



SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE

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Director

SCIENCE AND TECHNOLOGY



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AGENDA

- S&T Strategic Vision
- TDWG Process
- S&T RDT&E / TRLs
- BAAs / RFIs
- CRADAs
- S&T Needs
- S&T Programs / Funding



S&T VISION

**Provide Revolutionary Game Changing
Technology to Reduce/Remove
SOF Capability Gaps**

ACHIEVING THE VISION

Paths/Processes

1 Understand the Gap

- Priority
- User/Customer
- Mission Area

Products

2 Tech Exploration

- ID Existing Research
- Determine Applicability
- Evaluate Constraint
 - \$\$
 - Technology
 - Time
 - Authority

Products

3 Strategy Development

- ID Potential Partners
 - Tech Providers
 - Co-Users
 - Resources (\$\$/People)
 - Transition Path
- Balance
 - Risk (Tech, \$\$, Time)
 - Reward (Value to SOF)
 - Impact (Breadth)

Products

We can't do **X** that is:

- Mission Critical
- Mission Enhancing
- Game Changing

We're Doing **Y** as a Work Around (Not Value Added)

- Substantial Mission Impact
- Substantial Resource Management

OUTPACE THE ENEMY'S
'OODA Loop'

X

Art of the Possible

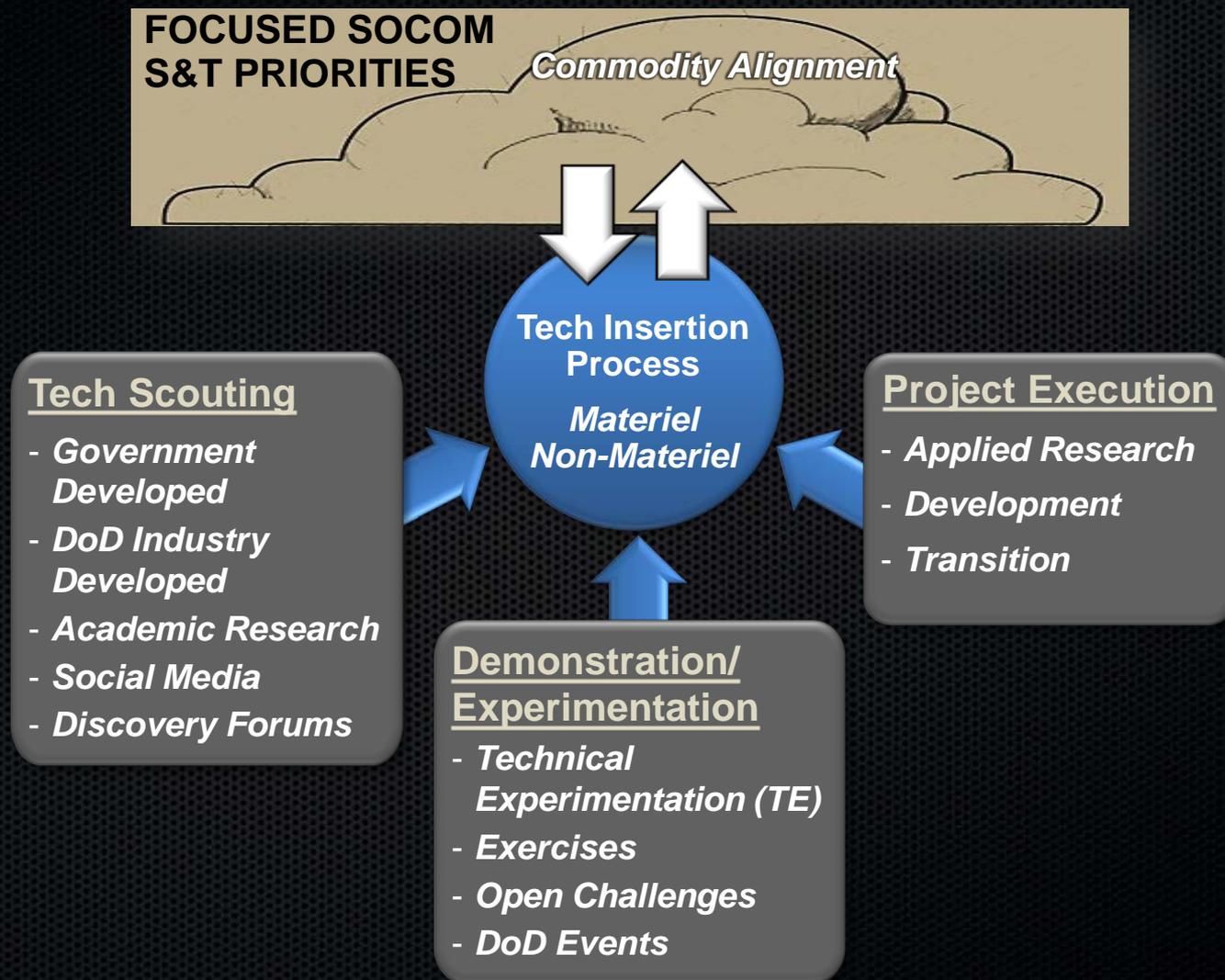
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Categorized Solution Set
Aligned to Component &
TSOC Gaps

- High Priority/SOF Unique
- Co-Develop/Planned Improvement
- High Priority/Externally Funded
- Co-Develop Revolutionary

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S&T – MOVING FORWARD

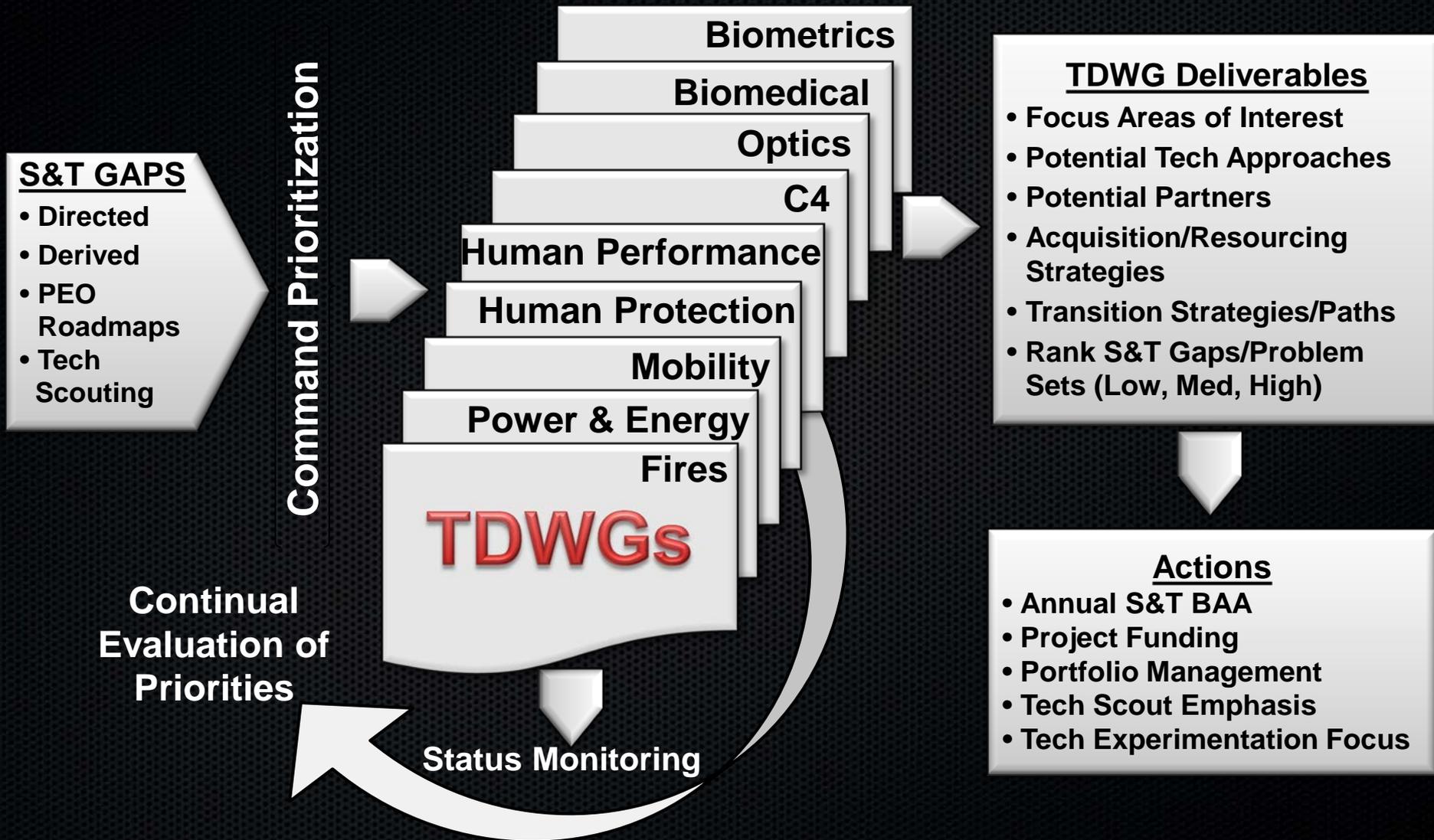


A Balanced Approach to Address SOF Needs Now and in the Future

TECHNOLOGY DEVELOPMENT WORKING GROUPS (TDWGs) TASK/PURPOSE

- **Provide collaborative venue for stakeholders to express Science & Technology (S&T) priorities, monitor S&T project progress, and to distribute knowledge and outcomes**

BEHAVIOR & EXECUTION



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Tech Discovery

Technically Feasible?
SOF Unique?
Executable?



ST Budget Activity 2 (BA 2) Applied Research

Studies, investigations, and non-system specific technology efforts

Systematic study to understand the means to meet a recognized and specific need short of system development

Breadboard laboratory prototypes

ST Budget Activity 3 (BA 3) Advanced Technology Development

Development of subsystems and components and efforts to integrate them into system prototypes

Proof of technological feasibility and assessment of subsystem and component operability and producibility

Field experimentation and/or tests in a simulated environment

POST MILESTONE B: ACQUISITION PROGRAMS OF RECORD

TECHNOLOGY READINESS LEVEL (TRL)

Metric/measure used to assess the relative maturity of evolving technologies (materials, components, devices, etc.) prior to incorporating that technology into a system or subsystem

TRL 3-5

TRL 5-7

TRL 7+

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BROAD AGENCY ANNOUNCEMENTS/RFIs

- S&T, TALOS BAAs are focused on targeted capability gaps
- TE, TALOS, and Collaborative Planning Sessions RFIs
- Participate in OSD Rapid Innovation Fund (RIF) BAA
- USSOCOM/USAMRAA Biomedical Research and Development BAA



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COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENTS (CRADAs)

- **What...**
 - Provide a mechanism for technology transfer
 - A legal document. No money can be exchanged.
- **Why we use them...**
 - Provide resources in support of non-federal entity RDT&E efforts
 - Allow non-federal entity to expend IR&D to support cooperative development
 - Save time and money
 - Increase communications and focus technology development
- **SOCOM S&T CRADAs...**
 - **SORDAC-ST-14-01-XX Collaborator (Blanket document – multiple agreements)** *“Development of Special Operations Peculiar Technologies to Bridge USSOCOM Capability Gaps”*
 - **SORDAC-ST-13-02 Northrop Grumman Systems Corporation** *“Development of Special Operations Peculiar Technologies to Bridge United States Special Operations Command (USSOCOM) Capability Gaps”*
 - **SORDAC-ST-13-01 W. L. Gore & Associates, Inc.** *“Development of Multispectral Camouflage for Special Operations Forces Applications”*
 - **SORDAC-ST-12-01 Battelle Memorial Institute** *“S&T Cooperative R&D”*

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

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APPLIED RESEARCH (BA2) & ADVANCED TECHNOLOGY DEVELOPMENT (BA3)

- BA2 – Studies, Early Laboratory Hardware, Software Development Models, Concept Exploration: Technology Readiness Level (TRL) 3-5
- BA3 – Prototypes, Demonstrations, Operational Leap Ahead Capability: TRL 5-7

ACQUISITION STRATEGY

- Various (Competition, IDIQ, CRADA, etc.)
- Leverage External Acquisition (Services, Laboratories, OGAs)

PERIOD OF PERFORMANCE

- Project Dependent
- S&T is emphasizing Technology Discovery and longer term technology development efforts

MILESTONES

- Project Dependent

POINT OF CONTACT

- 813.826.9482 (TILO)

FUNDING

- FY14 BA2/3: \$14.142M / \$14.414M
 - FY15 BA2/3: \$24.854M / \$25.663M
- Note: 15PB, TTL not included

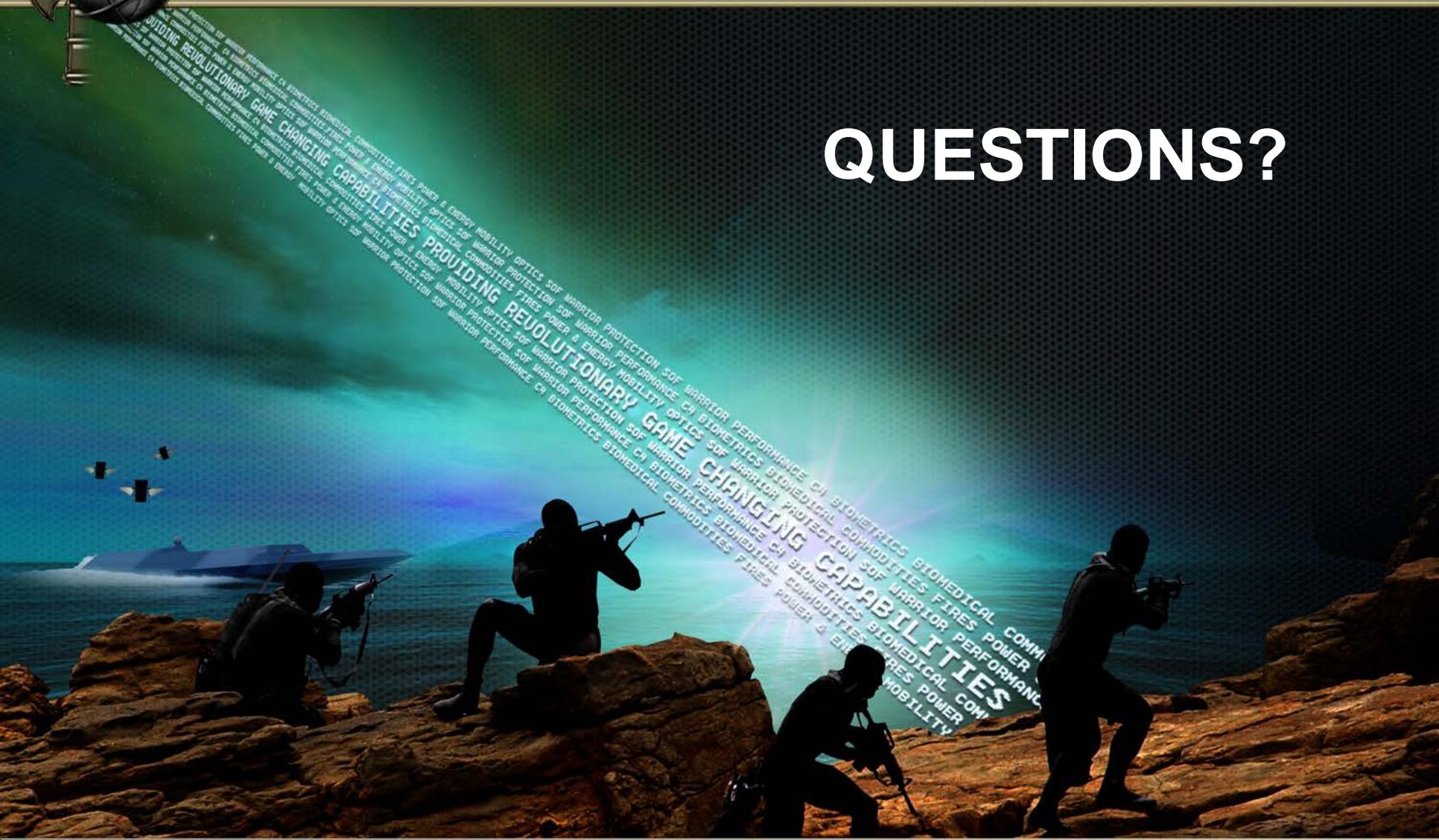
CURRENT CONTRACT/OEM

- Various



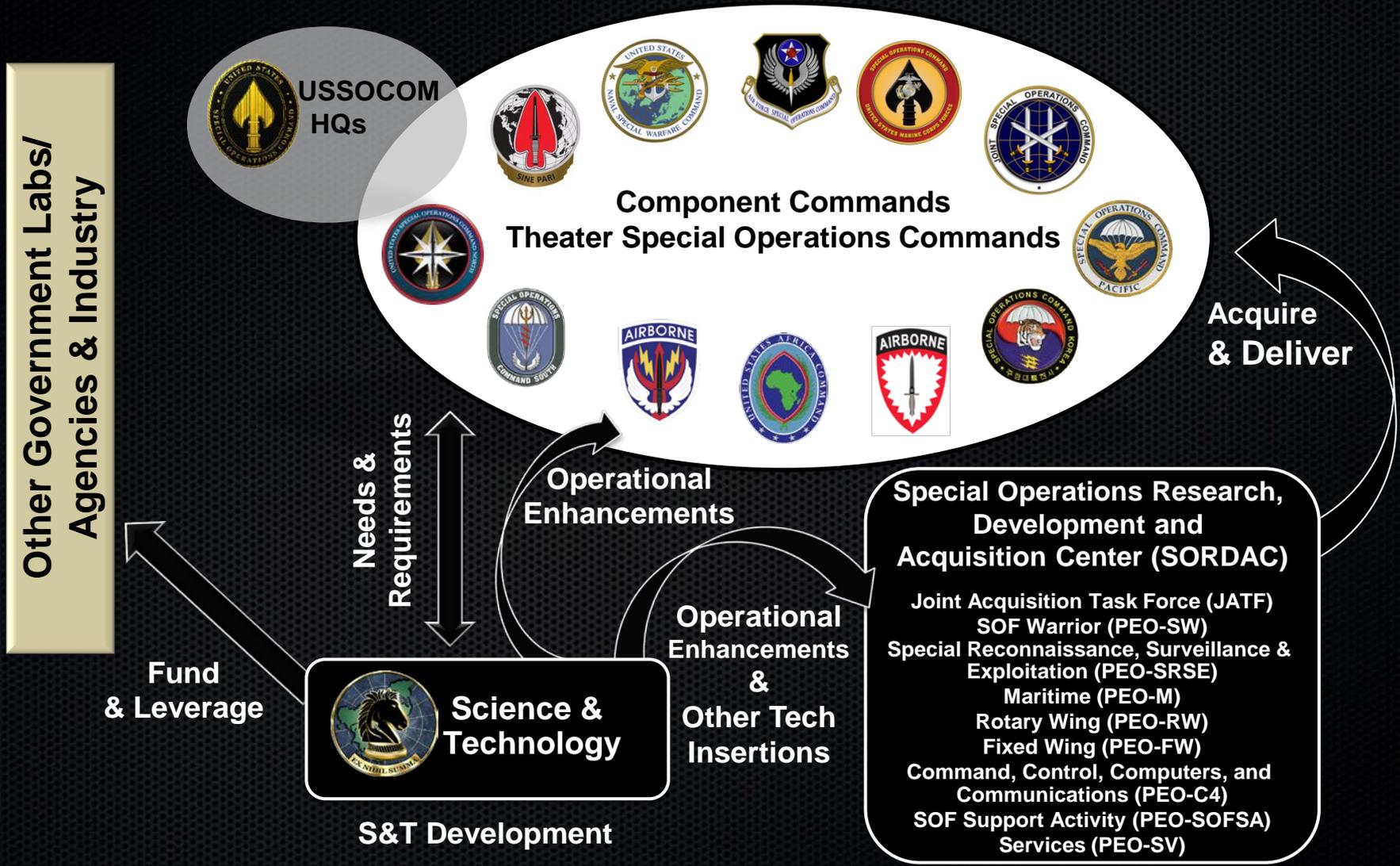
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QUESTIONS?



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S&T CAPABILITIES TO THE SOF OPERATOR



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