Applications Session: Rapid Response

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**Purpose**
To enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive national incident management system

- Federal agencies led by DHS/FEMA all organized by the NRF and use NIMS & ICS
- Local/State/Federal “assets” ready for response
- ICS reverses the top-down; requests go up instead (ARF’s and MA’s at State EOC’s & FEMA RRCC’s)
How is imagery used in ICS?

• GIS Unit, including IMAT (mobile)
• Situation Unit (ESF #5) – EOC std. config
• Off-site geospatial intelligence via IRSCC (HSIN portal, USGS EROS DC HDDS, other portals)

• Note: Challenges of on-site vs. off-site; telemetry and on-site capability (computers, skills, access)
ICS examples

- GIS Unit & Situation Unit – real-world & exercise at two very different locations
  - NR 1994; 2003 & 2007 Wildfires in SoCal
  - Station Fire: large table w/ paper topo maps and acetate layer using markers (plus mobile GIS unit with digital mapping and Tachyon for comm’s)
  - NLE 11 at Region VI RRCC: all digital but with limitations and impacted communications and slow computers (large files causing problems)
Station Fire Incident

Situation Unit
Station Fire Incident

Mobile GIS Unit
Station Fire Incident

Morning Briefing by Incident Commander
National Level Exercise 2011 (NLE 11)
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National Level Exercise 2011 (NLE 11)
ShakeOut ‘08, ‘09, ’10, ’11, ’12
TTX’s and in case of a real event

• For SoCal earthquakes, USGS has federal Stafford Act role and will respond in ICS mode; we’re in ESF #5 and responsible for earthquake EEI’s (essential elements of info)
  – Situation Unit at USGS Pasadena (event time until Clearinghouse is up)
  – Clearinghouse with CGS & CalEMA (about 24-48 hrs. after event)
  – JFO (after declaration, set up several days after event)

• Opportunities for NASA/JPL/Caltech involvement with CalEMA, FEMA, USGS in future TTX’s

• What needs to be done to get imagery products like UAVSAR actually used in ICS for future real-world events?
  – Emphasis on rapid and actionable geospatial intelligence
    • CAP, FMV, RAMS
    • In 2007 wildfires, LiDAR & hyperspectral not MA’d (‘too slow’)
Questions?

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