Simulators Division
(AFLCMC/WNS)
Update
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2021 SUCCESSES

KC-135 Contract Award - CAE

KC-10 Award – Nova Technologies

T-53 ATD Device Delivery – Frasca

F-16 Balad, AB Iraq Device Delivery – L3 Harris

JTC TRS Contract Award – LINK, L3 Harris

C-130J MATS Device Deliveries – Lockheed Martin
ACCELERATE CHANGE OR LOSE
How it relates to Simulators Division and You

AFLCMC… Providing the Warfighter’s Edge

- Uncontested USAF Dominance is not Assured
  - How should training architectures evolve to ensure success in any high-end fight?

- Good Enough Today will Fail Tomorrow
  - Simulator Common Architecture Requirements and Standards (SCARS)
  - Common Synthetic Training Environment (CSTE)
  - Digital Engineering

- We must Collaborate Within and Throughout to Succeed
  - Scale and sustain innovation initiatives

- Empowered Airman can Solve any Problem
  - Trust the Members to ‘Run with Scissors’

- Consequences of Failure – and Success – are Profound
ACCELERATE CHANGE OR LOSE

Action Orders

Airmen
- Find and enhance universal skillsets that are important to Airmen
- Must be resilient and ready to operate and succeed in the High end fight

Bureaucracy
- Must increase speed and efficiency to effectively work with Industry Partners
- Needs a “tune-up” to deliver at the speed of relevance
- Streamline decision-making, eliminate redundancies and limit bureaucratic levels

Competition
- USAF must understand and master the competitions at the heart of the mission

Design Implementation
- Work within future budget constraints to re-shape the future of training
The Future....

- Narrow opportunity to modernize the fleet
- Interim National Security Guidance provides path for Peer Competition
- Long Term Vision will make short term changes easier
- Budget Constraints and Issues
- Legacy Platforms mean Relevance not Age
- Acquisition Reform – Digital Engineering is Critical
- How do platforms sense and share data at the speed of relevance

Lt Gen David Nahom interview with Mitchell Institute, July 2021

“When it comes to modern combat, if you don’t like change, you’re going to really dislike irrelevance”  Maj Gen Mark Kelly, Commander USAF ACC
Typical Air Force Simulator Program Lifecycle

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

How should WNS portfolio evolve to support 21st Century Force Training Needs?
WSS POM Heat Map Trend

AF WSS 21POM
- Requirements: 17.8B
- Funded: $15.7B
- FY20-21 Growth: $1.4B
- Percent Funded: 88.1%
- Risk: Moderate

AF WSS 22POM:
- Requirements: 18.6B
- Funded: $15.6B
- FY21-22 Growth: $0.8B
- Percent Funded: 83.9%
- Risk: High

AF WSS 23POM:
- Requirements: 21.0B
- Funded: $15.1B
- FY22-23 Growth: $2.4B
- Percent Funded: 71.7%
- Risk: Failure

Source: CAFDEex, FY20-23 POM RQMTs, does not include USSF
WNS FUNDING PROFILE

- WNS training systems in CAM portfolio are funded to failure point
  - Requirements are outstripping budget
  - Air Force is prioritizing sustainment of those weapon systems which strengthen the fight, in accordance with the NDS
  - Requirements within the WNS portfolio, identified above failure, are at risk
    - Obsolescence, tech refresh, concurrency upgrades
    - WNS continually working to maximize budget execution and UFR processes to garner additional capability as funding is available

How do we keep what we have relevant and ready?
SCARS and CSTE

1. SCARS Standards (GRA)
2. CSTE Design
3. CSTE SDK
4. Evolving Legacy Sims
   Standardize New Sims
How do we scale the *right* innovations at the enterprise level and sustain?
Key Take-Aways

• We value your partnership and appreciate your feedback as we work through near term execution challenges

• WNS has the expertise to develop and sustain the training environment of the future; however, we need to rebalance our portfolio to better support 21st Century Force training needs

• Near term focus: successfully execute SCARS and keep training systems relevant and ready in a challenging fiscal environment

• Strategic goal is to ensure SCARS and CSTE architectures are compatible

• Innovation Activities: how do we scale and sustain right initiatives?

• I/TSEC 2022: Air Force is Host Service
UPCOMING COMPETITIVE ACQUISITIONS

2021

- Aug 21 – T-1A GBTS- Apr 22
- Aug 22 KDAM ATARS– Jul 23
- Sep 21 - T-38C TS Jul 22
- Oct 21 – MAF DMO - Apr 22
- Nov 21 – B-52 TS - Oct 22
- Jan 22 Man in the Loop - Jun 22

2022

- Mar 23 - C-17 CLS – Apr 24
- Oct 21 – MAF DMO - Apr 22
- Sep 21 - T-38C TS Jul 22
- Aug 22 KDAM ATARS– Jul 23
- Aug 21 – T-1A GBTS- Apr 22

2023

- Full and Open
- TSA III
- Undecided

KEY
SIMULATORS SNAPSHOT

75 Programs

9 MAJCOMS
29 Program Offices
20 Countries

560+ Members Strong

2,300+ Training Devices
Over 93% of the Air Force inventory

FY20

615 Contract Actions

$2.98B Active Year
(includes $1.4B for FMS)

788 Funding Documents
• Compliance to SCARS common control standards will reduce ATO documentation

• USAF is consolidating the number of Authorizing Officials across the Training System Classification boundaries

• DevSecOps will fulfill a number of cybersecurity controls necessary to onboard applications to the SCARS Evaluated Products List (EPL)
• Move from command segregated missions scenarios (stovepipe) to a joint warfighter environment
  • Massive multiplayer option—simulate entire AF going to war

• Enable Train-How-We-Fight vision
  • Multiservice, multinational
  • Fully live virtual integrated, full spectrum missions

• The Center of Excellence for Simulators

• Go Faster Smarter (AI, VR, quick innovation, new Ctr approaches)
  • Innovation Cell
  • Partner w/ AFRL, DoD Agencies, small business, non-traditionals, Sister Services
  • Explore new game-changing technologies to enhance readiness
• Simulators Division New Business Office
  • Dedicated to developing simulator capability for international partners
  • Experience with FMS processes and awareness of industry capability

• Success in combining like country requirements into one contractual vehicle to reduce cost to partnering countries
  • Combines aspects of both bilateral FMS and Cooperative Development Efforts
  • Countries will only pay a portion of the development cost and receive the end capability within a typical FMS Period of Performance
VR/MR/AI ROLE IN THE FUTURE

• **Virtual Reality**
  - Many Aircrew training devices are currently using AR training modules, particularly for immersive, familiarization training tasks early in the curriculum
  - Pilot Training Transformation is exploring the use of VR in the training curriculum
    - Pilot Training Next has already implemented
  - Simulators Division is exploring how VR capabilities can be used as part of the spectrum of training devices
  - Providing lower cost immersive training devices to supplement the high-fidelity simulators

• **Artificial Intelligence**
  - Predictive analytics to refine training content for individual students
  - Virtual instructor to analyze student performance and give feedback
  - AI controlled virtual entities that play other roles in a training scenario

• **Simulators Division is working on a number of training projects involving these elements with different training units and MAJCOMs**

Industry Challenge: How to scale and sustain innovation initiatives
• **AF Modeling and Simulation Executive**
  - Effectively synchronize USAF and USSF investments in M&S
  - Lead strategic efforts to reduce costs, shorten schedules and expand capabilities such that DAF readiness is improved to defeat current and future threats

• **AF Operational Training Infrastructure 2035 Flight Plan**
  - Establishes imperative to train as we intent to fight and 12 lines of effort to provide relevant and realistic operational training environment

• **Collaboration Forums**
  - Operational Test and Training Cross Function Team (HAF/A3 Led)
  - MAJCOM Summit (Simulators Division Led)
Telework/Hybrid work environment still in flux

Technology is critical enabler
- Need for VPN with appropriate and robust bandwidth
- Software tools that are current and compatible with Industry

Leadership focus: Staying Connected
- Extra effort by Team and Supervisors to connect
- Onboarding can be challenging
- Collaboration and teaming is possible in this environment