Lt Col Gary Roos, USAF
Simulators Program Office (AFLCMC/WNS)
Air Force Materiel Command
13 June 2019
Rosen Centre Hotel
Orlando, FL
• Approximately 500+ members strong
• Manage 64 programs and provide direct support to 9 MAJCOMs across the air & SOF domains

• Portfolio includes 2,300+ Training devices and configurations worldwide
• In FY18, executed >600 contract actions and managed $3.3B across 10 different appropriations
SPECTRUM OF TRAINING

Virtual Reality

Mixed Reality

Integrated DeskTop Trainers

Part Task Trainers

Advanced Flight Training Devices

Full Flight Simulators

In-Aircraft Training

SPECTRUM OF TRAINING
• AFLCMC Program Lifecycle

*AFLCMC/WNS & AFRL/RHA combine to form the “Training Systems Product Group”

• Sims typically developed with new platforms then transition to Sim SPO

AFLCMC Program Offices
- F-35
- F-22
- B-21
- T-X

• FMS
- F-15
- F-16
- C-130J
- C-130H
- NATO C-17
- RAAF C-17

• USAF
- A-10
- B-1
- B-2
- B-52
- E-3 AWACS
- F-15 TDAS
- F-16 TS
- C-130
- C-130J
- C-17
- C-5
- KC-10
- KC-135
- KC-135 BOSS
- AFSOC ACTS
- JTC TRS
- KDAM ATARS
- PMATS
- T-1A
- T-6
- T-25
- T-38
- T-53S
- TSS
- VTRAT
- URT GBTS
- LVC
- SCARS
- DMON
- MAF DMO
- DTOC
- XCITE/NGTS

• AFRL Human Effectiveness Directorate
  - SLATE ATD, Technology Development

Industry

• Tech Transition

AFLCMC

- KC-46
- ~150 Devices

- ~2383 Devices

- 63 programs

- Sims Program Office
• Vision – “…a realistic, integrated training environment that allows our forces to train in an operationally and tactically relevant employment scheme to achieve and sustain full-spectrum readiness.”

• Air Force has identified 13 OTI Lines of Effort required to achieve the OTI vision.

1. Funding Strategy
2. Human Capital Plan
3. SYNTHETIC-TO-LIVE CAPABILITY
4. Data and Technical Standards
5. Acquisition Policy
6. Acquisition Oversight
7. Institutionalize OTI

8. Relevant Threat Environment
9. Quality Metrics
10. Joint Interoperability
11. Multinational Interoperability
12. COMMON ARCHITECTURE
13. Exercise Oversight

• Simulator Program Office directly impacts lines 3 and 12 with the LVC and SCARS initiatives
INNOVATION INITIATIVES

- OTAs
  - Distributed LVC
  - Fresh Adaptive Scenarios for Training (FAST)
  - B-1/B-52 cross-cutting visual system upgrade

- Innovation Cell
  - A/R & V/R
  - Cloud Technologies
  - Artificial Intelligence and Adaptive Learning

- Pitch Day
  - I/ITSEC 2019

A technology incubator to infuse innovation in a systematic way across the enterprise
Simulators Acquisitions

- Most programs use TSA III for awards
  - IDIQ Contract with 25 Participants in 2 Pools

**Small Business**
- Aero Simulation
- Aerospace Training Systems Partners, JV
- Aviation Training Consulting, LLC
- Bowhead
- CTE, JV
- CymStar
- Delaware Resource Group of Oklahoma
- DLPI, JV
- Fidelity Technologies Corporation
- Logistics Services International, Inc.
- Nakuuruq Solutions
- Nova Technologies
- Quadrant Training Solutions, JV

**Unrestricted**
- The Boeing Company
- CAE USA
- Cubic Defense Applications
- FlightSafety Services Corporation
- General Dynamics Information Technologies
- HII MIS
- L3 Technologies
- LB&B Associates
- Lockheed Martin
- Northrop Grumman Technical Services
- Raytheon Technical Services Company
- TRU Simulation
Simulators Acquisitions, Cont.

- Allows for the use of FAR Part 16 Ordering Procedures
  - Fair Opportunity Selection vs. Source Selection
  - Average time from FOPR release to award is 166 days
    - 5 awards
    - Efficiency is increasing
  - More agile and quicker way to Train the Warfighter

TSA IV

- RFI – Summer of 2019
- Industry Day at I/ITSEC 2019
- Planned Award – Q4 2022
Simulators Pitch Day

Team:
Maj Patrick Kawonczyk
SIMs Pitch Day Project Lead

Capt Peter Van Remmen
Contracting Officer

Margaret Merkle
SIMs Innovative Solutions PM
Overview

- What is the Simulators Pitch Day?
- How to get involved
- Focus Areas
- Timeline
What is Simulators Pitch Day?

- Opportunity for small businesses to propose innovative solutions to tough problem sets
How do I get involved?

- Must be classified as a small business to be eligible to bid on SBIR projects
- Keep an eye out for an announcement (19.2 out in June!)
- There are several focus areas looking for innovative solutions proposals
What are the topics?

- Artificial Intelligence aided instruction in the simulator
- Performance based training
- High-fidelity, deployable simulator
- Increasing visual acuity, image compression algorithms
- High-end weather effects physics simulation and visual impacts
- Data capture and analysis
- Cross-domain/multi-level security networked ops
- Cloud based simulators
- Use of unmodified OFP files in simulator

19.2 Announcement on WWW.SBIRSTTR.AF.MIL
19.3 in fall timeframe
## Notional Timeline

<table>
<thead>
<tr>
<th>Event</th>
<th>Dates</th>
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<tbody>
<tr>
<td>BAA Open Announcement pre-release – part 1</td>
<td>May 2019 ✓</td>
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<tr>
<td>BAA Open Announcement (Phase I only – part 1)</td>
<td>June 2019 ✓</td>
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<tr>
<td>White Papers and Presentations Due</td>
<td>July 2019</td>
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<tr>
<td>Solicitations Awarded</td>
<td>July 2019</td>
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<tr>
<td>Execute Phase I awards (part 1)</td>
<td>July 2019 – October 2019</td>
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<tr>
<td>BAA Open Announcement pre-release – part 2</td>
<td>Aug/Sept 2019</td>
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<tr>
<td>BAA Open Announcement (Phase I and Phase II)</td>
<td>Sept/Oct 2019</td>
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<tr>
<td>White Papers and Presentations Due</td>
<td>Nov 2019</td>
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<tr>
<td>Solicitations Awarded</td>
<td>Dec 4, 2019 @ IITSEC</td>
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Questions?