Army Corrosion Summit
9 Feb 10
Mr. James R. Bryant
**LOGSA Mission**

**U.S. Army Materiel Command, LOGSA, Redstone Arsenal, AL, 35898**

Approved for public release; distribution unlimited

**2010 U.S. Army Corrosion Summit, Huntsville, AL, 9-11 Feb**

**ABSTRACT**

**SUBJECT TERMS**

- unclassified
- unclassified
- unclassified

**LIMITATION OF ABSTRACT**

Same as Report (SAR)

**NUMBER OF PAGES**

12

**NAME OF RESPONSIBLE PERSON**

unclassified

unclassified

unclassified

Same as Report (SAR)

12
LOGSA Mission

As the Army’s Authoritative Source for Logistics Data, Provide Logistics Intelligence, Life Cycle Support, Technical Advice, and Assistance to the Current and Future Force; Integrate Logistics Information (Force Structure, Readiness, and other Logistics Data) for Worldwide Equipment Readiness, Distribution Analysis, and Asset Visibility for Timely and Proactive Decision Making.
LOGSA Command Structure

LOGSA Commander
COL James Rentz

Deputy to the Commander
Mr. Geoff Embrey

LOGSA (Forward) Office
Ms. Joan Horton, Chief

Enterprise Integration Center, Chief
Mr. Richard Manley

- Full Range of Resource Management Tasks
- All Support Services (Manpower, Studies, Training, Personnel, Staff Functions)
- Information Technology to Support Business/Mission Systems
- AMC Data Manager: LMP Data Integrity, Issue Resolution
- Support to SALE (GCSS-A & PLM+)
- LIW Integration
- CTASC Production

Logistics and Engineering Center, Chief
Mr. Jim Bryant

- Author/Update Army Acquisition Logistics/ILS Policy
- Develop and Support Automated Tools for Materiel Development
- PD AOAP
- Publish Monthly PS Magazine
- Responsible Office for Equipment and Technical Publications Program
- Operate Packaging Applications Test Lab and Provide Packing, Storage, Containerization and Hazardous Materiel Program Leadership

Soldier Support Center, Chief
Mr. Brian Brown

- Functional Owner of LIW Systems Applications
- Customer Focused Channel Management
- Logistics Analysis
- Army Air Clearance Authority (AACA)
- Assign DODAACs, RICs, & Project Codes
- Conduct Worldwide Training
- Logistics Operations Center

Worldwide Operations...
- Redstone Arsenal, AL (HQ)
- Tobyhanna Army Depot, PA
- Pensacola, FL
- Ft. Belvoir, VA
- Balad, Iraq
- Arifjan, Kuwait
- CONUS & OCONUS AOAP Labs
- APOE LNOs
PS Magazine’s Efforts to Combat Corrosion

From AR 700-138:
5-13. The Preventative Maintenance Monthly: This is an official technical bulletin published monthly by DA and distributed throughout the Army. It is intended to enhance materiel readiness by identifying and emphasizing proper maintenance and supply procedures. Review of PS Magazine should be a regular part of unit readiness initiatives...

- Jan 2000-Dec 2009…
  357 “CORROSION” references
  (an average of 3 instances per issue)

- CY09… 11 of 12 issues contained references to “CORROSION”

- Dec 09 issue contained 6 “CORROSION” references

- Expect a full-length “CORROSION” article in July, 2010
PS Magazine’s Efforts to Combat Corrosion

“CORROSION” references in PS 685 (Dec 09)...

- Editorial page: “Check the hydraulic systems on low-use vehicles. As vehicles cool down after use, moisture can condense in the vehicle’s hydraulic reservoir. Condensation can cause corrosion in the reservoir and the hydraulic system.” (Low Use Vehicle)

- Page 7: “Sure, you can slow the damage by occasionally wiping away any condensation in the ammo compartment. But to really put the brakes on corrosion, you’ve got to stop moisture.” (Abrams Tanks)

- Page 20: “Use test kit. NSN 6850-01-154-3653, to test the nitrite (corrosion protection) level of antifreeze.” (Vehicles)

- Page 24: “Even if the barrel doesn’t get so hot that it’s warped, the heat can take the finish right off the barrel. Then corrosion has an open door.” (Small Arms)

- Page 25: “...the cap traps moisture in the barrel, which leads to corrosion.” (Small Arms)

- Page 51: “Rubbing alcohol removes the protective coating on the compartments’ walls, which can lead to corrosion and arcing.” (Sentinel Radar System)
Technical Publications

- 12,500+ ETMs on Web
- 18 address corrosion
- TB 43-0213 - Corrosion Prevention and Control including Rustproofing Procedures for Tactical Vehicles and Trailers (578 hits)
- TM 1-1500-344-23-1, Cleaning and Corrosion Control Volume 1 (460 hits)
Integrated Logistic Support (ILS) Policy

• Current Army Level Regulations and Pamphlets contain very high level statements regarding prevention and control of corrosion

  – AR-700-127, ILS. Corrosion is identified as a logistics related design influence parameter affecting the supportability, availability, and life cycle cost of a system
  – DA PAM 700-56, Logistics Supportability Planning and Procedures in Army Acquisition. The R&M effort on any acquisition program should emphasize...thermal, shock, vibration, corrosion, durability...analyses and tests
  – DA PAM 700-127, ILS Managers Guide. Currently no coverage

Issue for the next Army ILS Executive Committee (3-5 Mar 10)
Logistics Supportability Planning

How SYSPARS Works

Latest Policy
Training Information
Lessons Learned
Expert Knowledge/Experience

SYSPARS Integrated Documents

- Acquisition Strategy
- Business Case Analysis (BCA)
- IUID Plan
- Supportability Strategy
- Performance Based Logistics (PBL)
- Materiel Fielding Plan
- Provisioning Plan
- Performance Based Agreement
- ILS Statement of Work
- Transportability Report
- Supportability Assessment
- Life Cycle Milestone Schedule
- Warranty Advisor
- Simulation Support Plan (SSP)
- DMSMS Management Plan
- Proposed: Corrosion Prevention and Control Plan

How SYSPARS Works

Latest Policy
Training Information
Lessons Learned
Expert Knowledge/Experience

Sample Document
This is a test of the emergency broadcasting system... This is only a test... This is a test of the emergency broadcasting system... This is only a test... This is a test of the emergency broadcasting system... This is only a test... This is a test of the emergency broadcasting system... This is only a test...

This is a test of the ILS supportability of any weapon system makes it very important to provide supply support, maintenance, computer resources, transport facilities, manpower, personnel, and other applicable areas.

This is a test of the emergency broadcasting system... This is only a test... This is a test of the emergency broadcasting system... This is only a test... This is a test of the emergency broadcasting system... This is only a test...
Packaging, Storage, and Containerization Center

- Packaging and Preservation are critical elements of Corrosion Control
- PSCC is DoD's largest packaging applications test facility
- PSCC is the designated lead service testing activity for the following Materials and Processes:

**Materials**
- Tapes
- Adhesives
- Barrier Materials
- Preservation Materials
- Desiccant
- Fiber Board Boxes
- Wood Boxes
- Wire Bound Boxes
- Non-metal Pallets
- Marking and Labeling Materials
- Bags and Sacks
- Tags, Document Protectors, and Packaging Lists

**Processes/Systems**
- Unitization Systems
- Marking and Labeling Systems
- Stretch Wrap Systems
- Cold-Seal Packaging Systems
- Plastic Wrap Systems
- Plastic Bag/Package Forming Systems
- Vacuum Formed Thermoplastic Systems
Corrosion Testing Examples

- **Night Vision Goggle Helmet Mount Assembly**
  - Testing for Tobyhanna Army Depot to evaluate the mechanical components of the mount assembly
  - Testing IAW Per Mil Std 810F Environmental Engineering Considerations and Laboratory Tests

- **Bar Code Labels**
  - Salt Fog Testing is conducted to evaluate various labels, inks and surfaces that would be subject to marine conditions

- **M-16 Rifle Barrier Material**
  - Tested materials to determine optimum storage pack

- **PSCC provides their testing services to private industry by authority of 10 United States Code (USC) §2539b**
Conclusion

- Corrosion prevention is addressed in a number of LOGSA products and services
  - Policy
    - AR 700-127 and related policies
  - Tools
    - Acq Log Tools
    - SYSPARS
  - Services
    - Packaging, Storage, Testing, Training
  - Publications
    - Technical Publications
    - PS Magazine