Autonomic Logistics Global Sustainment (ALGS)
21st Century Sustainment for the Lightning II

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NDIA National Logistics Conference
F-35 Sustainment Solution...

Integrated Business Approach

Integrated Training System

Integrated Support System

Integrated Information System

Completely Integrated & Integral to the Aircraft
F-35 Improves Supportability, & Deployability

- New Logistics Model
  - Revolutionary Integrated Diagnostics
  - On-Board Health Monitoring
  - Electronic Tech Data
  - Portable Maintenance Aids

Worldwide Support 24/7
What is Autonomic?

• The JSF Autonomic System Provides:
  • Failure analysis
  • System health monitoring
  • System status and health transmission
  • In-flight system service re-routing
  • Post flight services:
    – Correct repair parts
    – Support Equipment
    – Fuel
    – Weapons
    – Trained maintainers

Autonomic Monitoring, Prognostics & Health Mgmt support the F-35
Integrated Information System

**TRADITIONAL**
- Non-Integrated Info Systems
- Precautionary LO Repairs
- No Reach Back to Formal Training
- Multiple Info / Support Systems Not Integrated

**F-35 ALIS**
- Total Asset Visibility
- LO Health Assessment System
- Connectivity to Training Centers
- Integrates OEM Engineering, Supply, and Training With the Customer

**BENEFIT**
- Integrated Mission Planning / Maintenance / Supply / Training / Qualifications / Aircraft Info
- Unclassified LO Confidence Reports
- Data / Procedure Currency

Most Current Information Continuously Available
ALIS Supports All Phases of Sortie Generation

Legend

Sortie
ALIS

One Solution

Mission Planning/Preparation

- Plan Resources
- Mission Planning
- Air Tasking Order
- Fleet Analysis
- Change Configuration Items
- Pilot and Maintainer Debrief
- Technical Data
- Technical Data
- Pilot and Maintainer Debrief

Launch

- Mission Update
- Distributed Pilot Training
- PHM Downlink
- Work Orders For Maintenance Actions
- Locate Parts
- Maintain Point-of-Use Training
- Locate Support Equipment

Execute Mission

Sustain

Turn

Recover
ALIS Configuration Example
**ALIS Summary**

- Initial ALIS Design Complete; Architectural Framework Established

- Provides:
  - *Air Vehicle Operational Support & Maintenance*
  - *Supply Chain, Support Equip Mgmt*
  - *Distributed Training*
  - *Integration with government infrastructures*

- Currently supporting the Flight Test air-vehicles

*ALIS is the Logistics Enabler for the F-35*
Questions?