



SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

Accelerating SOF Innovation

Mr. Mark Shook

JSOC J8X S&T



Partnering to Maximize the SOF Technical Advantage



- **Why? – Increasing Pace of Tech Dev, Global Democratization of Tech, Flattening US Budgets – all Erode US Advantage**
- **What? – Bring Solutions providers and Problem generators closer together; shepherd collisions**
- **How? – CRADA's, SBIR's, TE's, FTF's, Vendor Loan Agreements, Online Scout Cards**
- **Latest Gaps/ Themes;**
 - *Human Effects – Offensive and Defensive*
 - *Autonomous Systems*
 - *Influence Warfare*

“Stop Missing Opportunities”



Why?

SOF's technical advantage is dependent on rapid: problem identification, resourcing and resolution.

- Untapped Problem Solving Potential
- Unmet Needs
- Flat Government Spending
- Industry IR&D
- Desire to collaborate
- The real \$ is in sustainment

We can't afford to miss opportunities to solve problems faster.

What?

Problem Solving 101
– *Know the problem, Find the solution, Resource*

- Reduce the barriers between Problems and Solutions
- Share til it hurts
- Accept Risk
- Partner
- Reinforce success
- Acknowledge our limitations

Embrace our dependence on partnerships

HOW?

- Our Gap List puts our needs in the hands of solvers – it is **JSOC's “dating profile”**.
- Cooperative R&D Agreements accelerate solutions to a point of demonstration.
- Demonstrations impact resourcing decisions.
- Vulcan is a safe place for both industry and government – acts as “holding pond” for solution and problem to connect

JSOC – 2019 Priority Areas

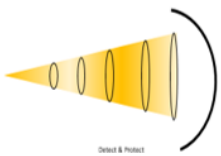


HUMAN EFFECTS

Increasing the quality and duration of life for the SOF operator, and reducing that of our enemies

Why? The human is our most precious resource, yet we continue to place more of the burden on them. This and the emergence of new physical threats risk a long-term toll on our SOF operators.

What Now? Tools to Measure and Mitigate Directed Energy Threats, Improve the Human-Machine Interface, Enrich Human Performance/ Resilience with Medical feedback, Exploit Non-Lethal Effects against our enemies.



AUTONOMOUS SYSTEMS

Letting machines do more of the work

Why? The age of the intelligent machine has arrived; at least commercially. Commercial self-driving cars, IBM's Watson, the Cloud, and Artificially Intelligent decision aids all have unrealized military utility. The skilled human, our most precious asset, does not scale well. Smart machines could scale while enhancing mission effect and reducing human risk.

What Now? Improve Human Machine Interfaces, Update Policy, Optimize C4 Architecture for AI, Enhance Training/ Expertise - re-tool our workforce to compete in this new environment.



INFLUENCE WARFARE

Changing Minds

Why? Google and Facebook have proven the effectiveness of targeted digital influence operations. SOF has struggled to translate those commercial tools, techniques and lessons learned to our mission.

What Now? Tools to Deny, Degrade, and Counter enemy propaganda, Measure and Visualize Tool effects in Near Real Time, Delegation of PSYOP authorities, Automated Analytics, Digital Marketing Training

