



ArcGIS for the Military: Sustainment and Logistics

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Technical Workshop

Goals of the Workshop

- **Briefly review ArcGIS for the Military system**
- **Explain how ArcGIS is configured to support sustainment and logistics**
 - **Operational Environment**
 - **Planning and Analysis**
 - **Monitoring Operations**
- **Recommendations and best practices**

ArcGIS for the Military: Business Framework

Mission Command



Movement & Maneuver



Intelligence



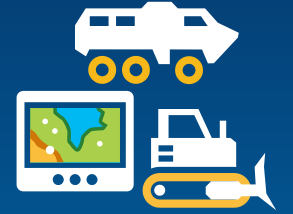
Fires



Sustainment & Logistics



Protection



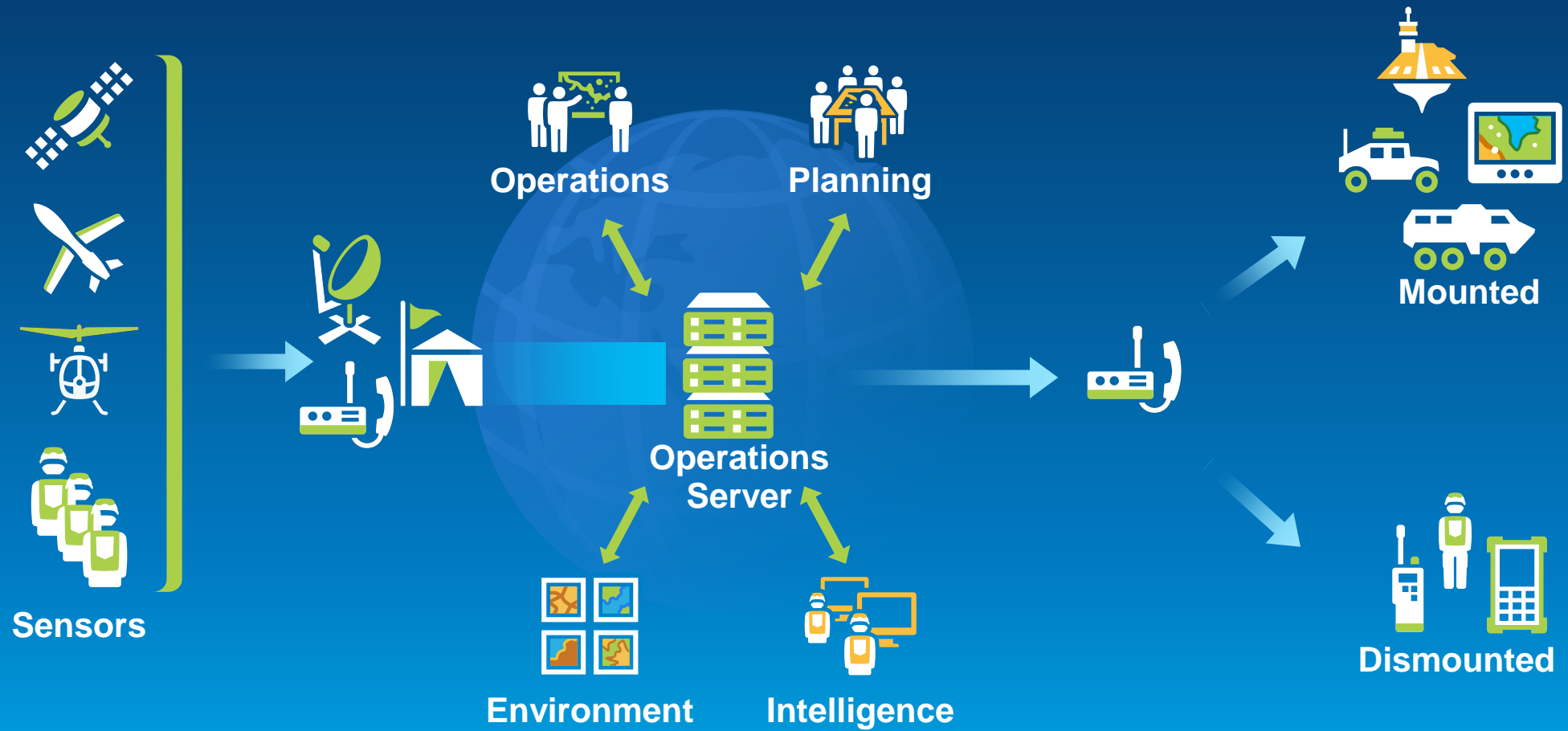
Operational Environment



Portal



ArcGIS for the Military: Solution Design



ArcGIS for the Military – Sustainment and Logistics

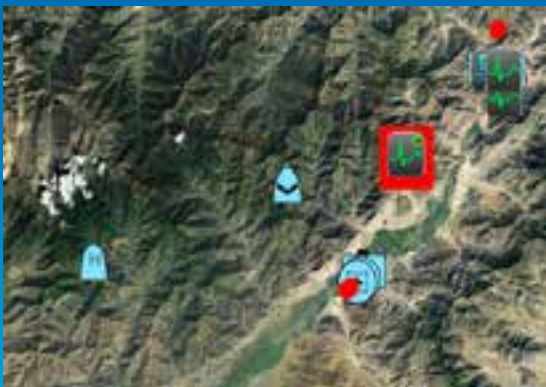
Logistics Reporting



Convoy Tracking



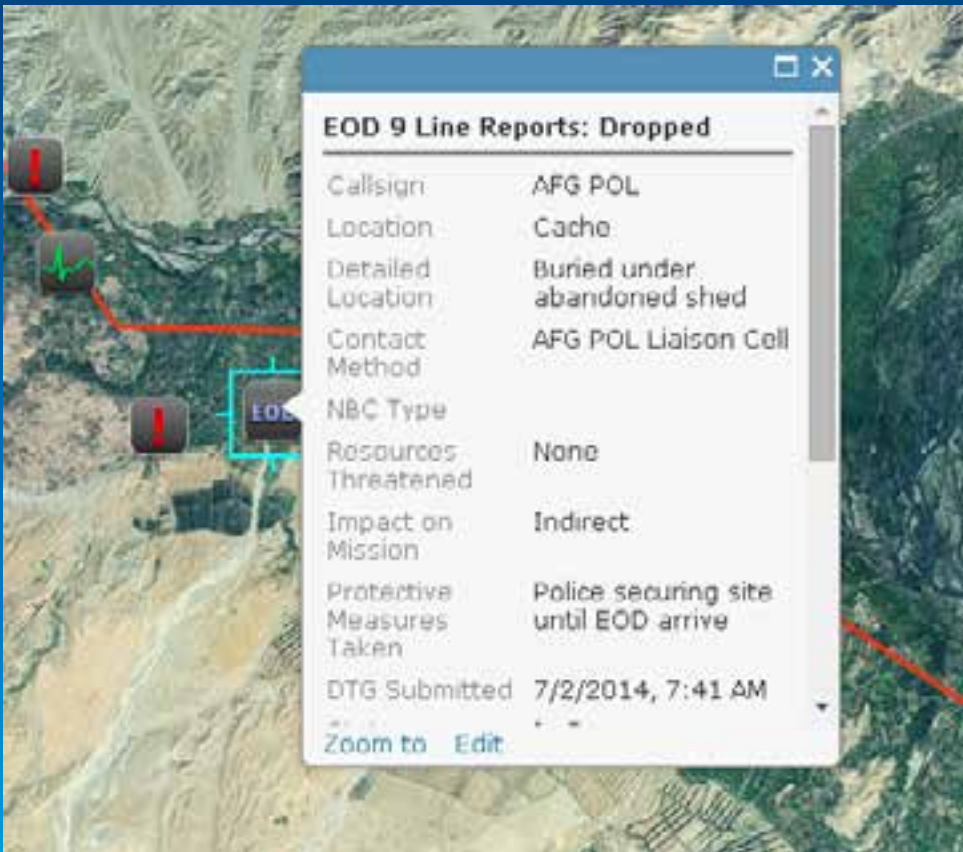
Medical Evacuation Reporting



Movement Reporting



Data Schemas



SITREP: 2-1-C-1

DTG Submitted	12/29/1899, 4:00 PM
Callsign	2-1-C-1
Activity	Securing LOC
Effective	Substantially Operational
Own Situation Disposition/Status	Platoon and attached elements of 2/4/D located at COP
Situation Overview	LOC secure
Operations	Regular patrolling improving relations with local pop; difficulties in covering full AO due to terrain
Intelligence/Reconnaissance	Request additional UAV or recon elements to address gaps in coverage
Sustainment	
Communications/Connectivity	Additional rebro required to extend comms coverage into NE area
Personnel	

EOD 9 Line Reports: Dropped

Callsign	2-2-B
Location	Cache
Detailed Location	Buried under abandoned shed
Contact Method	Coy Net
NBC Type	
Resources Threatened	None
Impact on Mission	Indirect
Protective Measures Taken	T-UGS deployed
DTG Submitted	7/2/2014, 7:02 AM
Status	New
Type of Munition	Dropped
Recommended Priority	Minor
NBC Contamination	Unknown
Incident ID	0

SPOTREPs: Hostile Ground Vehicle

Unique Designation	Shadow 3
Size	2 vehicles / 2+ pax
Activity	Moving S along main route
Location	On road
Unit / Uniform	Displaying militia flags
Equipment	Toyota land cruiser - No visible weapons
Relative Location (Distance)	
Relative Location (Bearing)	
DTG Submitted	7/2/2014, 7:01 AM
Activity Type	Moving
Unit Type	Irregular
Equipment Type	Hostile Ground Vehicle
Size - Echelon	Squad
Symbol ID	shgpev-----

Data Capture

- **Collector - Offline data collection and Sync**
- **Geoform**
- **GeoEvent Processor**

The screenshot shows a mobile application interface for data capture. At the top, there is a status bar with various icons and the time 12:13. Below the status bar is a navigation bar with three icons: a checkmark, a list, and a document. The main content area is titled "DTG SUBMITTED" and displays "July 02, 2014" with a "Use current" option. Below this are several sections, each with a dropdown menu:

- STATUS**: New
- SPECIALIST EQUIPMENT REQUIRED**: Extraction Equipment
- SECURITY AT PICK-UP SITE**: No Enemy Troops in Area
- MARKING AT PICK-UP SITE**: None
- NBC CONTAMINATION**: All Clear

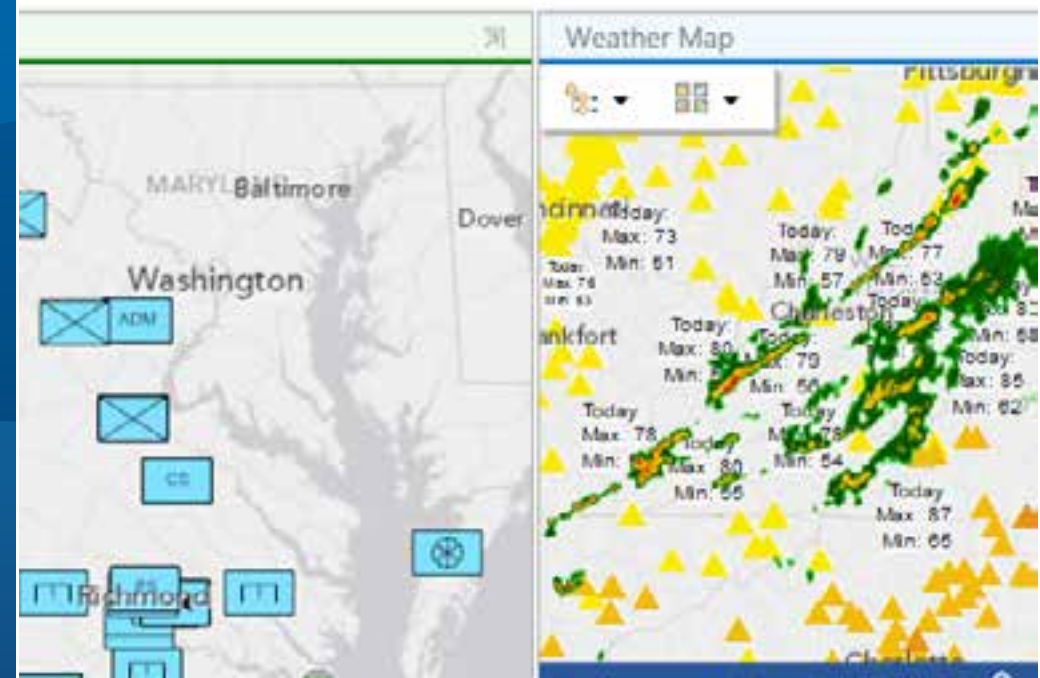
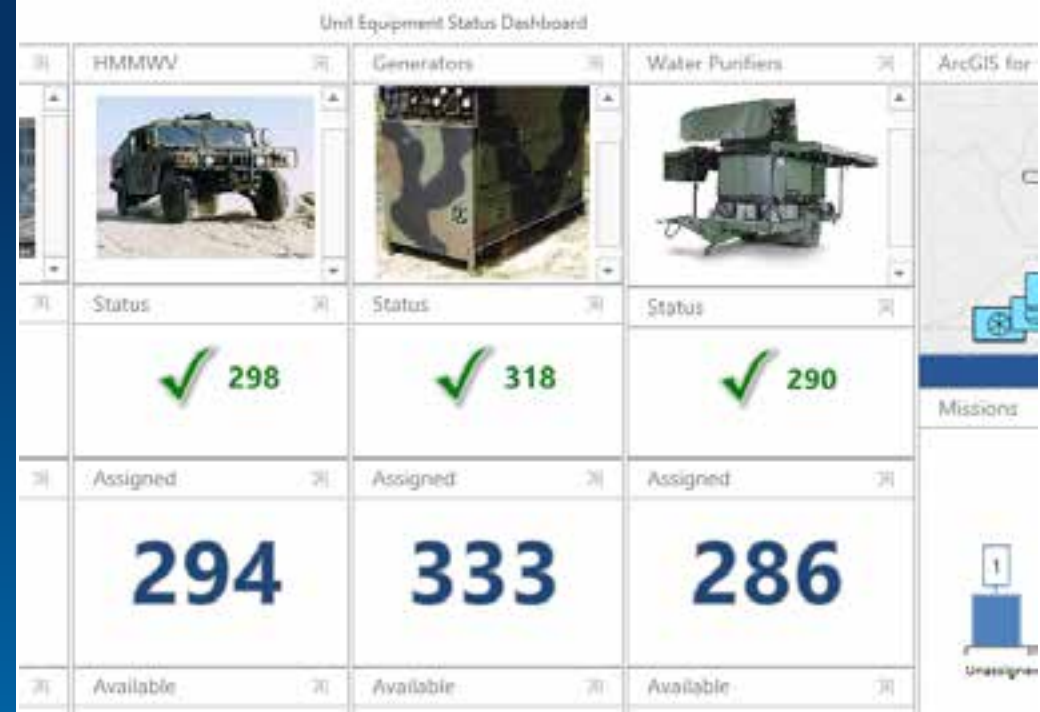
At the bottom of the screen, there is a navigation bar with two icons: a location pin and a gear.

Data Presentation

- **Operations Dashboard**
- **Briefing Book**
- **Executive Dashboard**
- **Story Map**

Operations Dashboard

Joe Bayles



Briefing Book

Anneley McMillan

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Integrating Picture for Movement

UXO Reports





Callsign	Location	Detailed Location
2/1	Cache	Inside farm buildings
Watchkeeper	She Sham Bagh Fuel station	Charge under storage tank
FOB PALACE	100m E of FOB	Open ground to E of FOB
AFG POL	Cache	Buried under abandoned shed
Wolfpack 2 D	Buried on N side of road	Under rocks and mixed debris; trigger line to NNW, unmanned when found

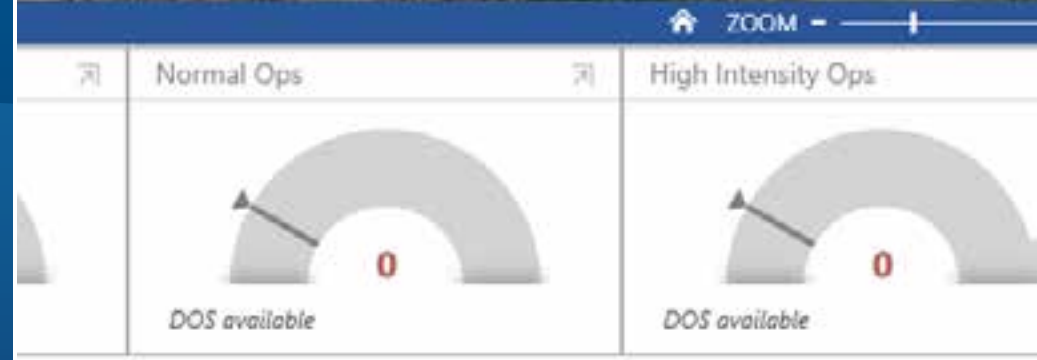
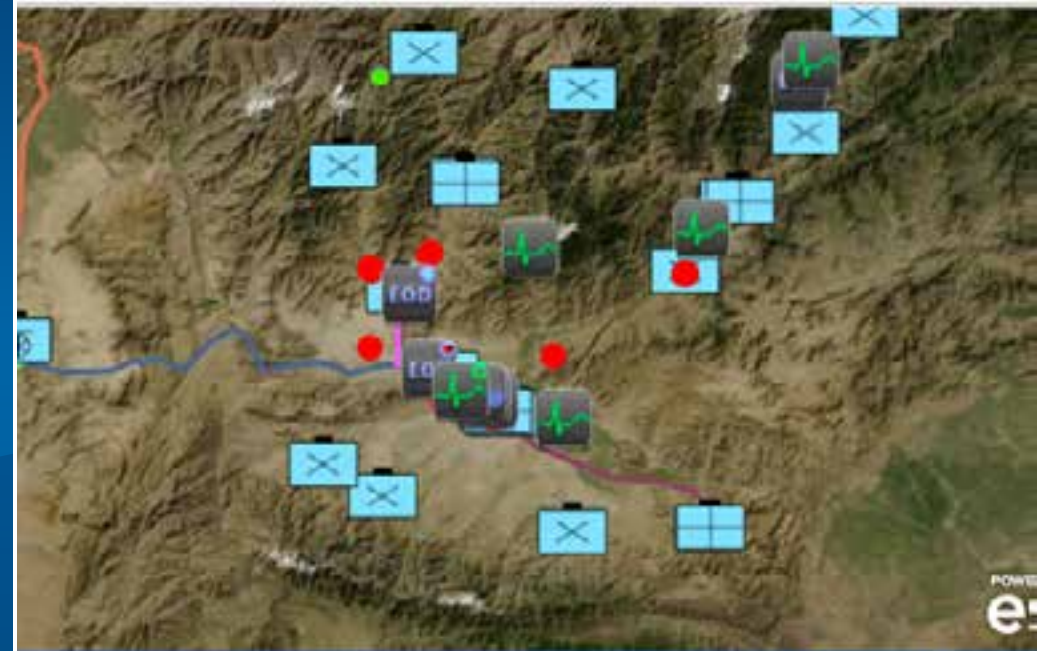
Significant activity to report

Operations Dashboard & Analysis

Joe Bayles

Logistics Reporting Dashboard

Class II	Class III	Class IV	Class V
 0 DOS	 0 DOS	 0 DOS	 0 DOS
Deployment - Lowest reported	POL - Lowest reported	Materials - Lowest reported	Munitions - Lowest reported



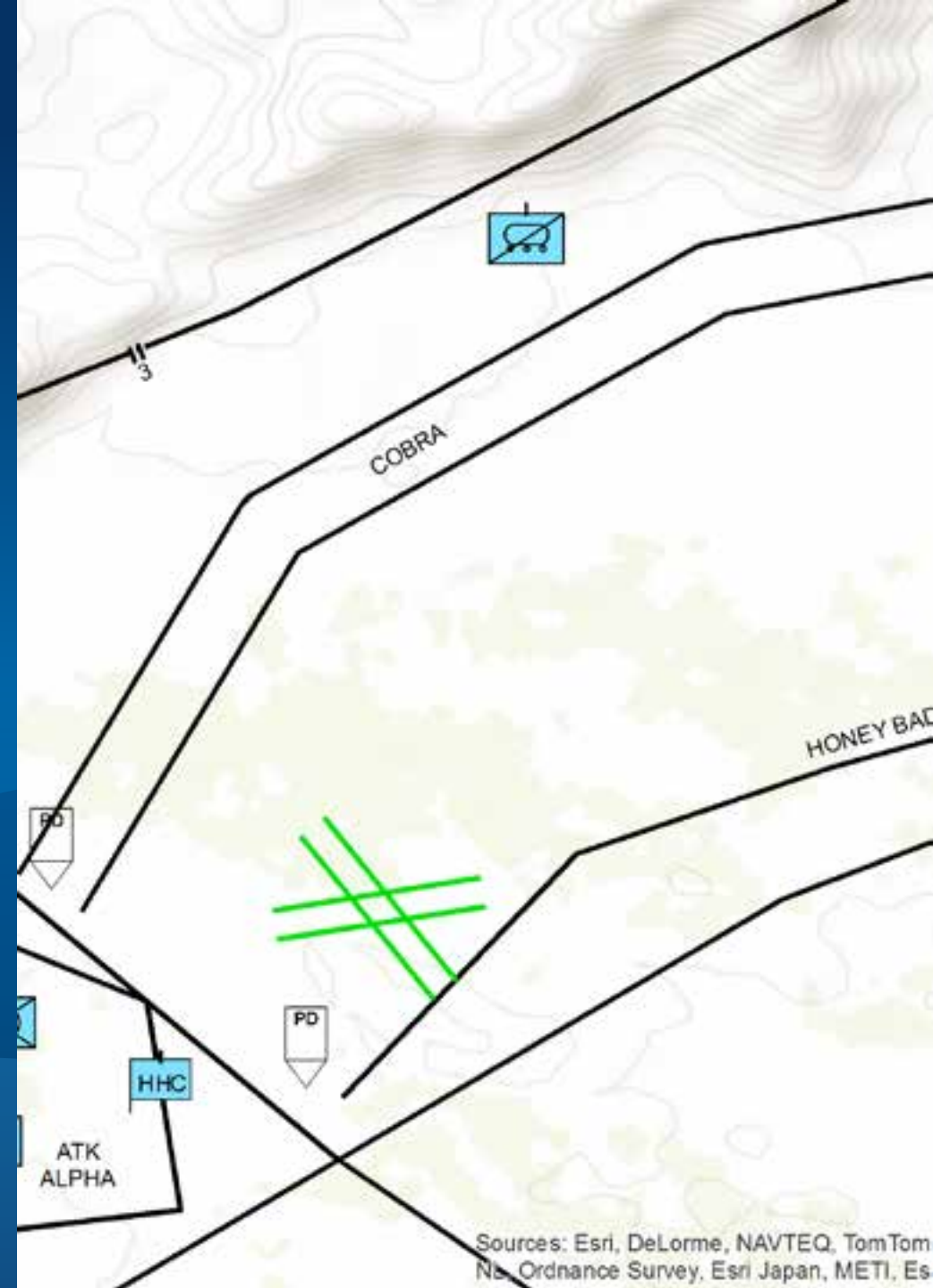
Planning the Sustainment of the Operations

Military Features Template

- **Based on MIL-STD-2525D**
- **Symbol Set and Layers**
- **Layers based on geometry and then by symbol set**
 - **Areas: Control Measures, METOC**
 - **Lines: Control Measures, METOC**
 - **Points: Activities, Control Measures, Land Units, etc.**

Military Features Template

Jim Weakland

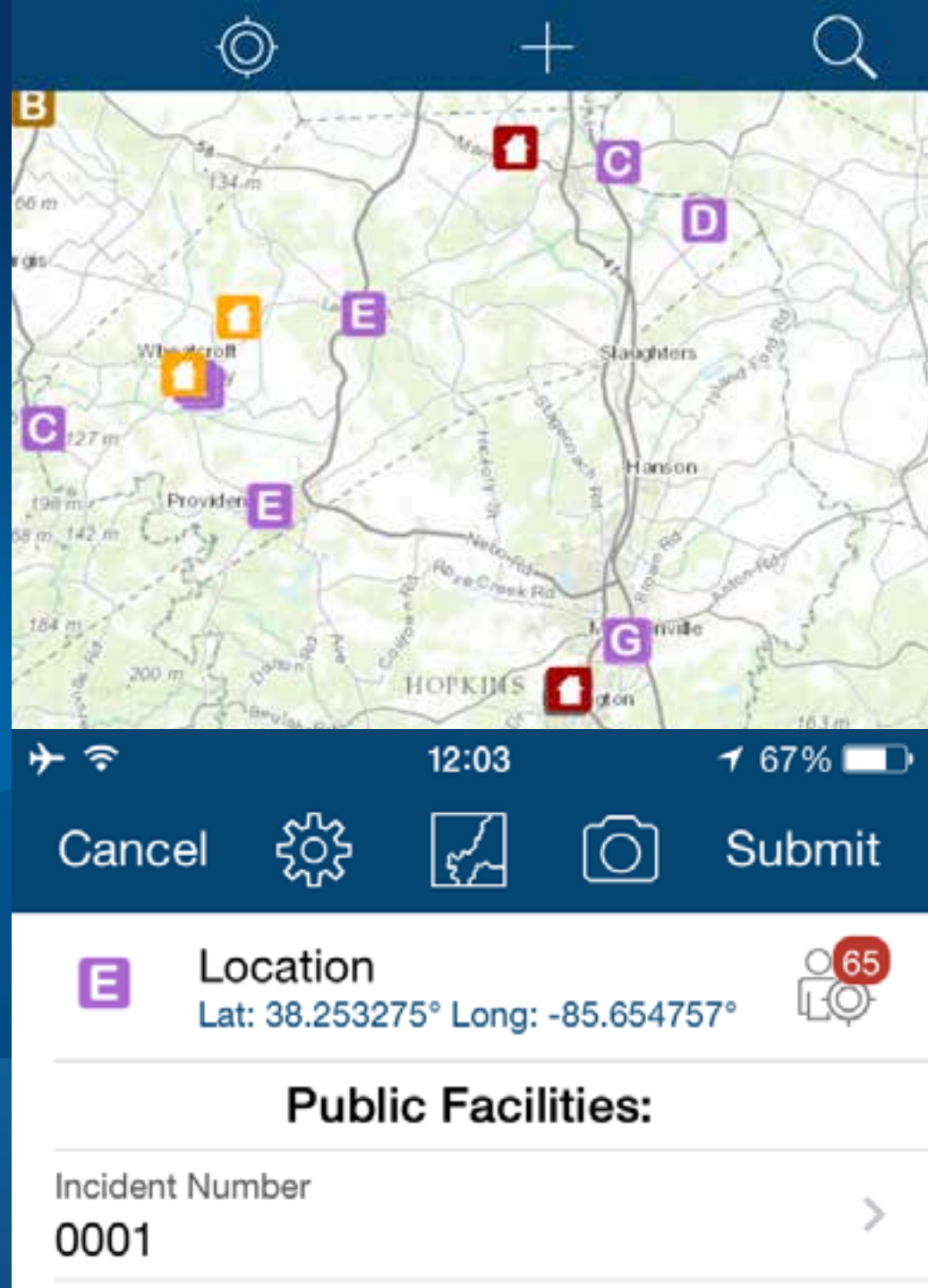


Executing the Sustainment of an Operation

- **Collector App**
- **Vehicle Commander**

Collector App

Joe Bayles



Vehicle Commander

Joe Bayles



Sharing the Information

Portal for ArcGIS



Portal for ArcGIS

Jim Weakland

Portal Featured Content

Mobile Apps



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Friendly Operations Dashboard



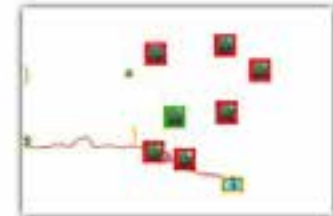
Situation Reporting



n



Panama Canal Shipping



SustainmentReportingV2



bon



Afghanistan Civilian Aeronautical Layers



Iranian Fast Boat Hours

1 2 3 4 5 6 7 8 9 10

James

Find

The mo

Recent

Groups

System Integration / Data Interoperability



Resources

- **Solutions Website**

- <http://solutions.arcgis.com/military/>

- **Videos**

- <http://video.arcgis.com/series/48/defense-and-intelligence/order/desc>

- **Forum**

- <http://forums.arcgis.com/forums/82-Defense-amp-Intelligence>

- **Blogs**

- <http://blogs.esri.com/esri/arcgis/category/subject-defense/>

Resources

- **GitHub**
 - <https://github.com/Esri>
- **Facebook**
 - <https://www.facebook.com/Esri.Defense>
- **Twitter**
 - <https://twitter.com/EsriDefense>

Thank you...

- **Please fill out the session survey-**
 - Offering ID: 1508
 - Online – www.esri.com/ucsessionsurveys
 - Paper – Put in drop box
- **Questions-**
 - **Now's the time to ask, or you could...**
 - Please come ask me directly
 - Email us
 - jbayles@esri.com
 - jweakland@esri.com
 - amcmillan@esri.com



Understanding our world.