



ISIS
TRAINING & SIMULATION INDUSTRY SYMPOSIUM

Lt Col Gary Roos, USAF
Simulators Program Office (AFLCMC/WNS)
Air Force Materiel Command
13 June 2019
Rosen Centre Hotel
Orlando, FL



AFMC



ACC-ORLANDO



ARL-ORLANDO



NAWCTSD



PEO STRI



PM TRASYS



SIMULATORS PROGRAM OFFICE LEADERSHIP



SENIOR MATERIEL LEADER
Col Philip Carpenter

DEPUTY FOR PROGRAM OPERATIONS
John Carr



DEPUTY FOR PROGRAM INTEGRATION
Tony Johnson



ENGINEERING
Paul Phillips

Training Sys Ops
VACANT
F-16
Susan Schemmel
Air Combat
Craig Siefert
SOF / AETC
Stephanie Moore
Tanker / AWACS
Barry Green
Airlift
Jeff Pfledderer
DMO
Anthony Montecalvo
Enterprise Develop.
Heath Morton



LOGISTICS
Mark Neville
Tim Morningstar
(Acting)

Air Combat
VACANT
Airlift
Joe Gerley
SOF/AETC
James Brown
OTI
Christal Green
FMS
Josh Sowers



AIR COMBAT
Rick Hricko

Bomber / Attack
Lt Col Aaron Hart
F-16
Ryan Pinsenschaum
F-15 / AWACS
Maj Emilio Talipan



AIR MOBILITY
Greg McCan

Tanker
Maj Keith LeBlanc
Airlift
Rich Johnson
KC-46A / FMS
Robin Moshier



SPECIAL OPS & AETC
Lt Col Gray Roos

Special OPS & UAV
Christine Haupt
Air Education
Mike Astahoff



OPERATIONAL TRAINING INFRASTRUCTURE (OTI)
Lt Col Rick Jaime

Enterprise Development
Vacant
Distributed Training Systems
Lt Col Mike Jungquist



FINANCE
Keith Riethman

Deputy
Shannon Barnes
Air Combat
Don Miller
Air Mobility
Jeff Morningstar
SOF / AETC
Tony Swain
FMS
Eric Ellsworth
Cost
Johathan Bell



CONTRACTING
Cecelia Benford

Deputy
Jackie Edwards
Air Combat
Nathan Shrider
Air Mobility
Norm Willis
SOF/AETC
Bob Mitchell



As of 23 May 2019



SIMULATORS PROGRAM OFFICE ORGANIZATIONAL CHART



SENIOR MATERIEL LEADER

DEPUTY FOR PROGRAM OPS

Programmatics/Execution
Manpower & Personnel
EPASS Management
CAG

DEPUTY FOR PRGM INTEGRATION

Strategic Planning
Process/Knowledge Management
Program Control
New Business – USAF/FMS

AIR COMBAT TRAINING SYSTEMS

F-15/BOMBER/ATTACK TRAINING SYSTEMS

A-10 ATS	F-15 RSAF
B-1 TS	F-15C/E MTC
B-2 TS	F-15 TDAS
B-52 TS	T2
F-15 Qatar	T4

F-16 TRAINING SYSTEMS

F-16 Training Systems	
F-16 FMS Sustainment	
F-16 MTC	F-16 Morocco
F-16 Bahrain	F-16 Pakistan
F-16 Egypt	F-16 Romania
F-16 EPAF	F-16 Slovakia
F-16 Iraq	F-16 Taiwan
F-16 Jordan	F-16 Thailand

AWACS TRAINING SYS

AWACS FCT/MTS
AWACS DRAGON
AWACS MTC

AIR MOBILITY TRAINING SYSTEMS

AIRLIFT SYSTEMS

C-5 Training Systems
C-17 Training Systems
C-130 ATS/MTS
C-130J MATS
C-130 ANG RWST
HC/MC-130J

TANKER SYSTEMS

KC-10 Training Systems
KC-135 Training Systems
KC-135 BOSS (ANG)

KC-46A / FMS

KC-46A ATS	
KC-46A MTS	
C-17 Australia	C-130 India
C-17 NATO	C-130 Italy
C-130 Egypt	

SPECIAL OPS & TRAINING SYSTEMS

SPECIAL OPS & UAV TRAINING SYSTEMS

ATARS II
AFSOC ACTS
JTC TRS
KDAM ATARS
PMATS

AIR EDUCATION & TRAINING SYSTEMS

A&OP Training Systems	
Spatial D	
IRC	
T-1A GBTS	T-53A ATD
T-6 GBTS	Towers
T25 SECT	URT GBTS
T-38C ATS	VTRAT

OPERATIONAL TRAINING INFRASTRUCTURE (OTI)

ENTERPRISE DEVELOPMENT

SCARS
XCITE / NGTS
Cybersecurity

DISTRIBUTED SYSTEMS OPERATIONS

DMO
• CAF DMO
• MAF DMO
• F-22 / F-35 DMO Support
DTCO
LVC TN

As of 23 May 2019



SIMULATORS PROGRAM OFFICE

- 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



Advanced Flight Training Devices



Integrated Desktop Trainers



Full Flight Simulators



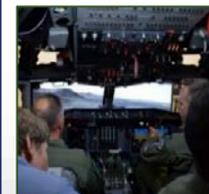
Mixed Reality



Part Task Trainers



In-Aircraft Training



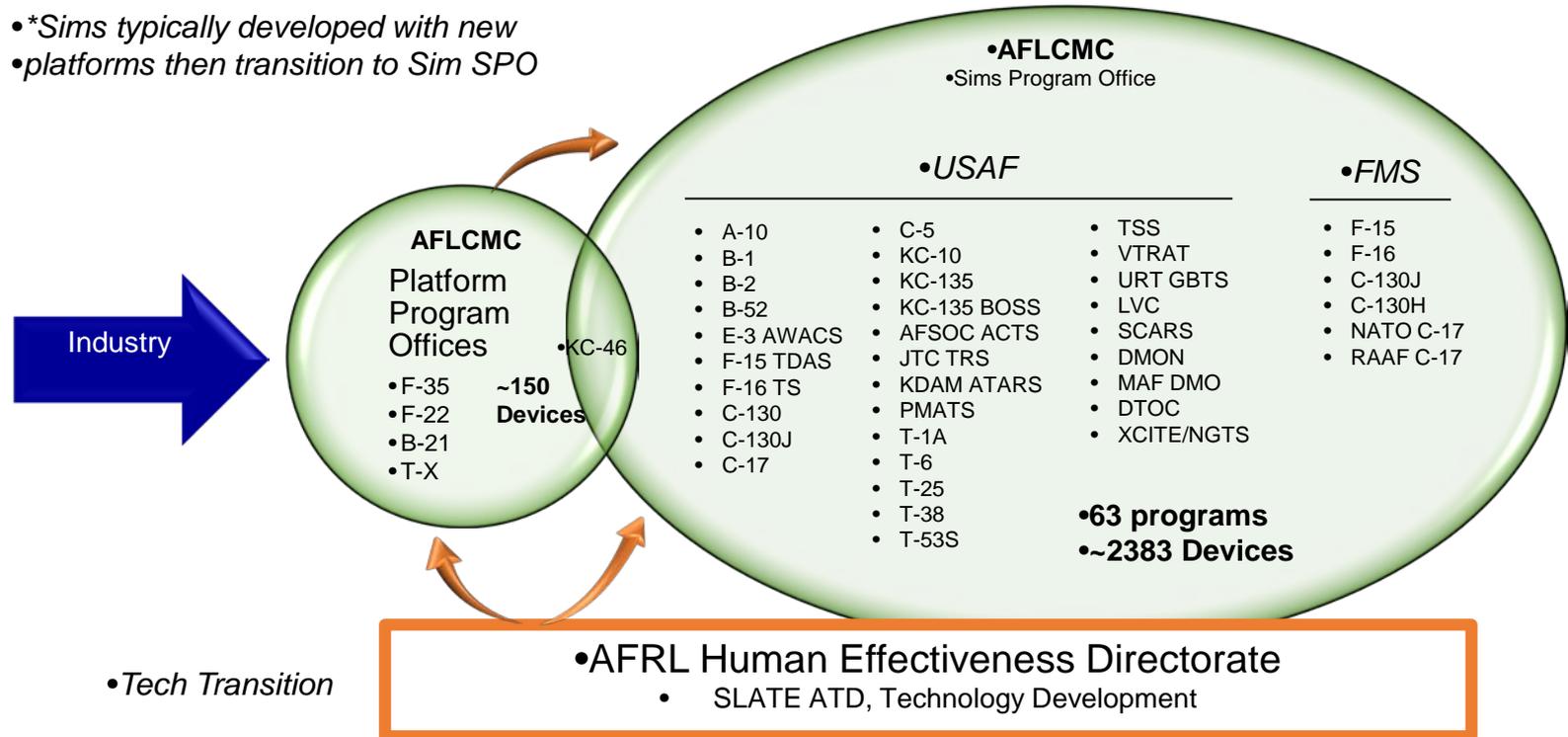
SPECTRUM OF TRAINING



SIMULATOR UNIVERSE

•AFLCMC Program Lifecycle

- *Sims typically developed with new platforms then transition to Sim SPO



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



AF OTI 2035 FLIGHT PLAN

•**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.”**



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

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

- | | |
|---------------------------------|------------------------------------|
| 1. Funding Strategy | 8. Relevant Threat Environment |
| 2. Human Capital Plan | 9. Quality Metrics |
| 3. SYNTHETIC-TO-LIVE CAPABILITY | 10. Joint Interoperability |
| 4. Data and Technical Standards | 11. Multinational Interoperability |
| 5. Acquisition Policy | 12. COMMON ARCHITECTURE |
| 6. Acquisition Oversight | 13. Exercise Oversight |
| 7. Institutionalize OTI | |



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



•Innovative Initiative



•Experimentation & Prototype



•Production & Enterprise Implementation

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



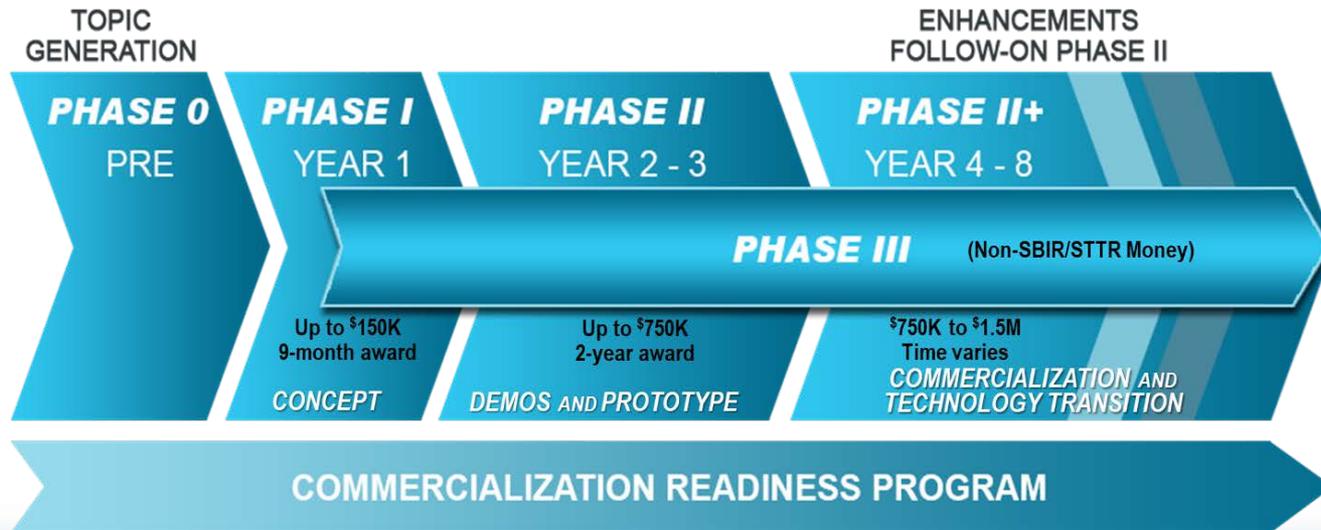
Overview

- **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

Event	Dates
BAA Open Announcement pre-release – part 1	May 2019 ✓
BAA Open Announcement (Phase Is only – part 1)	June 2019 ✓
White Papers and Presentations Due	July 2019
Solicitations Awarded	July 2019
Execute Phase I awards (part 1)	July 2019 – October 2019
BAA Open Announcement pre-release – part 2	Aug/Sept 2019
BAA Open Announcement (Phase I and Phase II)	Sept/Oct 2019
White Papers and Presentations Due	Nov 2019
Solicitations Awarded	Dec 4, 2019 @ IITSEC



Questions?

