



# SPACE SYSTEMS COMMAND

Overview

*#SpaceStartsHere*





# »»» Space Systems Command



SPACE STARTS HERE

SPACE SYSTEMS COMMAND

*Delivering Lethal and Resilient Space Capabilities to Defend the Nation in the Contested Space Domain*





## SSC's Priorities

- Mission

*SSC develops, acquires, equips and sustains lethal and resilient space capabilities*

- Vision

*Leverage partnerships and innovation to deter and dominate any future contest in space*



# What Motivates Us?



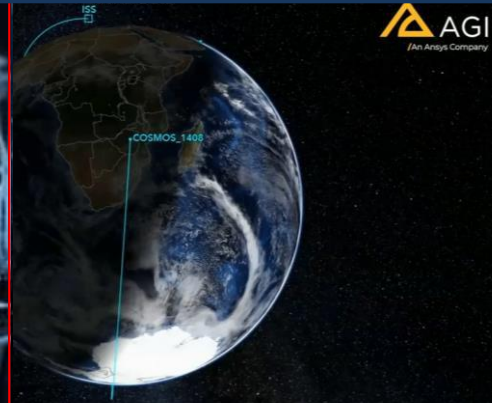
Top U.S. general calls China's hypersonic weapon test very close to a 'Sputnik moment.'



China launches world's first quantum communications satellite.



China is launching 'kidnapper' satellites, with grappling arms capable of plucking satellites out of orbit.



Russian direct-ascent anti-satellite missile test creates significant, long-lasting space debris.



Russia has a new weapon that USSF dubs the 'Nesting Doll.' It opened up and another satellite came out. And it opened up and a projectile came out. That projectile is designed to kill U.S. satellites.

\* VIDEO CREDIT AGI

**"The world is becoming an increasingly dangerous place and preserving US national security interest in space is growing hard everyday...A resilient, ready and combat capable Space Force is indispensable to deterrence today, tomorrow and every day after that."**

Gen. B. Chance Saltzman, Chief of Space Operations, U.S. Space Force





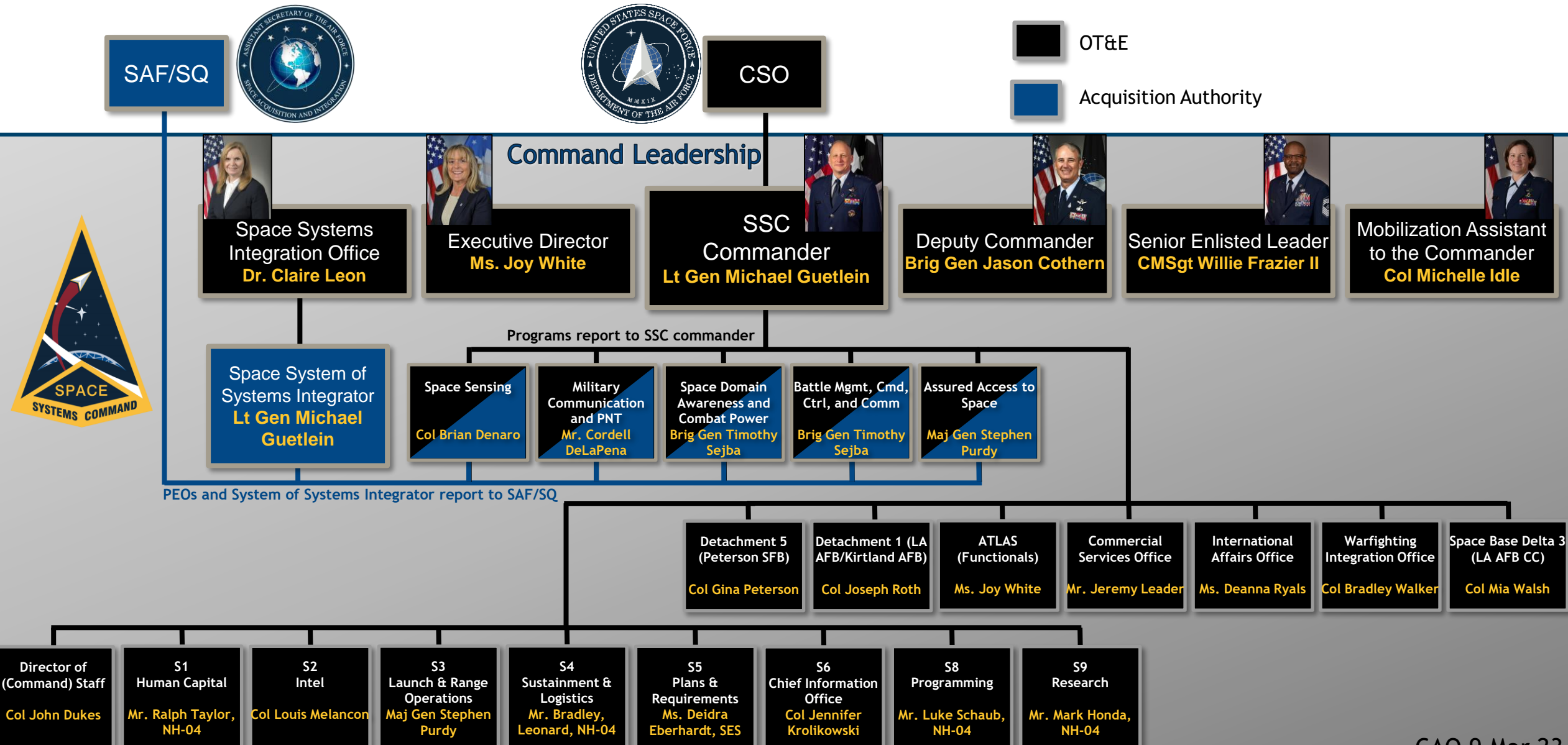
# U.S. Space Force Organization

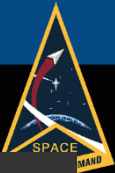


*The U.S. Space Force Will Innovate Faster to Outpace Threats from Adversaries*

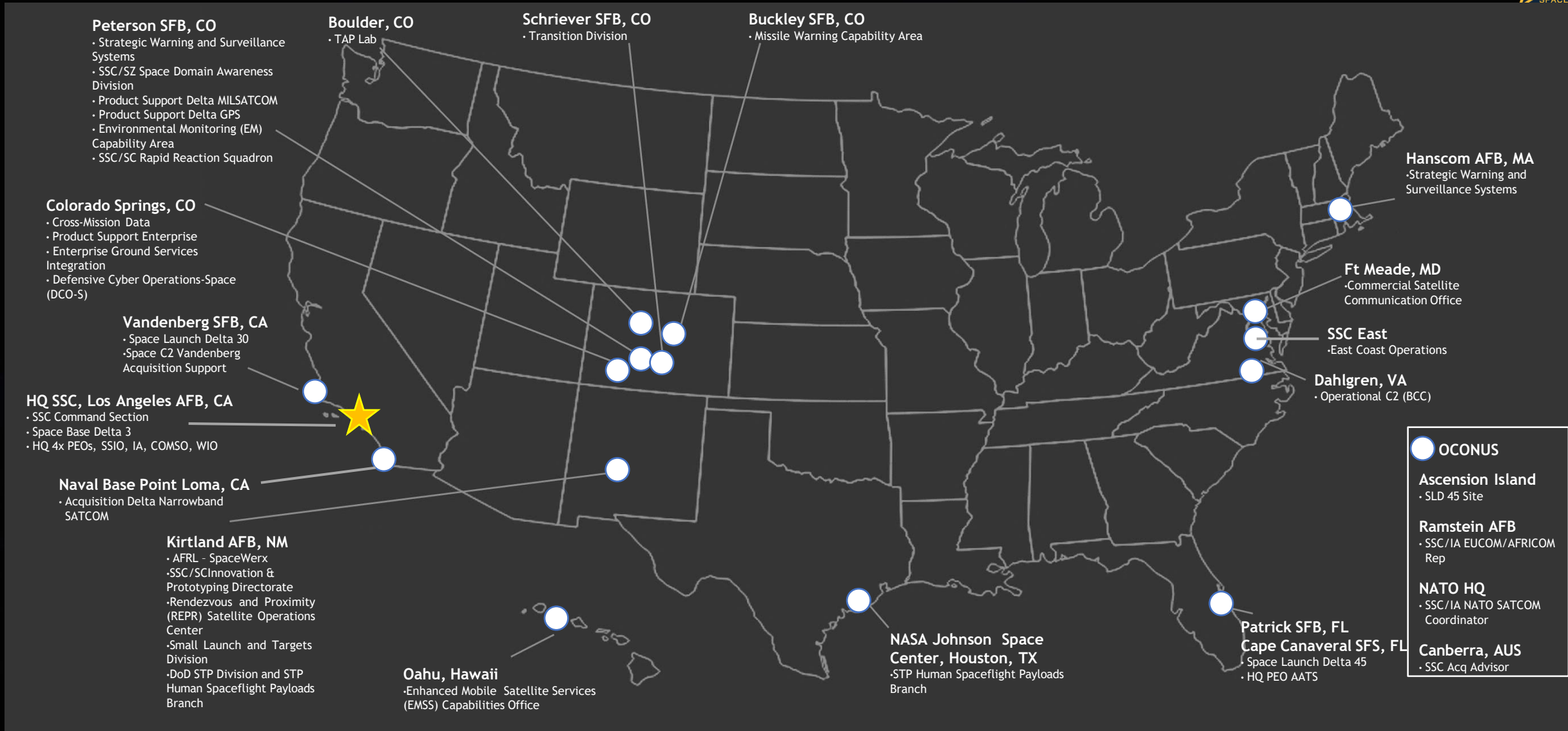


# SSC Organization



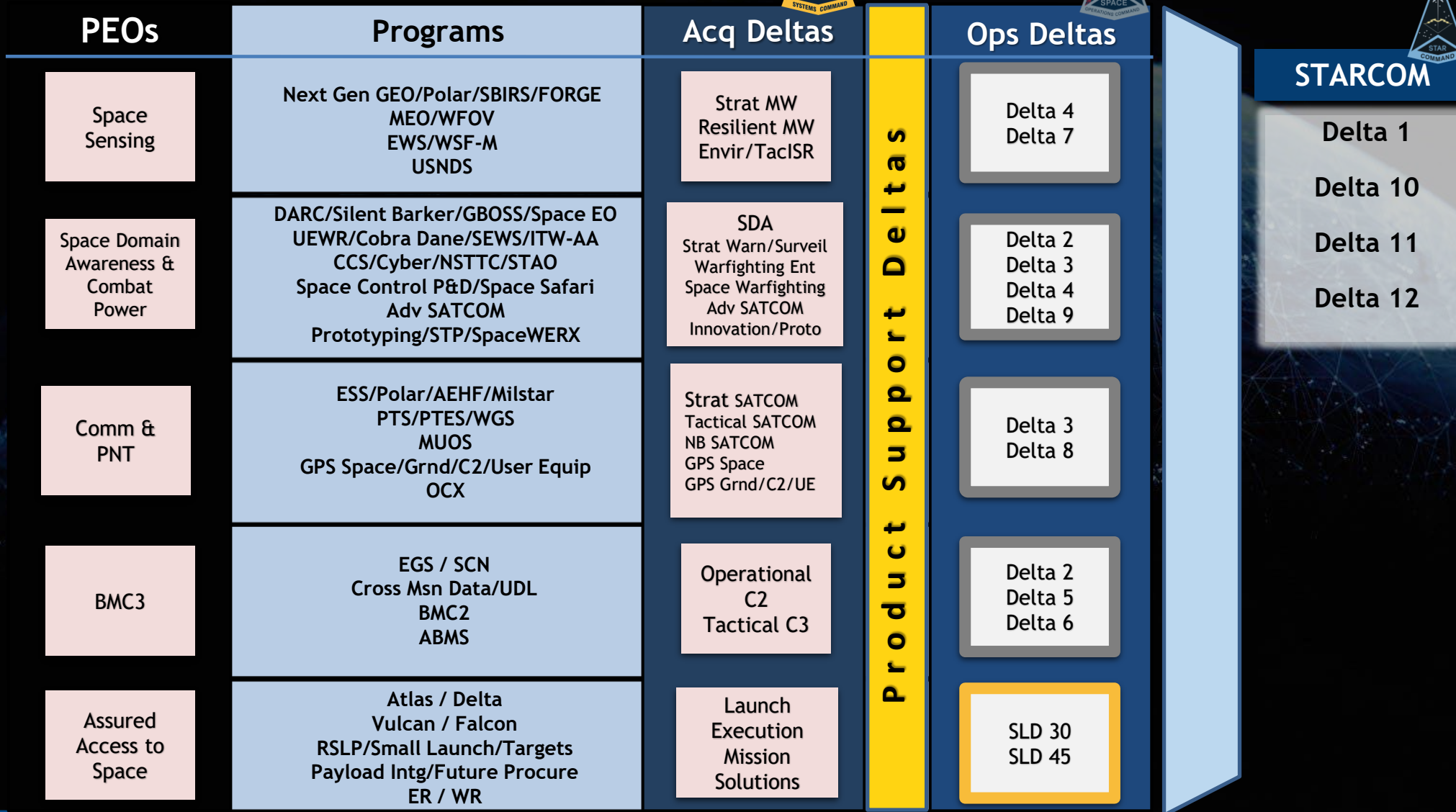


# Where We Are





# FIELDCOM Integration







## ▶▶▶ Getting after the 2026 fight

Exploit what  
we have



Buy what  
we can



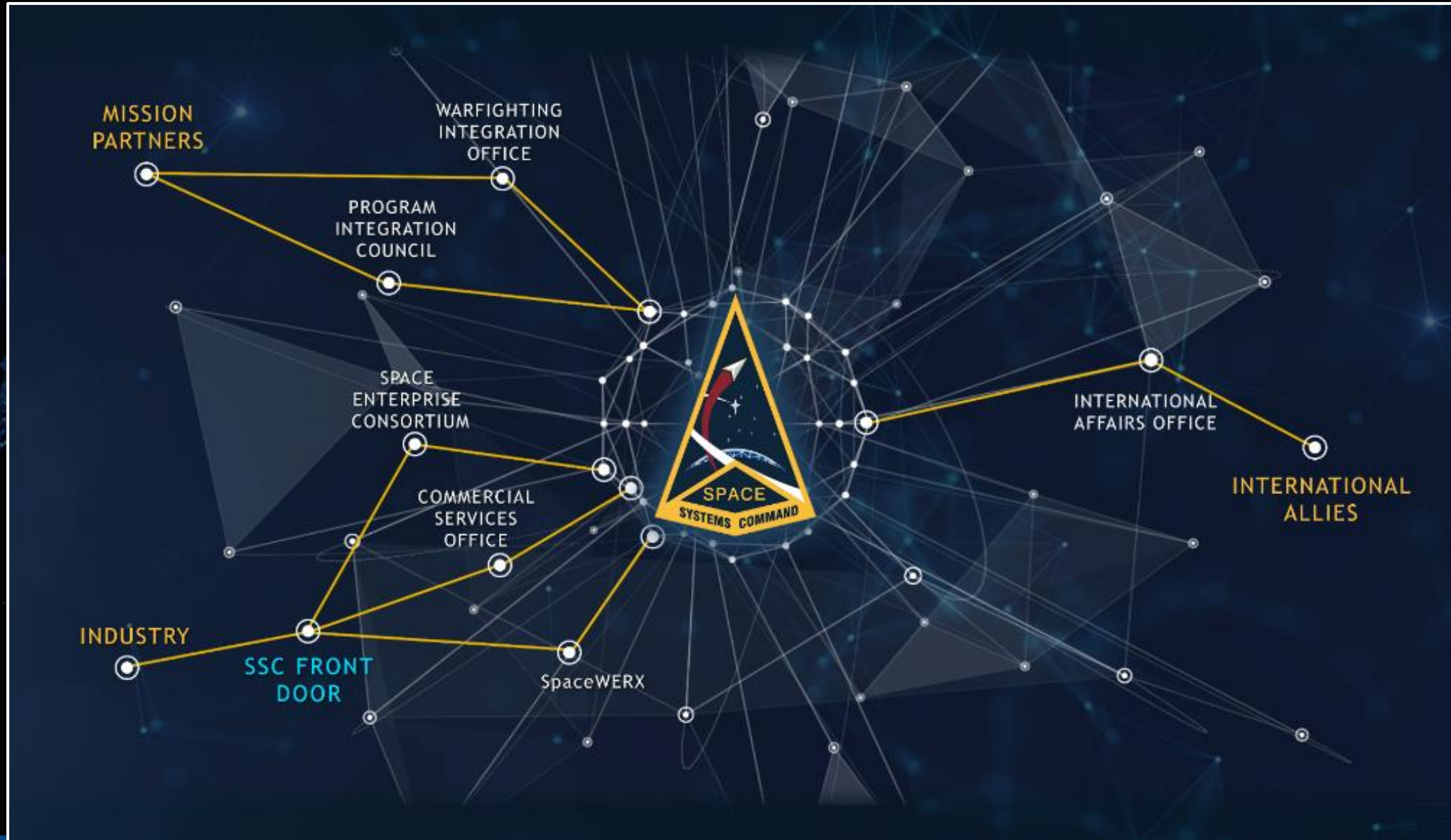
Build only what we  
must



***Pivoting to an Exploit and Buy model allows for speed, use of latest technology, and architecture-level resilience***



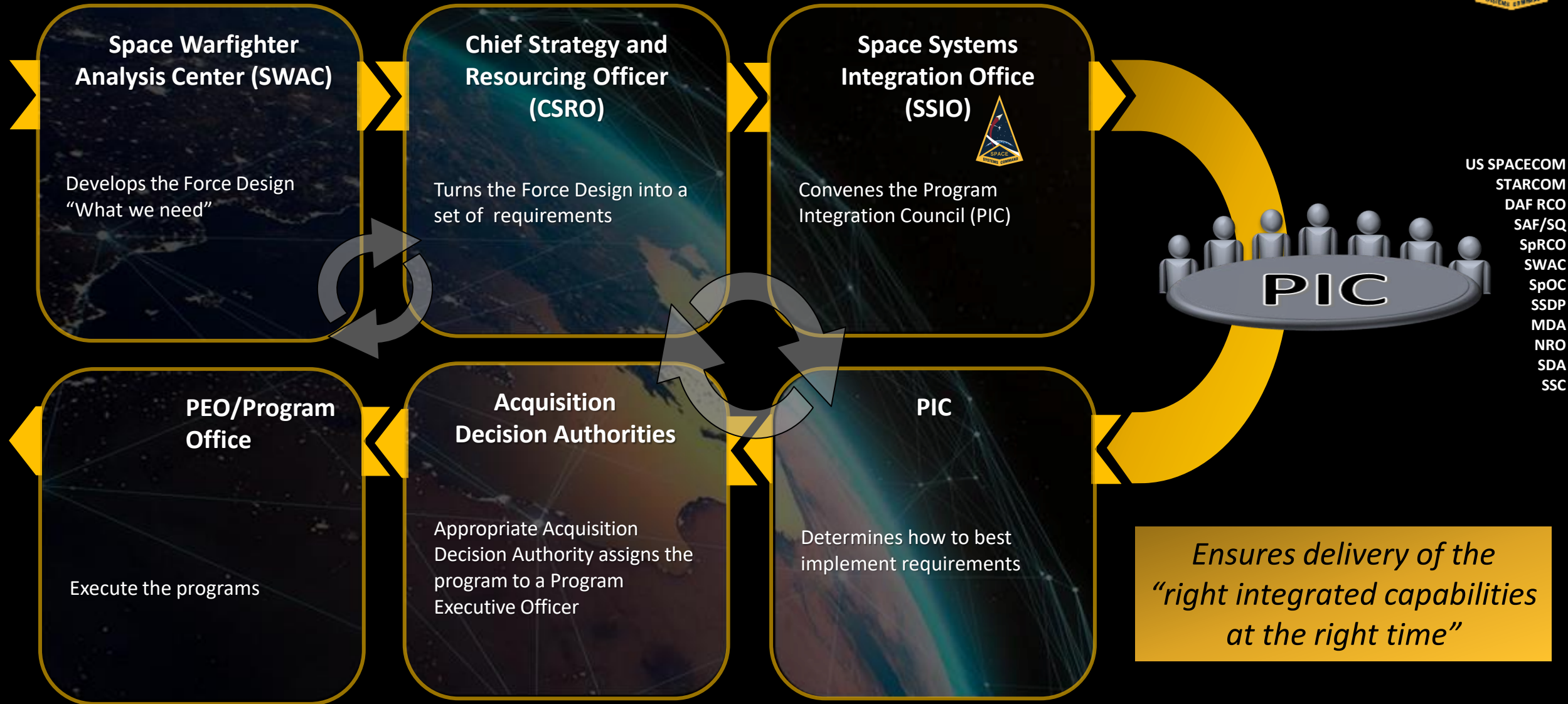
# External Stakeholders







# Force Design to Execution





## SSC Capability Delivery Organizations

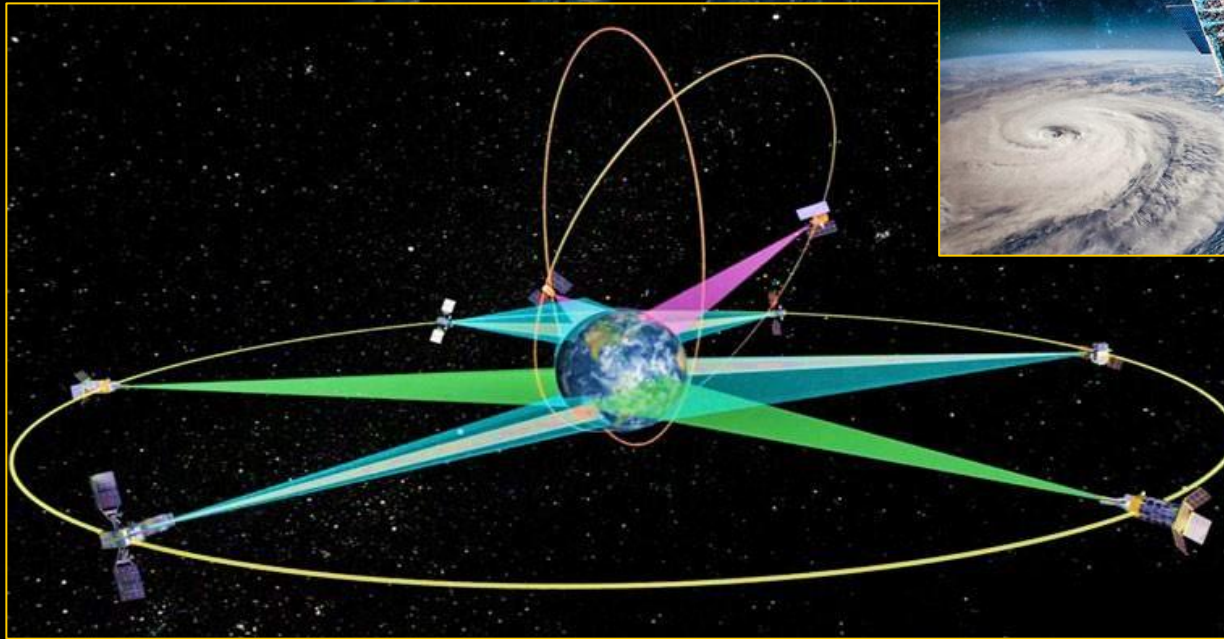
- **PEO for Space Sensing**
  - Resilient MW/MT/MD & Integration
    - Combined effort SSC-MDA-SDA
  - Environmental & Tactical Surveillance
  - MW/MT/MD GEO & Polar
- **PEO for Military Communications and Positioning, Navigation & Timing**
  - SATCOM: Tactical, Strategic, Narrowband (USSF transfer)
  - PNT/GPS: Space, C2, User Equipment
- **PEO for Battle Management, Command, Control & Comms (BMC3)**
  - Operational C2
  - Tactical C2 & Information Mobility
- **PEO for Space Domain Awareness & Combat Power**
  - Warfighter Enterprise
  - Space Warfighting
  - Advanced Comms
  - Space Domain Awareness
  - Strategic Warning & Surveillance
  - Innovation & Prototyping
- **PEO for Assured Access to Space**
  - Space Launch Deltas (operational)
  - Launch Services, Launch Enablers
- **Space Systems Integration Office**
- **Warfighting Integration Office**
- **International Affairs Office**
- **Commercial Services Office**





# SPACE SENSING

- MISSILE WARNING / MISSILE TRACKING / MISSILE DEFENSE (MW/MT/MD)
- ENVIRONMENTAL MONITORING
- TACTICAL SPACE-BASED ISR



*Delivering persistent space sensing for integrated all domain awareness to deter, defend, and win*

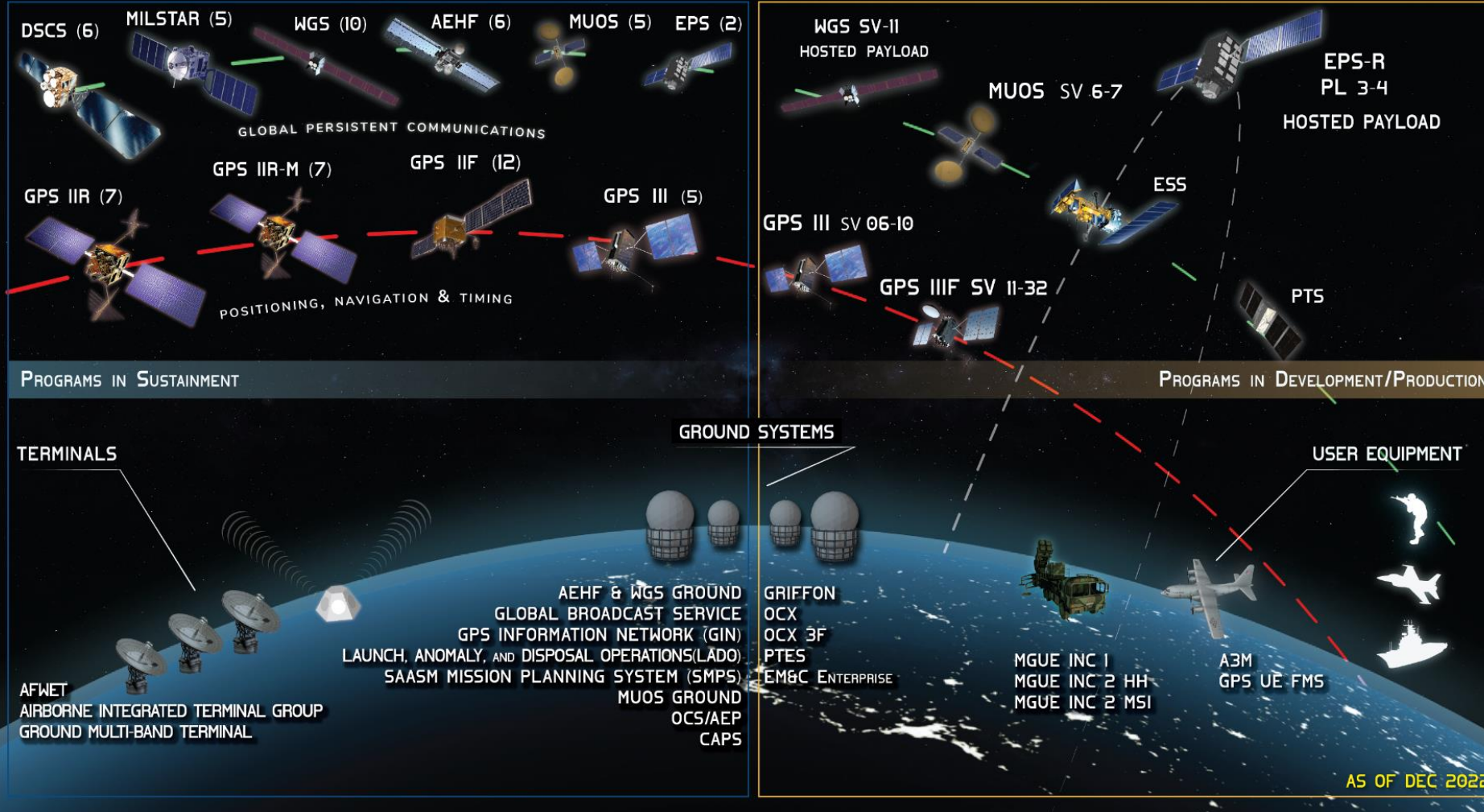




Mr. Cordell DeLaPena

# MILITARY COMMUNICATIONS POSITIONING, NAVIGATION, & TIMING

MILCOMM & PNT OV-1



- **Military Communications**
- **Positioning, Navigation and Timing**

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



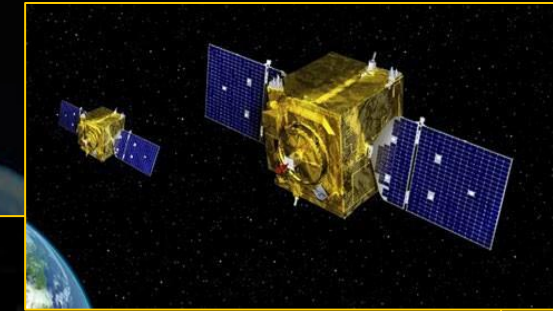


Brig Gen Tim Sejba

# SPACE DOMAIN AWARENESS AND COMBAT POWER



- Space Domain Awareness
- Combat Power
- Innovation & Prototyping



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





Brig Gen Tim Sejba

# ▶▶▶ BATTLE MANAGEMENT COMMAND, CONTROL, AND COMMUNICATIONS



- Space Ground and Communications
- Operational Command and Control
- Tactical Command and Control



*Delivering Resilient, integrated Space C3 systems to enable timely multi-domain warfighting*

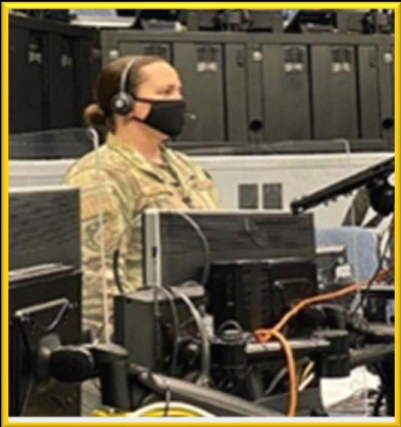




Maj Gen Stephen Purdy

## ASSURED ACCESS TO SPACE

- Space Access
- Launch and Range Operations
- Orbital Resiliency



*Delivering On-Demand Orbital and Sub-Orbital Services, Materiel, and Capabilities to the Warfighter*

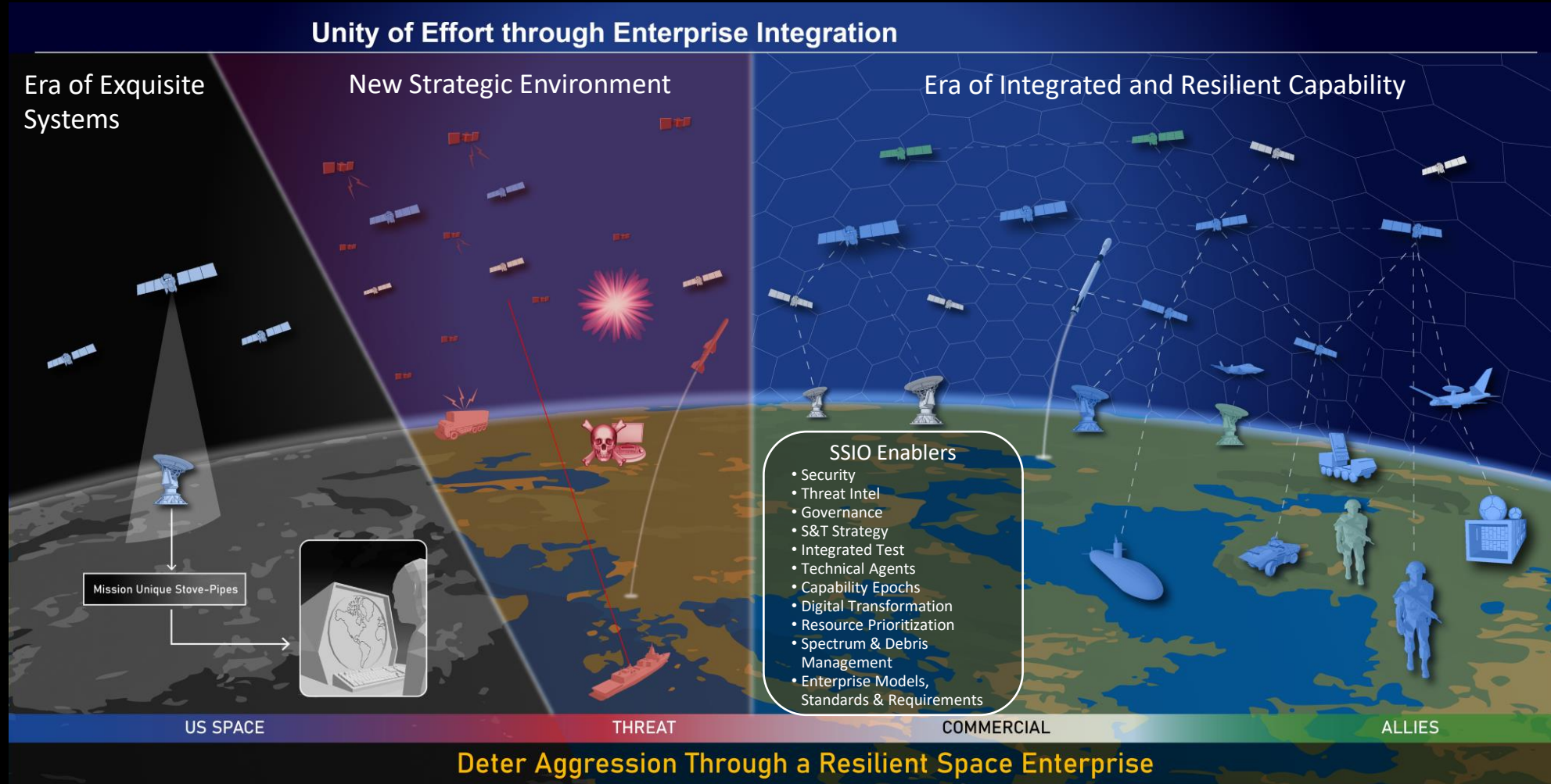




Dr. Claire Leon

# SPACE SYSTEMS INTEGRATION OFFICE

Aligning, integrating and enabling space capabilities to achieve a resilient and integrated space enterprise, deter competitor aggression and assure the uninterrupted delivery of all-domain combat power



ASSURED ACCESS TO SPACE

SPACE DOMAIN AWARENESS/ COMBAT POWER

SPACE SENSING

COMM & PNT


BMC3


SPACE PARTNERS








# Distinct Missions, Strong Partners


- 

Chartered in 2013 by DoD & DNI to blend Title-10 & -50 analysis
- 

Established in 2015; jointly manned for daily coordination and contingency response
- 

Air Force Space Command & NRO pivot to resilience vs. threats
- 

Joint Industry Days beginning in 2018 (2020 canx for COVID)
- 

2020 Joint Space Warfighting Forum
- 

2020 Space Force Acquisition Council & Program Integration Council



**Rapidly Evolving Architecture, Technology and Operations to Stay Ahead of Threats**





*#SpaceStartsHere*







## SSC Incubators and Successful Industry Days

- Space Enterprise Consortium - Vehicle for partnering with non-traditional industry, has awarded almost \$3B across 101 prototype projects in its first 5 years
- SpaceWERX - Small business incubator awarded over \$227M in contracts to more than 160 companies
- Space Test Program - Utilizing excess capacity on commercial satellites to host new payloads
- Instituted recurring Industry Days for transparency and to better communicate government needs
  - Reverse Industry Days allows industry to freely share approaches (Tac-ISR event completed 35 one-on-ones!)
  - Completed Industry Days: Space to Space Comms, TacISR, SDA/Cislunar, Tac-RS, ISAM, and RIoT AoA - over 400 attendees representing 200 companies at the SDA/Cislunar event alone!
  - Next Industry Days: AI/ML and Space Analytics, Civil Augmented Space Reserve (CASR), International Industry Days, and more! (2023)
- International Affairs - 11+ International Partner Visits in 2022!
  - Co-Chair for the Capabilities Architecture Working Group, leading 3 multinational teams--better allied-data sharing

***Well postured to maximize use of commercial space capabilities for the USSF***