Persistent Surveillance Support to Targeting

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Agenda

• Joint Persistent Surveillance Integration Office (JPSIO)
• Feature Based GEOINT vs Activity Based GEOINT
• Persistent Surveillance Framework Model
• Objectives of Persistent Surveillance
• Critical technologies Underpinnings
• Ops-Intel Model
• Redefining Targeting
JPSIO Mission and Vision

• Mission: Provide collaborative leadership for enabling persistent GEOINT in the NSG and DOD
• Vision: To be the community focal point for guiding and integrating activities supporting the tasking, processing, exploitation and dissemination of GEOINT data collected in a persistent surveillance environment
  – Key interface with USDI, Joint Staff, Agencies, COCOMs and other leaders in the Persistent Surveillance community
  – Defining the persistent GEOINT TPED CONOPS, operational and technical architecture, standards
Feature Based GEOINT vs. Activity Based GEOINT

• Feature based GEOINT focuses on:
  – Structural components
  – Specific locations

• Activity based GEOINT focuses on:
  – Capturing activities as they occur
  – Developing and unraveling networks

• Persistent Surveillance moves us from being feature focused to being activity focused

• The focus of collection is activity – not the static image
Intelligence Operations

Mission Domain

Strategic
Analyse/Exploit

Forensic analysis of FMV

Find

Operational

Tactical

Real-time exploitation of WAPS (Angel Fire)

Fix

WAPS (EO, MTI)

INSITU (UGS, Ground Cameras)

Traditional FMV

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THE UNITED STATES OF AMERICA
Objectives of Persistent Surveillance

- Capture, characterize, and geolocate activities or transactions
- Identify and geolocate actors or entities conducting activities or transactions
- Identify and geolocate networks between actors and/or entities
- Understand broader interactions between networks
- Develop pattern of life
Critical Technologies

• Data Discovery
  – Identify, track and automatically tag activity
  – Metadata and standards to enable rapid search and retrieval

• Data Integration
  – Common analytic environment that supports integration of multiple sources of intelligence

• Throughput
  – Better/smarter data compression/reduction methods or technologies
  – Improved storage capacities
Ops-Intel

• Persistent surveillance enables the development of intelligence in real time that can further refine or enhance the strategic intelligence picture and also impact current operations while they are ongoing.

• This breaks the traditional strategic vs. tactical dichotomy.

Currently having a significant impact in Iraq
Redefining Targeting

• As Persistent Surveillance redefines how intelligence supports operations, it is also redefining what is meant by targeting.

• Feature based GEOINT is no longer sufficient for asymmetric warfare with elusive adversaries
  – Must identify, track and target activities rapidly
  – Mission effectiveness is determined by the extent of impact on a network of actors/entities, not how much of a structure is left standing