES DEM/VAL

- Identification of New Technologies
- Dem / Val of New Technologies
- Data Collection / Analyses to Implement Proven Technologies

Examples: Corrosion Sensors for CBM+, Detergents, Soil/Water Analyses, Environmental Effects

Technology Integration With CBM Concept
AMCOM Corrosion Program

“Getting Technology to the War Fighter”
AMCOM Corrosion Program

CORROSION PREVENTIVE COMPOUNDS (CPC)

– New Improved CPCs
– SOP/TM Implementation
– Included in Corrosion Repair Kits/Unit Training
AMCOM Corrosion Program

AIRCRAFT PAINT INSPECTION

Color Chips/Coupons for Each Color
Handheld Coating Thickness Inspection Instruments
Digital Camera
IPT Determined Inspection Locator
AMCOM Corrosion Program

PROTECTIVE AIRCRAFT COVERS PROJECT

Vapor Transfer Properties (Eliminates Condensation)

Custom Fitted

Patented Material
AMCOM Corrosion Program

Dehumidification (DH) Project
Aviation Technical Supply

Humid & Corrosive Environment
Stores $17M Unique High Value Parts

The SOLUTION....

$92K Commercial Off The Shelf DH Unit
AMCOM Corrosion Program

DETECTING HIDDEN CORROSION
AMCOM Corrosion Program

ACQUISITION SUPPORT

– Provide Corrosion Prevention Assistance & Guidance
– Corrosion Prevention and Control (CPC) Plan Reviews
– Corrosion Prevention Action Teams (CPAT)
– Design for CPC Based Upon Lessons Leaned

CPC:
Design the System, Design the Support, Support the Design
AMCOM Corrosion Program

Coatings for Magnesium Beach Exposure

Anodize/HT Resin Coating/23377C/53039

Conversion Coating A/HT Resin Coating/23377C/53039

Conversion Coating B/HT Resin Coating/23377C/53039
AMCOM Corrosion Program

MAGNESIUM GEARBOX

From This

To This
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Questions?