

COMMAND BRIEF 2021 – DIAMOND IN THE DESERT

WHITE SANDS MISSILE RANGE

CSM Christopher Prosser
Installation CSM
White Sands Missile Range

**Testing the Future,
Changing the World**

BG Eric D. Little
Commanding General
White Sands Missile Range



Vision and Mission

Vision:

A People First team of professionals operating the premier test, evaluation, and training range that delivers superior customer focused support and products, while simultaneously providing a high quality of life for our service members, civilians, and families.

Mission:

White Sands Missile Range provides America's Armed Forces, allies, partners, and defense technology innovators with the world's premiere research, development, test, evaluation, experimentation, and training facilities to ensure our nation's defense readiness.

Priorities:

- PEOPLE

Quality of Life
Leader and Professional Development
Customer Focus and Service

- MODERNIZATION

Supporting the Army in MDO
Investing in Cutting Edge Test and Evaluation Technology



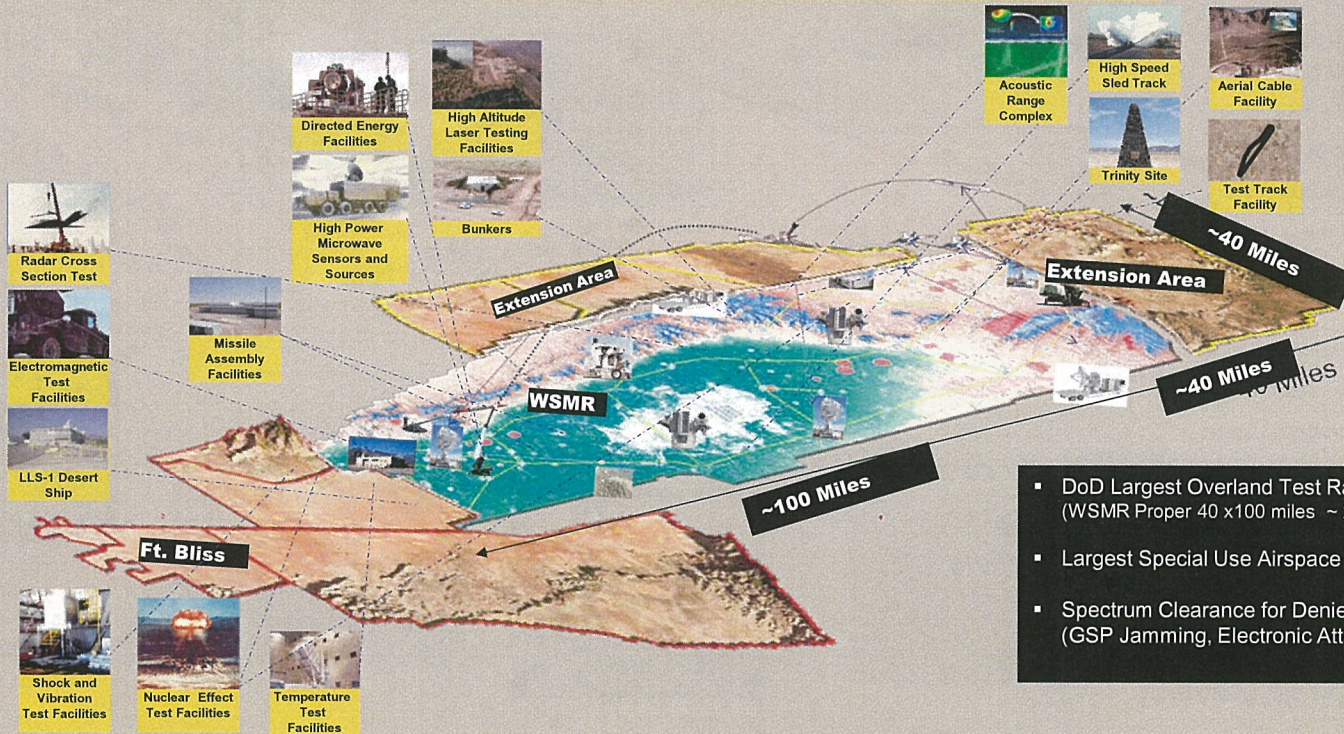


Diamond in the Desert: WSMR is a National Treasure

Critical Crossroads for National Security Modernization

Major Elements of the Range

- Data Reduction
- Flight Safety
- Range Control
- Target Control
- Timing
- GPS
- Radar
- Telemetry
- Network Services
- Mission Services
- Transmission Services
- Meteorological Systems
- Real-Time Systems
- Airspace Management
- Optics



Range Capabilities Aligned with the DoD's Priorities

- Directed Energy
- Hypersonic/Long Range
- Swarming Autonomous/Unmanned Systems
- Integrated Air and Missile Defense
- Space Test Support and Satellite Environmental Testing
- Nuclear Weapons Effects

- DoD Largest Overland Test Range (WSMR Proper 40 x100 miles ~ 2.2M Acres)
- Largest Special Use Airspace 24/7/365
- Spectrum Clearance for Denied Environments (GSP Jamming, Electronic Attack)





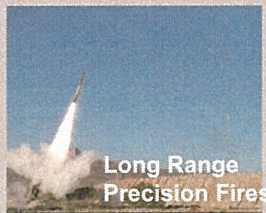
Talented Professionals at White Sands Missile Range

The WSMR Workforce is recruited across the region to include New Mexico's STEM producing Universities

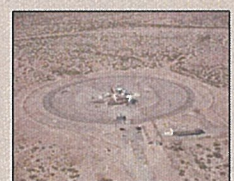
- New Mexico State
- University of New Mexico
- New Mexico Institutes of Mines and Technology



Air & Missile Defense



Long Range Precision Fires



Nuclear Reactor

Talented Workforce enables us to Test!

- 1400 plus STEM Professionals
- Computer Scientists
- Aerospace Engineers
- Electrical Engineers
- Mechanical Engineers
- Mathematicians
- Physicists
- Statisticians

Our professionals drive Modernization

- Radar Tracking Instrumentation
- Optics Instrumentation
- Nuclear Reactor Operations
- Telemetry Tracking Instrumentation
- Network Data Collection and Communications
- "Big Data" Analytics
- Long Range Corridors
- Infrastructure Sustainment
- Missile Assembly Facilities



CUAS



Hypersonic



Space Vehicles



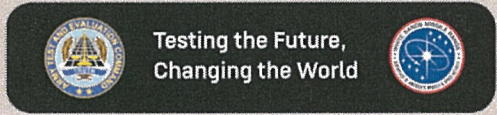
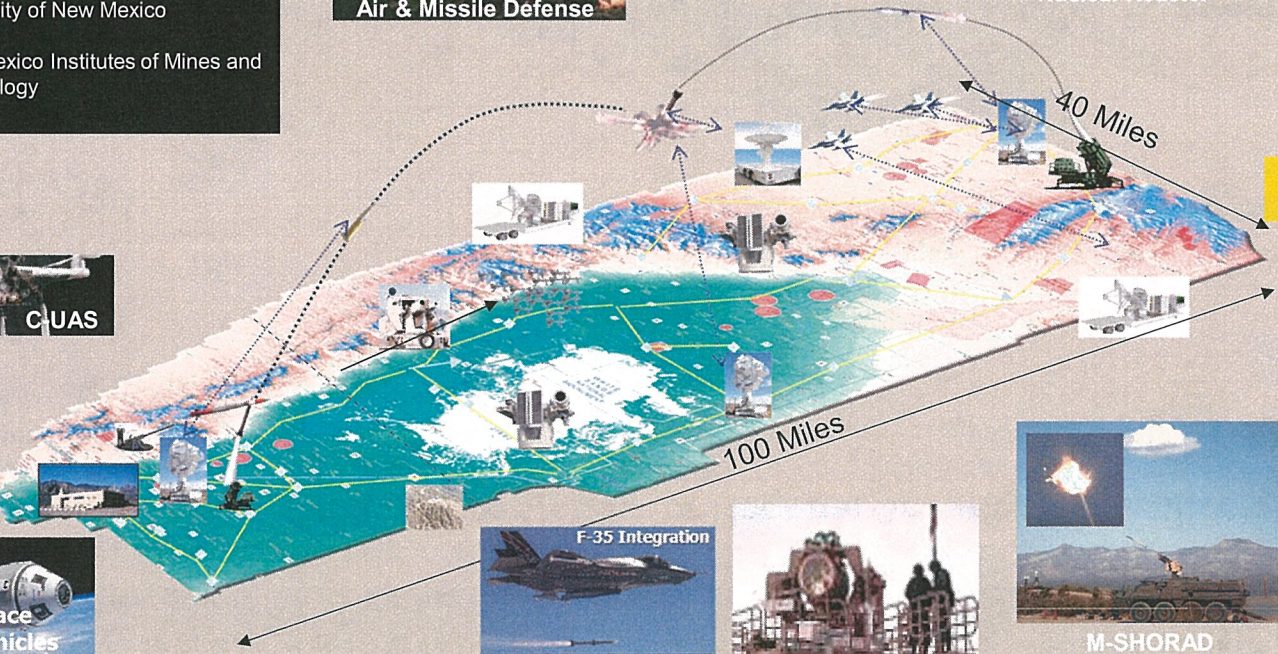
F-35 Integration



DE High Energy Laser



M-SHORAD





Team White Sands Missile Range

31 Tenants Include

- Air Force Nuclear Weapons Center
- Special Operations Training Center
- The Research and Analysis Center (TRAC)
- National Aeronautics and Space Agency (NASA)
- White Sands Test Facility (WSTF)
- ATEC Inspector General
- US Army Garrison
- National Reconnaissance Office (NRO)
- Defense Threat Reduction Agency (DTRA)
- Army Combat Capabilities Development Command (CCDC):
- Data & Analysis Center and Army Research Laboratory
- Center for Countermeasures (CCM)
- National Geospatial Intelligence Agency (NGIA)
- NASA Tracking and Data Relay Satellite System (TDRSS)
- White Sands Test Center (WSTC)
- Commissary (DECA)
- Army and Air Force Exchange Service (AAFES)
- Civilian Personnel Advisory Center (CPAC)
- 407th AFSB Logistics Readiness Center
- Test, Measurement and Diagnostic Equipment Support Center (TMDE)
- Mission Installation Contracting Command (MICC)
- 3-6 ADA Patriot Test Detachment
- McAfee Health / Dental Clinic
- PEO Simulation Training and Instrumentation (PEO STRI)
- Air Force 704th Test Group
- Air Force 49th Air Traffic Control
- Naval Surface Warfare Center Port Hueneme Division White Sands Missile Range
- United States Space Force
- Air Force Research Laboratory
- Air Force 781st Test Squadron



A Team of Teams

- Nation's premier Joint Range Directed Energy; Hypersonic; Long Range Precision Fires; and Air and Missile Defense
- Crossroads of Defense innovation with our allies and partners to include the United Kingdom, France, Germany, Japan, South Korea and Poland among many other to participate in or to observe a test.
- Establishment of the United States Army Special Operations Training Center makes White Sands Missile Range the capstone training location for the Army and Special Operations Training Command
- NASA at White Sands is the foundational for many of their commercial partners to test and develop systems
- WSMR is critical to the modernization of our Nuclear Deterrent
- Our location and capability is critical to the validation of concept; testing of systems; and the employment of capabilities related to Multi-Domain Operations





United States Navy Test Detachment White Sands

Activity: NSWC Port Hueneme Division, White Sands Detachment

200+ Personnel

Navy Sites and Assets:

- USS Desert Ship (LLS-1) (LC 35)
- MK 41 VLS
- Rocket Launchers (50K, Athena, 4.3K)
- Gun Sites (5inch, Railgun)
- Launch Complexes (LC36, LC37)
- Missile Assembly Facility
- Frequent Operations off Site (PMRF, Hebredez)

Mission Areas:

- **Suborbital Vehicles:** BMD Targets, NASA Sounding Rockets
- **Surface Weapons Testing:** AEGIS, Standard Missile, RAM, Railgun, HVP, etc.
- **Special Projects:** Directed Energy, hypersonics, Air-to-Air, etc.





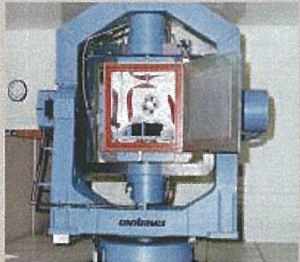
United States Air Force, 704th Test Group



586 Flight Test Squadron

- Fleet of 4 T-38s; 2 C-12s
- Flying test bed for technology

704th Test Group is critical to our successful partnership with Holloman AFB



746 Test Squadron

- Test GPS/Inertial navigation systems
- Navigation warfare



Holloman High Speed Test Track

- The fastest place on earth
- Tests egress systems and munitions



RCS Advanced Measurement

- Sub scale or full aircraft

600+ Personnel

\$90M+ Annual Budget



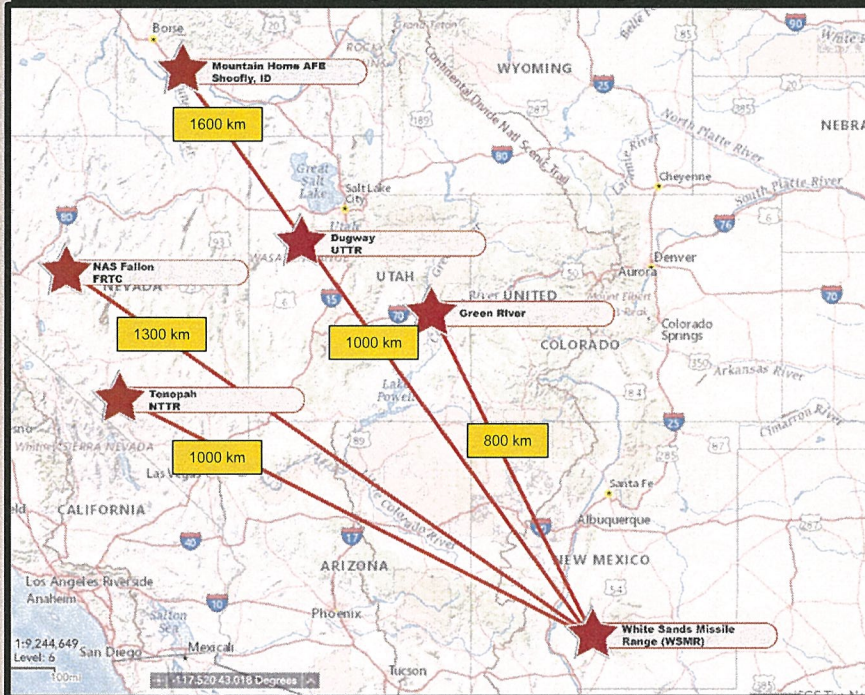
Testing the Future,
Changing the World





Mountain Desert Corridors

Prospective Long Range Firing Corridors



- DOD overland ranges do not support hypersonic and long range precision fires (LRPF) requirements
- INF Treaty limitations no longer applicable (Treaty eliminated Intermediate Range Missile class in the ranges of 500km to 5500Km)
- Overland testing limit collection by potential peer and near peer competitors
- Corridors initially establish to support Pershing II Missile testing in the 1980s
- DOD Re-establishing Mountain Desert Corridors
 - Supports LRPF
 - Supports Hypersonic land/air launch
- DOD initiated Environmental Impact Studies projected to complete by 2025





Modernization Priorities

Modernizing to Support future and emerging requirements

Multi Domain Operations

Special Operations Forces Training Center: Capstone training center focused on denied operations in all domains to include test of concepts; operational validation of multi domain doctrine; and integration of emerging developmental technologies

US Army's Multi Domain Task Force: Increased utilization of White Sands Missile Range enables leveraging denied environment testing of concepts; emerging technologies and operational concepts

Military Construction

INFORMATION SYSTEMS FACILITY: Groundbreaking 24 August 2021 on \$72 Million Dollar Facility

MISSILE ASSEMBLY BUILDING: replaces multiple outdated facilities. Designed to accommodate explosive safety and developmental missile technology requirements. Approved but not funded for FY 23-26 timeframe.

MISSILE ASSEMBLY SUPPORT FACILITY: Required for the ground support equipment to include generators, launchers and radars associated with emerging missile testing. Approved but not funded for FY 23-26 timeframe.

MID RANGE CONTROL CENTER: Expands the capability of DOD's largest range to enable precise instrumented test operations throughout the range complex. In Design Process.

POWER INFRASTRUCTURE: Single point of failure for the installation. Recent extreme rainfall demonstrated the need for multiple avenues of electric power lines supporting the installation. Working with the Army to generate a solution.

WE ARE IN LOCKSTEP WITH THE ARMY'S EIGHT MODERNIZATION PRIORITIES

1. Long Range Precision Fires

2. Next Generation Combat Vehicle

3. Air and Missile Defense

4. Future Vertical Lift

5. Army Network

6. Soldier Lethality

7. Synthetic Training Environment

8. Assured Positioning, Navigation and Timing/Space





Population and Economic Impact

6,000+

Civilian Employees

300+

Service Members

900+

Housing Residents

Population

The on base population includes military, dependents, retirees, DOD Civilians, and housing residents.

An even larger population not included in these numbers is the White Sands Missile Range community which resides within a 40 mile radius. Which includes active duty, reserve component, and retirees.

**\$1.9 BILLION
ANNUAL ECONOMIC IMPACT**

Economic Impact

Much of the spending at White Sands Missile Range includes research, testing and to support missions.

Additionally, the economic impact includes, construction, general contracting local purchasing, employment, labor income and industry output.

**\$5.3 MILLION
DAILY ECONOMIC IMPACT**

