Simulators Division
(AFLCMC/WNS)
Update
16 June 2021

Col John Kurian
Senior Material Leader
Simulator Division
2021 SUCCESSES

AFLCMC... Providing the Warfighter’s Edge

KC-135 Contract Award - CAE

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
• 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
• 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 LEADERSHIP

AFLCMC... Providing the Warfighter's Edge

CHIEF OF ENGINEERING (EN)
Paul Phillips
DEPUTY
Jeff Pflederer

CHIEF OF FINANCE (FM)
Kristen O'Sullivan
DEPUTY
Bruce Comer

SENIOR MATERIEL LEADER
Col John Kurian
MANAGEMENT OPS
Scott Cummings

DEPUTY FOR PROGRAM OPERATIONS
John Carr
DEPUTY FOR PROGRAM INTEGRATION
Penny Mason

CHIEF OF LOGISTICS (LG)
Mark Neville
DEPUTY
Joe Gerling

CHIEF OF CONTRACTING (PK)
Christine Diehl
DEPUTY
Karen Palomaki

AIR MOBILITY
Branch Chief
Greg McCan
DEPUTY
Rex Easley
EN – Brian Wrennan / Greg Enochian
FM – Kim Hodkow
LG – James Brown
PK – Shana Hamerich
Special Ops & UAV
Jacob Kolb
Air Education
Mike Astahof

OPERATIONAL TRAINING INFRASTRUCTURE
Branch Chief
Lt Col Drew Frasier
EN – Vascant / Mike Bakud
FM – Steve Heyi
LG – Christal Green
PK – Shana Hamerich
Enterprise Development
Maj David Meyn
Distributed Training Systems
Lt Col Ross Uhler
Common Architecture & Standards
Mike Burns

FMS
Branch Chief
Doug Rogers
EN – Susan Schenkel
FM – Eric Ellsworth
LG – Josh Stowers
PK – Karen Palomaki
Fighter Programs
TBD
Airlift / Tanker
Programs
Gail Sheridan
New Business
Latahia Blake-Hubbard

As of Jun 21
SIMULATORS SNAPSHOT

- **75 Programs**
- **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**

- **9 MAJCOMS**
- **29 Program Offices**
- **20 Countries**
Typical Air Force Simulator Program Lifecycle

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

AFLCMC... Providing the Warfighter’s Edge

Large Portfolio Touching Virtually Every Aspect of our Warfighters Training Environment
## SIMULATORS MEETING RHYTHM

**I/ITSEC = Interservice/Industry Training, Simulation and Education Conference**  
**OTI = Operational Training Infrastructure**  
**PMR = Program Management Review**  
**STCF = Simulation & Training Community Forum**  
**TSIS = Training & Simulation Industry Symposium**

### Event Schedule

<table>
<thead>
<tr>
<th>Month</th>
<th>Event</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Jan</td>
<td>AFLCMC + Test + Navy Trng Orgs</td>
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<tr>
<td>Apr</td>
<td>MAJCOM PMRs</td>
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<tr>
<td>May</td>
<td>MAJCOM PMRs</td>
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<tr>
<td>Jun</td>
<td>One Voice Summit</td>
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<tr>
<td>Jul</td>
<td>MAJCOM PMRs</td>
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<tr>
<td>Aug</td>
<td>2021 Only</td>
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<tr>
<td>Sep</td>
<td>All MAJCOM Summit</td>
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<tr>
<td>Oct</td>
<td>2021 Only</td>
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<tr>
<td>Nov</td>
<td>STCF</td>
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<tr>
<td>Dec</td>
<td>TSIS</td>
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As of Apr 2021
ACHIEVING “UNITY OF EFFORT”

• **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)
SCARS INITIATIVE

- SCARS is a sustainment initiative to apply enterprise management across the AF Training Systems
- Incrementally establish a common open-systems architecture governed by defined standards
- Operational Training Infrastructure (OTI) end state with SCARS – well known standardized security baseline and common DMO Mission rehearsal baseline (same threat signatures & constructive models)

- SCARS Increment 1 (FY21) – establishes core infrastructure (centralized and edge components), cybersecurity controls, and digital engineering
- Future SCARS Increments – cross domain security, common electronic warfare environment, common constructive threat environment, standardized communication protocols
For the contractors who have contractual requirements to support the SCARS Engineering Capabilities Board, these are the primary areas where the Government needs help from industry:

- Present ideas to the SECB for incorporation into SCARS Standards
- Pitch ideas for pathfinder projects for studies, prototyping and testing
- Support the SCARS Standards Maintenance Process to evolve the ideas for incorporation into the standards
- Provide SCARS Affiliate services as specified in the SECB Charter (2 Feb 2021). Meeting attendance alone does not meet requirements.

**OPE Rollout Schedule, tentative**

<table>
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<tr>
<th></th>
<th>FY21 Q4</th>
<th>FY22 Q1</th>
<th>FY22 Q2</th>
<th>FY22 Q3</th>
<th>FY22 Q4</th>
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<tr>
<td>Air Combat</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Mobility</td>
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<td>1</td>
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<td>8</td>
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<td>AFSOC</td>
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</table>
• Goal: Provide repeatable process for Industry (Large and Small) outside of existing WNS contracts to demonstrate technology/products to WNS and user community
  • Initial Demonstration of technology in Innovation Cell’s Holodeck
  • If promising, proceed to the AFRL Testbed for more detailed look
  • WNS could either request Affiliate contractor develop the technology or could have AFRL work with Contractor directly
  • Final step is transition the technology into production

Technical Maturity Level
(relevant to operational training requirements)

Innovation Cell using Holodeck (AFLCMC/WNS)
Scheduled demonstrations; initial entry point for technology from industry

SCARS Testbed (AFRL) or Training System’s TSSC
Informal trial agreement to demonstrate selected items in representative environment

WNS IPT (SCARS or Training System)
Develop, sustain, test, accredit, and on-board items either centrally (SCARS) or on specific training systems

User Buy-In Required to Progress to each Stage
• 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)
FMS PARTNERSHIPS
“Speed of Change”

• 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

Industry Challenge: How to scale and sustain innovation initiatives

- **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**

Inside the Air Force's Next-Generation of Pilot Training
youtube.com
WORK ENVIRONMENT & THE FUTURE

- 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
UPCOMING COMPETITIVE ACQUISITIONS

KEY
- Full and Open
- TSA III
- Undecided

2021
- Aug 21 – MAF DMO - Mar 22
- Sep 21 - T-38C TS Jul 22
- Jan 22 Man in the Loop - Jun 22

2022
- Aug 22 KDAM ATARS – Jul 23
- May 22 CAF DMO – Jun 23

2023
- TBD VTTC VBE – TBD
# Program Requirements

**Principle Mission:** Train in a secure, realistic Networked Environment while reducing risk and operating cost.


<table>
<thead>
<tr>
<th>Acquisition Strategy</th>
<th>Period of Performance</th>
<th>Milestones</th>
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<tbody>
<tr>
<td>Competitive Fair Opportunity Selection using TSA III (FAR 16)</td>
<td>Anticipate 5-6 year Period of Performance</td>
<td>RFI</td>
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<td>Aug 20</td>
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**Point of Contact**

- **Organization:** AFLMC/WNS
- **Name:** Capt Sean Conway
- **Email:** sean.conway.5@us.af.mil

**Funding:**

- $30M/year

**Current Contract/Original Developer/OEM (If Recompete):**

- Northrop Grumman
# T-38C TRAINING SYSTEMS

**Program Requirements**

**The Principle Mission:** To consistently meet or beat a 95% T-38C ATD availability rate to support fighter/bomber pilot training requirements for weekly normal operations and periodic weekend surge requests.

**The T-38C TS Contract includes:** Contractor Logistics Support (CLS), Training System Support Center (TSSC), Program Management (including cybersecurity and FIAR), and sustainment engineering/modifications.

## ACQUISITION STRATEGY

| Competitive Fair Opportunity Selection  
| Small Business Set-aside (TSA III) |

## PERIOD OF PERFORMANCE

| 2-month base transition (01 Mar 22 – 30 Apr 22)  
| Base Year (1 May 22 – 30 Apr 23)  
| Six (6) 1-year options (1 May 23 – 30 Apr 29) |

## MILESTONES

| RFI  
| FOPR  
| Award  

Mar 20  
Sep 21  
Jul 22

## POINT OF CONTACT

**Organization:** AFLCMC/WNS  

**Name:** Lt Col Juan Ramirez  

**Email:** juan.ramirez.3@us.af.mil

## FUNDING

- ~$111M (including potential modifications)
- Firm Fixed Price (FFP): Majority of requirements
- Cost Reimbursable (CR): Contractor travel
- Cost Plus Fixed-Fee (CPFF): Over and above

## CURRENT CONTRACT/ORIGINAL DEVELOPER/OEM (IF RECOMPEDE)

| Aero Simulation Inc. |
## Program Requirements

Man in the Loop (MITL) stations will be used to provide manned threat decision making, as well as, High End Advanced Tactics and Training (HEAT2) capabilities in the Virtual Test Training Center at Nellis AFB, NV. First systems installed Q1 FY22. MITL is a government developed and owned system, procured through the Naval Air Warfare Center’s Aircraft Division (NAWCAD).

WNS will be contracting for maintenance, cybersecurity, and logistics support – to include, but not limited to:

- Multi-level Security operation - Periods Processing from S/SAR to TS/SCI/SAR, and vice-versa
- Scheduled / unscheduled maintenance, tech refreshes, and root cause analysis to resolve issues
- Daily operational checks and cybersecurity support

*Cybersecurity Risk Management Framework (RMF) requirements will apply.*

### ACQUISITION STRATEGY

- Competitive Fair Opportunity Selection using TSA III (FAR 16)

### PERIOD OF PERFORMANCE

- 4 year POP (through end of TSA III)
  - End Date: 31 Aug 2026

### MILESTONES

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<tr>
<th>Draft FOPR</th>
<th>FOPR</th>
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<td>Sep 21</td>
<td>Jan 22</td>
<td>Jun 22</td>
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</table>

### POINT OF CONTACT

- **Organization:** AFLCMC/WNS
- **Name:** Gabriel Myers
- **Email:** gabriel.myers.3@us.af.mil

### FUNDING

- $ TBD
- Firm-Fixed-Price Contract

### CURRENT CONTRACT/ORIGINAL DEVELOPER/OEM (IF RECOMPETE)

- Procurement via NAWCAD (U.S. Navy)
**Program Requirements**

**Principle Mission:** Provide distributed mission operations services to enable realistic training up to S/SAR.

**The CAF DMO Contract includes:** The services for training, scheduling, and distributed mission operations necessary to ensure interoperability and interconnectivity of participant systems in accordance with the Joint Special Access Program Implementation Guide (JSIG).

**ACQUISITION STRATEGY**
- To be Determined

**PERIOD OF PERFORMANCE**
- 1 Jul 13 – 30 Jun 23

**MILESTONES**
- RFI
- Aug 19
- RFP
- May 22
- Award
- Jun 23

**POINT OF CONTACT**
- **Organization:** AFLCMC/WNS
- **Name:** Katie Urse
- **Email:** kathryn.urse@us.af.mil

**FUNDING**
- $500M
- FFP

**CURRENT CONTRACT/ORIGINAL DEVELOPER/OEM (IF RECOMPETE)**
- Northrop Grumman
# Program Requirements

**Principle Mission:** Aircrew Training and Rehearsal Support (ATARS), for AC/HC/MC-130J, CV-22, HH-60G & W, UH-1N and MH-139A

**The KDAM ATARS Contract includes:** Instruction, Contractor Logistics Support (CLS), Training System Support Center (TSSC), Cybersecurity, Financial Improvement Audit Readiness (FIAR), Database Generation Services (DBGS), and Courseware in support of AETC, ACC, AFSOC and AFGSC at Kirtland AFB, Joint Base Andrews, Davis-Monthan AFB, Moody AFB, Nellis AFB, Patrick AFB, JB Elmendorf AFB, Moffett Field, CA, Gabreski, NY, Kadena AFB, Aviano AFB, Maxwell AFB, Malmstrom AFB, FE Warren AFB and Minot AFB.

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<td>2-month base transition (30 Jul 23– 30 Sep 23) Base Year (1 Oct 23 – 30 Sep 24) Six (6) 1-year options (1 Oct 24 – 30 Sep 29)</td>
<td>RFI</td>
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**CURRENT CONTRACT/ORIGINAL DEVELOPER/OEM (IF RECOMPETE):**

CAE USA Mission Solutions Inc.

**Organization:** AFLCMC/WNS

**Name:** Mila Siglar

**Email:** mila.siglar@us.af.mil
Program Requirements

The Principle Mission: Provide high-end advanced training and tactics capability up to TS/SCI/SAR

The VTTC LSI Contract includes: Build, operations, and sustainment of a battlespace; key contract support elements consist of development, integration, and test activities; program management; configuration management; modeling and simulation engineering and technical management; network and systems engineering; operations and event/exercise support. Cybersecurity Risk Management Framework (RMF) requirements will apply.

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<thead>
<tr>
<th>Acquisition Strategy</th>
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<th>Milestones</th>
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</table>
| TBD                  | 5-year Period of Performance | RFI
|                      |                       | Nov 20 |
|                      |                       | RFP
|                      |                       | TBD |
|                      |                       | Award |
|                      |                       | TBD |

**Point of Contact**

Organization: AFLMC/WNS  
Name: Capt Christine Jestice  
Email: christine_joy.jestice@us.af.mil

**Funding**

$130M

**Current Contract/Original Developer/OEM (If Recompete)**

Northrop Grumman
SIMULATION AND TRAINING COMMUNITY FORUM (STCF)

DATE: August 11

Featuring

- MAJCOM PANEL
- In depth preview of upcoming WNS Acquisitions

REGISTER NOW