

SOF CHIEF INFORMATION OFFICER / SOCOM J6

RE-IMAGINING THE SOF INFORMATION ENVIRONMENT (SIE): DIGITALLY TRANSFORMING SOF TO COMPETE TO WIN

Dr. Lisa Costa, SES SOF CIO / SOCOM J6 Director 20 May 2021

## Far Ridgeline Notional Operations Vignette



- Specified Tasks
  - Ascertain terrain
  - Develop sub surface mapping
  - Develop patterns of life
  - Remain undetected

- Operational Scenario | Constraints
  - Denied, degraded SATCOM
  - Denied, degraded GPS
  - Radiofrequency jamming and Direction-finding
  - Large areas of geography with no landmarks
  - Limited Capacity of maritime mobility assets

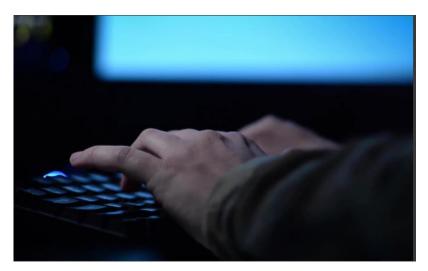
### Mission

- Conduct special reconnaissance
- Confirm or deny the presence of defense infrastructure
- Characterize the current status of suspected reclamation projects
- Generate maps, in real time, of the sub- surface terrain
- 72 hours to complete

### • <u>SIE Needed Capabilities</u>

- Global auto-failover multi-spectral, multi-transport
- Resilient Tactical Mission Networks
- Federated SOF Data Fabric
- DevSecOps to the Edge
- Single query to search/discover across multiple security enclaves
- Interoperability w/ Joint Force and Mission partners





# Does the SOF Information Environment (SIE) Shape the Force or does the Force Shape the SIE?

BOTH

Are we Digitally Modernizing or Transforming?

BOTH





# SOF Information Environment Four Primary Goals

### ADVANCE THE MOBILITY OF A GLOBAL MISSION FORCE



Build NextGen SIE Connectivity



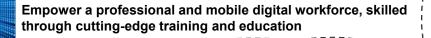
Enable global cloud access



Streamline tactical kit



Deliver fully capable mobile device access



### EMBED COLLABORATION & INSTANTANEOUS DATA DISCOVERY EVERYWHERE





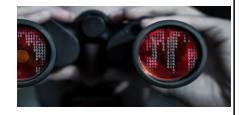


- Enable cloud-based OneDrive at all levels
- Implement Natural Language Processing libraries
- Invest in real time dashboards and divest of static slides
- Accredit Multi-domain Recommender Systems
- Enable collaboration through secure and compliant means

### DOMINATE THE CYBER ECOSYSTEM FOR SPECIAL OPERATIONS

- Understand the 5 W's of cyber threats
- Use data-driven cyber risk to prioritize actions
- Unity of effort between J2/J3/J6
- Establish policy to protect the SIE and DODIN





### **CULTURAL IMPERATIVE: OPERATIONALIZING INNOVATION**

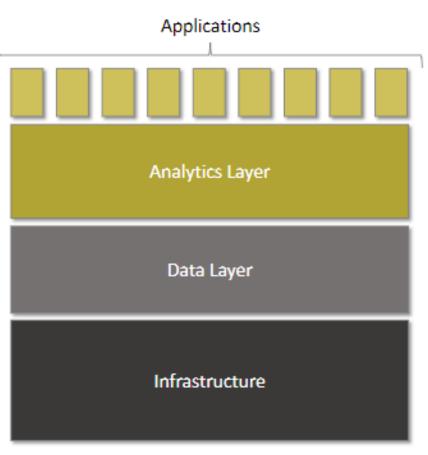
- Cultivate partnerships with Joint Force programs, commercial industry, and academia
- Policies and TTPs to support multi-domain interoperability
- Agile and cost-effective DevSecOps community
- Scale to meet component/TSOC fit-for-purpose mission needs





# SOF Needs from Industry and Academia

- Next Generation Cross-Domain Solutions
- Multi-cloud agnostic solutions from enterprise to tactical edge
- Contested Communications Environment (CCE)/ Denied, Disrupted, Intermittent, and Limited (DDIL) Capabilities
- Secure Internet of Things (IOT) integrated
- Integrating Zero Trust into Network Operations
- Secure Mobile Capabilities
- Software Defined Hardware
- "Just in time" Interoperable Waveforms



Common, Shared Environment

# Thank you!

#### **SIE PRIORITIES**

- **#1: Globally Mobile**
- #2: Data Discoverability
- #3: Cyber Secure
- #4: Operational Innovation

- Q&A with CIO/J6 Panel
  - Dr. Lisa Costa, SOF CIO/SOCOM J6
  - COL Joe Pishock, SOCOM J63 Current C4 Operations Division Chief
  - Mr. Mike Langlois, SOCOM J65 C4 Programs, Requirements and Governance Division Chief
  - CW5 Robert Byrd, SOCOM CIO/J6 Chief Engineer



SIE: DIGITALLY TRANSFORMING SOF TO COMPETE TO WIN