

DoD Corrosion Prevention and Control

Panel Discussion

Aging & Corrosion: Combating Effects on Mission Readiness and Costs

DoD Maintenance Symposium & Exposition

26 October 2005, Houston, Texas

Dr. Lewis Slotter

**Office of the Deputy Under Secretary of Defense
for Science & Technology**



Severe Marine Corrosion Environments



Ground Equipment Headed for Iraq





C-141 Depot Maintenance: Corrosion Remediation





Corrosion Under Antenna Cover



The Law

Public Law 107-314 Sec: 1067. Prevention and mitigation of corrosion of military infrastructure and equipment requires that:

- **DoD designate a responsible official or organization**
- **DoD develop a long-term corrosion strategy to include**
 - Expansion of emphasis on corrosion prevention & mitigation
 - Uniform application of requirements and criteria for the testing and certification of new corrosion prevention technologies within common materiel, infrastructure, or operational groupings
 - Implementation of programs to collect and share information on corrosion within the DoD
 - Establishment of a coordinated R&D program with transition plans

Strategy to include policy guidance & assessment of funding and personnel resources required



Response & Strategy : Integrated Product Team & Focused Corrosion Forums

Component Principals:

Army: Hilton Mills, HQ, Army Materiel Command

Navy: Bob Pohanka, Office of Naval Research

Air Force: Major Robert Reed, Air Force Corrosion Office

Marine Corps: Dave Ferris, MARCORPS Systems Command

Tri-Service Facilities: Tom Tehada, NAVFAC

(Current Chair, Tri-Service Facilities Working Group)



Integrated Product Team Structure

- Corrosion Prevention and Control IPT (CPCIPT)
 - Provide strategic review and advice
 - Develop and recommend policy guidance
- Working IPTs (WIPTs)
 - Policy and requirements
 - Impact, metrics and sustainment
 - Training and Doctrine
 - Communication and outreach
 - Specifications and standards
 - Facilities
 - Science and Technology



Source
Document:
Report to
Congress
November 2003

Download from
www.dodcorrosionexchange.org

Office of the Secretary of Defense

REPORT TO CONGRESS

Department of Defense

Long-Term Strategy
to Reduce Corrosion and the Effects of Corrosion
on the Military Equipment and Infrastructure
of the Department of Defense



December 2003

Prepared by the
Principal Deputy Under Secretary of Defense
(Acquisition, Technology and Logistics)



Strategy Response: Accomplishments

- “Quick Hits”
- DOD Strategic Plan for Corrosion Prevention and Mitigation
- Corrosion Policy in
 - DoD 5000 Guidebook – part of Systems Engineering
 - Guidebook for Designing and Assessing Supportability in DOD Weapon Systems
 - CPC Requirements included in capabilities docs (ICD/CDD)
 - DFARS – corrosion planning required for all programs requiring acquisition plans
 - DoDI 5000.2
- CPC part of Performance Based Acquisition and Logistics
- CPC Planning Guidebook published – Spiral 2



CPC Planning Guidebook

Changes featured in Spiral 2

- More comprehensive coverage of requirements and processes
- Improved process flow illustrations
- Unique system and facility processes delineated
- Specific aerospace applications included

Download from

www.dodcorrosionexchange.org



CORROSION PREVENTION AND CONTROL
PLANNING GUIDEBOOK

(Spiral No. 1 – DECEMBER 2003)

Issued by: PDUSD (AT&L)
Director, Corrosion Policy and Oversight



Accomplishments

- Quick Hits
- DOD Strategic Plan for Corrosion Prevention and Mitigation
- Corrosion Policy
- CPC part of Performance Based Acquisition and Logistics
- CPC Planning Guidebook published
- **Communication and Outreach Efforts**
 - AMPTIAC Quarterly Issue, http://amptiac.alionscience.com/pdf/AMPQ7_4.pdf
 - AT&L Magazine, http://www.dau.mil/pubs/dam/dam_issues04.aspAcquisition
 - Acquisition website features corrosion control training www.acq.osd.mil
 - Corrosion Website, <http://www.dodcorrosionexchange.org/>
 - Special Interest Groups – SIGs on corrosion website



Accomplishments

- Quick Hits
- DOD Strategic Plan for Corrosion Prevention and Mitigation
- Corrosion Policy
- CPC part of Performance Based Acquisition and Logistics
- CPC Planning Guidebook published
- Communication and Outreach Efforts
- Training
 - CPC Training Plan and Curriculum
 - Corrosion “101” – elective course for 135,000 AT&L workforce
 - Defense Acquisition University courses and video
 - NACE- The Corrosion Society involvement
 - Mr. Wynne training video



Future Activities

- Update the Strategic Plan
- Revise specs & standards processes
- Publish future CPC Guidebook Spirals
- Develop and approve service project plans
- Complete CPC Training Plan – “Corrosion 101+” courses
- Continue communication and outreach
- 2005 Tri-Service Corrosion Conference ➡
- Improve corrosion website
- Interact with the Defense Science Board
- Cooperate with the GAO

To include:

- Congress
- OSD
- Maintenance community



Maintenance Issues

- Determining, understanding, & tracking corrosion cost
 - Total aggregate cost
 - Should cost
 - Preventable cost
- Bringing best practices & real-world experience to training and materials, processes, and design selection
- Provide understanding & awareness of corrosion impact on
 - Readiness
 - Logistics burden
- Identification of
 - Research needed
 - High impact actions
 - Non-materiel solutions



Summary

- Corrosion is everyone's problem and all can contribute to prevention or control!
 - Policy
 - Acquisition
 - Maintenance/Logistics
 - Technology
 - Personnel training & awareness
- We are making progress in the fight against corrosion!
- Let's interact.

