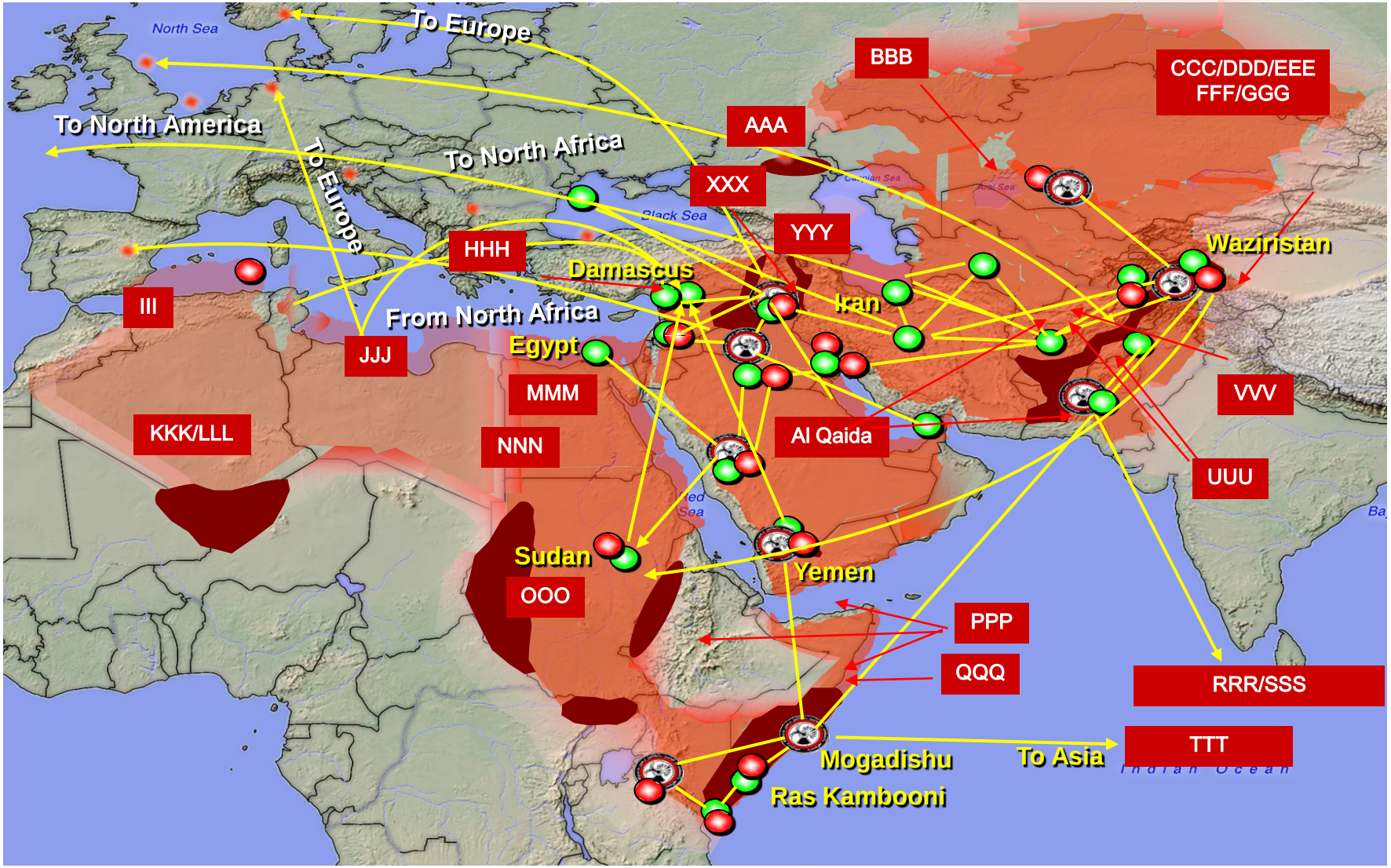
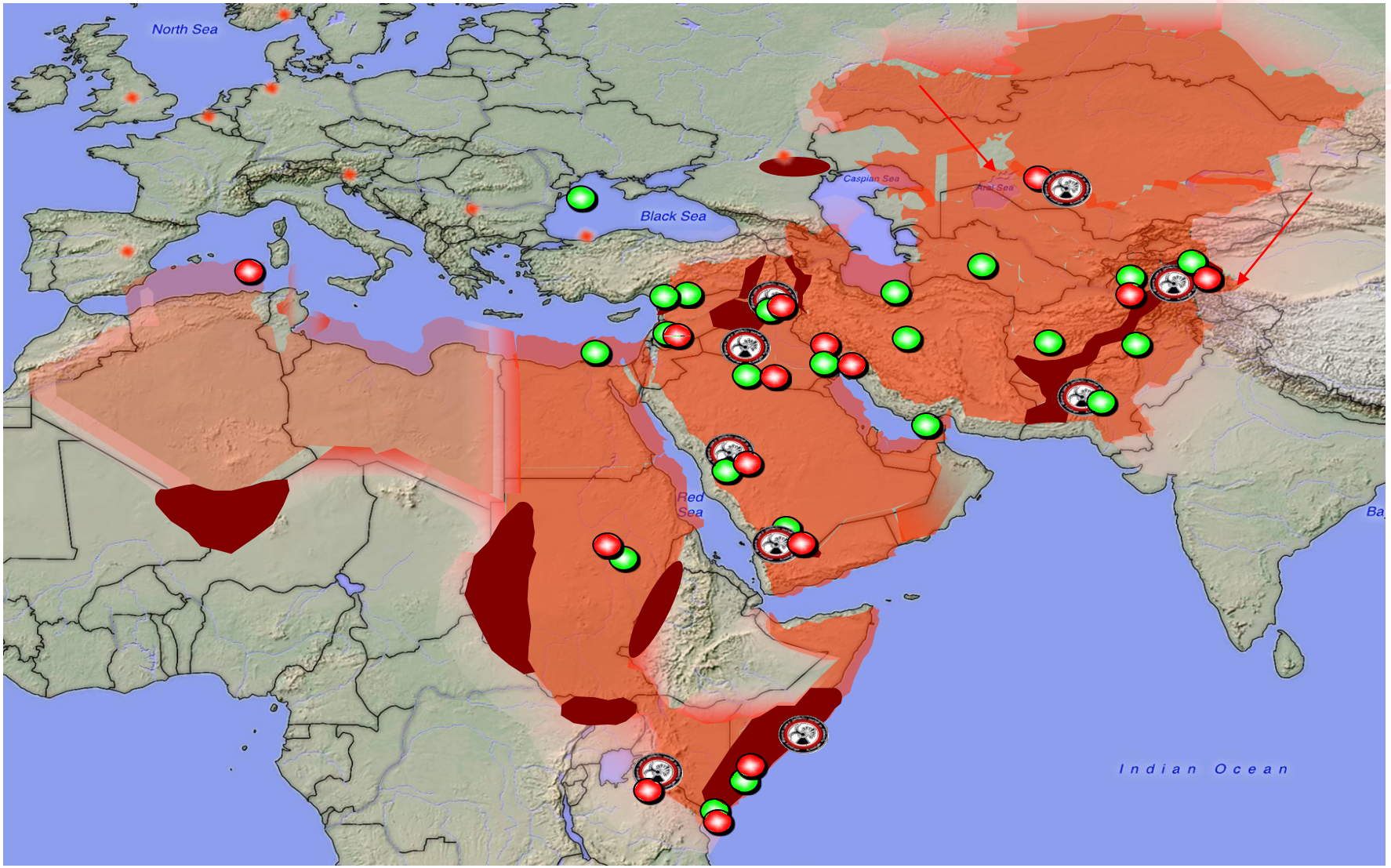
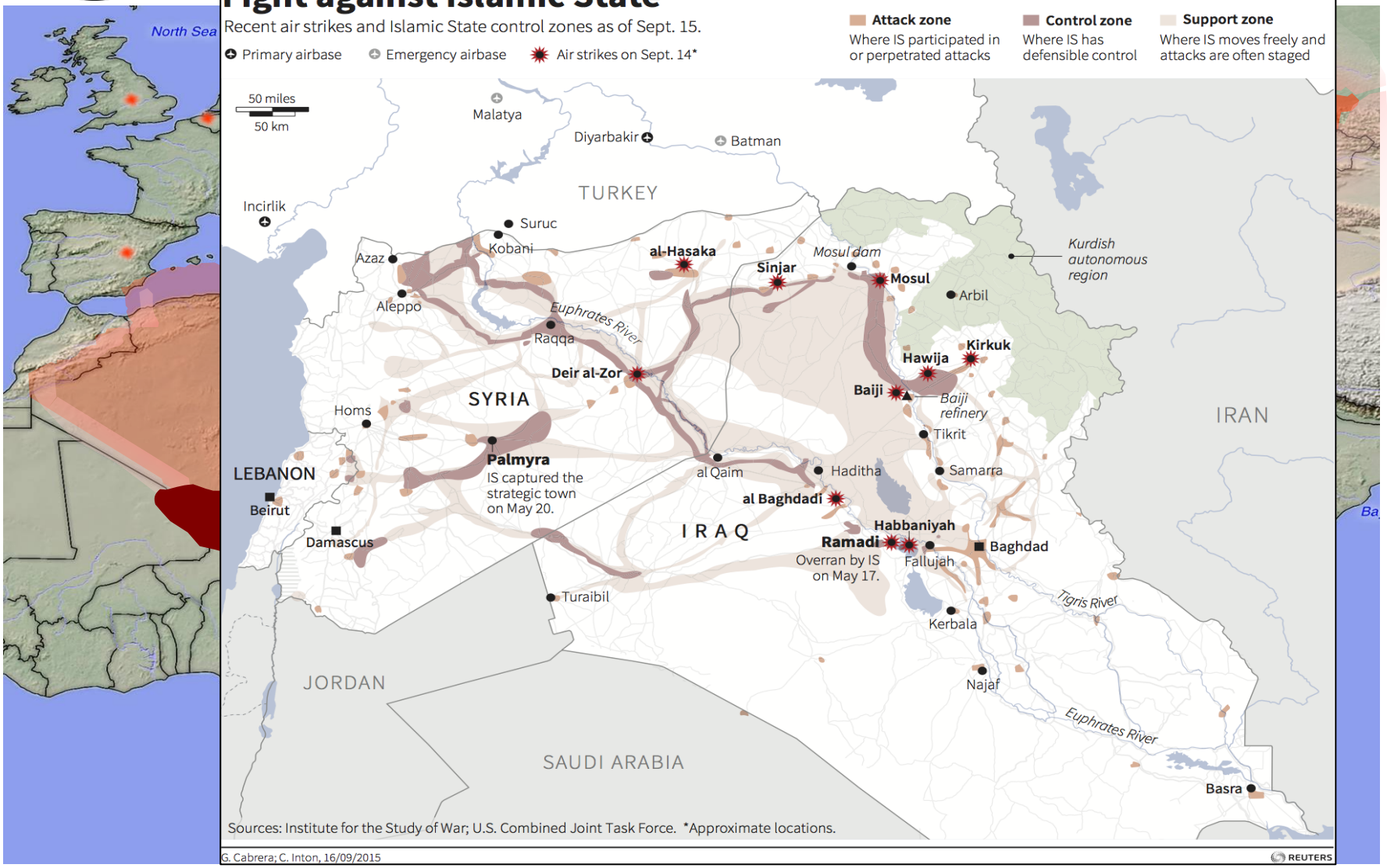
US Central Command
Technology Development

Al Qa'ida and Associated Movements (AQAM)
[circa 2002]




North Sea
Black Sea
Caspian Sea
Aral Sea
Red Sea
Indian Ocean

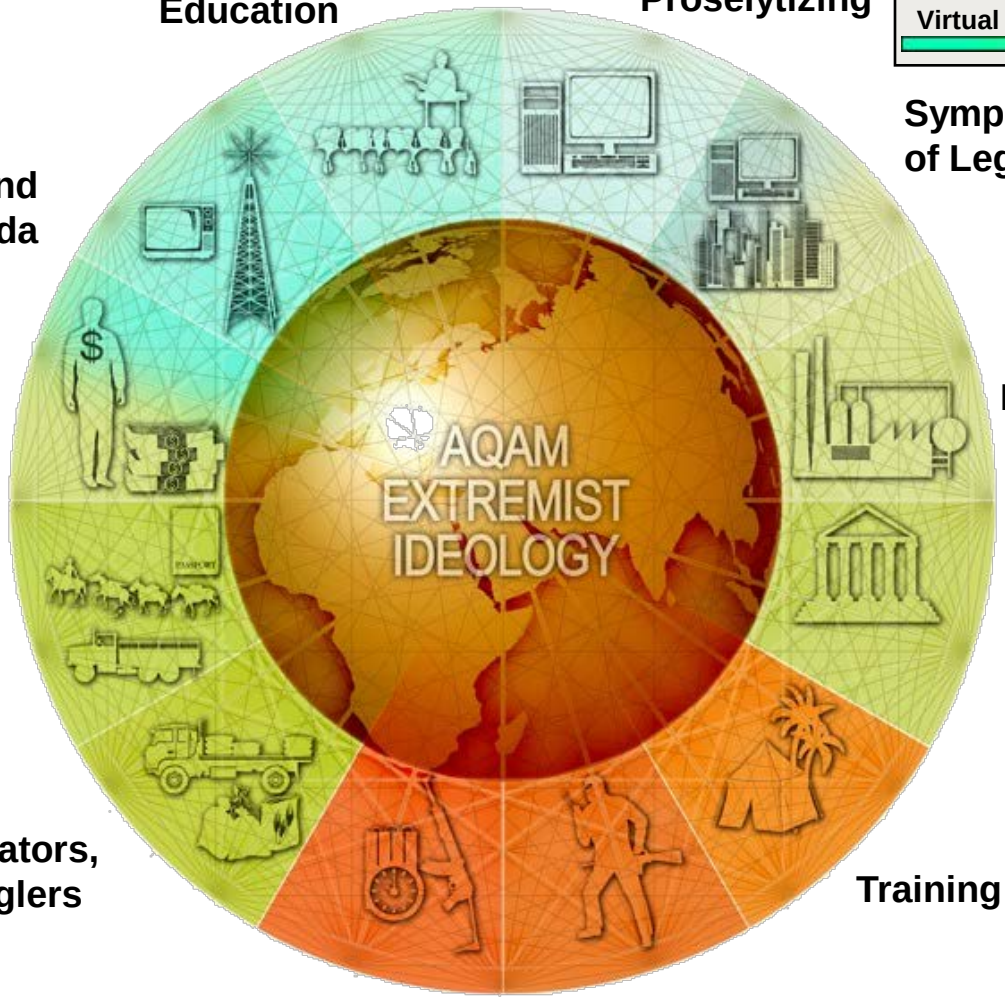
Da'esh Activities



Evolving Landscape

- **U.S. maintaining presence in Iraq and Afghanistan**
- **Instability continues across the AOR**
- **Da'esh activity continues to increase**
- **Foreign fighter flow**
- **Russian / Iranian involvement**
- **Yemen activity and support to regional partners**
- **Counter-Piracy mission continues**
- **Several splinter terrorist groups courted by Da'esh**
- **Refugee / Displaced Persons movement**
  - **As a result of conflict**
  - **Potential natural/manmade disaster**

Da'esh & AQAM: A Threat in All Realms



Recruitment and Education

Internet and Proselytizing

Virtual — Geographic

Sympathetic Members of Legitimate Govt's

Media and Propaganda

Ideologically Sympathetic NGO's

Front Companies

Financiers

Safe Havens

Facilitators, Smugglers

Training Camps

Technical Expertise, Weapons Suppliers

Human Capital, Fighters and Leaders

U.S. Central Command Tech Focus

- We focus on the JOINT solution that has the potential to satisfy a JOINT validated need
- Separate from the many technology needs of our customer(s) those technology challenges which:
  - *Do not have a readily available solution*
  - For high-impact needs there is *insufficient activity pursuing a solution*
- Seek out game-changing technologies which our customer(s) don't know they need

Thematic areas of concern

(not in priority order)

- ***A2AD solutions***
- Detect / Defeat:
  - IED initiators / initiator systems
  - Buried / concealed IEDs
  - Production and assembly of IEDs
- HME production standoff detection
- Culvert access denial / alerting
- Persistence in surveillance
- Biometrics (Identity dominance for FP/access)
- Non-lethal vehicle / vessel stop
- Reduce stress on the force:
  - Force Protection requirements
  - Increased automation
- Anti-swarm lethal / non-lethal
- ***Enable Partner Support***
- Predictive analysis techniques
- ***Tunnel detection / defeat***
- Holding all targets at risk
- ***Messaging / counter-Messaging***
- ***Mine Warfare (offensive/defensive)***
- ***IAMD overmatch solutions***
- C4ISR systems:
  - ***Processing, exploitation & dissemination***
  - Multi-level security
  - Cross domain solutions
  - ***Information access to tactical edge via MIL Comms, Cellular & WiFi***
- Tagging, Tracking, and Locating (TTL)
- ***Denying non-state actors state-like functions***
- Energy & Power efficiencies
- Scalable non-lethal / lethal effects
  - Directed Energy
  - Kinetics
- True SA for Blue … Fused Red
- Sustaining the force – reduced size, weight, amount, and retrograde
- Any sensor any shooter
- ***Cyber Warfare Defense***
- ***Detect, track, defeat UAS (Grp 1&2)***

By . . . . Through . . . . & With Strategy [Coalition & Surrogate Needs]

- **Combined Arms capability**
  - **C2**
  - **Maneuver**
    - **C-IED**
    - **Breaching**
  - **Precision fires**
  - **Air Support**
    - **CAS**
    - **ISR**
  - **Counter UAS**
  - **Service / Logistic Support**
    - **C-IED**
    - **Bridging**
  - **Force Protection**
    - **ISR**
    - **C-IED**

- **Win the Narrative**
  - **Expand authorities**
  - **Coord across Whole of Gov't**
  - **Scrape, sort, understand data**
  - **Automated sentiment scoring**
  - **Deploy counter-messages**
    - **Da'esh propaganda**
    - **Radicalization**
    - **Foreign fighter recruitment**
  - **Discredit Da'esh**
  - **Leverage media / print**

Points of Contact

[We've gone to DEE!]

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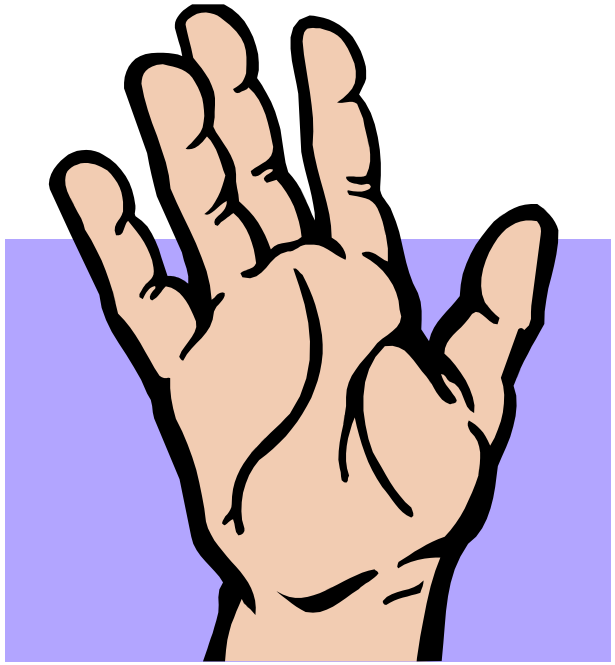

Raise your Hand

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Blah, Blah, Blah

QUESTIONS