

# **U.S. Army Space and Missile Defense Command / U.S. Army Forces Strategic Command**

## **A Global Command**

***Concept to Combat***

***Relevant and Ready***



Mr Larry Burger  
Future Warfare Center

***DISTRIBUTION A: Approved for public release; distribution unlimited***



# Command Lineage

**1794** Army Assumes Mission of Homeland Defense

**1957** Soviets Test ICBMs and Launch Sputnik

**1958** U.S. Army Launches Explorer I

**1962** First Intercept of ICBMs

**1963** First Satellite Intercept

**1964** Kwajalein to Army (from Navy)

**1967** Sentinel System

**1969** Safeguard System

**1974** Advanced Research Center Established

**1978** DE Research Initiated

**1984** First Hit-to-Kill Intercept  
of a Missile in Space

**1987** First Hit-to-Kill Intercept of  
a Tactical Ballistic Missile

**1946**

Operation Paperclip  
Army Air Defense  
Command

**1957**

Redstone Antimissile  
Missile System Office/  
NIKE-ZEUS Program

**1969**

Safeguard System  
Command

**1973**

Army Space  
Program Office

**1974**

Ballistic Missile  
Defense  
Organization

**1985**

Army Strategic  
Defense Command

**1992**

Army Space and Strategic  
Defense Command

**1997**

USASMDC

**2002**

ASCC USSTRATCOM

**2005**

TO&E Units  
GMD Units

**1988** Designation of Army Space  
Command

**1990** HELSTF transferred to Command

**1991** All TMD transferred to Command

**1994** ASPO transferred to Command

**1997** First Lasing of Satellite by  
Ground-Based Laser

**1999** Hit-to-Kill with Patriot & THAAD

**2001** Computer Network Operations  
mission added

**2002** Army Service Component  
Command to USSTRATCOM

**2003-2004** Activation of GMD units

**2005** Cdr, JFCC IMD

Activation of TO&E space units

**A Foundation of Operational and Technical Experience**



# Relationships

Department  
of the Army



United States  
Strategic Command



NAVY FORCES



USASMDC / ARSTRAT



AFFORSTRAT



MARFORSTRAT





# Commanding General

U.S. Army Space and Missile Defense Command  
/ Army Forces Strategic Command

Deputy - OPS

Deputy - RDA

100<sup>th</sup> MD  
Bde  
(GMD)

49<sup>th</sup>  
MD Bn  
(GMD)

BMDSM

Astronaut  
Det

Ft.  
Greely

1<sup>st</sup> Space Bde

53<sup>rd</sup> Signal  
Bn  
(SATCON)

1<sup>st</sup>  
Space  
Bn

117<sup>th</sup>  
Space Bn  
(COARNG)

Space and Missile  
Defense Future  
Warfare Center

Space and  
Missile Defense  
Battle Lab

Directorate of  
Combat  
Development

Simulation and  
Analysis  
Directorate

Space and  
Missile Defense  
Technical  
Center

Technology  
Directorate

T&E  
Directorate

Missile Defense  
Testing

USAKA/RTS

HELSTF

Technical  
Interoperability  
and Matrix  
Center

Interoperability  
Directorate

Systems  
Integration  
Directorate

Matrix Mgmt  
Directorate

Contracting and  
Acquisition  
Management  
Office



# Operations Enduring Freedom and Iraqi Freedom



- Regional SATCOM Support Centers planned & managed all theaters' SATCOM (UHF, SHF, EHF)
- Army Space Support to CFLCC, V Corps, I MEF, CPA, 4th Inf Div, and MNC-I
- Control of Defense Satellite Communication System communications infrastructure
- Coordination of expanded commercial satellite communications
- In-theater 24/7 missile warning system with the Joint Tactical Ground Station
- Space-based Blue Force Tracking support
- In-theater capability for MASINT annotated graphics and imagery products
- 24/7 reachback support



# Space and Missile Defense Future Warfare Center



**Mission:** Space and missile defense – from Concept to Reality

Develop and integrate innovative DOTMLPF capabilities  
for Army and joint space and missile defense

**Vision:** Dominant space and missile defense capabilities  
seamlessly integrated into the Future Force



**"Our military culture must reward new thinking, innovation, and experimentation."**

President George W. Bush, 11 December 2001



# The Space and Missile Defense Future Warfare Center

(Location and Facilities)



FWC (Colorado Springs, CO)

**Space and Missile Defense Battle Lab (SMDBL)**

- EEW (Exercises, Experiments, Wargames) User Lab
- DCD – Training and Doctrine Div
  - FA 40 Training Lab



FWC (Ft Monroe)

**SMDBL - Future Concepts  
& Architectures Div**

FWC HQs (Huntsville, AL)

**Operations Division**

**Decision Support Directorate**

- Simulation Center - SC
- Advanced Research Center – ARC
- High Performance Computing
- Distribution Center
- EADSIM
- Army SMD Analysis Center – ASAC

**Directorate of Combat Development (DCD)**

**SMDBL's Missile Defense Division**

- Missile Defense Futures Lab



## Additional FWC Liaisons

- CAC / NCS (Ft Leavenworth)
- STRATCOM (Offutt AFB, NE)
- JTAMDO (Washington, DC)

# Space and Missile Defense Future Warfare Center



## Space and Missile Defense Future Warfare Center Director / Deputy Director

**Innovative  
Ventures Office**

**JADO-H  
JT&E Office**

**Operations  
Division**

### **SMD Battle Lab**

**Frontiers Division**

**Future Concepts  
& Architectures Division**

**Experiments &  
Transformation Division**

**Space Division**

**Missile Defense Division**

**Jt Blue Force Tracking Div**

### **Directorate of Combat Development**

**Missile Capabilities  
Division**

**Space Capabilities  
Division**

**Training  
& Doctrine Division**

**Force Development  
Division**

### **Decision Support Directorate**

**Studies & Analysis  
Division**

**Models & Simulations  
Division**

**Information and  
Computational Engineering  
Division**

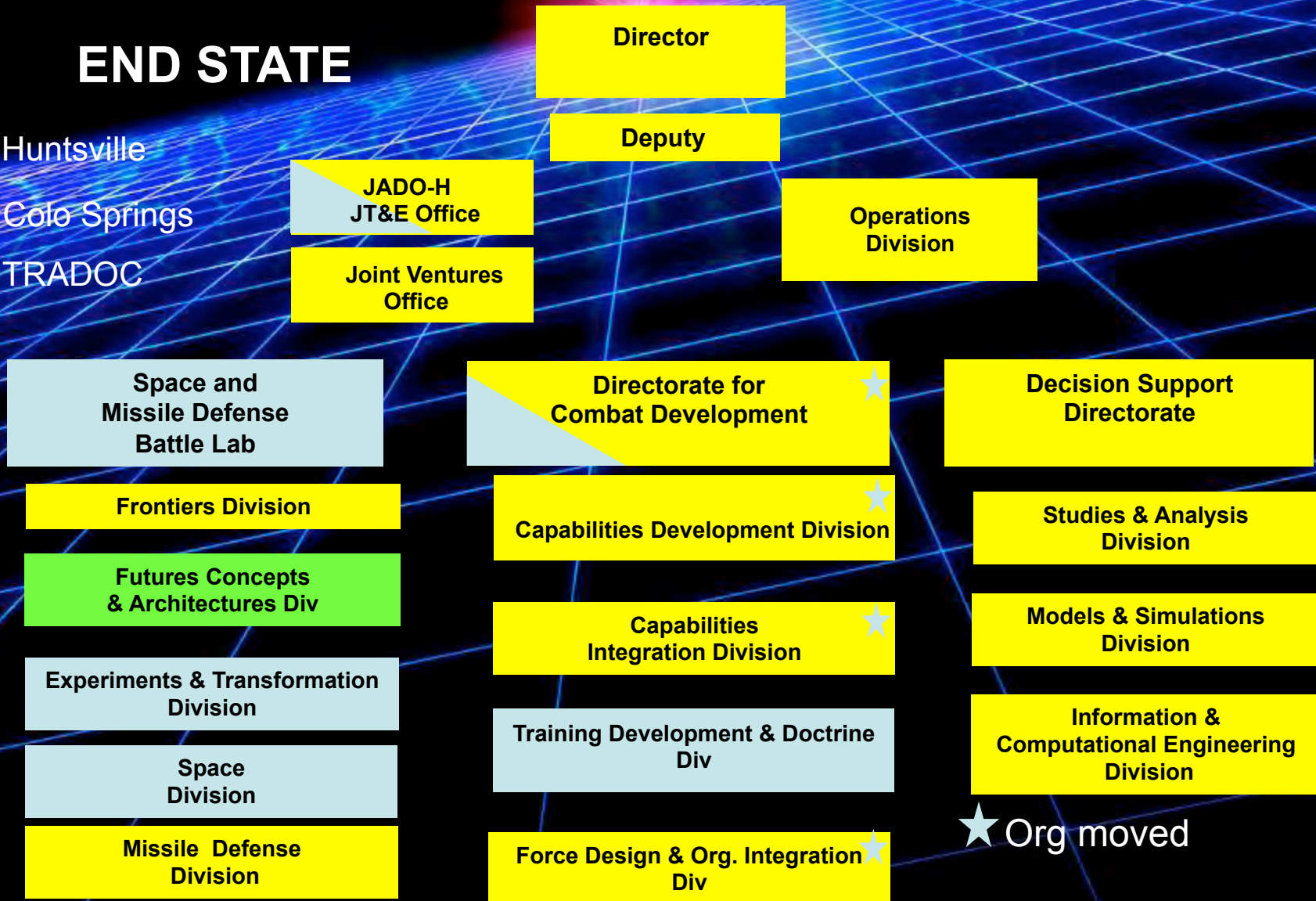


# Space and Missile Defense Future Warfare Center



## END STATE

- Huntsville
- Colo Springs
- TRADOC

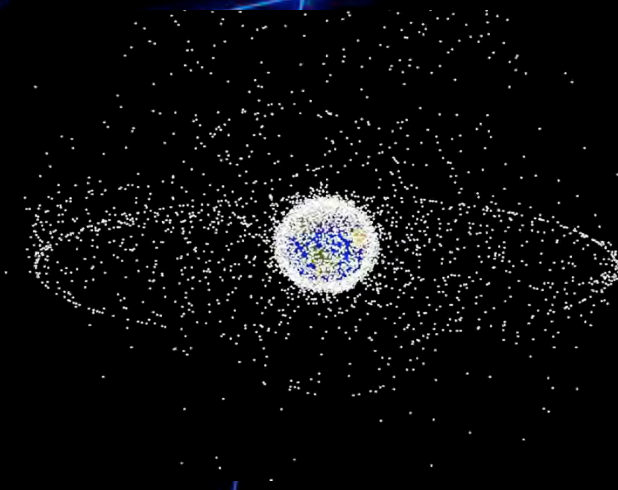
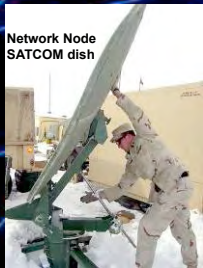


★ Org moved



# Satellites, Systems and Troops

Total Operational Satellites Today:	3,261
Total US-Owned and Operational Satellites Today:	1,049 (about 32%)
Total US <u>Ground</u> Forces (Iraq):	132,000
Total US <u>Air</u> Forces (in theater):	17,000
Total <u>Coalition</u> Forces (in Iraq):	14,200
Total US <u>Space</u> Forces (CENTCOM AOR):	102
Est. # of Satellite Antennas (Iraq) (mostly GPS antennas):	285,650 (conservative estimate)
Est. # of Satellite Antennas per ground troop (Iraq):	2.1



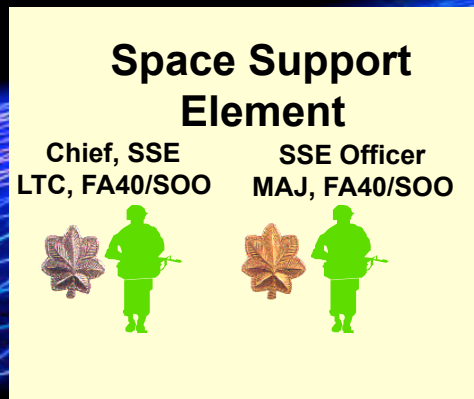


# Space Support Element (SSE) and Army Space Support Team (ARSST) Force Structure



Organic Space Forces

## Division

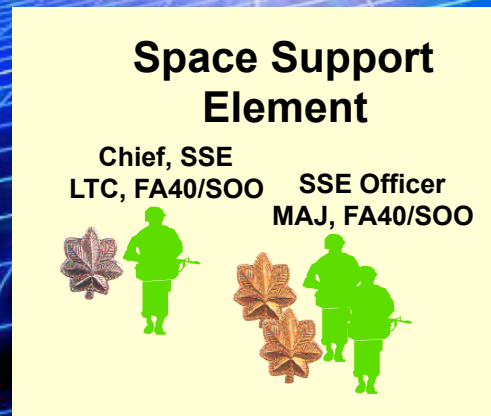


**4 Soldiers ea.**

**18 Divisions**

(10 AC, 08 RC)

## Corps

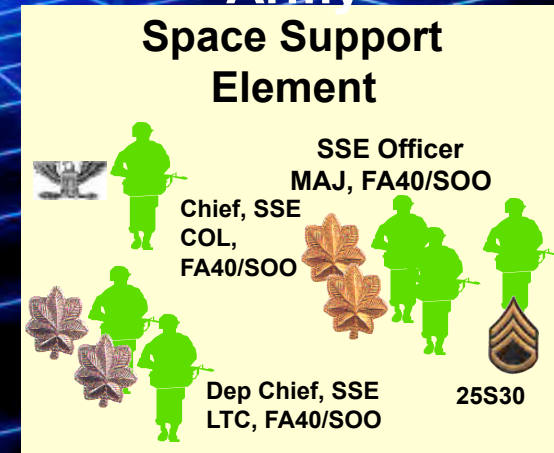


**5 Soldiers ea.**

**3 Corps**

(AC)

## Army



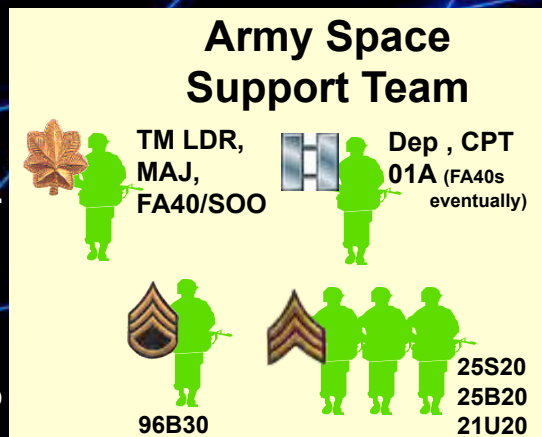
**6 Soldiers ea.**

**6 Armies**

(AC)

(17 activated to date)

Augmentation Space Forces



**27 AC and RC ARSSTs**  
(not all staffed)

## Space Support Enhancement Toolset (SSET)



**Each SSE\* and ARSST receive one SSET**

\* SSEs get one as "TPE", if deployed to the box



# **CENTCOM AOR Talking Points, “How”**

- **The CENTCOM theater is very mature (ISR saturation, robust SATCOM, fixed command posts, robust BFT, high concentration of ground troops in key urban areas).**
- **The enemy exploits available commercial space services (SATCOM, satellite cell phones), space products (imagery) and space capabilities (GPS, BFT, SATCOM broadcasts).**
- **US Army remains the largest consumer of space products and services.**
- **Army FA40s, approximately 183 on Active Duty, are the core of the Army Space Cadre. FA40s lead deployed ARSSTs (since 2002) and SSEs (since 2005) (6 SSEs and 2 ARSSTs in combat today).**
- **Organic and augmentation Army Space Forces are both important.**
- **Theater space forces operate jointly but are not organized jointly and rarely train jointly. Great synergy between Air Force, Army and Marine space troops.**





**Supporting America's Soldiers**