### **Logistics Officer Association**

### Lt Col Mark "Ski" Szatkowski HAF A4LM DSN 223-9837 Advanced Concepts Branch



Captain Alan Morford AMC A4/A4TI DSN 779-8174 Aerial Port Of the Future

### **U.S. AIR FORCE**

Integrity - Service - Excellence



#### Flightline Maintenance 2030: Linked, Lethal...Ready!

#### **FY19** Initiatives Integrating Initiatives

Institutionalize



Restore Readiness 

Drive Innovation

Cost-Effectively Modernize, Reforming the Department

Develop Exceptional Leaders

Strengthen our Alliances

#### **Air Force Logistics Core Capabilities**

Meet and Enhance Mission Generation • Set the Theater • Logistics Command and Control (Log C2)



**Evaluate** 

## Headquarters Air Mobility Command



## **AERIAL PORT OF THE FUTURE**

### Captain Alan Morford AMC A4/A4TI DSN 779-8174

Unrivaled Global Reach For America...Always!

# **Operational Approach**



"Any Air Force which does not keep its doctrines ahead of its equipment, and its vision far into the future, can only delude the nation into a false sense of security."

General Henry H. "Hap" Arnold Ensure rapid, Leverage Commanding General, USAAF technological robust global November 1945 advancements to mobility...ensure drive efficiencies. the most efficient Develop capabilities to Explore innovative movement and increase expeditionary and logistics positioning of aerial port efficiencies and operations. materials. improve throughput.

### 711th Human Performance Wing Study...

- 25% of 2T2 veterans receive VA compensation
  - 72% are from musculoskeletal injury
  - Monthly cost is estimated at \$1.26M





# **Current Initiatives**

- Exoskeleton
  - \$3M OSD Rapid Innovation Funds Program
    - Demo: Sarcos at Dover AFB Jan '19 & MOBILITY GUARDIAN Sep '19
- Wireless Radio Headsets
  - Fielded at Dover, AFB
- Android Team Awareness Kit
  - Interests...CRW & 735 AMS
  - Develops requirements for DESTNIE
- USTC Transportation Management System (TMS)
  - PACOM AOR Operational Prototype
- Autonomous K-Loader
  - Full Automation RDT&E Funding in review at USTC
  - Collision Avoidance Systems
    - Successfully demo'd passive system

### **Aerial Port of the Future Concept**



Multi-Modal Logistics Planner linked to Aerial Port Planner

Aerial Port Planner linked to Aircraft Load Master

## **Strategic Objectives**



#### S&T Research to Transition

Augment Human Performance

- Exoskeleton
- Powered Aircraft Roller System
- Hands-free Wireless Communication
- Pallet Optimization Tool
- K-Loader Collision Avoidance System

#### OT&E the Aerial Port(er) of the Future Capability Based Assessment

• Determine Gaps and Build Requirements

#### Human Capital Management

 Low Demand/High Density Skill Set Pool Enlarged

#### Resource APotF Implementation

#### **Develop Concept of Operation**

- Volpe Study
- AFRL via Rapid Innovation Funds
- Small Business Innovation Research



Respond to JLEnt Dynamic Info Demand Signal

Decision Enabled Strategic Transportation Network and Information Environment (DESTNIE)

- AI/MR/ML Technologies
- TMS Functional Representative

# Questions