Software Maintenance Growth: Opportunities and Challenges
Software Panel Members

Scott Reynolds
Air Force Deputy Assistant Secretary - Logistics

Steve Michaluk
OSD Maintenance Policy and Programs

Mike McClendon
Software Enterprise Institute

Ned Keeler
Director, Army Software Engineering Center

Verle Johnson
Chief Avionics Engineer, F-22

Joseph A. Leadley,
Senior Vice President & General Manager, Engility
Software Panel Deliverables

• Articulate the challenges industry and DoD face with the rapid growth of software intensive systems

• Highlight definitional, policy, organizational, and management aspects of software maintenance and sustainment

• Provide industry and DoD insight on meeting the challenges of managing software maintenance and sustainment in DoD
Agenda

- Software Maintenance Trends
- “The Software Universe”
- Panelist Introductions
Software Maintenance Trends – Growth

Weapons Systems are Increasingly Software Intensive

Source: NAVAIR and U.S. Army Communications-Electronics Life Cycle Management Command (CECOM)
Software Maintenance Trends – Resources

DOD Software Maintenance

Budget Pressure

~ $3.5 Billion

Source: POM 2014 PB-45 SNaP Data, both Organic and Contractor Requirements
Based on preliminary data

Organic Depot-Level Software Activities
by Location

36 Separate Locations

Army
Marines Corps
Navy
Air Force
Organic Depot-Level Software Activities
(Organization and Location)

**Army**
- AMRDEC, Redstone Arsenal, AL
- ARDEC SEC Picatinny Arsenal, NJ
- CECOM SEC/CERDEC SED Aberdeen (APG), MD
- CECOM SEC/CERDEC SED Ft. Huachuca, AZ
- CECOM SEC/CERDEC SED Ft. Sill, OK
- TARDEC Detroit Arsenal, MI

**Marine Corps**
- Aberdeen Proving Ground, MD
- Camp Pendleton, CA
- NSWC Panama City, FL
- SPAWAR Systems Center Atlantic, SC

**Navy**
- FRC East, NC
- FRC Southeast, FL
- FRC Southwest, CA
- NAWC China Lake, CA
- NAWC Lakehurst, NJ
- NAWC Orlando, FL
- NAWC Patuxent River, MD
- NAWC Point Magu, CA
- NSWC Carderock, MD
- NSWC Crane, IN
- NSWC Corona, CA
- NSWC Dam Neck, VA
- NSWC Indian Head, MD
- NSWC Panama City, FL
- NSWC Philadelphia, PA
- NSWC Port Hueneme, CA
- NUWC Keyport, WA
- NUWC Newport, RI
- Norfolk Naval Shipyard, VA
- SPAWAR Headquarters San Diego, CA
- SPAWAR Systems Center Atlantic, MD
- SPAWAR Systems Center Atlantic, VA
- SPAWAR Systems Center Atlantic, SC

**Air Force**
- Ogden ALC, UT
- Oklahoma City ALC, OK
- Patrick AFB, FL
- Peterson AFB, CO
- Warner Robins ALC, GA
- Vandenberg AFB, CA

• Preliminary data. Computer engineers (0854), computer scientists (1550), electronics engineers (0855) and electronics technicians (0856). Possess the necessary skills and are likely/potentially involved with Software Sustainment.
### Commercial Companies Supporting DOD Software

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Does not include corporate sub-divisions
Panelist Introductions

- Steve Michaluk, OSD Maintenance Policy and Programs
- Mike McClendon, Software Enterprise Institute
- Ned Keeler, Director, Army Software Engineering Center
- Verle Johnson, Chief Avionics Engineer, F-22
- Joseph A. Leadley, Senior Vice President & General Manager, Engility
Backup
Software Maintenance Issues

- Policy/Definitional
- Is software different? Why? How?
- COTS vs. Core
- On vs. Off for “Fully Integrated” Systems
- Transition from ICS/CLS to organic support
## POM 2014-2018 SNaP Data for Software Maintenance

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