U.S. ARMY RESEARCH, DEVELOPMENT AND ENGINEERING COMMAND

AMTC Utilization of OTA Panel - Systems Simulation, Software & Integration Directorate

Ken Pruitt

S3I

U.S. Army Aviation and Missile Research, Development, and Engineering Center
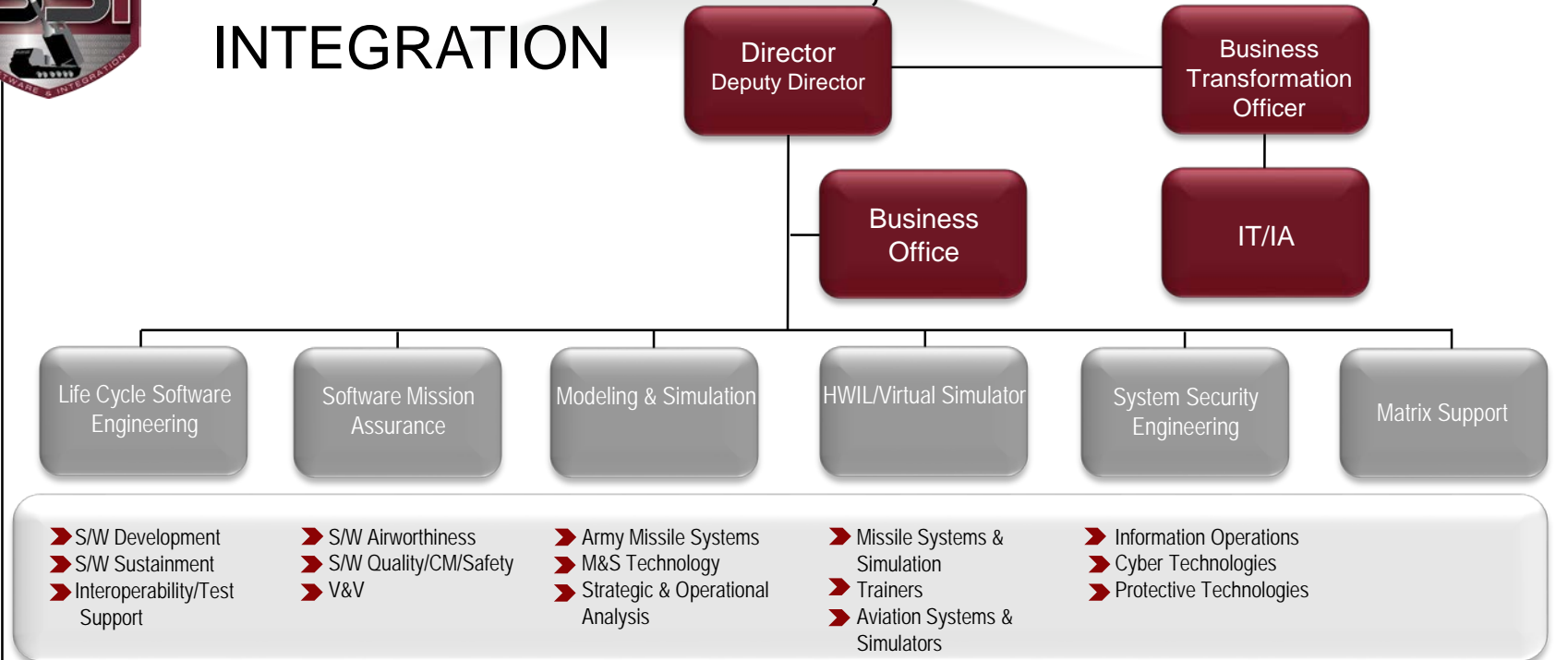
S3I STRUCTURE

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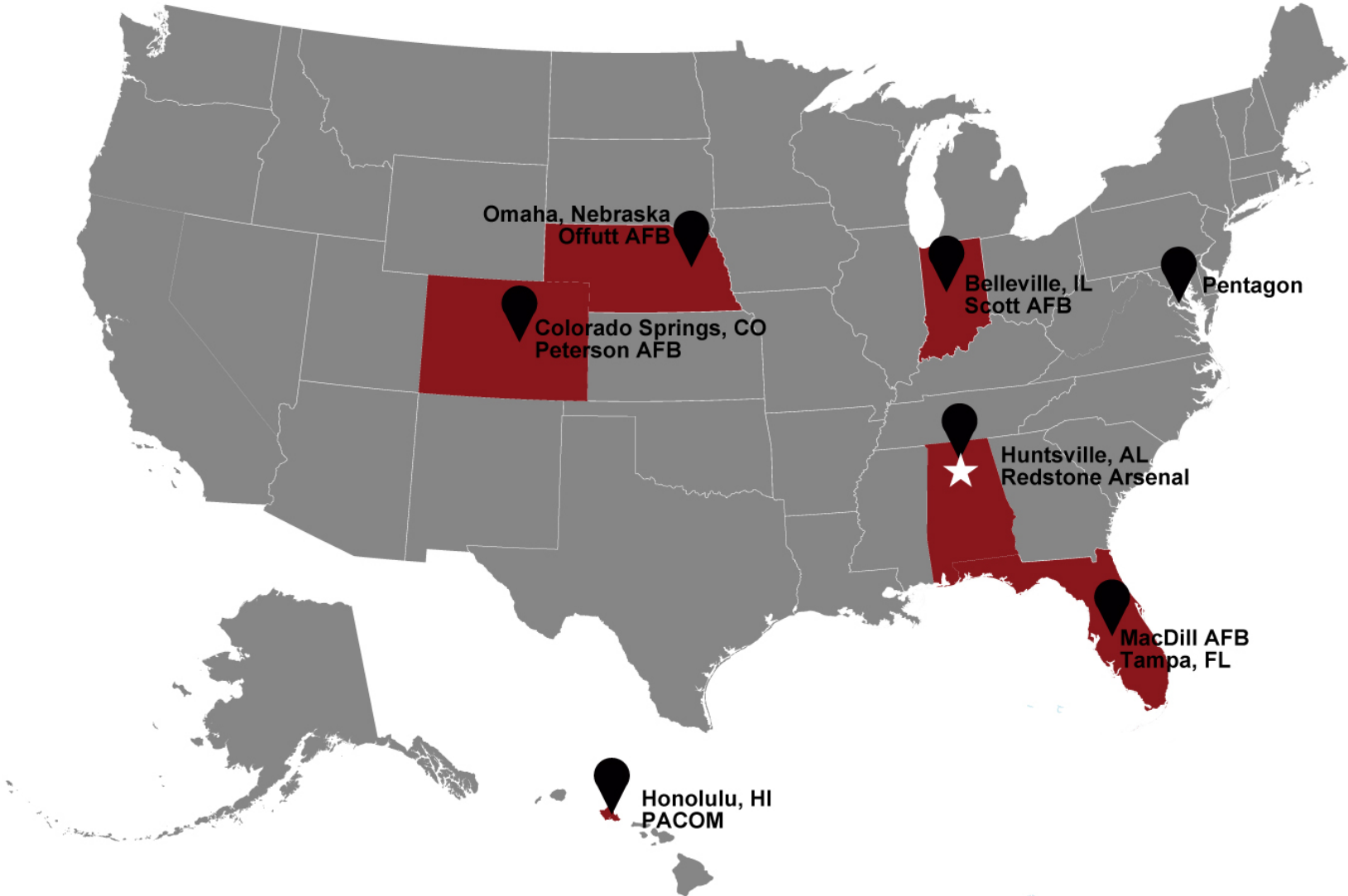
MERGE
APRIL 2018

SYSTEMS SIMULATION, SOFTWARE & INTEGRATION

Director
Deputy Director

Business Transformation Officer

Business Office

IT/IA

Life Cycle Software Engineering	Software Mission Assurance	Modeling & Simulation	HWIL/Virtual Simulator	System Security Engineering	Matrix Support
➤ S/W Development ➤ S/W Sustainment ➤ Interoperability/Test Support	➤ S/W Airworthiness ➤ S/W Quality/CM/Safety ➤ V&V	➤ Army Missile Systems ➤ M&S Technology ➤ Strategic & Operational Analysis	➤ Missile Systems & Simulation ➤ Trainers ➤ Aviation Systems & Simulators	➤ Information Operations ➤ Cyber Technologies ➤ Protective Technologies	

S3I OVERVIEW

LIFE CYCLE SW ENGINEERING SOFTWARE MISSION ASSURANCE MODELING & SIMULATION

- Live/Virtual/Constructive Simulations
- Virtual Threats & Environments Modeling
- Modeling & Simulation Technology
- Systems Engineering & Integration
- Operational Simulations
- Aerodynamics Analysis
- Endgame Analysis
- Performance Analysis
- Hardware-in-the-Loop
- Hardware & Software Integration
- Cyber Acquisition Support
- Hardware & Software Assurance
- Anti-Tamper
- Configuration Data Management
- Operational Test Event Planning
- Requirements Definition & Analysis
- Requirements Verification

- Prototypes
- Trainers
- Software Development
- Software Sustainment (PPSS/PDSS)
- Interoperability
- Software Airworthiness Assessments
- Software Safety Assessments
- Independent Software Verification
  & Validation (IV&V)
- Software Quality Assurance
- Software Testing
- Software Material Release
- Modeling and Simulation Accreditation
- Modeling & Simulation Data Analysis
- Software Fielding
- Software New Equipment Training
- Human Performance Training

HWIL / VIRTUAL SIMULATOR SYSTEM SECURITY ENGINEERING MATRIX SUPPORT

S3I DEVELOPS & DELIVERS RESPONSIVE AVIATION & MISSILE TOTAL LIFE CYCLE CYBER, SOFTWARE, PROTECTIVE TECHNOLOGIES, & SYSTEMS SIMULATION ENGINEERING TO ENABLE READINESS & ENSURE MODERNIZATION OF THE UNITED STATES ARMY TO OPTIMIZE JOINT WARFIGHTER CAPABILITIES AT THE POINT OF NEED.

POTENTIAL S3I USES OF AMTC OTA VEHICLE

Cybersecurity S&T

- Supply Chain Protection
- Cyber Analysis
- Cyber Defense Techniques
- Cyber Situational Understanding
- CEMA
- Program Protection
- Anti-tamper
- Signature Management
- SWA/HWA
- Weapon System Resilience

Modeling and Simulation

- System Characterization
- Kill Chain Analysis
- Environments

Hardware-in-the-loop

- Prototype Simulations
- Sensor/Signal Processing Algorithm Development
- System Assessments

AMRDEC Web Site
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