

Joint Strike Fighter



F-35 Joint Strike Fighter Autonomic Logistics Supply Chain

**23 October 2003
Luke Gill**





JSF Autonomic Logistics System



Highly Supportable Aircraft

- Reliable Design
- Prognostics and Health Management
- Remove/Replace (R/R) Maintenance

Training System

- Pilot Embedded Training
- On Demand Maintenance Training
- Air Vehicle Software Reuse
- Integrated Training



Support System

- Maintenance Support
- Supply Chain Management
- Support Equipment
- Joint-Service Tech Data
- Sustaining Engineering
- 24/7 Help Desk

Autonomic Logistics Information System

- Distributed Information System
- Elements include
 - Support Services
 - Training Services
 - Mission Support Services

Autonomic Logistics Provides Order Of Magnitude O&S Savings

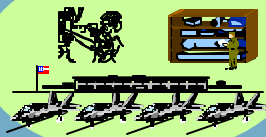


AL Operations Concept

User/
Warfighter:

Repair
Supply

Operating Sites



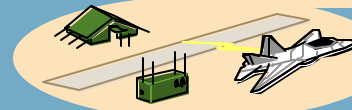
Operations at Sea



Repair Supply



Deployed Operations



Supply
Repair

Management
Capability
Infrastructure:

- Help Desk
- Supply Chain Management
- Sustaining Engineering
- Configuration Management
- Mission and Task Rehearsal
- Tech Data
- On-Demand Training

Autonomic Logistics Operations Center

24 Hour JSF Global Network



- Support Equipment Management
- Software Support Capability
- Maintenance Planning
- Tech Reps/ICS

Sustainment
Functions:

Base
Supply



Forward
Supply



OEM
Supply



Pilot
Training



LM Design Data



Transportation



Maintenance
Training



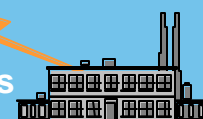
OEM Repairs



Real Time Analysis in
Performance and Cost
Decision Support



Organic Depots



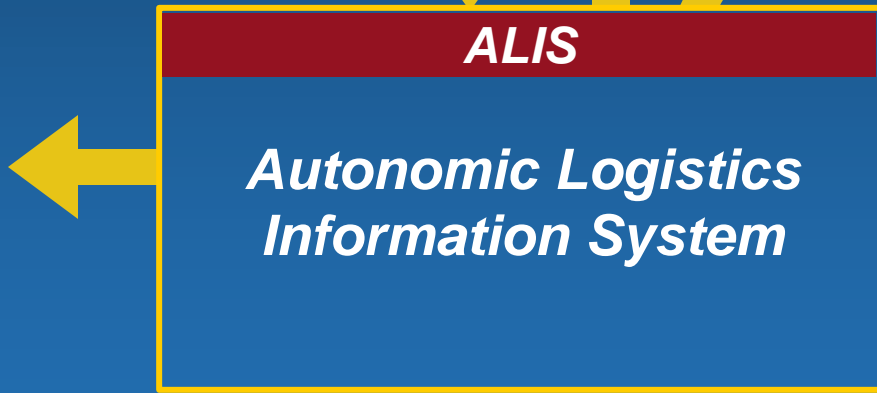
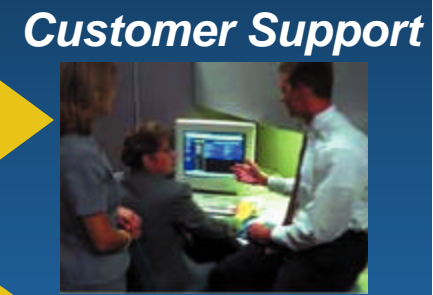
Operations Center Manages Network of Service Providers



ALIS – An Enabler of Total Life Cycle System Management

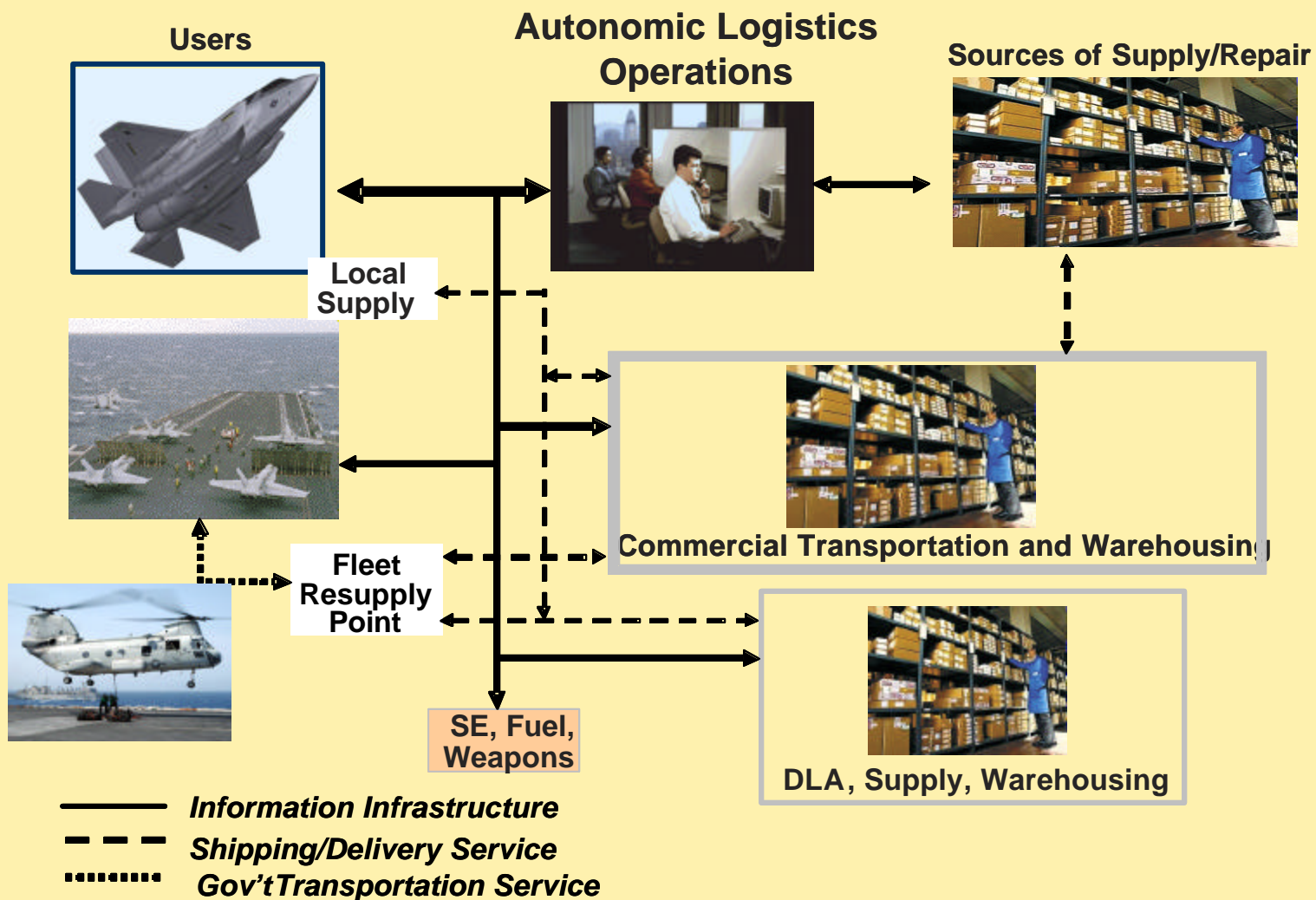


Downlink
PMA
PMD



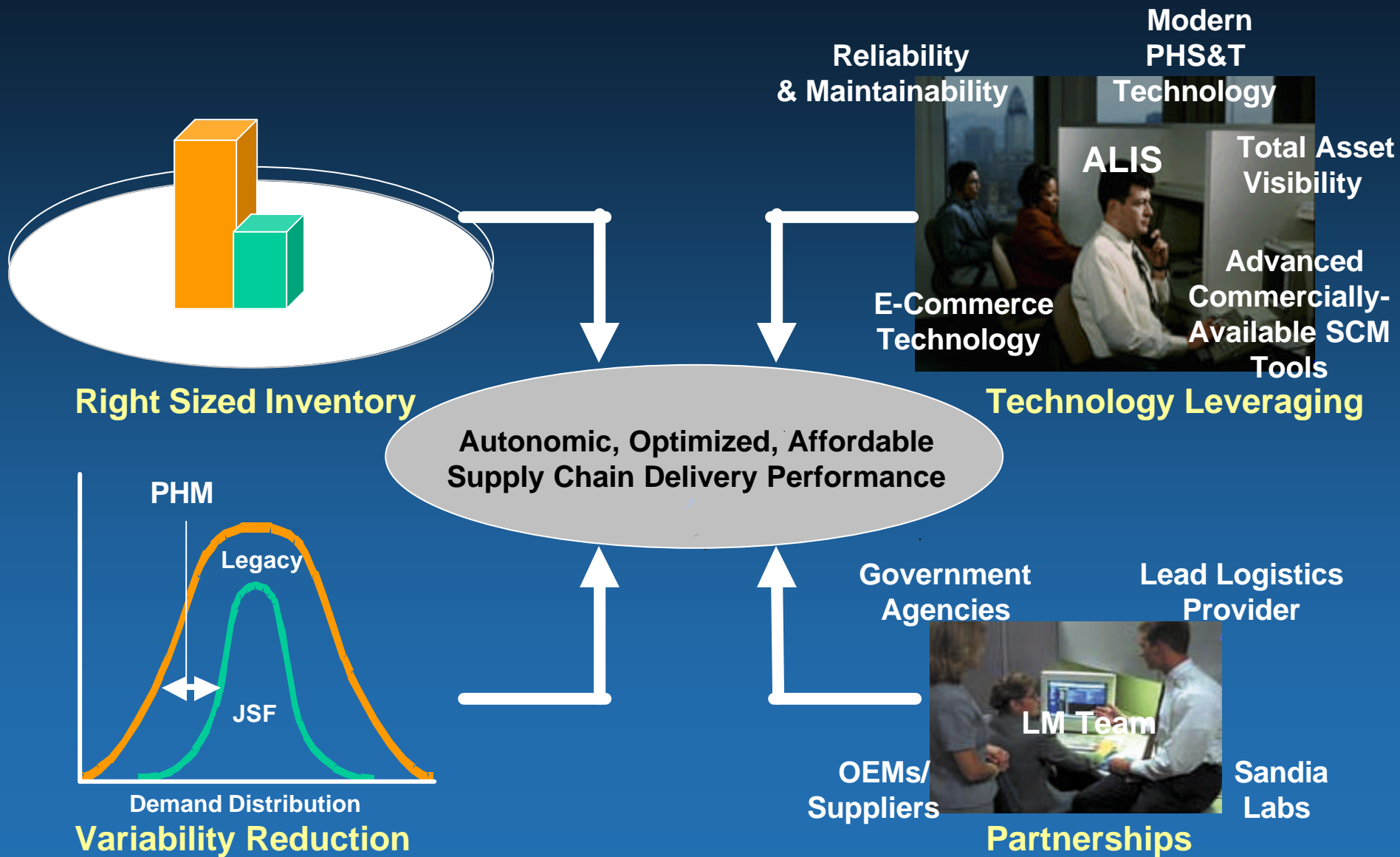


Supply Chain Management Infrastructure





Supply Chain Management Key Concepts





Key Supply Chain Management Features

- **Total Asset Visibility for Supply Chain**
- **Agile supply chain philosophy**
 - *Driven by aircraft availability requirements*
 - *Demand volume decreases and stabilizes due to*
 - Increasing reliability
 - Prognostics capability
 - Modern forecasting tools
- **Single supply chain with centralized inventory management**
- **A common pool of spare parts across service lines**
 - *86% Commonality of spares among the three aircraft variants*

We Sell a Guaranteed Service, Not Spares



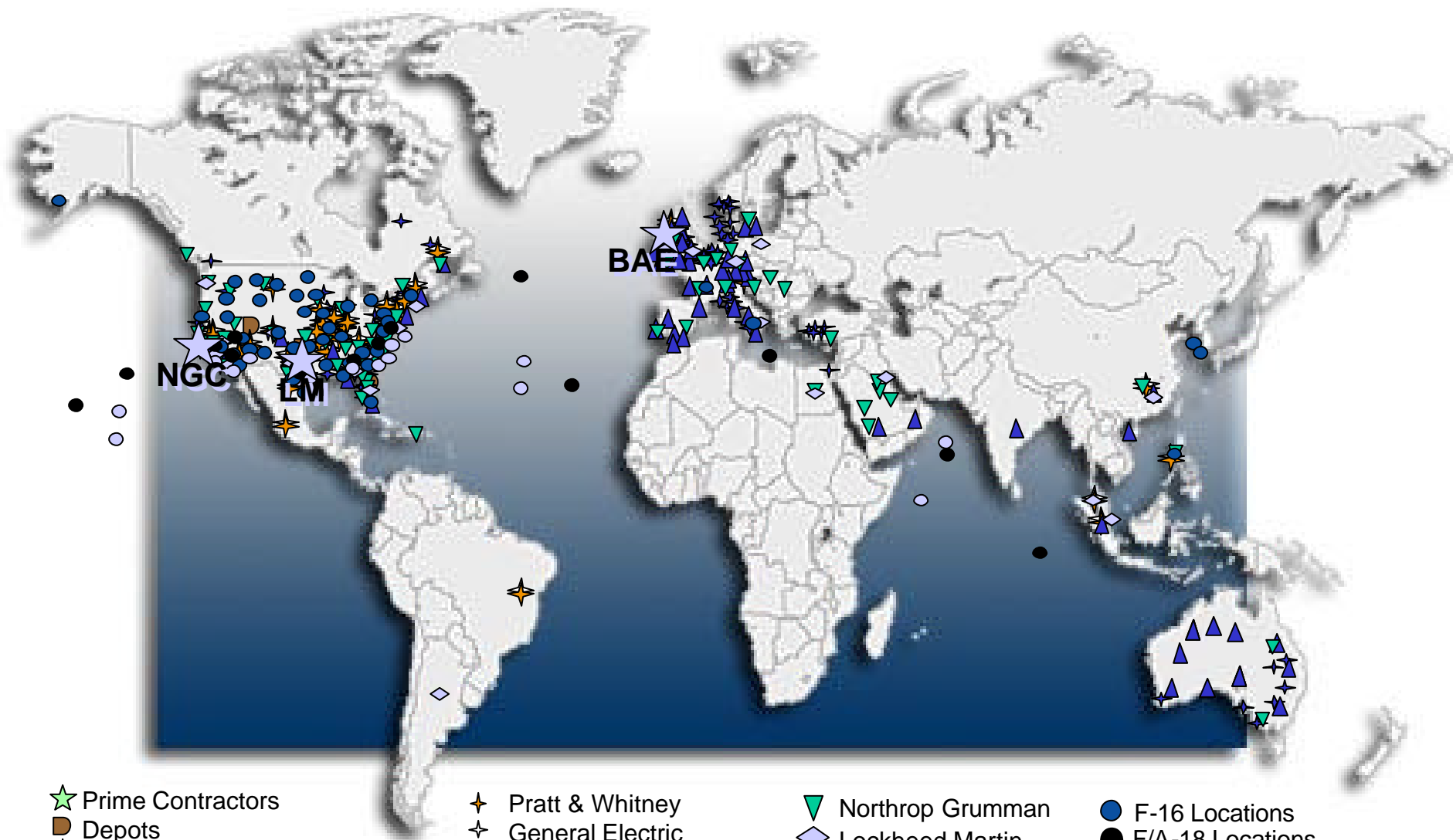
Lead Logistics Provider

- **Competitive subcontract for**
 - *Inventory Management*
 - *Distribution*
 - *Transportation*
 - *Information Technology Integration*
 - *Responsibility for time-definite deliveries*
- **We retain**
 - *Long-range simulation and forecasting*
 - *Vendor selection*
 - *Performance monitoring*
 - *Insight and knowledge to manage and improve the supply chain*

A Synergy of Core Competencies



F-35 Management Across The Globe



- ★ Prime Contractors
- Depots
- ✦ OEMs

- ✦ Pratt & Whitney
- ✦ General Electric
- ▲ BAE

- ▼ Northrop Grumman
- ◇ Lockheed Martin

- F-16 Locations
- F/A-18 Locations
- AV-8B Locations

JSF VISION



**Be the model acquisition program for joint service
and international cooperation**

Develop and produce an **affordable next generation
strike fighter weapon system and sustain it worldwide**