US Central Command
Technology Development
Al Qa’ida and Associated Movements (AQAM) [circa 2002]
Da’esh Activities

Fight against Islamic State
Recent air strikes and Islamic State control zones as of Sept. 15.

- Primary airbase
- Emergency airbase
- Air strikes on Sept. 14

IS control status
- Attack zone: Where IS participated in or perpetrated attacks
- Control zone: Where IS has defensible control
- Support zone: Where IS moves freely and attacks are often staged

Map showing strategic locations and control zones in Syria and Iraq.

Evolveing 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
- Media and Propaganda
- Front Companies
- Safe Havens
- Training Camps
- Ideologically Sympathetic NGO’s
- Financiers
- Facilitators, Smugglers
- Technical Expertise, Weapons Suppliers
- Human Capital, Fighters and Leaders

Sympathetic Members of Legitimate Gov’t’s
• 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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