Science and Technology Development 2014

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 needs 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**

Some technology areas we "pursue":

Chemical, Biological , Radiological, Nuclear, and Enhanced Conventional Weapons

- **Detection of CBRNE at tactically significant distances; with emphasis on the "E"**

- **Pre-shot counter-sniper, counter-mortar, counter-RPG technologies; with emphasis on automated systems**

- **Technologies which enable the transfer of information more securely, more quickly, to a wider set of users, to include the warfighter when it makes sense, with less bandwidth and dedicated support resources, e.g.:**

    - **Multi-level Security over single architectures**

    - **Bandwidth compression / reduction techniques**

    - **Data reduction [data=>info=>knowledge=>understanding=>wisdom]**

- **Through automation, remote action, new and novel techniques, technologies which reduce risk and / or stress on the force and / or improve the efficiency and effectiveness of our action(s)**

- **Technologies which allow for greater persistence over the battlespace with fewer platforms; employing improved sensor technology providing greater fidelity of information**

DOTMLPF – Doctrine, Organization, Training, Material, Leadership and Education, Personnel and Facilities

Common thematic areas of concern
(not in priority order)

- **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**
  - **Force protection / access**
- **Non-lethal vehicle / vessel stop**
- **Reduce stress on the force:**
  - **Force Protection requirements**
  - **Increased automation**
- **Anti-swarm lethal / non-lethal**
- **More efficient / effective / timely trng**
- **Predictive analysis techniques**
- **Voice to text technologies** (voice to voice)

- **C4ISR systems:**
  - **Info sharing between system**
  - **Multi-level security**
  - **Cross domain solutions**
  - **Faster … Better sorting / retrieval**
  - **On the move w/ GIG access to tactical edge**
    - **SATCOM, WiFi, WiMax, etc.**
- **Tagging, Tracking, and Locating (TTL)**
- **Lightweight "x" with greater "y"**
- **More power per unit of weight**
- **Scalable effects – non-lethal to lethal**
  - **Directed Energy**
  - **Kinetics**
- **True SA for Blue-Fused Red (**SOF, NATO, COALTION**)**
- **Sustaining the force – reduced size, weight, amount, and retrograde**
- **Holding all targets at risk**
- **Any sensor … any shooter; the Soldier as a sensor; any adversary … any battlespace … anytime**
- **Energy Reduction ALL TYPES**

Points of Contact

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   Discovery & Integration