SOF AT&L
Special Operations Forces
Acquisition, Technology, & Logistics

Mr. James Geurts Acquisition Executive
THANK YOU
MISSION
Provide rapid and focused acquisition, technology, and logistics to Special Operations Forces

VISION
Be the recognized expert and trusted provider to equip and sustain Special Operations Forces

PRINCIPLES
Deliver capability to user expeditiously; exploit proven techniques and methods; keep Warfighters involved throughout process; take risk and manage it!
Global Acquisition Network

DOD Labs, Industry, Academia & International Partners

- Combat Feedback
- Unconventional Uses

Service/International Acquisition

- SOF-to-Service Transition
- Innovative Acq Practices

USSOCOM Acquisition
Wide Array of Programs

- MAAWS
- GMV1.1
- Sniper Weapons & Accessories
- DVEPS
- AC130J
- Genedrive Bio Identifier
- RFCM
- MCTF
- GROUND 118 Programs / Projects

- DDS / SDV
- MH-47
- CV-22
- CCM Mk 1
- LRBS
- SCAMPI
- SWCS
- Hand Held Link-16
- DCS
- Identity Operations
- AIR 109 Programs / Projects

- Prometheus Block 2
- Intelligence Collection Systems
- Special Operations Tactical Video System (TVS)

- LRBS
- DCS
- Hand Held Link-16
- DVEPS
- AC130J
- Genedrive Bio Identifier
- RFCM
- MCTF
- GROUND 118 Programs / Projects

- CV-22
- CCM Mk 1
- LRBS
- SCAMPI
- SWCS
- Hand Held Link-16
- DCS
- Identity Operations
- AIR 109 Programs / Projects

- Intelligence Collection Systems
- Special Operations Tactical Video System (TVS)

- MARITIME 24 Programs / Projects

- LRBS
- SWCS
- Hand Held Link-16
- DCS
- Identity Operations
- AIR 109 Programs / Projects

- C4I 142 Programs / Projects

- Prometheus Block 2
- Intelligence Collection Systems
- Special Operations Tactical Video System (TVS)

- SRSE 59 Programs / Projects

- LRBS
- SWCS
- Hand Held Link-16
- DCS
- Identity Operations
- AIR 109 Programs / Projects

- Camelion
- Prometheus Block 2
- Intelligence Collection Systems
- Special Operations Tactical Video System (TVS)

- SRSE 59 Programs / Projects
<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rounds of ammunition</td>
<td>110M</td>
</tr>
<tr>
<td>Weapons, accessories, lasers, &amp; visual augmentation systems</td>
<td>60,772</td>
</tr>
<tr>
<td>Operator survival/equipment items</td>
<td>211,966</td>
</tr>
<tr>
<td>Radios, SATCOM terminals, &amp; ancillary equipment</td>
<td>2,503</td>
</tr>
<tr>
<td>Information Technology automation devices &amp; systems</td>
<td>37,406</td>
</tr>
<tr>
<td>Operator &amp; Medic kits</td>
<td>5,605</td>
</tr>
<tr>
<td>ISR kits</td>
<td>4,417</td>
</tr>
<tr>
<td>Vehicles</td>
<td>368</td>
</tr>
<tr>
<td>TACLAN FoS equipment deliveries</td>
<td>2,500</td>
</tr>
<tr>
<td>SCAMPI node, USSOCOM Strategic Entry Point, &amp; media ports</td>
<td>16</td>
</tr>
<tr>
<td>CASEVAC kits</td>
<td>522</td>
</tr>
<tr>
<td>Rotary Wing aircraft &amp; systems</td>
<td>153</td>
</tr>
<tr>
<td>Tactical MISO systems</td>
<td>23</td>
</tr>
<tr>
<td>Fixed Wing aircraft</td>
<td>30</td>
</tr>
<tr>
<td>Mobile Technology &amp; Repair Centers deployed</td>
<td>13</td>
</tr>
<tr>
<td>Prototype Diver UBAs</td>
<td>20</td>
</tr>
<tr>
<td>Maritime Surface Crafts</td>
<td>19</td>
</tr>
<tr>
<td>Undersea Manned Submersibles</td>
<td>3</td>
</tr>
</tbody>
</table>
SOF AT&L Funding (MFP-11)

17 President’s Budget

Does not include non MFP-11 in support of SOF
EXPONENTIAL Environment

LOCATIONS
More countries, more diverse operating locations, challenging logistics and communications infrastructure

MISSIONS
Dynamic, rapidly changing, encompassing the full range of direct, indirect, training, and preparing

PARTNERS
Varying degrees of integrations and reach. Interacting in ops, cooperative development and foreign comparative test

C2 DEMANDS
Requires seamless, integrated, and effective C2 at the global scale with high confidence

MARKET-PLACE
Global and commercially driven. Heavy use of COTS/GOTs increases complexity

“If the rate of change on the outside exceeds the rate of change on the inside, the end is near.”
Jack Welch
Track the tech

Broadband speeds will more than double by 2019 to 42.5 Mbps, the equivalent of streaming 8 HD Netflix films at once.

Clock speed estimated to triple over this decade to 10 gigahertz, enabling unprecedented miniaturization and low power consumption.

Wearables / connected devices sold expected to triple by 2019 to 150M, massively expanding the internet of us.

Source: Economist, Cisco, BI Insights, BCG Analysis
Radical Leveling Technologies

• Linear vs Exponential vs Exponential Plus

• Why We Care
  - Downskilling
  - Stranger Visions
  - Small Footprint/ Signature Reduction/New Signatures
  - Arms Racing Among State and Non-State Actors for WMDs/WMEs
Our Blueprint

Set **unreasonable** expectations

Execute an **elastic** business definition

A **cause**, not a business

Embrace and listen to **new voices**

Enable a market for **innovation**

**Exploit** low-risk experimentation

Create and exercise the **network**

**Velocity is our Competitive Advantage**
Planning for the Future

Understand Gaps
Technology Gaps
Component & TSOC Gaps
PEO Gaps
Threat-Related Gaps

Understand Technology
DISCOVER
Scouting
Roadmaps
Red Team
ENABLE
Internal Projects
External Projects
Studies
TRANSITION
PEOs
Military Services
Enablers, COI, OGA, DoD

Develop Solutions
Deliver “Game Changing” Technology
Maximize Leverage
(DoD, Industry,
Academia, Partner
Nations)
Execute Planned Transitions

Involve Warfighters
Increase Speed
Manage Risk
SOF S&T Needs

- Comprehensive Signature Management for Personnel & Platforms*
- Unmatched Ballistic Protection Through Advanced Armor/Novel Materials
- Capabilities to Sufficiently Execute Countering Weapons of Mass Destruction (CWMD)
- Enhanced Human Performance*
- Far Forward Combat Casualty Care
- First Pass Accuracy and Lethality
- SOF Small Unit Dominance (SOFSUD)*
- Precision Guided Munitions/Scalable Effects Weapons (SEW)
- Counter Terrorism / Tagging, Tracking, & Locating (TTL) Technologies
- C4 Revolutionary Capabilities
- Optical Electronics, IR, & Lasers
- Anti-Access/Area Denial (A2/AD)*
- Battlespace Awareness*
- Intelligence, Surveillance, & Reconnaissance (ISR)
- Cyber/Social Media Analysis Tools
- Leap Ahead Power & Energy Systems
- Biometrics/Sensitive Site Exploitation (SSE)
- Military Information Support Operations (MISO)

* FY15-19 Science and Technology Integrated Priority List (STIPL)
Breaking Down Barriers

PEO INDUSTRY DAYS + S&T LAB DAYS 93+

NON-FAR CONTRACTS (OTAs) 5

INDUSTRY VISITS 127+ With AE In FY15

TILO 603 Submissions

SOFWERX Ybor City Location opened Dec 2015

TALOS 30 RAPID PROTOTYPING SESSIONS 215 Different Organizations

CRADAs 144+ SIGNED

SBIRs 56+ PROJECTS

TECHNICAL EXPERIMENTATION 170+ Experiments

NON-FAR CONTRACTS (OTAs) 5

Attendees 946

CRADAs 144+ SIGNED

SBIRs 56+ PROJECTS

TECHNICAL EXPERIMENTATION 170+ Experiments
**Acquisition Agility Ecosystem**

**Supporting Innovation**
1. Build the Network
2. Provide the Venues
3. Develop the Tools and Processes

**SOF CAPABILITY NEEDS**

- Local Community
  - Thunderdome
  - Hackathons
  - STEM events
  - Volunteers

- Leverage Network:
  - Services & IC
  - Government Labs
  - Industry
  - Academia
  - Non-profits

Technology Domain Awareness
- Vulcan
- DIUx
- H4D

Advanced Manufacturing & Rapid Prototyping

 Ideation & Iteration Venues
- SOFWERX
- DirtyWERX
- User Test Bed

**Customers and Culture**

**POTENTIAL SOLUTIONS**

**Acquisition Agility Ecosystem**
Innovation Thrives in a Marketplace

Network Engagement
Mini Robotics
Capability Collaboration Events
RAPID Prototyping
CO-INVENTION
TECHNOLOGY AWARENESS
HACKATHONS
OpenWERX Challenges
EDUCATION WITH AT&L
Growing the next GENERATION
Creative Staffing Model

DoD Interns: Recruit promising talent and develop with challenging roles and experience

Industry Fellowships: Leverage industry expertise, and share development opportunities

University Interns: Quickly bring in skilled workforce and expose to DoD culture and challenges

Note: Companies shown reflect first round of fellows only
Leveraging Diverse Communities to Solve Tough SOF Problems

- Monthly challenges
- Open to anyone
- On the spot prize awards
- Go to WWW.SOFWERX.ORG
Rapid Agile Prototyping Series (RAPS)

- Control / Carriage of Precision Weapon
- MedRZR Improved Litter Carrying Capability
- SAASM GPS PUCK Receiver Kit
- Cubesat Payload Prototyping Lab

- Replacement of the Forward Area Manifold (FAM) Cart
- Extending SOF’s Small Arms Capability
- Innovative use of Commercial Off the Shelf
- Single Man Flying Machines
Advanced Manufacturing (AM)

Objective: Empowered units & individuals solving problems & implementing solutions at the point of need

Additive Manufacturing & 3D Printing Design Training at Unit Sites

Enabling Production/Training through the SOF Advanced Manufacturing HQ Node
Enable the Global SOF Network with distributed use of networked advanced design and manufacturing tools.

Pre-deployment training ensures specialized skills including:
- Engineering (CAD, 3D printing, documentation)
- Welding, machining and advanced manufacturing
- Carpentry / electrical
- Kydex & sewing
- Platform / Weapons / C4
Emerging Areas of Interest

- Open Source
- Crowdsourcing
- Deep/Machine Learning/AI
- Advanced Analytics

Using Advanced Tools to Simplify and Increase Velocity
QUESTIONS?

James “hondo” Geurts
HQ USSOCOM/SORDAC
james.geurts@socom.mil
813-826-9402

@hondogeurts(twitter)

Also on LINKEDIN