# The only easy day was yesterday.....

**Special Operations Forces Acquisition, Technology, & Logistics** 

Mr. James "Hondo" Geurts

Acquisition Executive



# A Rich Tradition of Innovation



## Recognize This?

#### Organizations and Conferences (Page 28)

- (1) Insist on doing everything through "channels." Never permit short-cuts to be taken in order to expedite decisions.
- (2) Make "speeches." Talk as frequently as possible and at great length. Illustrate your "points" by long anecdotes and accounts of personal experiences. Never hesitate to make a few appropriate "patriotic" comments.
- (3) When possible, refer all matters to committees, for "further study and consideration." Attempt to make the committees as large as possible never less than five.
- (4) Bring up irrelevant issues as frequently as possible.
- (5) Haggle over precise wordings of communications, minutes, resolutions.
- (6) Refer back to matters decided upon at the last meeting and attempt to re-open the question of the advisability of that decision.
- (7) Advocate "caution." Be "reasonable" and urge your fellow conferees to be "reasonable" and avoid haste which might result in embarrassments or difficulties later on.
- (8) Be worried about the propriety of any decision raise the question of whether such action as is contemplated lies within the jurisdiction of the group or whether it might conflict with the policy of some higher echelon.













Preservation of the Force and Family



# Authorities and Responsibilities



## SOF AT&L



## **MISSION**

Provide rapid and focused acquisition, technology, and logistics to Special Operations Forces



### **VISION**

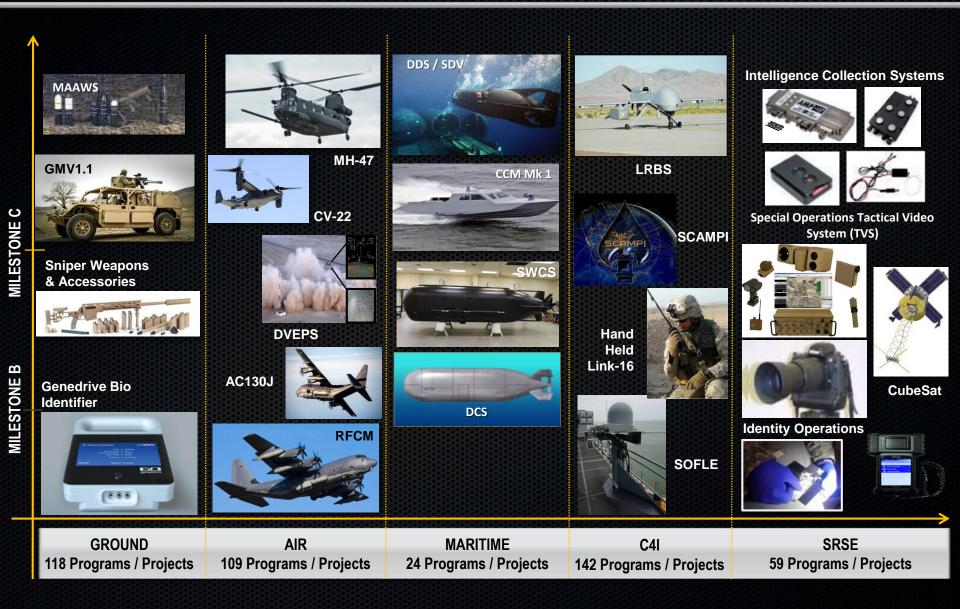
Be the recognized expert and trusted provider to equip and sustain Special Operations Forces



## **PRINCIPLES**

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

## Wide Array of Programs



## FY15 Acquisition

SOF ACQUISITION TEAM ~600 personnel	98M 42,334	Rounds of ammunition Weapons, accessories, lasers, & visual
INNOVATION  - International commercial classification for use of high energy Li-Ion batteries in manned submersibles  - Low cost/expendable satellites  - Improved tactical combat casualty care	1,874 4,909 28,590 2,187	augmentation systems Operator survival/equipment items Radios, SATCOM terminals, & ancillary equipment Information Technology automation devices & systems Operator & Medic kits
<ul> <li>Target engagement weapons/systems         <ul> <li>Advanced armor/materials</li> <li>Low Visibility/LPI C4 systems</li> <li>Deployable Rapid DNA Analysis</li> <li>Manned/unmanned ISR</li> <li>SOF-unique night vision</li> <li>Coalition partners data sharing exercise participation</li> <li>Tactical Assault Light Operator Suit</li> </ul> </li> </ul>	1537* 2,455 627 2,769 13 313	Field Service Reps placed on contract * (provided to support USSOCOM via PEO SOFSA)  ISR kits Vehicles TACLAN FoS equipment deliveries SCAMPI node, SOCOM Strategic Entry Point, & media ports CASEVAC kits
ANNUAL SCOPE  500+ programs/projects Oversaw \$7.9B  Awarded \$3.4B  11,528 contract actions (inc 4,456 actions for services for \$1.85B)	84 16 29 9 8 3	Rotary Wing aircraft & systems Tactical MISO systems Fixed Wing aircraft Mobile Technology and Repair Centers deployed Maritime Surface Crafts Undersea Manned Submersible Prototypes

# SOF Acquirers – Our Best Resource



Credible

**Technical Expert** 

Joint by design

Innovator/Entrepreneur

**Efficiently effective** 

Supported by mission focused team/tools



**Sharing SOF Characteristics and Mindset** 

# Global Acquisition Network

DOD Labs, Industry, Academia & International Partners





- Combat Feedback
- Unconventional Uses



- SOF-to-Service Transition
- Innovative Acq Practices



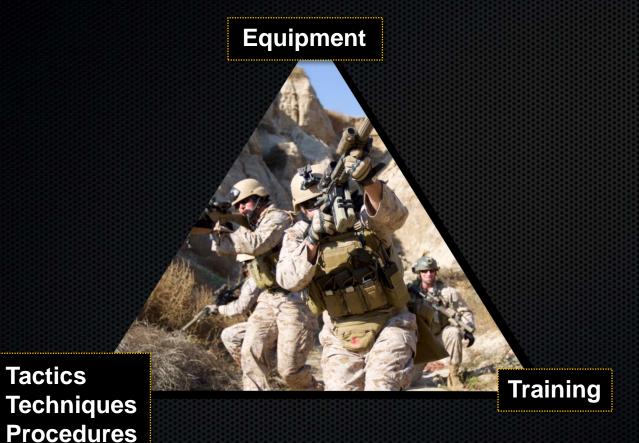






**USSOCOM Acquisition** 

## Combat Development Cycle



## Key Attributes

Worldwide Use Speed to field

Easily integrated into existing/future capabilities

Applicable in multiple mission areas

Reliable, employable, supportable, affordable

Kinetic/non-kinetic

Non-Developmental **Items** 



**EO/IR Systems** 



**AFSOC MC-130** 



**SOF Modified Items** 

"Monster Garage"

SOPGM

# Acquisition

How we do





**Operator Consoles** 



30mm Gun

Rapid **Development**  "If the rate of change on the outside exceeds the rate of change on the inside, the end is near."

Jack Welch

## Our Blueprint

Set <u>unreasonable</u> expectations
Execute an <u>elastic</u> business definition
A <u>cause</u>, not a business
Embrace and listen to <u>new voices</u>
Enable a market for <u>innovation</u>
Exploit low-risk experimentation
Create and exercise the <u>network</u>

USSOCOM acquisition ... light, agile, lethal: a pathfinder for DoD acquisition reform: USSOCOM leads the way by focusing on modifying organization culture rather than processes. GLENDA H. SCHEINER

LEADING THE REVOLUTION - GARY HAMEL

## Planning for the Future

**Understand Gaps Understand Technology Develop Solutions Technology Deliver Scouting** Gaps "Game Changing" DISCOVER **Roadmaps Red Team Technology** Component & **Maximize Leverage TSOC Gaps Internal Projects** (DoD, Industry, **ENABLE External Projects** Academia, Partner **Studies PEO** Nations) Gaps Execute **PEOs Planned TRANSITION Military Services Threat-Related Transitions** Enablers, COI, OGA, DoD Gaps

**Involve Warfighters** 

**Increase Speed** 

**Manage Risk** 

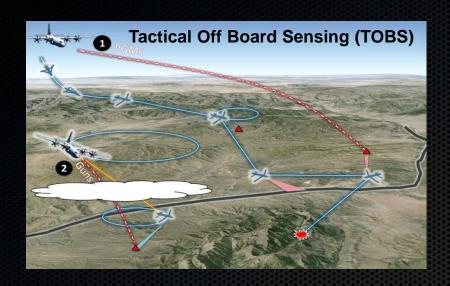
## SOF S&T Needs



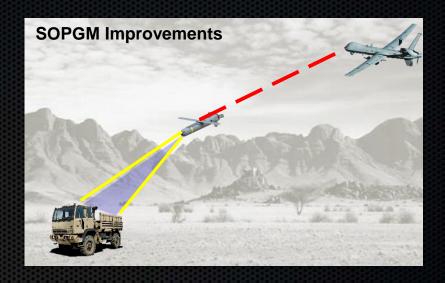
- Comprehensive Signature Management (CSM)\*
- Human Performance\*
- First Pass Accuracy and Lethality
- Small Unit Dominance (SOFSUD)\*
- Intelligence, Surveillance,
   & Reconnaissance (ISR)
- Tagging, Tracking, & Locating (TTL)
- C4 Revolutionary Capabilities
- Electro-optics, IR, & Lasers
- Military Information Support Operations (MISO)
- Scalable Effects Weapons (SEW)
- Anti-Access/Area Denial (A2/AD)\*
- Battlespace Awareness\*
- Leap Ahead Energy & Power Systems
- Sensitive Site Exploitation (SSE)

<sup>\*</sup> FY15-19 Science and Technology Integrated Priority List (STIPL)

# Fixed Wing Precision Munition Gaps



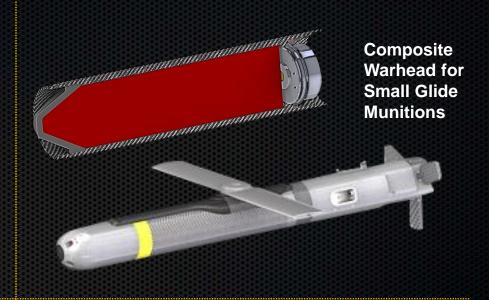


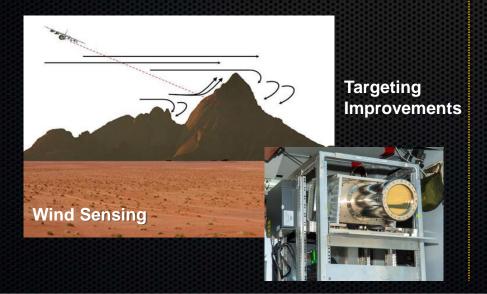


- TOBS
  - Enhanced targeting under weather and at standoff ranges
- SOPGM
  - FMV capable w/ display in cockpit
  - Long range standoff strike capability
- Smart / Guided Munitions
  - First shot lethality
  - Moving target engagement

# Fixed Wing Precision Munition Gaps

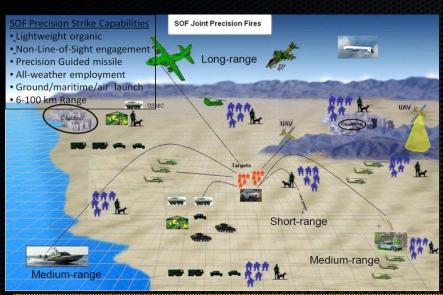


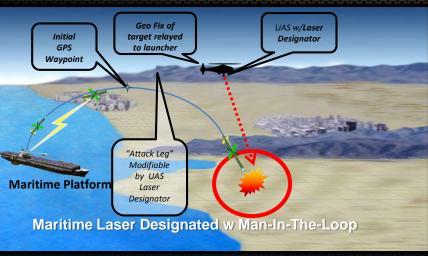


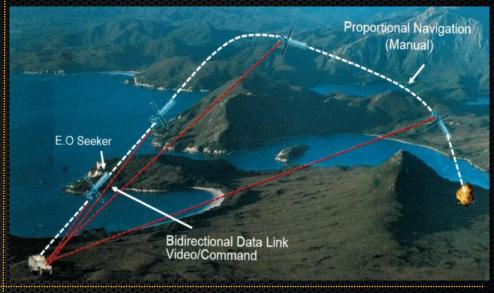


- Denied Environment
  - Comms / GPS / IADS / Weather
- Composite Warhead
  - Enhanced Lethality
  - Low Collateral Damage
- Targeting Improvements
  - Improving 1st shot accuracy
  - Improved probability of hit

# Ground/Maritime Precision Munition Gaps







#### **Ground-Based Man-In-The-Loop Strike**

GAP: Short, Medium and Long Range Precision Strike:

- All- Weather, non-line of sight engagement
- Modular Employable on Multiple Types and Sizes of Ground and Maritime Mobile Platforms
- Real-timeC2 w/ Man-In-The-Loop, laser and/or GPS guided
- Tailorable Target Effects to Mitigate Collateral Effects on Non-combatants and Surrounding Structures
- Capable Against Fast Moving Targets

## Directed Energy (DE)

### Why:

 Provide a Range of Offensive and Defensive Desired Effects with DE

#### **Objective:**

- Demonstrate Operationally Suitable DE Prototype
- Establish Engineering and Airworthiness Criteria for Testing and Fielding
- Aid in Develop Concept of Operations (CONOPS) and Concept of Employment (CONEMP) for DE

#### **Applicable Technologies:**

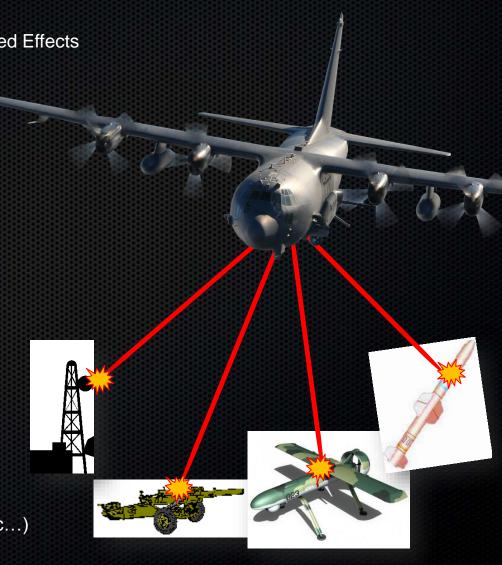
- High Energy Laser (HEL)
- Power Management
- Aiming and Focus Turret

#### **Benefit:**

Minimize Collateral Damage and Signatures

#### **Next Steps:**

- Assess Currently Available Technologies
- Determine Tech Readiness Levels
- Provide Advocacy for Service Efforts (AF, Navy, Etc...)
- Focus on High Risk Areas
- Begin Transition Planning/Aircraft Integration

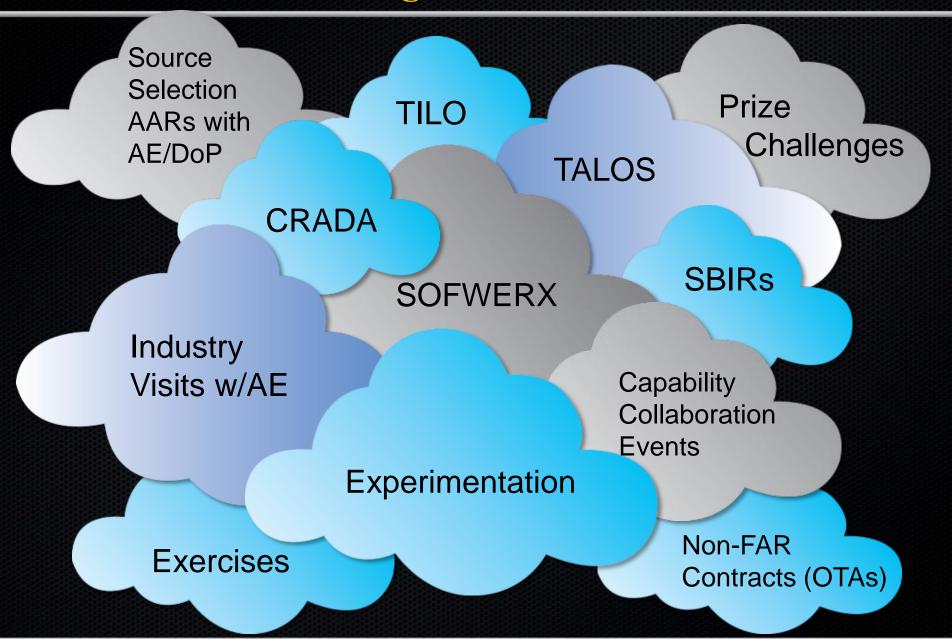


# The 3rd Offset - not a Thing but a way of Operating

- Using existing technologies to create new capability at the time/cost
- Using new ideas and technologies to solve to old problems
- Empowering innovation at the point of need vs serial delivery processes
- Developing, thickening, and exercising an adaptive network
- Reducing barriers to entry and collaboration while incentivizing co-invention
- Acquire then require wherever possible
- Radically reduce the cost per bet and exponentially increase the iteration speed

Make velocity our competitive advantage

## Breaking Down Barriers



## Enabled by Tools

## **Project Vulcan**

**Turn Everyone into a Sensor** 



# Technical Experimentation



## **SOFWERX**

**Create Venues for "Return on Collisions"** 



## **S&T Council**

**Voice of Components/TSOCs** 

## SOFIC



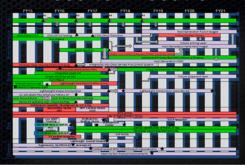
Industry Engagement

### **TILO 2.0**



## PEO Technology Insertion Roadmaps

Link What Components
Need to Execution



# Innovation Thrives in a Marketplace

# SOFWERX







CO-INVENTION THUNDERDOME EVENTS

Rapid Prototyping Project Vulcan EDUCATION WITH AT&L

TECHNOLOGY AWARENESS Fellowship/Interns

WORKFORCE DEVELOPMENT Industry Engagement

## SOFWERX - Hackathons









## **TALOS**

#### Initial Prototype

# **Prototyping**

#### Design

eview

#### Manufactured Prototype

UNCESTIED

#### Armor Design Concept

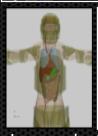
















**End User Eval** 

### **Four Month Total Process**

- TALOS: Vision to improve the survivability of the SOF operator via innovative process
- Joint Acquisition Task Force established in Nov 2013, comprised of:
  - Operators
  - Engineers
  - Acquisition Professionals
- First Article Prototype Combat Suit to be delivered in 2018
- Potential Tech transitions (C4I, targeting, armor, cooling vest, passive exoskeleton, power)
- Successful radical Armor design has occurred through an iterative, collaborative process with operators, materials engineers, research labs (technical and medical), and industry partners



# New Operating Models

# TALOS Rapid Prototyping Environment (RPE)

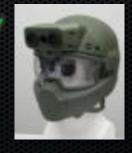








Rapid Transition Opportunities









**Field Trials** 



Thickening the Network

## New Ways of Thinking

Strategy: Enable the Global SOF Network with distributed use of networked advanced design and manufacturing tools



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

# New SOF Acquirers













## For Further Engagement

#### **SMALL BUSINESS HELP**

Christopher Harrington
Director, Office of Small Business Programs
Christopher.Harrington@socom.mil
813.826.9475

### **SUBMITTING PRODUCTS OR IDEAS**

Shelvin Watts
Technology & Industry

Technology & Industry Liaison Officer

TILO@socom.mil

813.826.9482

## INFORMATION ON SOCOM NEEDS, PROGRAMS AND PROCESSES

http://www.socom.mil/sordac

#### **EXPERIMENTATION IDEAS**

http://www.socom.mil/sordac/ Pages/ExpWithUS.aspx

### **COME VISIT THE AE**

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# Adapt or Die

