

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

A Global Command

Concept to Combat

Relevant and Ready



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Future Warfare Center

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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

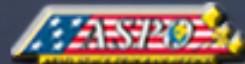
Operation Paperclip
Army Air Defense
Command

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



2005



TO&E Units
GMD Units

ASCC USSTRATCOM

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



100th MD
Bde
(GMD)



1st Space Bde



49th
MD Bn
(GMD)



BMDSM



Astronaut
Det



Ft.
Greely

53rd Signal
Bn
(SATCON)

1st
Space
Bn

117th
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

Deputy - RDA

Technical
Interoperability
and Matrix
Center

Interoperability
Directorate

Systems
Integration
Directorate

Matrix Mgmt
Directorate

Operations Enduring Freedom and Iraqi Freedom



- Regional SATCOM Support Centers planned & managed all theaters' SATCOM (UHF, SHF, EHF)
- Army Space Support to CFLGCC, 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

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

Operations
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

Director

Deputy

Operations Division

Space and Missile Defense Battle Lab

Frontiers Division

Futures Concepts & Architectures Div

Experiments & Transformation Division

Space Division

Missile Defense Division

Directorate for Combat Development

Capabilities Development Division

Capabilities Integration Division

Training Development & Doctrine Div

Force Design & Org. Integration Div

Decision Support Directorate

Studies & Analysis Division

Models & Simulations Division

Information & Computational Engineering Division

★ 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 Ground Forces (Iraq):

132,000

Total US Air Forces (in theater):

17,000

Total Coalition Forces (in Iraq):

14,200

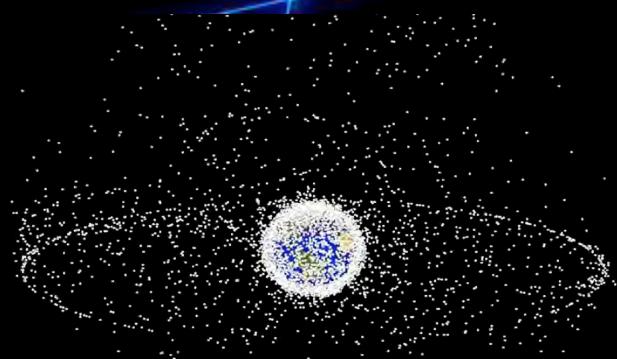
Total US Space Forces (CENTCOM AOR):

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

Space Support Element

Chief, SSE
LTC, FA40/SOO SSE Officer
MAJ, FA40/SOO



4 Soldiers ea.

18 Divisions
(10 AC, 08 RC)

Corps

Space Support Element

Chief, SSE
LTC, FA40/SOO SSE Officer
MAJ, FA40/SOO



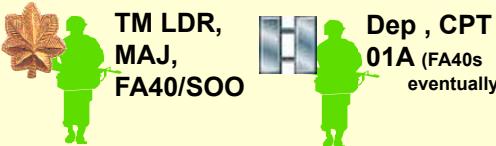
5 Soldiers ea.

3 Corps
(AC)

Augmentation Space Forces

Army Space Support Team

TM LDR, MAJ, FA40/SOO Dep, CPT 01A (FA40s eventually)



96B30 25S20 25B20 21U20



27 AC and RC
ARSSTs
(not all staffed)

Army Space Support Element

SSE Officer
MAJ, FA40/SOO



Chief, SSE
COL, FA40/SOO

Dep Chief, SSE
LTC, FA40/SOO

25S30

6 Soldiers ea.

6 Armies
(AC) (17 activated to date)

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