We

# Space Industry Days 2024

## Integrated Warfighting for the Great Power Competition

## DAY 2 (24 OCT) SLIDES

AFCEA Los Angeles

NDIA Greater Los Angeles

SCAPR Southern California Aerospace Professional Representatives

AFA Air & Space Forces Association Schriever Chapter #147

AFA AIR & SPACE FORCES ASSOCIATION

**Schriever Chapter 147 – Los Angeles**

**The Air & Space Forces Association (AFA) is an independent nonprofit dedicated to advocating for and supporting the U.S. Air and Space Forces.**

EVENTS:

✓ SSC Executive Forum - June
✓ Salute to SSC Dinner - June
✓ Schriever Wall of Honor Induction - Sept
✓ SSC Industry Days (co-host)
★ **Schriever Space Futures Forum and Executive Reception – Nov 14-15**
★ **Space Force Ball – Nov 15**

ACTIVITIES:

- SSC Events support
- Airmen & Guardian and Family Support
- Awards & Scholarships for Military/Civilian
- Air & Space Forces Retiree & Veterans Events
- Gold Star Families Support
- ROTC & JROTC Scholarships & Support
- STEM Education Awards & Grants
- CyberPatriot & Stellar Xplorer Grants
- LA Military Charitable Fund Donations
- Air & Space Forces Recruiting Support

# Space Domain Awareness & Combat Power: INTEGRATED WARFIGHTING for the GREAT POWER COMPETITION

SPACE INDUSTRY DAYS
24 October 2024

Colonel Bryon E. C. McClain
Program Executive Officer

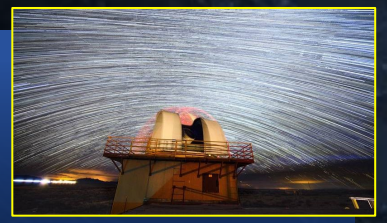
# The Challenge: Great Power Competition

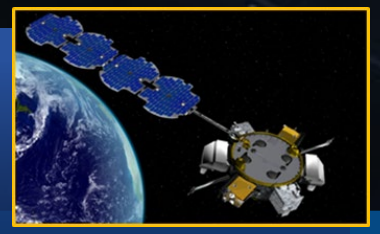
**Space Threat 2020**

**Space Threat 2030**

**Are we ready?**

# What is SDACP?





## What We Do

### Space Domain Awareness

- Rapidly detect, warn, characterize, attribute, and predict threats to national, allied, and commercial space systems
- High capacity ground radars, detailed optical systems, and space-based assets maximize full characterization

### Combat Power

- National security deterrence capabilities countering threats and aggression and prevail in conflict in space
- Unrivaled offensive and defensive capabilities required to gain, maintain, and exploit space superiority

### Innovation & Prototyping

- Next-generation rapid, innovative & affordable technology that leverages international, commercial, & interagency partnerships

**Mission**

***Drive advanced warfighting capabilities in, from, to and through space for the joint fight***

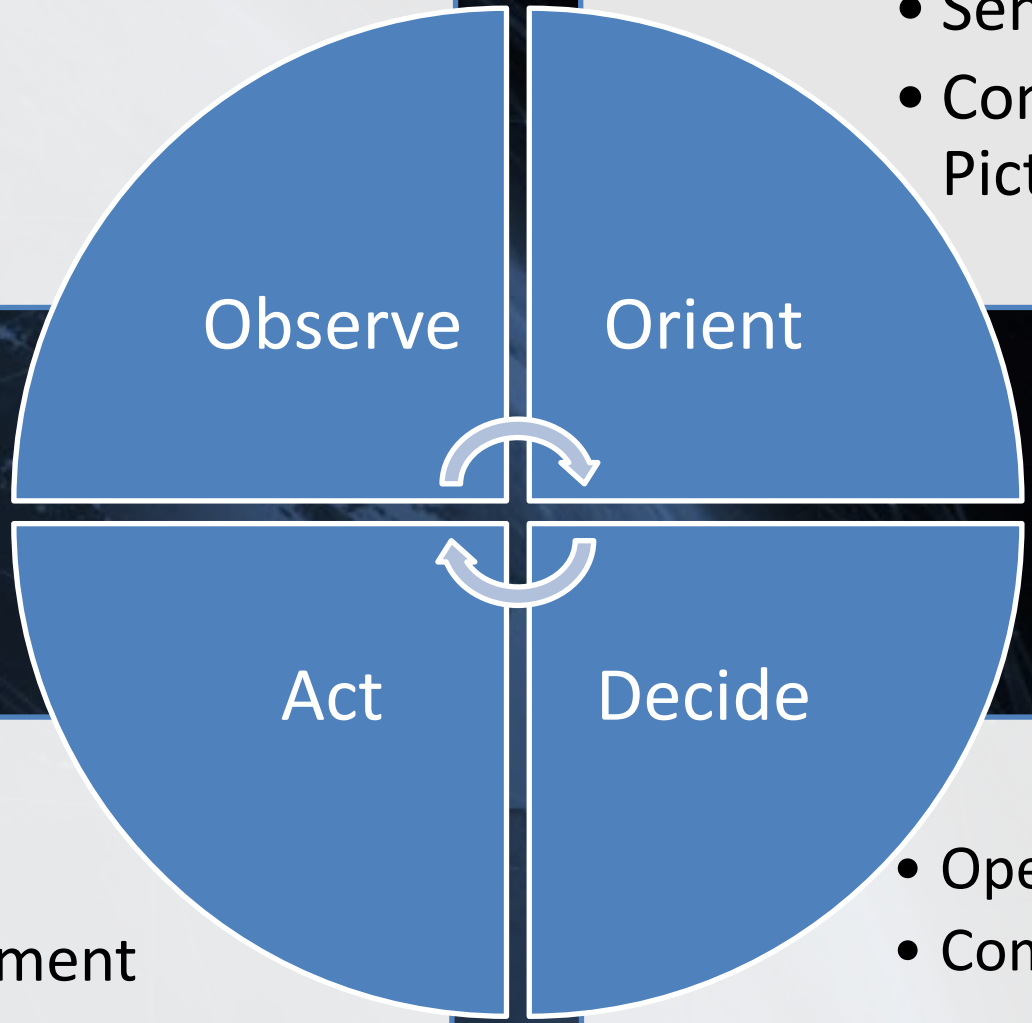
**Vision**

***A world-class team outpacing the threat***

# How do SDACP capabilities integrate?

- Space Domain Awareness

- Sense making
- Common Operating Picture




- Combat Power
- Battle Management

- Operational Planning
- Command & Control

# Program Management Required

(Image by Jim Osterman, AI Poe)

# Exploit, Buy, Build – Industry & Exploit


Thrift Store


Department Store

Tailor Made

# Collaboration

# Thinking Different: Vision

Nine Space Acquisition Tenets

Essential Program Management Skills for Government Space Acquisition Professionals

A Simple Formula to Go Fast in Space Acquisition

1) Build smaller systems
+ 2) Use existing technology
+ 3) Drive contractor scope to 3 years or less
+ 4) Use fixed price contracts
= Mission Capabilities Faster to Our Warfighters

## How Can Industry Help?

- Only bid on programs you can actually achieve
- Propose executable contracts
- Help us take advantage of existing technology
- Deliver warfighter capability on cost and schedule

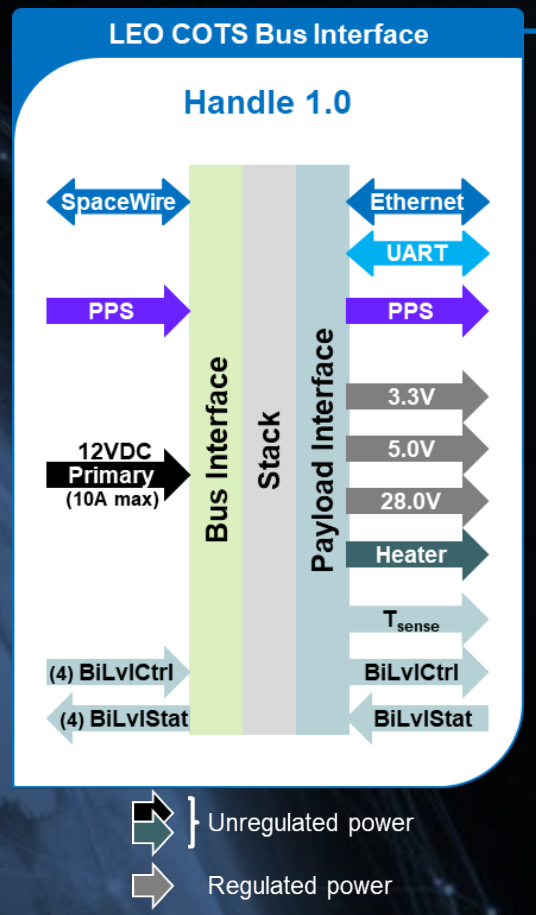
# Go Fast: Open System Architecture

- Space Safari is motivated to use COTS spacecraft and mission payloads to meet response timelines
- Employing modular open systems approach (MOSA) to enable rapid integration of space capabilities
- Developing bus-payload interface electronics
  - Covers electrical and digital interfaces
  - Dev kit for independent payload development
  - Command and control via OpenC3, "drop in" to ground architecture
- Prototyping against 6 different payloads and 2 buses
- Exploring tech transfer options

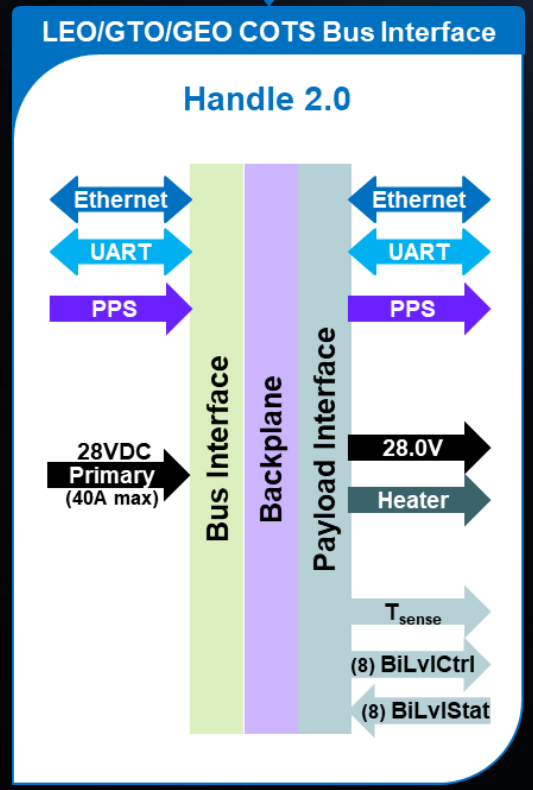
**Handle ICD available for industry review on 01 Dec 24**

- Seeking "pain point" identification and/or level of compliance
- Send request to library.mailbox@aero.org
- Provide Government org & contract number with need-to-know statement

## Aerospace Corp's Handle Transformation




As flown (Aerospace funded)




(Government funded)

Handle-only SWaP (28W, 3kg, 200x200x100 mm$^3$)

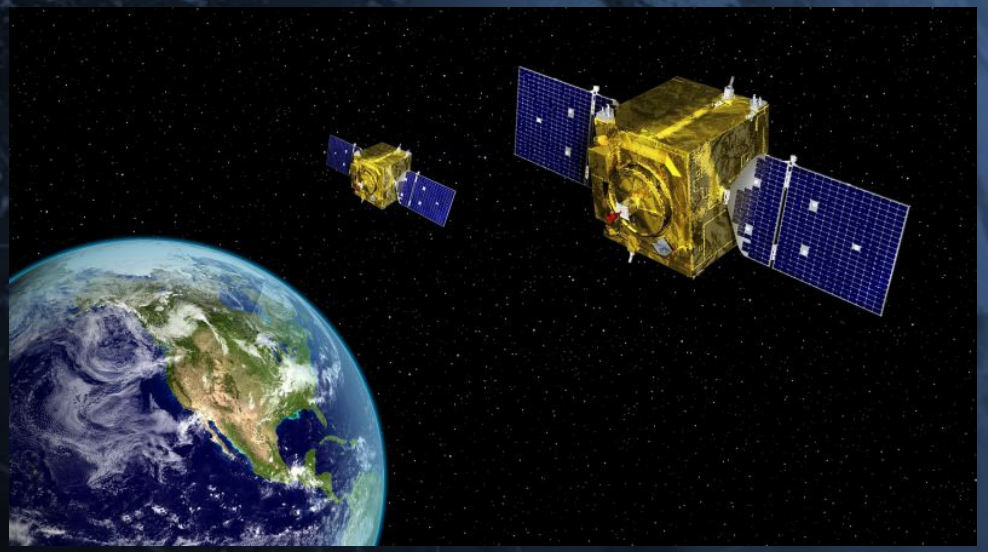
SSC.SZ.SpaceSafari_Outreach@spaceforce.mil

# Program: GEO SDA RFI

GEO SDA: The Government is considering a proliferated GEO SDA architecture to meet future 2030 collection requirements

- Government exploring options to compete future product lines
- Draft RFP expected to be released in FY25 with an FY26 start
- Future acquisition goal to reduce security

SAE TENETS: Build smaller systems, Use existing technology, Drive contractor schedule to 3 years or less, Use fixed price contracts

Industry Dates of Interest

- 05Mar24 - RFI issued
- 12Sep24 - Market Research Industry Day
- Classified Draft RFP - scheduled FY25

# EW Threat Integration Program (EWTIP)

EWTIP: Provides intelligence informed software capabilities against *new and emerging* threats to ensure CCS and other EW architectures maintain effectiveness against evolving adversary capabilities.

- Pre-execution embedded Software Acquisition Path
- Creates opportunities for businesses to engage in new mission technique developments

SAE TENETS: Use existing technology, Drive contractor scope to 3 years or less to deliver


Industry Dates of Interest

- Initial Study (FOPR Sep24; Contract Oct24)
- Port Rams (RFP Feb 25; Contract Mar25)
- Titans Study (RFP Mar25; Contract May25)

# FY25 RFPs & CONTRACT AWARDS

| Acq Delta | Program Name | Name of Planned Contract in FY25/CY25 | Target RFP Release (date) | Target Contract Award (date) | POC |
|---|---|---|---|---|---|
| SSC/SZ | PARCS Product Division | Logic Chassis Replacement project | Nov 2024 | Jan 2025 | Mr. Randy Threet/ Mr. James Hartmetz NH-03 |
| SSC/SZ | NCMC ITWAA | NISSC II Follow-On - NCMC Sustainment | FY25 | Mar 2026 | John Martin |
| SSC/SZ | NCMC ITWAA | NISSC II Follow-On - CMSFS Comm Support | FY25 | Dec 2025 | Capt Maldonado Santiago |
| SSC/SZ | NCMC ITWAA | IDSS Follow On | Feb 2025 | Jul 2025 | Matt Sheridan |
| SSC/SZ | Space Domain Awareness | MARK IV-B Next Gen | Sep 2024 | Jan 2025 | Jennifer Valentine |
| SSC/SZ | MEADOWLANDS | CCS Meadowlands Sustainment | Mar 2025 | Jan 2026 | Lt Col Natasha Peeples |

# QUESTIONS


# Battle Management Command, Control, and Communications (BMC3)

## SSC Industry Day

Ms. Shannon Pallone
Program Executive Officer

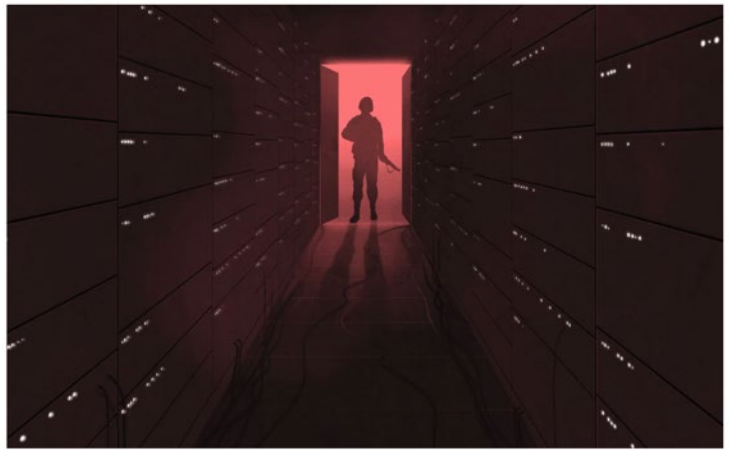
# Threat Environment

> *"The Space Force must harness the benefits of technological innovation and emerging capabilities if we're going to be able to out-compete our competitors, or Space Force will lose, the Joint Force will lose, and the U.S. will lose"*

Gen. B. Chance Saltzman, Chief of Space Operations, 10 April 24

## How AI is changing warfare

An AI-assisted general staff may be more important than killer robots



## Redefining Space Defense In The Digital Age

Forbes

**Kelle Wendling** Forbes Councils Member
**Forbes Technology Council** COUNCIL POST | Membership (Fee-Based)

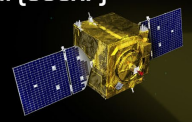
May 29, 2024, 06:15am EDT

## America's military has the edge in space. China and Russia are in a counterspace race to disrupt it

By Simone McCarthy, CNN
12 minute read · Published 12:12 AM EDT, Mon May 27, 2024

# OBSERVE ORIENT DECIDE ACT (OODA) LOOP

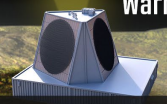
HYPOTHETICAL SITUATION: AN UNKNOWN SATELLITE APPROACHES A CRITICAL U.S. SATELLITE WITH ERRATIC MANEUVERS, PROMPTING CONCERN ABOUT ITS INTENTIONS.



Geosynchronous Space Situational Awareness Program (GSSAP)

Threat

U.S. High Value Asset



Upgraded Early Warning Radar (UEWR)

## SDACP Key Players

- UEWR
- Space Fence
- Space Surveillance Telescope
- GSSAP
- TacRS

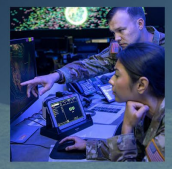
SDACP SDA assets detect unusual activity. The threat's maneuvers are unpredictable.

## OBSERVE ORIENT DECIDE ACT

## OODA LOOP

## BMC3 Key Players

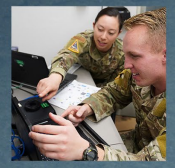
- Unified Data Library
- Warp Core
- Space Command & Control (C2)



BMC3 programs analyze and interpret information to understand its meaning and context.

## SDACP Key Players

- CCS
- Rapid Reaction Branch
- Defensive Cyberspace Operations – Space
- TacRS



SDACP denies the threat's ability to maneuver.

Counter Communications System (CCS)

## BMC3 Key Players

- Rapid Resilient C2
- Space C2
- Strategic Decision Conferencing

Based on the analysis, decision makers weigh options and choose the best course of action.

# BMC3 By the Numbers

## BMC3 SNAPSHOT

**TOTAL VALUE WITHIN PORTFOLIO** — **$4.4B** (FY22-29)

**74+** CAPABILITIES DELIVERED FOR THE WARFIGHTER

**MISSIONS SUPPORTED 28+**

**Programs:**

- 1 SWP Program
- 1 ACAT III Program
- 8 AML-Exempt Projects
- 37 Sub-Application/Projects

**7** INTERNATIONAL COALITIONS

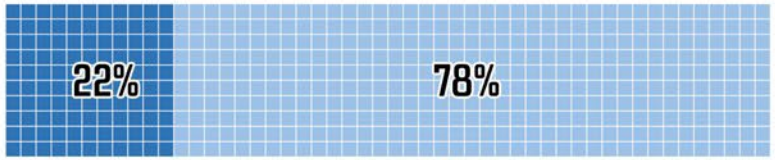
AUS - CAN - FRA - GER - NZL - U.K. - JPN


Connecting USSF space systems, international operations centers, commercial and civil antennas, and the DoD to build a resilient enterprise ground architecture

**Our Partners:**

| 100 | 60 | X |
|---|---|---|
| INDUSTRY PARTNERS | GOVERNMENT PARTNERS | CLASSIFIED PARTNERS |

**Our People:**



# FY2024 Highlights

**Satellite Control Network (SCN) Typhoon Recovery**
Returned 2/3 SCN antennas damaged by Typhoon Mawar to full ops in under 4 months

**SDA Capability Integrated Tests (SCIT)**
Accelerated SW development proved out agile practices, averaging 126 days to close CAT IU Test Problem Reports

**meshONE-T Operations Support**
Installed 9 nodes to support NORAD-USNORTHCOM, providing 10G long-haul comms between the Eastern Air Defense Sector and the Secret Commercial Cloud Services system supporting the ABMS Cloud-Based C2

**Unified Data Library (UDL) High-to-Low Data Transfer**
Reduced time to provide critical data to govt partners (NASA & DoC) from 4 hrs to mere mins supporting planetary defense and space traffic management missions

**Allied Exchange Environment (AXE)**
Won “Fight Tonight” Competition; Enabled data sharing with international allies

# Operational C2

*"The USSF seeks capabilities from the commercial sector that can contribute to the holistic generation of SDA."*
*USSF Commercial Space Strategy 2024*

**Mission Overview**

- Deliver critical services to warfighters for timely, quality driven battlespace decisions in the space domain fight
- Provide infrastructure, enterprise services, and mission applications that enable responsive, resilient operational-level capabilities for space operations centers

**2024 Major Activities**

- Space Delta 2 Operationally Accepted UDL, CODA and NDPP providing first electro-optical data from commercial and non-traditional sensors
- National Space Defense Center Operationally Accepted Kronos
- ATLAS is conducting its 9th Integrated Test Event; on track for Operational Trial Period

**Key Technology Areas**

- Data as a Service
- Software (SW)
- Application development
- Platform
- Infrastructure

# Industry Opportunities

**Program Name:** Space Command and Control (C2)

**Description of Effort:** Space C2 performs software, platform, and infrastructure development for the Space Domain Awareness (SDA) mission area and for Operational C2 centers such as the Combined Space Operations Center (CSpOC), National Space Defense Center (NSDC), Space Force Deltas, COCOMs and other DoD customers.

**Summary:**

1. DevSecOps Platform and Space C2 Enablement: FOPR released 13 Sep 24 GSA OASIS Pool 1b
2. 24/7 Network Operations Center: FOPR release 1QCY25 to OASIS+
3. Data Software Services (DSS): FOPR release 4QCY24 to 18 DSS IDIQ Contract Contractors
4. Organic Software Support: FOPR release 1QCY25 to GSA MAS
5. Other SDA SW FOPRs/RFPs: Release FY25 TBD
    - SDA Common SDA Workflows
    - Dynamic SDA Events
    - Messaging
    - Launch Risk Reduction

**Timeline:** Anticipate Contract Awards spanning 1QCY25- 3QCY25
**Contract Value Ranges:** ~$15M to ~$200M including option years
**Contact Information:** Matt Gonzales, SSC/BCCS, matthew.gonzales.8@spaceforce.mil

# Industry Opportunities

**Program Name:** 24x7 Network Operation Center (NOC) Support

**Description of Effort:** This contract seeks to provide expert services in support of a 24x7 NOC to monitor ATLAS as well as its suite of applications and data feeds. This solution must enable continuous monitoring of the system and available information boards, as well as enable basic Tier 1 level maintenance such as account resets and login issues. It must also enable the requirement to roll back to legacy system in the event of an outage lasting longer than 2 minutes

**Timeline:**

- Draft RFP Release Date: 4QCY24 to OASIS+ Small Business Pool
- RFP Release Date: 1QCY25
- Estimated Contract Award Date: 3QCY25

**Contract Value:** ~ $30-40M (5 years)

**Contact Information:** Logan Bolitho, Maj, BCCS, logan.bolitho@spaceforce.mil

# Industry Opportunities

**Program Name:** Data as a Service (DaaS) *changing to Data Software Services (DSS)*

**Description of Effort:** The Government has transitioned to an agile approach toward software development to deliver advanced warfighter capabilities that require the aggregation of massive amounts of data from disparate sources and systems. The DaaS contract will assist the scaling of this effort by providing enterprise data storage and data management solutions capable of operating in secure environments and providing data products and advanced analytics to the DoD and Joint force with focus on Air and Space operational communities

**Timeline:**

- Draft RFP Release Date: 4QCY24 to DSS IDIQ Pool
- RFP Release Date: 4QCY24
- Estimated Contract Award Date: 3QCY25

**Contract Value:** ~ $150-180M (5 years)

**Contact Information:** Matt Gonzales, SSC/BCCS, matthew.gonzales.8@spaceforce.mil

# Industry Opportunities

**Program Name:** Space C2 Organic Support

**Description of Effort:** The Organic Support contract seeks to provide product management, product design, and software engineering services to support the design, development, integrations, test, deployment, and continuous improvement of operational capabilities delivered by Kobayashi Maru's Rapid Software Section (Section 31). These capabilities primarily support Space Tasking Cycle and Electronic Warfare workflows for the Combined Space Operations Center under Delta 5 and the Satellite Communications mission area under Delta 8.

**Timeline:**

- Draft RFP Release Date: 4QCY24 to GSA MAS
- RFP Release Date: 1QCY25
- Estimated Contract Award Date: 2QCY25

**Contract Value:** ~ $35-45M (5 years)

**Contact Information:** Matt Gonzales, SSC/BCCS, matthew.gonzales.8@spaceforce.mil

# Satellite Control Network

*"The USSF seeks capabilities from the commercial sector that increase and/or improve data transport speed, capacity, agility, flexibility, reliability, and/or resiliency and incorporate emerging technologies for the Joint Force to maintain competitive endurance." USSF Commercial Space Strategy 2024*

## Mission Overview

- Sustain and maintain the Satellite Control Network (SCN)

## 2024 Major Activities

- SCN Sustainment
- Mission Transport Remote Tracking Station (MTR)
- Air Force Satellite Control Network Edge Transport System (ANETS)

## Challenges

- Sustaining beyond End of Life (EoL) equipment
- Aging infrastructure
- Electronic and mechanical failures w/significant downtime

## Recent Successes

- Typhoon Mawar Response Team

# Industry Opportunities

**Program Name:** The Data Transport Product Support Sustainment Logistics Maintenance (DSLM) contract was awarded 22 Mar 2024 and ends Sept 2029. **Industry engagements will occur in 2028.**

**Description of Effort:** The DSLM contract provides for sustainment, maintenance, logistics, facilities and security support. The contract locations potentially include: Schriever Space Force Base, CO; Vandenberg Air Force Base, CA; Diego Garcia, British Indian Ocean Territory; Guam Tracking Station, Guam; Hawaii Tracking Station, HI; New Boston Air Force Station, NH; Eastern Vehicle Checkout Facility, FL; Thule Air Base, Greenland; Oakhanger, Hampshire, United Kingdom; Automated Test Bed, Colorado Springs, CO.It also provides for coordination with various depots in support of Level 2 hardware and software maintenance responsibilities

**Timeline:**

- Awarded March 2024 ends September 2029

**Contract Value:** $271M Awarded

**Contact Information:** Ms. Tane Yingling, Email: tane.yingling@spaceforce.mil

# SCN Modernization

*"The USSF seeks capabilities from the commercial sector that increase C2 capacity and capability. The USSF will prioritize capabilities with dynamic technology (i.e. multi-band). These types of capabilities allow for delivery of resilient data management, decision support tools, planning support, and secure global communications to the* Joint Force to avoid operational surprise and deny adversarial first-mover advantages." *USSF Commercial Space Strategy 2024*

## Mission Overview

- Drive enterprise integration and modernization of tactical level C3 capabilities to transform satellite operations

## Major Activities

- Deliver AFSCN Scheduling Tool (AST) for Operational Acceptance
- Stand up the Joint Antenna Marketplace (JAM)
- Expand meshONE-T
- Deliver Minimal Viable Product for Enterprise Resource Manager (ERM)
- Deliver Federal Augmentation Services (FAS) for Operational Acceptance
- Characterize suitability of Modularized Transitional RTS – Deployable (MTR-D)

## Key Technology Areas

- Expanding network capacity
- Ground Resource Management
- Aging infrastructure
- Modern data transport networks

# Industry Opportunities

**Program Name: Joint** Antenna Marketplace (JAM)

**Description of Effort:**

- **Exploit** existing antenna capabilities and services
- **Buy** or lease commercial antenna capacity
- **Build** antennas with niche capability only (e.g. SGLS and Mil Ka)
- Provide framework to streamline access to enhanced antenna capacity
- Enable secure, dynamic, real-time satellite command and control
- Flexible marketplace model facilitates adaptive scheduling of contacts and data transport globally to and from antenna locations, significantly enhancing USSF satellite control resiliency

**Timeline:**

- RFI Released 3 September, 22 responses received
- 19-21 November: JAM RFI Follow-Up Industry Days in Colorado Springs, CO

**Contract Value:** TBD

**Contact Information**: Lt Col Brian Kester, USSF SSC/BCT; brian.kester.1@spaceforce.mil

# Ways to Engage

## CTO Industry Engagement

Launched Nov 2023

**176** Industry Partner Meetings


**Minutes of Engagement**

**8,285**

**Ways to Connect**

- **45** minutes — **In-Person** (INNOVATION HUB COS)
- **45** minutes — **Virtual**
- **15** minutes — **Follow-On**

### Top 10 Topics of Discussion

1. DevSecOps
2. Artificial Intelligence and Machine Learning
3. Cybersecurity
4. Space Domain Awareness
5. Cloud Computing
6. Data Management and Analytics
7. Command and Control
8. Integration
9. Software Development
10. Ground Station Networks

### Look for Us At:

SFA SPACEPOWER 24
AFA WARFARE 25
SPACE SYMPOSIUM 25
SPEC INDUSTRY DAYS 25
SPACE INDUSTRY DAYS 25
SFA SPACEPOWER 25
OTHERS... TDB

SCAN TO CONNECT

## WOW! (Waffles on Wednseday)

Waffles Eaten? **1,534**

Wednesdays **39** of 52

Connections Made? INVALUABLE

## The Wisdom Sessions

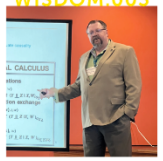
Launched March 2024

The Wisdom Sessions, our lunchtime series, was created to foster learning, growth, and community within our teams. Topics are carefully curated to inspire and challenge. We hope you'll join us!

UPCOMING
- WISDOM.006 Dec 4th
- WISDOM.007 Jan 8th
- WISDOM.008 Feb 12th
- WISDOM.009 Mar 5th

WISDOM.001 — **Dynamic Space Operations**
ExoAnalytic Solutions

WISDOM.002 — **Explainability in AI**
Nara Logics



WISDOM.003 — **Looking Backwards to Understand**
Orion Space Solutions, an Arcfield Company

WISDOM.004 — **AI for Knuckle-Draggers**
Dr Jack Long, acting Navy Chief AI Officer at the Office of Naval Research

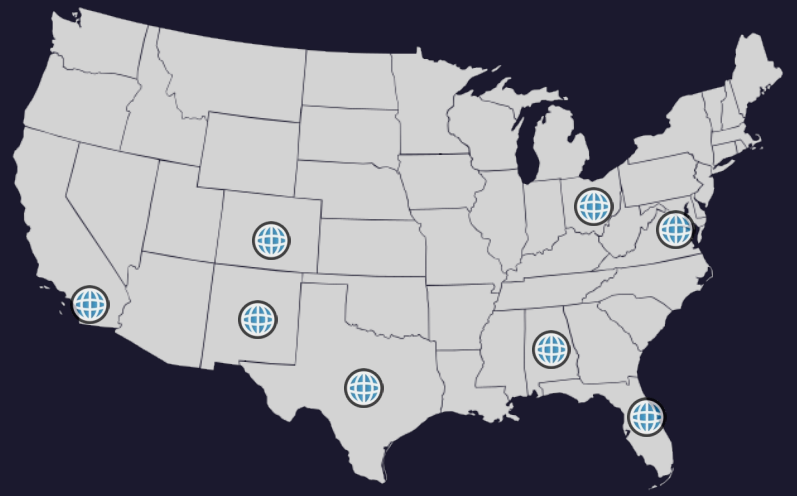
WISDOM.005 — **The Future of AI is Horse Poop!**
Dr. Joel Mozer, Space Force Chief Science Officer Emeritus

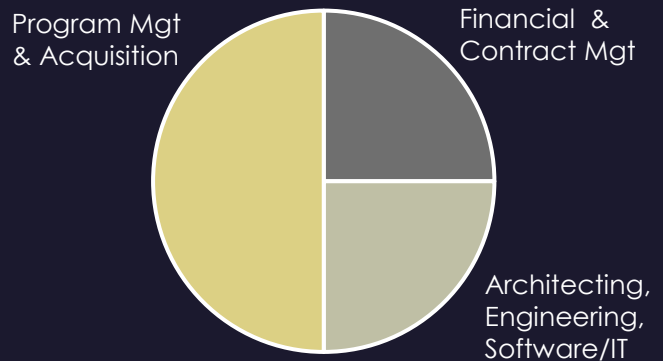

#TogetherWeWill
WWW.THECTO.SPACE

# Transparent Community Dialogue

# About OMNI

- OMNI Consulting Solutions specializes in providing expert advisory support to the U.S. Space Force, offering strategic insights, acquisition support, and innovative solutions tailored to the unique challenges of Space, Defense, and Security.
  - Supporting SSC since 2011 – 160+ employees nationwide
  - OASIS Pool 5B SB & OASIS+ Prime
  - Top Secret facility clearance
  - Service Disabled Veteran Owned Small Business
  - ISO 9001:2015, 14001, and 27001 certified







•Contact
- •HQ: El Segundo, CA
- •Nate Conn – Chief Growth Officer
- •nconn@omniconsultcorp.com
- •www.omniconsultingsolutions.com


***Architecting, planning, engineering, and executing Space programs to maximize customer outcomes***

# Mission Focused

## Sea, Air, Space, Ground & Cyber

**Our data analytics, cyber & integrated solutions** are built around a digital ecosystem that is standards based, leverages artificial intelligence/machine learning (AI/ML) and best of breed technology to deliver a wide range of products & solutions to support the warfighter in all domains – Sea, Air, Space, Ground & Cyber.

## Our Core Tenants:

**Mission-Driven Innovation & Speed to Solution**

Technology centered around the warfighter to deliver tangible and mission critical solutions – in months, not years.

**Agility & Responsiveness w/out Disruption**

"Aim, Fire, Adjust" - we want to deliver not only rapidly but in a way that is flexible, scalable and capable of rapid deployment and iteration. We don't look to displace or disrupt, but compliment & augment. Additionally, data ownership always remains with our customers.

**Deliver Value @ Reduced Cost**

High quality solutions can be delivered at lower costs without sacrificing performance, capabilities or reliability.

**AI + Digital Transformation.**

Integrated across our portfolio.

**Risk Analysis & Rapid Integration.**

Solutions to meet the mission.

**Logistics, Modeling & Simulation**

Advanced Analysis & Exploitation.

**Defensive & Resilient Cyber**

Identify, Protect and Defend.

**Space Domain Awareness.**

Meeting Space challenges today.

**Acquisition & Sustainment.**

Decades of continued support.

arcfield.com

# SETTING THE TRAJECTORY.

# FUELED BY INNOVATION.

We support the nation by creating a technological advantage for our mission partners and by solving the most complex and demanding national security and space-related challenges.

SPACE DOMAIN AWARENESS

VERY LOW EARTH ORBIT (VLEO) CAPABILITIES

SYSTEMS OF SYSTEMS ENGINEERING AND INTEGRATION

SENSOR AND PAYLOAD DESIGN

SMALLSAT AND CUBESAT SPACECRAFT

ARCFIELD™ | ORION SPACE SOLUTIONS | STC AN ARCFIELD COMPANY

# Space Industry Days
# MilComm & PNT (MCPNT)

24 October 2024

Mr. Cordell DeLaPena Jr, SES, DAF
Program Executive Officer for MilComm & PNT

# Agenda

- MilComm & PNT: Overview
- Current Operational Environment
- Year of the Pivot
  - Where We Are
  - Where We Are Going
- Contract Actions


MCPNT Video

# MilComm & PNT Mission & Vision

## Mission

Rapidly deliver premier MilComm and PNT capabilities resilient to the threat by the relentless pursuit of warfighter needs and acquisition excellence

## Vision

World-class space professionals connecting people and systems, any time any place, to enable unity of effort across all warfighting domains

*EPS-R Launch from Vandenberg SFB, CA, 11 Aug 2024*

# MILITARY COMMUNICATION & PNT

**1800+**
active duty, civilian, and contractor employees

**4 GPS Ground Stations**
**17 GPS Monitoring Stations**
**2 GPS Control Stations**

*GPS satellites in sustainment*

- 6-GPS IIR
- 7-GPS IIR-M
- 12-GPS IIF
- 6-GPS III

*SATCOM satellites in sustainment*

- 6-AEHF
- 6-DSCS
- 2-EPS
- 5-MILSTAR
- 5-MUOS
- 10-WGS
- 4-UFO

**28 satellites/payloads** in production or development

WGS 11 (1) WGS 12 (1) GPS III (4) GPS IIIF (10) R-GPS(8) MUOS (2) EPS-R (2)

# MCPNT BY THE NUMBERS

**FY24-28 total budget $21.6 billion**

**32** Active Programs

**9** Systems in Sustainment

- 9 *ACAT I Programs*
- 1 *ACAT II Programs*
- 5 *ACAT III Programs*
- 3 *MTAs*
- 3 *SWPs*
- 10 *AML Exempts*
- 1 *Quick Start*

**8** *Ground Systems*

Over **2 Million** Units
*of GPS User Equipment (UE) fielded with next-gen Military GPS UE starting to field*

Over 400,000
GPS User Equipment (UE) sold through GPS Foreign Military Sales (FMS)

**More than 200 GPS FMS cases in work and active engagement with 60 allied nations**

17,000+
SATCOM Terminals

as of Sep 2024

# Adversary View of Space

## CHINA

- "Develop the space industry and build China into a space power is our eternal dream"
  - Sees space as critical to both a modernized economy and "informatized" warfare
- Relies on a suite of growing space & counterspace capes to support national goals
  - Near term: regional hegemony
- Plans to COMPETE
  - Sees future of domain as China-led
    - 550% increase in on-orbit satellites since 2015

## RUSSIA

- The bedrock of Russian strength in space is Soviet-era technology & infrastructure
- Recent sanctions reduced space development capabilities
  - Faces challenges related to budget, corruption, workforce, and quality
- Plans to DENY & DEGRADE
  - Acknowledges asymmetric position
  - Aggressively pursuing diverse counterspace options

"The Space Force's $30 billion budget needs to grow — whether that's through internal Defense Department trades or an increase from Congress"

"[The Space Force] budget is going to need to double or triple over time to be able to fund the things we're actually going to need to have,"

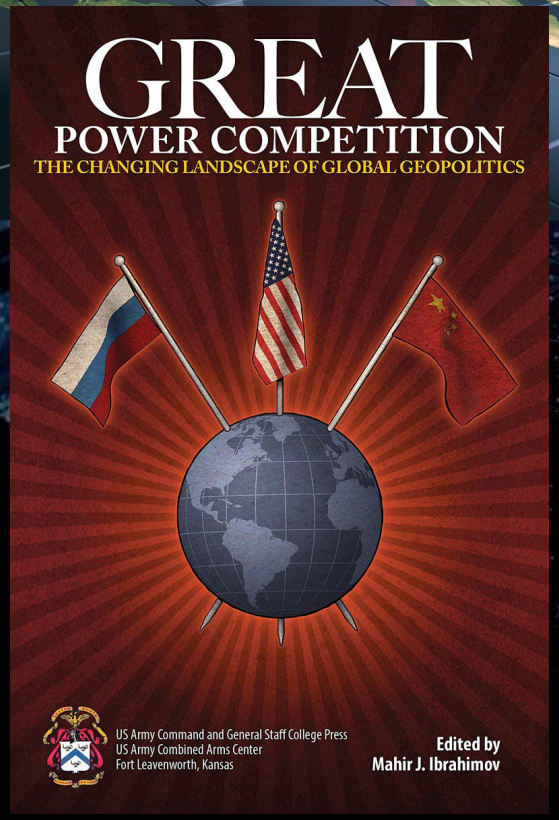
"We have received Quick Start authority to field additional low-cost GPS satellites to increase the resilience of the GPS system and have initiated that program."

SECAF Frank Kendall at the Air & Space Forces Association's 2024 Air, Space and Cyber Conference

*"I have instructed our briefers to stop referring to the Chinese Communist Party and the People's Liberation Army as a 'future', or 'emerging', or 'potential' threat. … It is a serious threat today,"*

*– SECAF Kendall, AFA, 16 Sep 24*

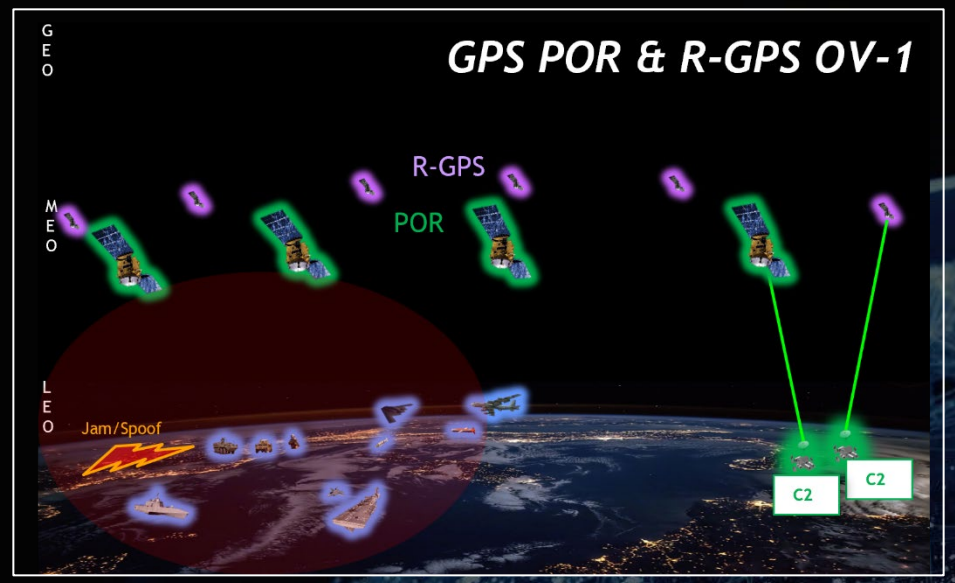
# MCPNT Pivot for GPC

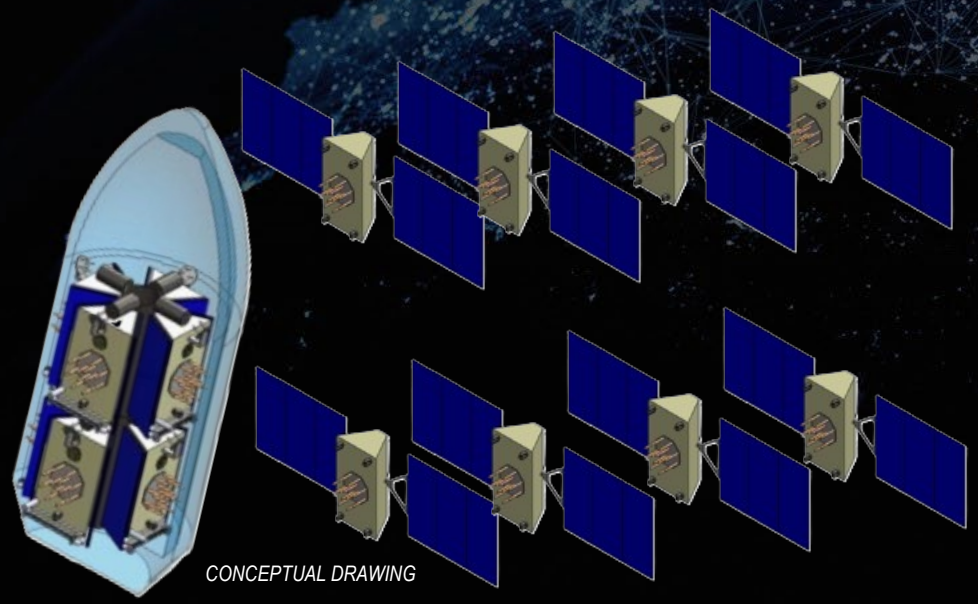



- **Capability Delivery**:
  - Current programs focused on execution
- **Race to Resiliency**:
  - USSF's first Quick Start for Resilient GPS (R-GPS)
  - SATCOM Disaggregation
- **Commercialization & International**:
  - Luxembourg mPOWER
  - PTS-G
  - Space Norway (EPS-R)
- **Non-Traditional**:
  - Reverse Industry Days
  - SpaceWERX Challenge Events
  - STRATFI / TACFI

***Outpace the Threat & Accelerate Joint Warfighter Capabilities***

# Resilient GPS (R-GPS)




- **Resilient GPS augments GPS constellation with proliferated small satellites**
  - Implementing SWAC Force Design and Defense Science Board recommendations
  - Transmit core GPS signals providing resilience to Million+ military (DoD & Allied) and Billion+ worldwide civilian users
  - "YMCA" signals: L1 C/A, P(Y), and M-Codes
  - Acquired in LEAPs (Lite Evolving Augmented Proliferation) of up to 8 satellites
- **Leveraging new FY24 NDAA "Quick Start" Authority**
- **Strategy leveraging both traditional and non-traditional vendors**
  - Phase 0: 4 vendors to executable design concepts in early 2025
  - Phase 1: Up to 2 vendors to Full Design and Payload Demo in 2026
  - Phase 2: Up to 2 vendors build up to 8 satellites for launch as early as 2028
  - USSF Affordability Goal: $50 - $80M per SV

***Resilient GPS LEAP 1 Phase 0 Awarded September 2024 - 6 Months from Approval to Award!***

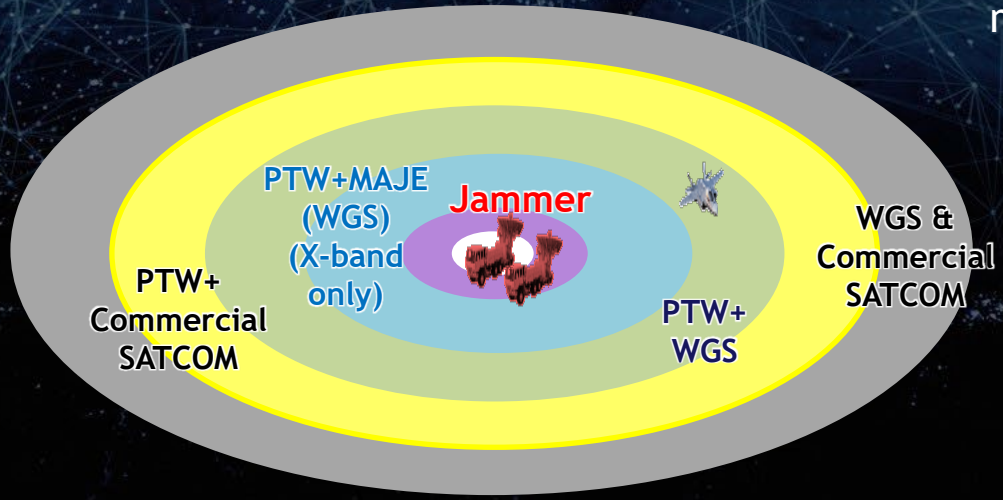
# Disaggregated and Diverse Systems

## ESS

- Survivable and endurable SATCOM capability for the NC3 Mission
- Space and control segments for worldwide arctic DoD strategic, secure and jam-resistant communications for ground, sea, and air assets

## PTS-R

- Provide tactical users with beyond-line-of-sight, advanced anti-jam, low-probability-of-intercept protected communications in highly-contested anti-access/area denial environments by utilizing the Protected Tactical Waveform




## PTS-G

- Purpose-built, disaggregated X-band and mil-Ka band capability to satisfy demand as an extension to WGS
- PTS-G = GEO orbit disaggregated complement to PTS-R
- Maximizes the use of commercial space vehicle providers – COTS products with minor modifications

| | | | |
|---|---|---|---|
| ESS Space Development and Production | CPIF/CPAF/CPFF/FFP | Competitive | Est. Award Q2FY25 |
| PTS-R EMD, Production & Operations | FFP | Competitive (Limited) | Est. Award Q2FY25 |
| Protected Tactical SATCOM-Global (PTS-G) | IDIQ (FFP) | Competitive | Est. Award Q3FY25 |

# Commercial SATCOM Augmentation

**Protected-Strategic (EHF)**

AEHF → TRANSITIONING → ESS

- Critical for ops through and after nuclear attack (NC3)
- Moderate data rates, classified user equipment
- Onboard processing for anti-jam, anti-scintillation

**Protected-Tactical (X, mil-Ka)**

PTS-Resilient (mil-Ka)

PTS-Global (X-band, mil-Ka)

- Critical for ops near enemy (anti-jam or low detectability)
- High data rates, unclassified user equipment (5000+ users)
- PTS-R: onboard processing for high anti-jam in conflict area
- PTS-G: ground processing, anti-jam or low detectability

**Wideband (X, mil-Ka)**

WGS (1-10) / WGS (11-12) → TRANSITIONING

- Assured military access using commercial technologies
- High data rates, unclassified user equipment (5000+ users)
- After WGS12, transitions to PTS-R, PTS-G, & commercial

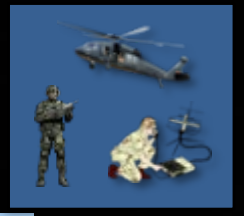
**Commercial (L, C, Ku, Ka)**

iridium, INTELSAT, SES, STARLINK, O3b mPOWER, inmarsat, Viasat, amazon | project kuiper

- Alternate paths, high capacity, low cost for routine ops
- Worldwide coverage in GEO and now MEO, LEO
- Military shares resources with other users

**Narrowband (UHF)**

MUOS → MUOS SLE



- Critical for mobile users through canopy and all weather
- 3G cellular-like SATCOM, global voice and data
- Low data rates, small user equipment (20,000+ users)

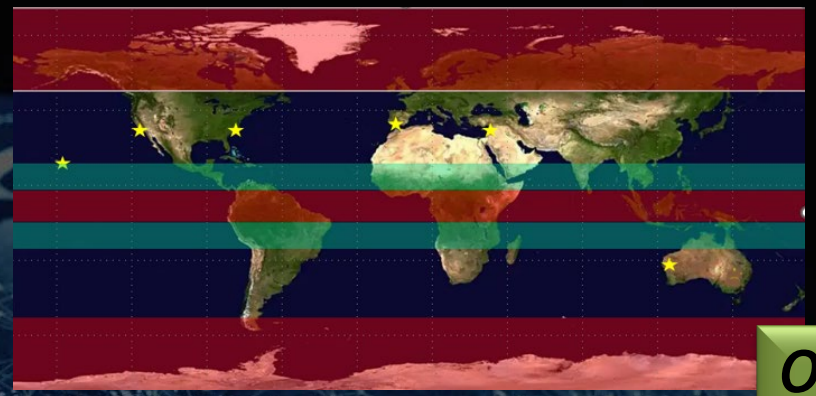
2010s | 2020s | 2030s

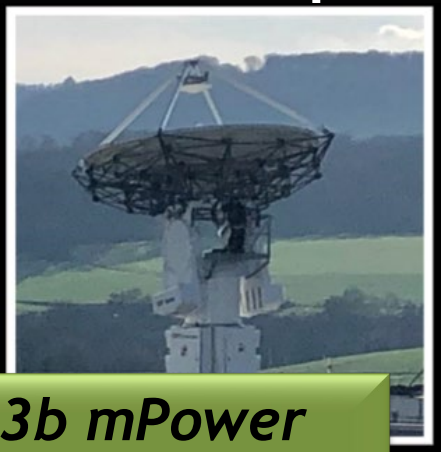
Graphic is UNCLASSIFIED

**AEHF:** Advanced Extremely High Frequency
**MUOS:** Mobile User Objective System **WGS:** Wideband Global SATCOM
**ESS:** Evolved Strategic SATCOM
**PTS:** Protected Tactical SATCOM
**SLE:** Service Life Extension

# International Partnerships

**Executing 400 active FMS cases**
- Total active case value ~$70M
- In receipt of inquiries for over 40K M-code receivers





***O3b mPower***
***Luxembourg***

***EPS-R***
***Space Norway***

- 18 April 2024: EPS-R Control and Planning Segment (CAPS) Operationally Accepted
- 11 August 2024: Successful dual launch of Space-X payloads; now undergoing on-orbit checkout

**Current Status**
- USSF is funded for 3 years of pooled capacity (FY24-26) and six dedicated gateways
- Capacity should be available for DoD users by the summer of 2024; will fully leverage SES commercial gateways and infrastructure

**Future Plans**
- Long term plan is for a sovereign ground infrastructure, followed by the joint hub variant to enable PTWoC
- Sovereign unique solutions, sovereign capacity management, other modifications also in consideration

# MILSATCOM Reverse Industry Day

*3 - 4 Sep 2024 @ COSMIC*

## 5 Areas of Modernization/Integration:

1. Move SATCOM into the **Space Data Network (SDN)** domain
2. Increase communications adaptability through **system virtualization**
3. **Achieve higher capacity gateway and infrastructure resilience**
4. Increased need for **small/micro satellites** to build more prolific constellations
5. Leverage **5G/6G NTN/Direct to Device technologies** while maintaining military robustness, resilience, and autonomy



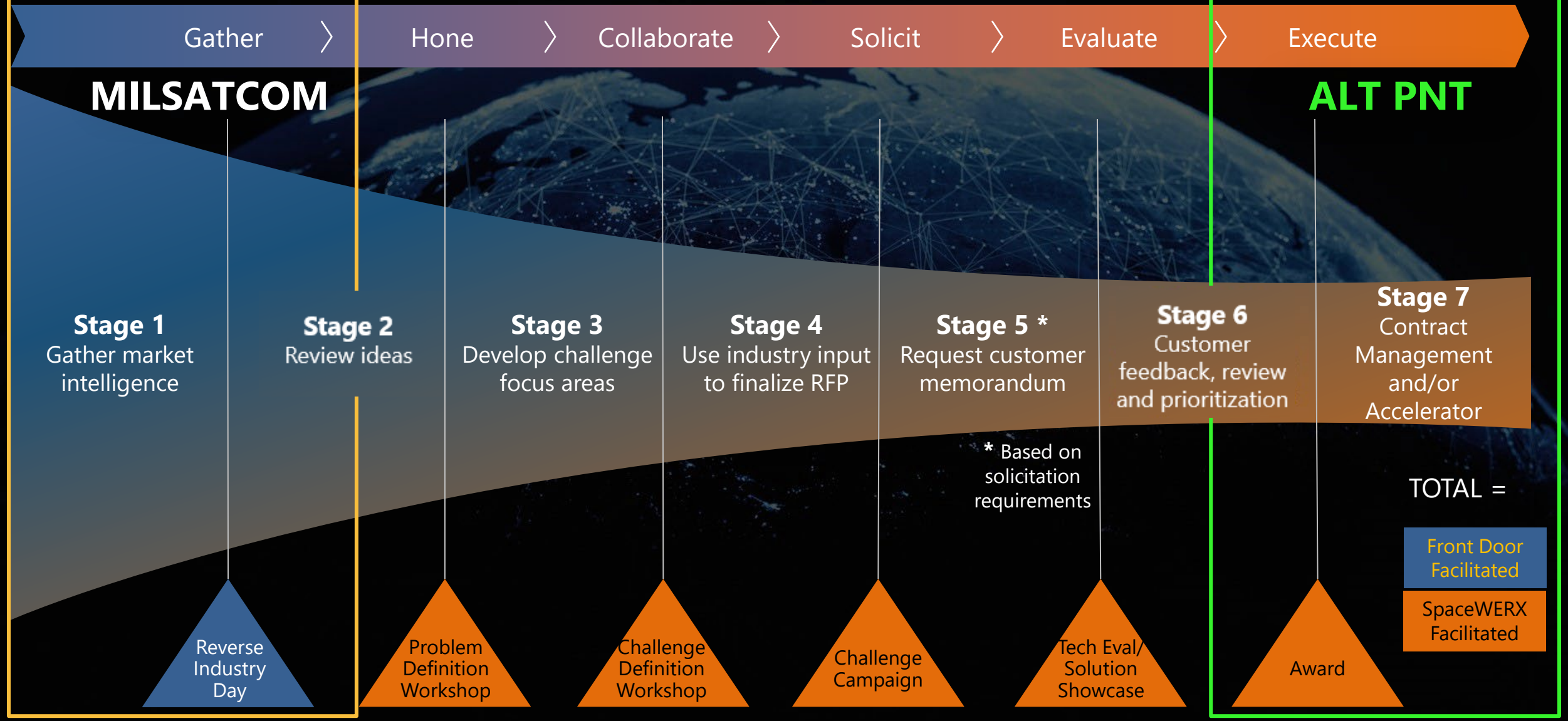


***2 Days / 160+ Participants***

# Reverse Industry Days and SpaceWERX Challenge Integration

2023: Alt PNT RID
2024: MILSATCOM RID

2024: AltPNT SBIR Awards
2025: MILSATCOM SBIR Awards




SPACEWERX

# Commercial Integration: PNT Development Initiatives

## SpaceWERX/AFWERX Alt PNT Challenge

- 122 responses from industry
- Awards: 20 x $1.9 Million

### Focus Areas

- **Non-Radio Frequency (RF) PNT:** Develop PNT that is not based on electromagnetic signals
- **Alternative Space-Based PNT:** Develop space-based PNT from other non-Global Navigation Satellite System sources
- **PNT Fusion:** Develop techniques and algorithms for fusing multiple independent sources of PNT
- **PNT Assurance and Integrity:** Develop and mature GPS and GNSS signal integrity and PNT assurance techniques to validate signals broadcast in a multi-GNSS environment
- **PNT Situational Awareness (SA), Monitoring:** Enhanced capabilities to monitor the global GNSS spectrum environment
- **PNT Innovation Center:** Define, develop, and equip a government-funded Alternative PNT Innovation Center

* Awards have the potential for follow-on TACFI Funding

# MilComm & PNT Futures Branch

- Led by Ms. Katherine Coens
- Responsible for near-term to long-term MilComm & PNT future capabilities
  - Leveraging both AI/ML
  - Teaming with Partner Nations/NATO allies (Allied by Design)
- Implementing SWAC Force Designs into MilComm & PNT programs
- Working with SpaceWERX, AFWERX, SSC Front Door, SpOC, and AFRL to bring new capabilities into programs
  - SBIR for MILSATCOM being released soon
  - Partnering with industry through TACFI and STRATFI
  - Transitioning AFRL technology into programs of record

***Working to rapidly adapt to the threat through new technologies, partnerships, investments***

# FY24 Awarded Contracts

| Contract | Contract Type | Sole Source or Competitive Contract | Award Date | Value |
|---|---|---|---|---|
| MCPNT SAFS Financial Support Services | FFP | Competitive | Q1FY24 | $185M |
| SAFS-2 SATCOM Financial Services | CPFF | Sole Source | Q2FY24 | $9.9M |
| SAFS-2 PNT Acquisition and Financial Services | FFP | Sole Source | Q2FY24 | $20.3M |
| WGS-12 | FFP | Sole Source | Q2FY24 | $439.6M |
| SLE Space Risk Reduction and Early Design (Phase 1) | FPIF | Competitive | Q2FY24 | $132M |
| Foreign Military Sales BAE Selective Anti-Spoofing Module SAASM 3.7 Single Chip Module | FFP | Sole Source | Q2FY24 | $8.5M |
| Foreign Military Sales BAE GPS Receivers | FFP | Sole Source | Q2FY24 | $7.4M |
| Foreign Military Sales Trimble Military and Advanced Systems Receivers | FFP | Sole Source | Q2FY24 | $18M |
| ESS Mission Planning Apps (Phase 1 & 2) | FFP x 5 and FPIF x 2 | Competitive | Q4FY24 | $250K x 5, $20M x 2 |
| WGS GSCCE | FFP | Sole Source | Q4FY24 | $28.6M |
| Resilient GPS Phase 0 | FFP | Competitive | Q4FY24 | $10M x 4 |

***FY24 Contract Awards: $930.55M***

# Non-Traditional and Commercial Awards & Opportunities

| Contract Type | Award | Value |
|---|---|---|
| SBIRS: Alt PNT SBIRS Contract Awards | Q4FY24 | $41.8M (22 x $1.9M) |
| TACFI: Tactical Funding Increase Award | Q2FY24<br>Q3FY24<br>Q4FY24 | $5.7M (3 x $1.9M)<br>$3.6M x 1<br>$1.25M x 1 |
| STRATFI: Strategic Funding Increase Award | Q3FY24<br>Q4FY24 | $3.3M<br>$4M |

***FY24 Contract Awards: $59.65M***

| Opportunity | Award Window | Value |
|---|---|---|
| SBIRS: MILSATCOM SBIRS Contract Awards | Q3FY25 | $15.2M (8 x $1.9M) |
| COMMERCIAL: Timing Over Commercial Signal | FY25 | $10M |

***FY25 Potential Awards: $25.2M***

# Active Solicitations and Upcoming RFPs

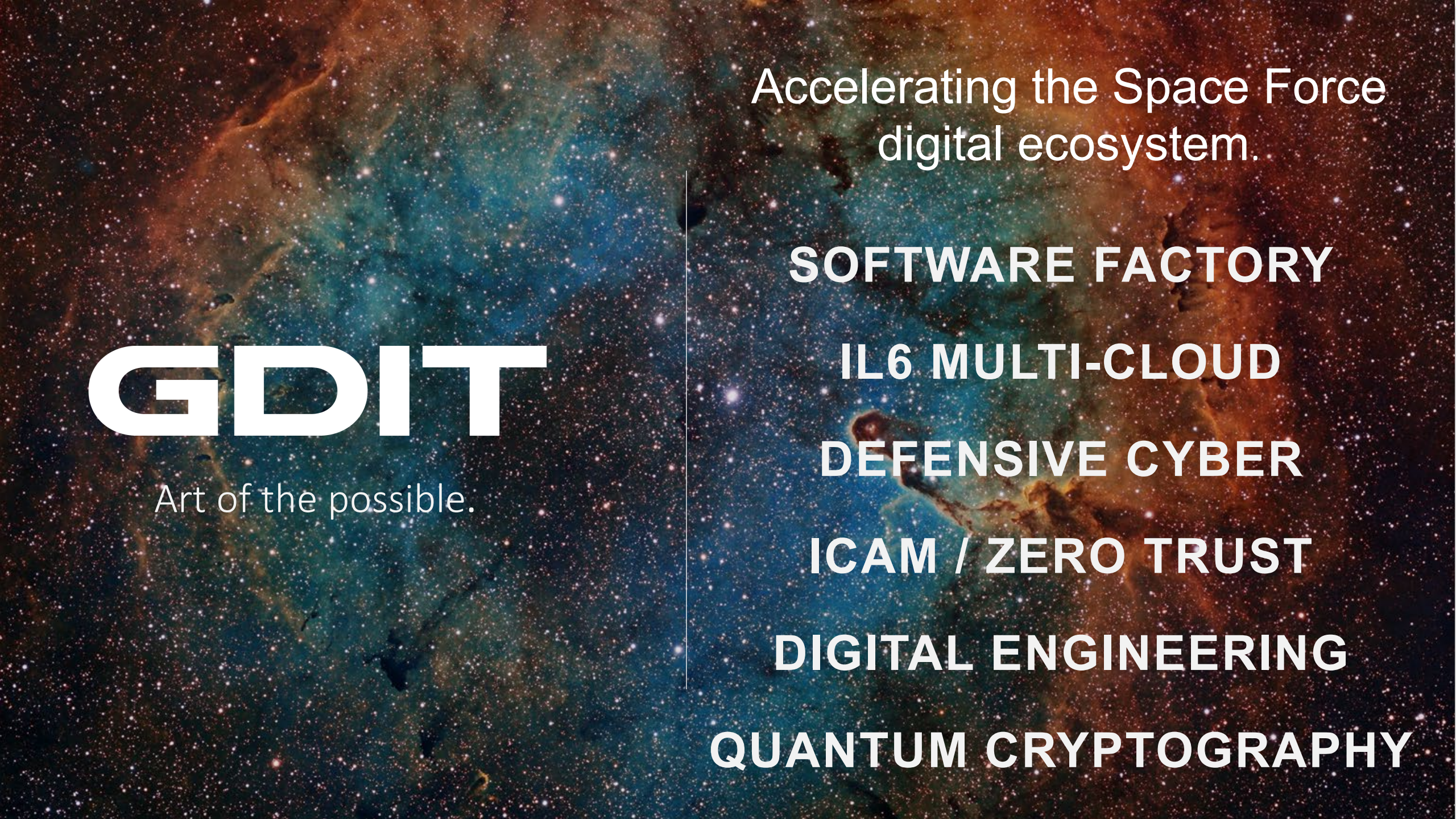
| Contract | Contract Type | Competitive / Sole Source | RFP Release/ Award Date | Value |
|---|---|---|---|---|
| ESS Space Development and Production – Active Solicitation | CPIF/CPAF/CPFF/FFP | Competitive | Q2FY24 / Q2FY25 | ~$8B* |
| MUOS Ground Modernization – Active Solicitation | CPIF/CPAF/CPFF/FFP (IDIQ) | Sole Source | Q2FY24 / Q1FY25 | $2.2B ceiling |
| Tiqker Space Duty Acceleration (TACFI) – Active Solicitation | FFP | Sole Source | Q3FY24 / Q4FY24 | $3.9M |
| PTS-R EMD, Production & Operations – Active Solicitation | FFP | Competitive (Limited) | Q3FY24 / Q2FY25 | ~$6.3B* |
| ESS Out-of-Band Command & Control (OOB-C2) Application via Command and Control System – Consolidated (CCS-C) | Task Order via IDIQ | Sole Source | Q1FY25 | ~$40M |
| Enterprise Management & Control (EM&C) [OTA] | FFP | Non-Competitive | Q1FY25 | $5M |
| Enterprise Management & Control (EM&C) – Development | IDIQ | Competitive | Q1FY25 | < $100M |
| Enterprise Management & Control (EM&C) - Integrator | IDIQ | Competitive | Q1FY25 | > $100M |
| Protected Tactical SATCOM-Global (PTS-G) | IDIQ (FFP) | Competitive | Q2FY25 | ~$4B ceiling |
| ESS GIF & SOSI (Phase 2) | FPOF & CPAF | Sole Source | Q2FY25 | $287M |
| MUOS SLE Space (Phase 2) | FFP/CPFF | Limited Competition | Q2FY25 | ~$2.2B |
| Space Hub Integrated ECU Leading-Edge Development (SHIELD) | FFP | Sole Source | Q2FY25 | ~$20M |
| ESS Mission Planning Apps (Phase 3) | TBD | Sole Source | Q4FY26 | ~$240M |

***FY25-FY26 Contracts Value: ~$22.8 Billion***

*In Source Selection; Values Pre-Decisional

*#CommunicateNavigateDominate*


*#SpaceStartsHere*


GDIT
Art of the possible.
Accelerating the Space Force digital ecosystem.
SOFTWARE FACTORY
IL6 MULTI-CLOUD
DEFENSIVE CYBER
ICAM / ZERO TRUST
DIGITAL ENGINEERING
QUANTUM CRYPTOGRAPHY

# SCAPR

Southern California Aerospace Professional Representatives

## **WHAT** do we do?

- We promote and maintain effective business-related communication between Southern California government agencies and the aerospace industry.
- Establish a forum and environment for the presentation of information on government space programs that is helpful to our members.
- We are a non-profit, non-discriminatory and politically non-partisan organization.

## **WHO** are we?

- Over 120 members from over 80 large and small companies employed in business development and program management.
- All members have an interest in working with government and military space programs.
- SCAPR is a non-attribution environment where speakers can talk candidly about their programs and related issues without fear of being directly or incorrectly quoted in the press.

## Complete Membership Application

Scan the QR Code to the right:

Or go to:
www.scaprla.org/apply-for-membership/

## 2024 SPEAKERS

**Ms. Barbara Baker**
Deputy Program Executive Officer
MILCOM and PNT

**Dr. Claire Leon**
Director
Space Systems Integration Office

**Col Rich Kniseley**
Senior Materiel Leader
Commercial Space Office

**Col Craig Frank**
Chief Information Officer
Space Systems Command

**Col Bryon McClain**
Program Executive Officer
Space Domain Awareness and Combat Power

**Lt Gen Philip Garrant**
Commander
Space Systems Command

**Ms. Natalie Riedel**
Director of Contracting
Space Systems Command

**Lt Col Gary Thompson**
Chief
Platform and Enterprise Services,
Operational C2 Delta, PEO BMC3

ASTRION™

# Empowering our customers to tackle what's next with impactful solutions.

*30+ years of **Results with Impact***

## CAPABILITIES & EXPERTISE

**SPACE**

- Launch Operations & Integration
- Systems Engineering & Integration
- Cybersecurity
- Turnkey Multi-Project Mission Solutions
- Safety & Mission Assurance
- Multi-Disciplinary Engineering
- Aeronautics Research
- Advanced Technology Development
- SmallSat Integration & Development
- Rapid Development

**DEFENSE**

- Force Protection
- Counter-UAS
- Logistics Engineering
- Environmental and Safety
- Aviation Services
- Air & Missile Defense
- Test & Evaluation
- Systems Engineering
- Software Engineering
- Modeling & Simulation
- Range Operations

**CIVIL**

- Air Traffic Management
- Information & Cybersecurity
- Procedure Development
- Safety Risk Management
- Test & Evaluation

## SPACE CUSTOMERS

- US Space Force
- US Space Command
- Air Force Research Lab (AFRL)
- NRO
- DIA Missile and Space Intelligence Center
- NOAA & FAA
- Commercial Space
- OSD Research & Engineering
- Joint Special Operations Command (JSOC)
- NASA

## SPACE LOCATIONS

- El Segundo/ Vandenberg/ Mtn View / Pasadena, CA
- Denver/Colorado Springs, CO
- Albuquerque, NM
- Stennis Space Center, MS
- Ogden, UT
- Glenn Research/ Dayton, OH
- National Capital Region
- TN Valley/Huntsville Metro, AL
- Greenbelt, MD
- Patrick SFB/Melbourne, FL
- Johnson Space Center, TX
- Hampton/Wallops Island/ Langley, VA

ASTRION™


# SPACE RAPID CAPABILITIES OFFICE

## *PRESENTATION TO THE 2024 SPACE INDUSTRY DAYS*

*OCTOBER 2024*



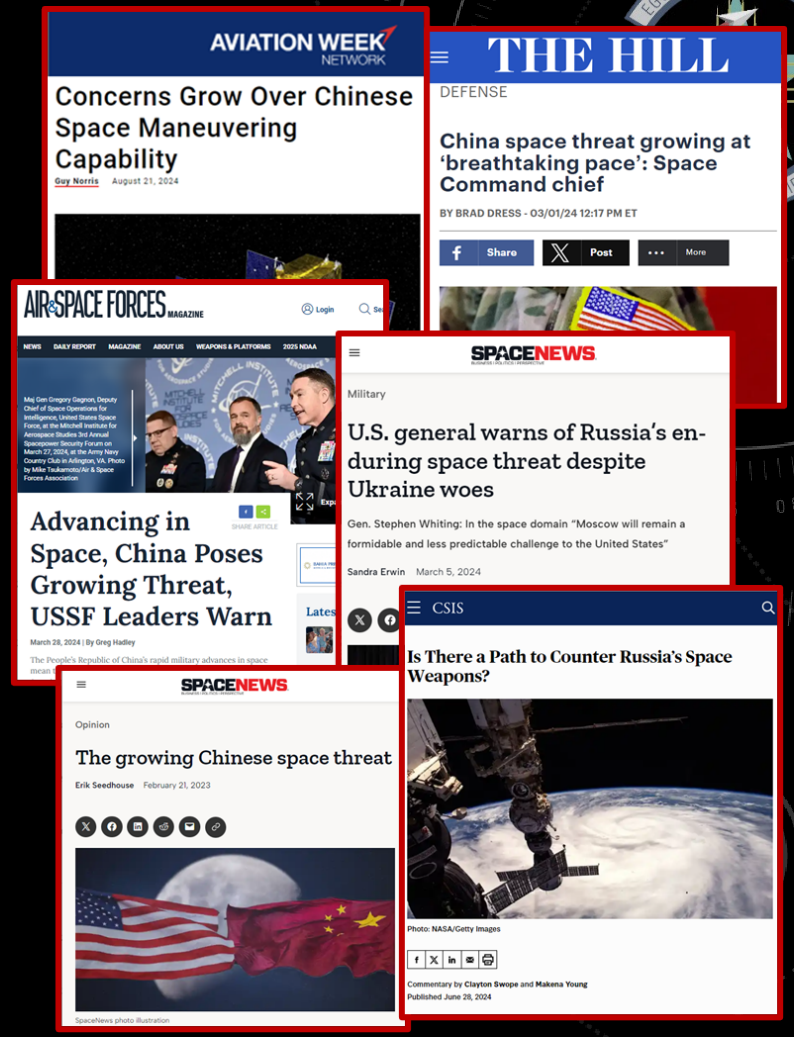
*For additional info, please contact: Space RCO Strategic Communications Director at matthew.fetrow@spaceforce.mil*

# OVERVIEW

- Space RCO Introduction
- Program Examples
- Working With Us

# THE THREAT IS REAL AND HERE NOW

- Space is a warfighting domain with threats growing at a "breathtaking pace"
- Military space leaders increasingly more direct in the need to be able to counter those threats
- Means the USSF needs to be able to present new, but operational *and combat-credible* systems that:
  - Responsibly hold space threats at risk when needed
  - Defend US and allied satellites when threatened
  - Employ dynamic and dominant space maneuver to achieve surprise and gain the tactical initiative
  - Possess all supporting enablers of awareness, autonomy, etc.

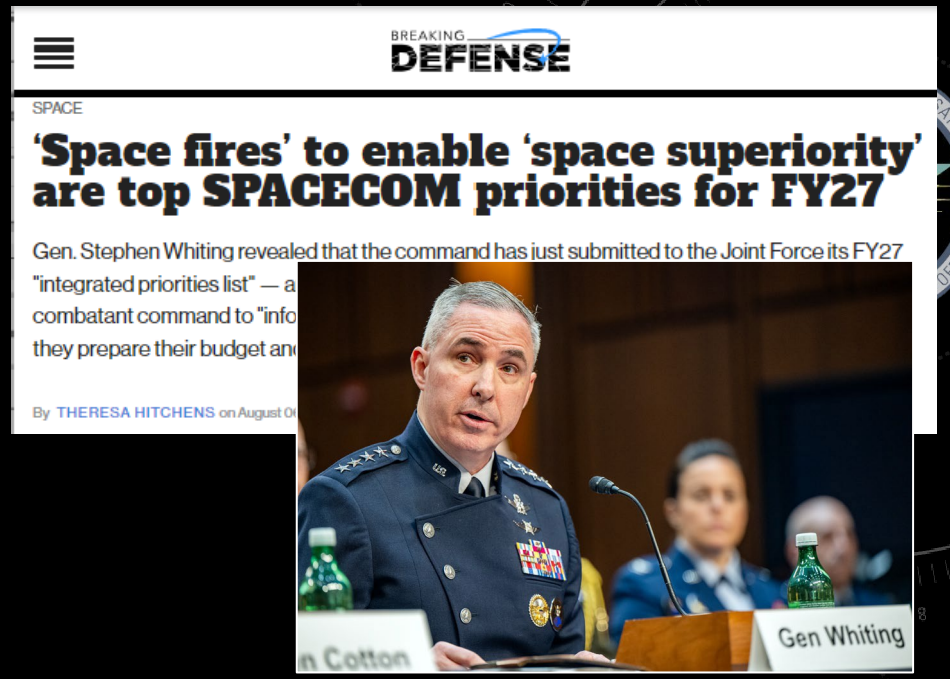



***Space RCO is proud to be the office delivering timely and combat-credible systems to counter increasing space threats***

# PROTECT AND DEFEND FOCUS

We are the Space Force's acquisition office delivering space and ground systems to counter threats:

- Awareness sensors to alert operators of threats to HVA's
- Ground jammers to deny adversary comms with satellites used to target our forces
- Satellite operations software allowing operators to control many dynamic satellites at once
- Flexible ground communication systems that connect to multiple satellites at a time
- And many more…




**"We have seen [China's] development of counter-space weapons just rapidly, breathtakingly increase…. Now, it is about having professionals laser-focused on this problem: How do we defend against these threats?"** *Gen. Stephen Whiting, CDR, USSPACECOM, Aspen Security Forum, 7/17/24*

# OFFICE DETAILS: SMALL & INDEPENDENT

- A small (~250 people), independent non-traditional USSF acquisition office established by statute in 2018
- Executing about a dozen programs assigned by our Board-of-Directors (BoD)
- Charged with rapidly delivering first-of-their-kind operational space systems to counter threats
  - Systems that protect space assets and defend Joint forces from space-enabled attack
- Headquartered in Albuquerque, NM, with offices and staff in LA, CO and DC


***Space Force Rapid Capabilities Office:***
***Delivering the most challenging military space systems***

# WE DON'T WORK ALONE


- We work with STARCOM early in and throughout the acquisition to execute Integrated Test for our systems

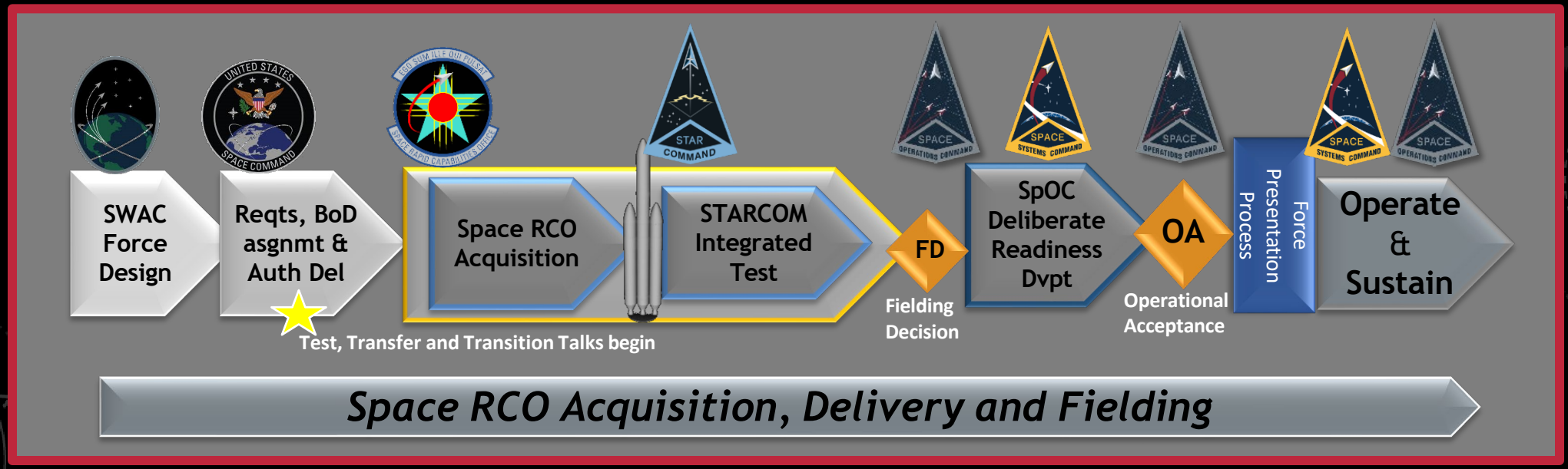

- We work with SpOC in defining system requirements, creating design reference missions, to support their fielding decision and operational acceptance


- And we work with SSC to prepare for system sustainment and follow-on programs

***We aren't done until our systems are combat-credible and presentable***

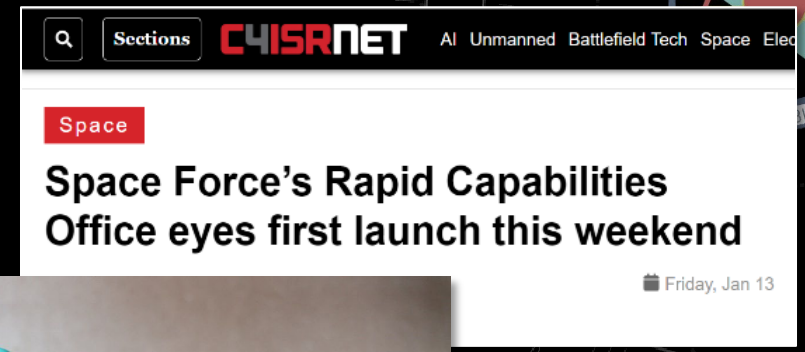
# PARTNERSHIPS TO GAIN COMBAT CREDIBILITY

- Delivering and *successfully fielding* a combat-credible space capability to the USSF goes far beyond Space RCO; requires continuous coordination with all USSF Field Commands and many others
- Requirements and integration well-coordinated inside and outside the USSF
- Space RCO completes initial acquisition but *tests* with STARCOM, *transfers* to SSC for follow-on acquisition and sustainment, and *transitions* to SpOC for operational acceptance



# PROGRAMS: SPACE PROTECTION PAYLOADS

- Two on-orbit warning payloads to help USSF high value satellites detect and ID threats
- One small, robust encryption payload to support secure data downlink on the host spacecraft
- Launched on SSC's LDPE-3A in January 2023 and tested for 6 months—still collecting interesting data!
- Space RCO delivered 8 systems so far; transferring production contracts to SSC
- Coordinated with USSF S5, SSC/SSIO, SpOC and others on an enterprise approach for space protection payloads on USSF spacecraft




KG-505 Flight Hardware

# PROGRAMS: SATELLITE COMMUNICATIONS AUGMENTATION RESOURCE (SCAR)

- Relocatable, electronically-steerable satellite comm systems (antennas, electronics, software) to expand satellite control comms bandwidth and flexibility
  - Designed to make multiple contacts simultaneously
  - Relocatable system with flexible tasking to better support dynamically operating satellites
- Contract awarded to BlueHalo in May 2022
  - Aug 2023: Completed sub-scale demo
  - April 2024: Integrated backend mission services demo and feedback session with operators
- Site for first unit selected by SpOC
- Unit deliveries starting in 2025

*Image credit: Senior Airman Ruben Garibay*

*Image credit: BlueHalo*

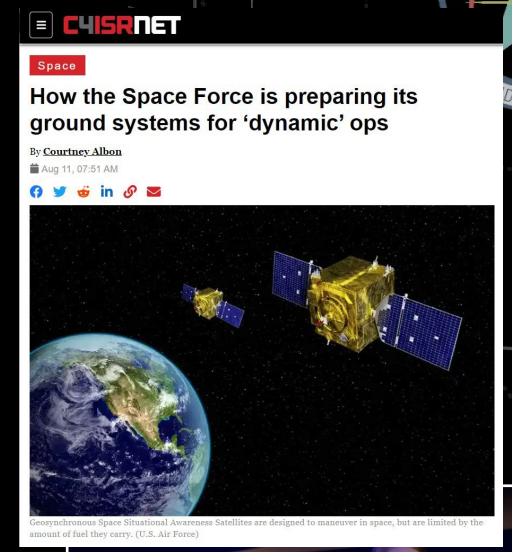
# PROGRAMS: REMOTE MODULAR TERMINALS (RMT)

- Small, low-cost transportable jammers for ground-based electronic warfare against satellites used to target Joint Forces
  - Augments existing jammers with proliferated, remotely controlled and relocatable systems, to include austere environments
- Contract awarded to small biz Northstrat Inc in Sep 2022, just 38 days from receipt of proposals
  - Completing the first set of 24 units (antennae, electronics, software) with 4 delivered ~1 year from contract kickoff!
- Tightly coordinating with all USSF Field Commands to get to Operational Acceptance
  - STARCOM: Stood up Integrated Test Team within 4 mos and Integrated Test *completed* within 18 mos from award
  - SpOC co-authored key requirements documents, participated in all milestone reviews and leading Fielding Decision processes for operational transition
  - SSC provided Dep PM and Space RCO will transfer production contract to SSC in 2025


Image credit: STARCOM

# PROGRAMS: RAPID RESILIENT COMMAND AND CONTROL (R2C2)

- Combined Space RCO/SSC program delivering critical, tactical ground segment software to operate dynamic USSF satellites with protect and defend missions
  - Provides 8 tactical SatOps functions, such as Rendezvous and Proximity Operations (RPO) planning, antenna brokering and telemetry, tracking and command
  - Connects machine-to-machine through C3BM-approved interfaces to the operational battle management system, integrated to the larger C3BM architecture
- Awarded a multi-year indefinite-delivery/indefinite-quantity contract to 20 small business for software tools and infrastructure for application development
  - A total of 25 software vendors now on contract
  - AWS for cloud infrastructure, La Jolla Logic and IS4S for backbone services
- Authority to Operate in place for both unclassified & classified commercial cloud environments granted in 3 months


C4ISRNET

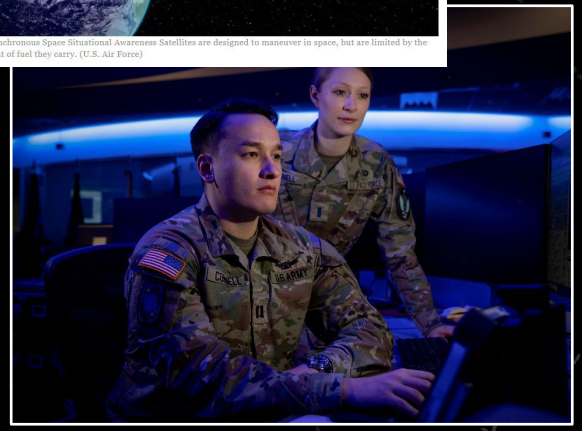
Space

How the Space Force is preparing its ground systems for 'dynamic' ops

By Courtney Albon

Aug 11, 07:51 AM

Geosynchronous Space Situational Awareness Satellites are designed to maneuver in space, but are limited by the amount of fuel they carry. (U.S. Air Force)



(U.S. Space Force photo by Dennis Rogers)

# HOW TO DO BUSINESS WITH SPACE RCO

- We expect to have just a few specific opportunities in the next year
- Space RCO tailors every acquisition and acquisition strategy
- For most acquisitions, we will publish Requests For Information – to aid in refining acquisition strategy and to assess the industry base
- Sometimes our specific opportunities are classified – even the RFIs and RFPs might be classified. For these efforts, we need to work with companies who can manage classified programs:
  - Facility Clearance Letter (FCL) (allows companies to hold and manage clearances)
  - Staff with security clearances (or readily clearable)

# DOING BIZ WITH US: WHAT WE ARE/AREN'T LOOKING FOR

- Helping industry better understand how we do business and what we ARE and are NOT looking for saves time for both parties!
  - We are interested in full system capabilities – not component tech or subsystems
  - We're looking for mature tech (TRL 6+)—but okay with putting together multiple higher TRL components that have not yet been demo'd together
    - We do NOT do tech maturation, but happy to refer you to folks that do
  - We're generally looking for products and services to engender dynamic protect and defend missions, such as agile, autonomous spacecraft capable of sustained, dynamic space maneuver and key enablers
    - We do NOT focus on traditional space-based services (PNT, SatCom, ISR, MW)

***We're interested in mature, whole-system tech for protect and defend missions. We are not currently interested in space services missions.***

# HOW INDUSTRY SHOULD CONNECT WITH US

- Space Small Business Director maintains an open-door policy to meet with small businesses
- Best "point-of-entry" is Space RCO's Front Door email box: SpaceRCO.Innovations@spaceforce.mil
  - Actively monitored by Industry Outreach and Market Research lead
  - Conducts initial engagements and refers for follow-on engagement as appropriate with appropriate Space RCO members or Small Biz Director
- We routinely engage to educate at Conference booths, association Briefings for Industry (e.g. PACA-NM, AFCEA) & speaking engagements
  - Have participated in podcasts, numerous virtual forums, Collider events, etc. to educate and reinforce Space RCO's general interests


***We have connected with over 200 companies in the last few years!***

# EXPANDING OUR INDUSTRY BASE TAKES TIME

- Once preliminary Space RCO interest is established, we conduct more targeted tech exposure in a variety of ways:
  - Curated, private meeting panels with Space RCO Leadership at conferences
  - Visits from Space RCO leaders to company facilities or at Space RCO
  - Exposure and networking events with Space RCO Integrating Primes and/or Space RCO leaders
- For classified exposure and engagement (at Space RCO levels), we've sponsored a small number of companies (~20) for accesses req'd
  - Allows participation in Space RCO Portfolio Days, which includes a 1-on-1 meeting with leadership, and classified networking with Space RCO primes

***Space RCO understands these efforts have been limited in expanding actual opportunities and we are working to change that***

# SPECIFIC OPPORTUNITIES (1 OF 2)

- We are (still) looking for GEO-capable, agile, small satellites
  - We have had many conversations with non-traditional bus providers, exploring their plans for GEO capable satellites
  - Also discussing challenges and best approaches to manage classified work
- R2C2 ground satellite operations software program
    - Announced an IDIQ with 20 companies a few months ago
    - We are not done onboarding companies
    - If you think you are right for us – reach out  (we are keeping a list )
- Advisory and Assistance Services (A&AS) contract follow-on RFP released on 10/15/24
  - 8(a) set aside

# SPECIFIC OPPORTUNITIES (2 OF 2)

- Space RCO working to pilot a "Prime Fusion Accelerator" – connecting small companies with mature products to traditional and non-traditional system integrators
  - Pilot starting late fall will likely focus on awareness sensors for GEO spacecraft
- Space RCO has stepped up interest in SBIR's – particularly more mature efforts in RF and optical awareness sensing
  - Working with SpaceWERX to craft upcoming special topics on threat awareness sensors and own-ship awareness

***Expect to see an increasing number of unclassified Space RCO requirements posted on SAM.GOV and/or the PIEE/SOLICITATION module***

# CONNECT WITH US!

**On Facebook:**
https://www.facebook.com/TheSpaceRapidCapabilitiesOffice/

**On LinkedIn:**

https://www.linkedin.com/company/the-space-rapid-capabilities-office

**Business Development and Other Requests:**
SpaceRCO.Innovations@spaceforce.mil

***And... Join us at the sidebar....***


EGO SUM ILLE QUI PULSAT
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# Assured Access to Space Overview

24 October 2024

Brig Gen Kristin Panzenhagen

Program Executive Officer, AATS

# Intro Video

# Responsive and Reliable Launch

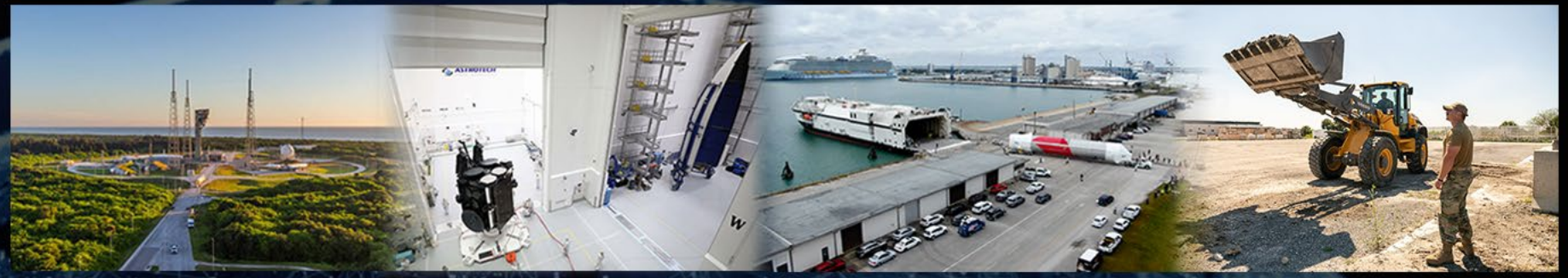
NATIONAL SECURITY SPACE LAUNCH

ROCKET SYSTEMS LAUNCH PROGRAM

MISSION ASSURANCE

# Resilient and Ready Spaceports

INFRASTRUCTURE



SPACEPORT OPERATIONS


DEFENSE

# Industry Opportunities/Engagements

| Opportunities | Date | Contact |
|---|---|---|
| NSSL Phase 3 Lane 1 Launch Services Procurement IDIQ | On-ramp RFP: 1Q FY25 | Kirsten Prechtl kirsten.prechtl@spaceforce.mil |
| NSSL Phase 3 Lane 1 Launch Services Task Orders | Multiple Mission RFPs: 3Q FY25 | Kirsten Prechtl kirsten.prechtl@spaceforce.mil |
| Cooperation with AF Civil Engineering Center to execute Spaceport MILCON efforts | Beginning FY28-30 | Lt Col Brian Velez brian.velez@us.af.mil |

| Engagements | Date | Contact |
|---|---|---|
| SFA Spacepower Conference | 10-12 Dec 24, Orlando FL | ussfa.org/spacepower-conference |
| Space Mobility Conference | 28 Jan 25, Orlando FL | spacemobility.org |

***Monitor SAM.gov and listed websites for updates and additional information***

December 14, 2024 ✦ Cape Canaveral Space Force Station, FL

# 3RD ANNUAL

# SPACE FORCE T-MINUS 10-MILER

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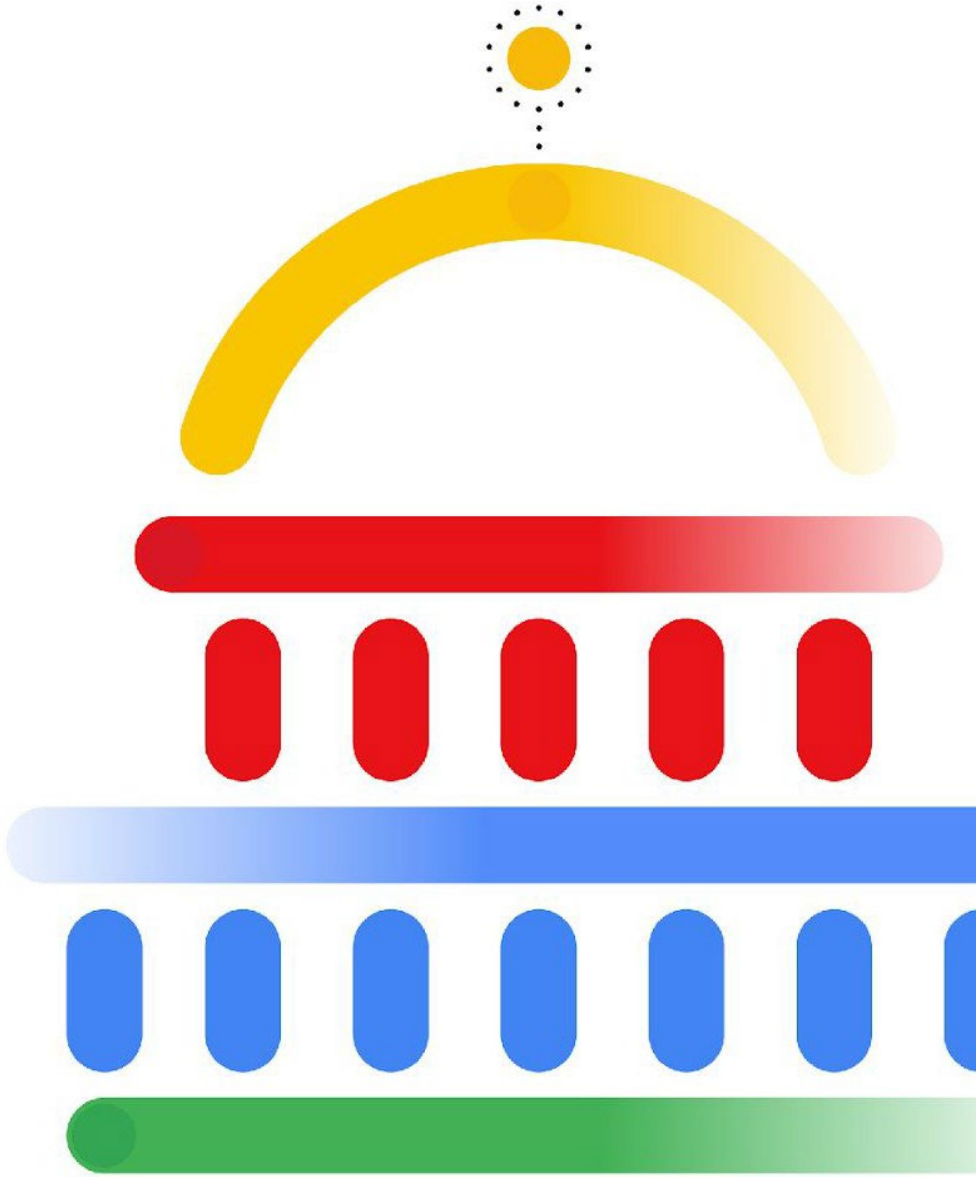
Google for Government

# Google for DoD



# Google Public Sector - Bringing the Best of Google to Government Customers

| Separate Legal Entity | Mission Understanding | Delivery Expertise | Contracting Know-How |
| --- | --- | --- | --- |

**Proud to Partner with DOD on JWCC**

# Cloud Platforms

### Edge

Google Distributed Cloud (GDC)

Air-gapped offering for private cloud deployments

### Classified

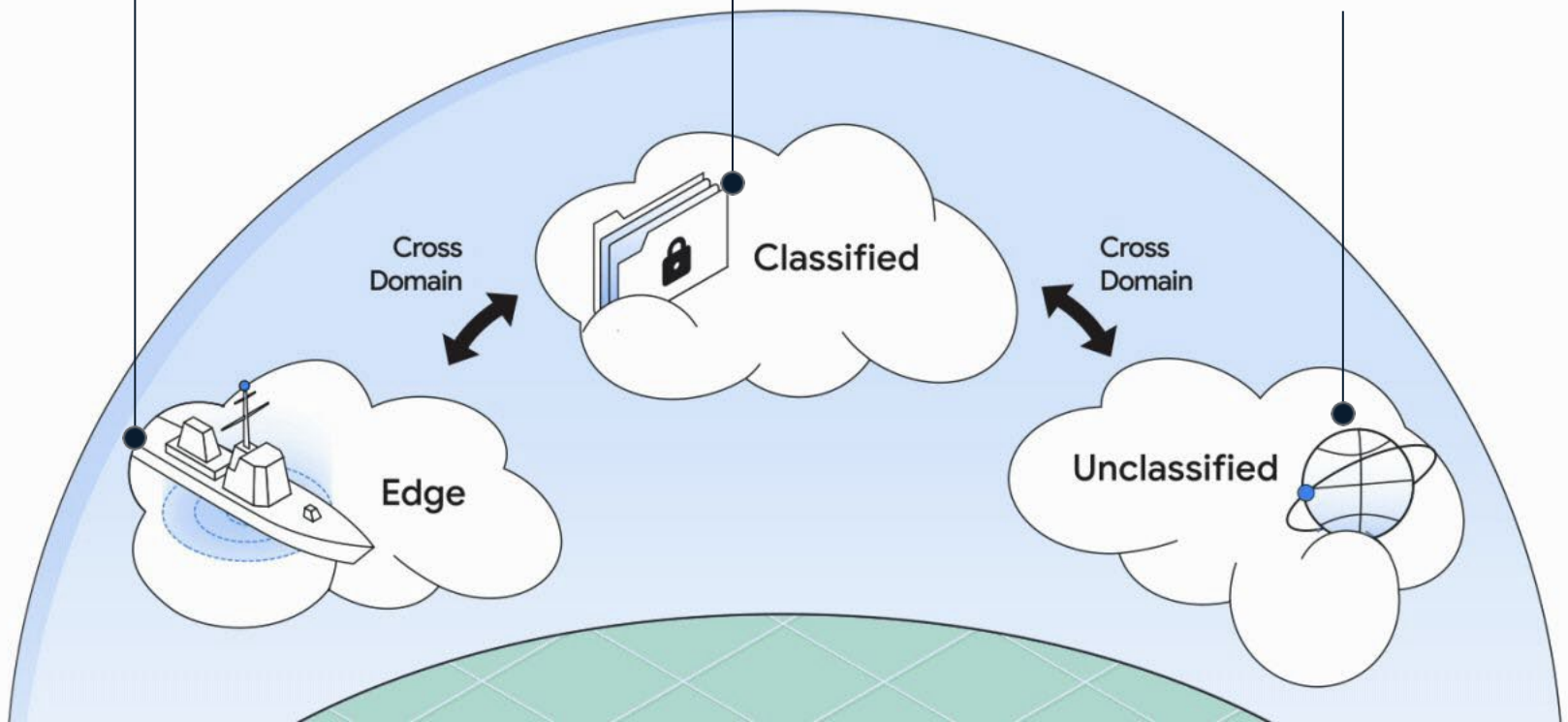
Google Distributed Cloud (GDC)

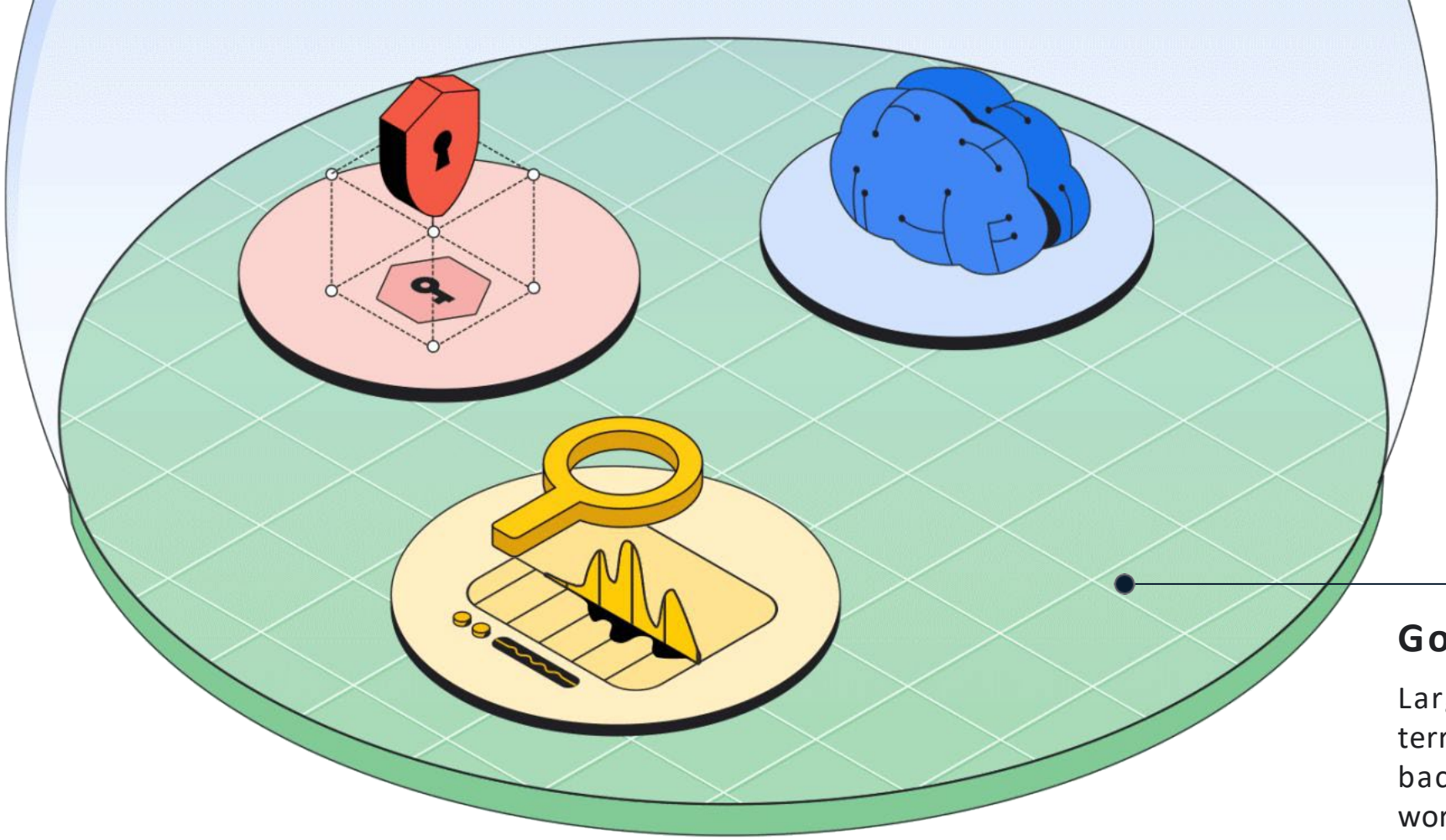
Industry leading tools & capabilities for enterprise use cases

### Unclassified

Google Cloud Platform (GCP)

Largest sovereign community cloud offering up to IL5

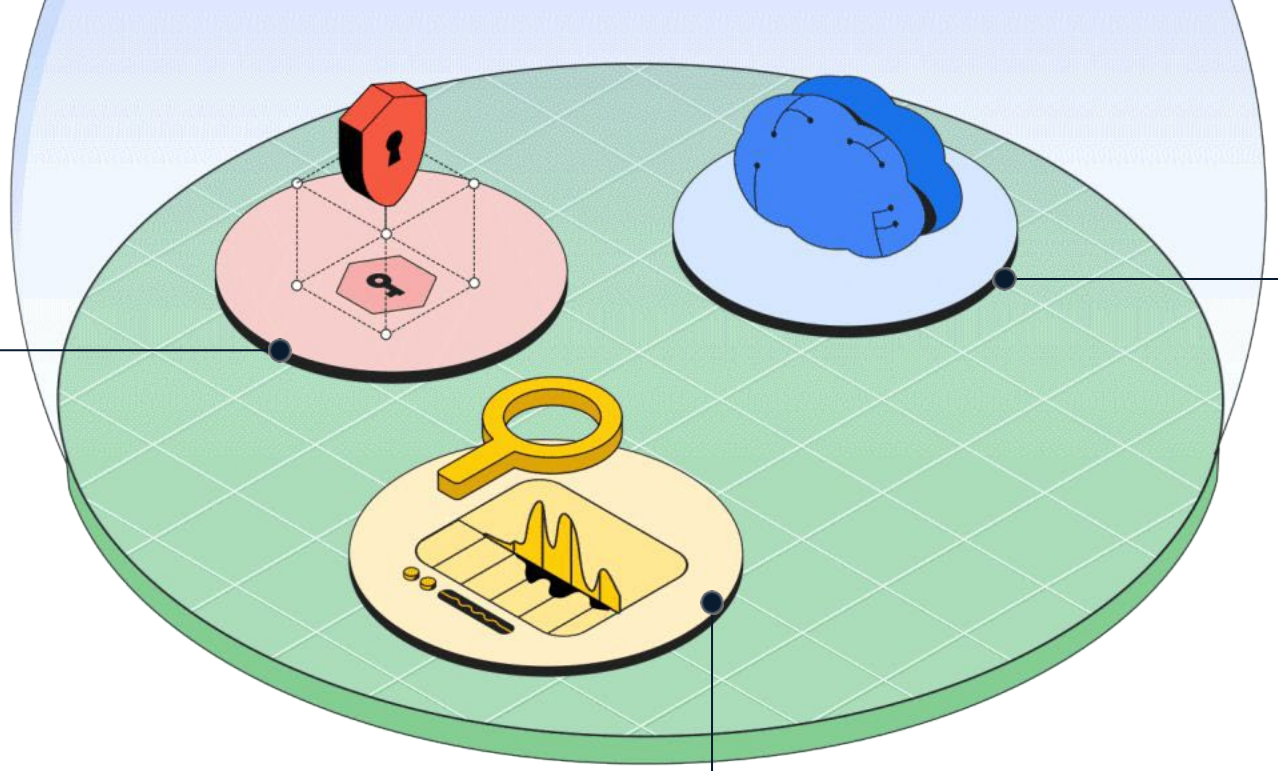




# Global Mesh

**Google Global Network**

Largest and most resilient terrestrial and subsea fiber backbone carrying 25%+ of the world's Internet traffic



### Cybersecurity

Best in class SecOps with Google Threat Intelligence powered by Mandiant

### Data & Analytics

Comprehensive platform for ingesting, processing, warehousing, and analytics led by BigQuery

# Differentiated Tools & Capabilities