



Technology Insertion vs. Logistics Efficiency Optimization

Marilyn T. Gaska, Ph.D.

Director, Logistics & Sustainment

Lockheed Martin Corporate Engineering and Technology

Can we have both innovate capabilities and sustainment cost savings?



- **Thesis: Innovative autonomous systems can help reduce manpower, perform logistics missions, and reduce logistics support requirements.**
 - **Address budget challenge**
 - **Fulfill need for agile Joint Force operations**

Focus areas



- **Autonomous warfighting**
- **Autonomous supply operations and flightline**
- **Infrastructure/consumable reduction with less manpower**
- **Medical cost avoidance and long term liability**

LM Autonomy Manpower Study



- **Significant Cost Implications**

- **6,392 Killed / 47,337 WIA**
- **\$200B+/year DoD Manpower**
- **\$1 Trillion Dollars Medical Liability**
- **over the next 40 years**



Way Ahead



- **Develop accurate “As-Is” vs. “Future” force data**
- **Demonstrate the ROI of autonomy in relation to the full life cycle cost of manpower and operations**
- **Comparative Model Build Demonstrating**
 - **Cost**
 - **Decreased manpower**
 - **Increased lethality/capability**
 - **Casualty avoidance and reduction**