



**Camp Pendleton Day 2022**

# **Ground Based Strategic Deterrent (GBSD) Panel Discussion**

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**BURNS & MCDONNELL**

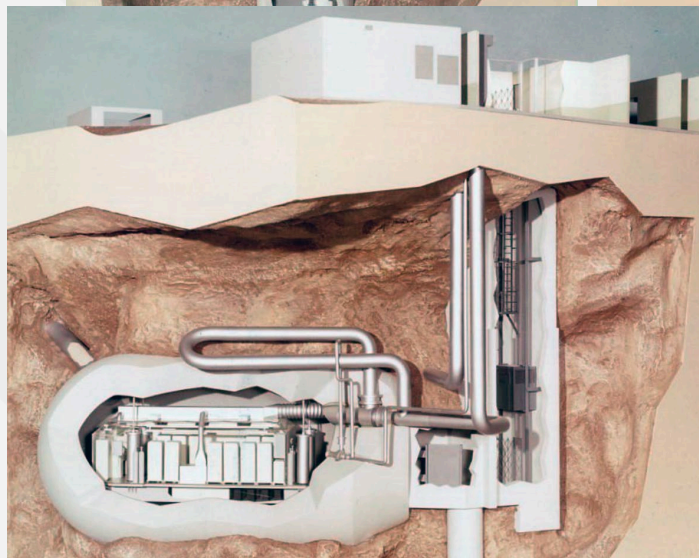
**June 16, 2022**

# Disclaimer

**This presentation contains unclassified material compiled from open-source, publicly-available information on the GBSD program and Minuteman III system. There is no controlled unclassified information or proprietary information presented or discussed.**

# 1960 Burns & McDonnell Designs MMIII

- ▶ Burns & McDonnell involved with the ICBM program since 1960's
- ▶ Over the 5-year period:
  - 352,000 hours;
  - traveled 1,600,000 miles on airlines; and
  - 700,000 miles by car



# Minute Man III ICBM



Photo Credit: DOD

Photo Credit: 90th Missile Wing Public Affairs



# GBSD Abbreviated Timeline

## September 2020

– AF Awards the \$13.3 Billion sole-source Engineering and Manufacturing Development Contract for the GBSD to Northrop Grumman

**2023:** Construction and deployment is scheduled to begin at F.E. Warren AFB, and is expected to be completed by 2031

**2025:** Construction and deployment is scheduled to begin at Malmstrom AFB, and is expected to be completed by 2033

**2036:** AF projects the GBSD to reach Full Operational Capability

**April 2022** – The GBSD has officially been designated the LGM-35A Sentinel

**Spring 2023:** The Final Environmental Impact Statement is scheduled to be released

**2027:** Construction and deployment is scheduled to begin at Minot AFB, and is expected to be completed by 2036

# Present Day Needs

- ▶ Ground Based Strategic Deterrent (GBSD) – Sentinel:
  - The program's funding ramp-up in **FY 2022** and **FY 2023** reflects the continuation of the Engineering and Manufacturing Development (EMD). Sentinel is planning to conduct its first flight test in **FY 2024**.
- ▶ GBSD program is expected to cost nearly **\$264B** through 2075
- ▶ **FY2021** Actual **\$1.4B**
- ▶ **FY2022** Enacted **\$2.6B**
- ▶ AF is asking for **\$3.6B** in the **FY2023** Military Construction Budget of which **\$444m** is to support the Program's infrastructure.

# GBSD Deployment Program Locations

- ▶ Vandenberg SFB, California
- ▶ Hill AFB, Utah
  - UTTR
- ▶ F.E. Warren AFB, Wyoming
  - Camp Guernsey
- ▶ Minot AFB, North Dakota
- ▶ Malmstrom AFB, Montana

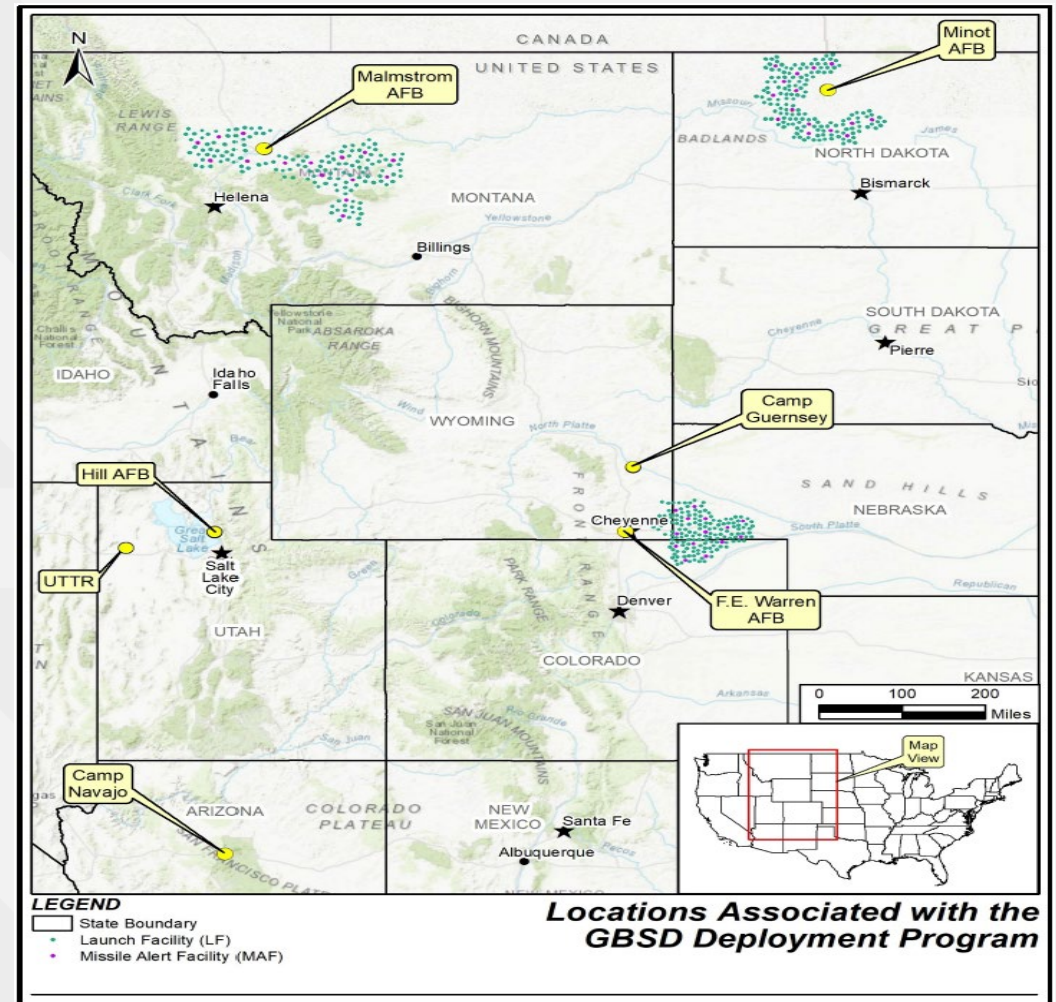


Image sources: Air Force Global Strike Command. 2020. "Environmental Impact Statement for the Ground-Based Strategic Deterrent Deployment and Minuteman III Decommissioning and Disposal: Public Scoping Materials."

# On Base Construction at Hill AFB

## FY19-28

- ▶ On-base Actions at Hill AFB would include new construction and renovation to support GBSD maintenance, training, storage, and support facilities:
- ▶ **FY20 Mission Integration Facility (MIF)** – 160,000SF Mixed Use Secured Building & Parking Garage
  - Awarded July 2020 (approx. \$100M)
- ▶ **FY22 Software Sustainment Center (SSC)** – 185,000SF Mixed Use Secured Building with optional parking lots
  - In Proposal phase
- ▶ **FY23 Technology and Collaboration Center (TACC)**
  - In RFP Development phase
  - \$100M+
  - Full & Open



# Hill AFB | GBSD Campus



The Air Force Operational Test and Evaluation Center headquartered at Kirtland Air Force Base, N.M., stood up Detachment 3 at Hill Air Force Base Oct. 1, 2020, to provide operational test and support for the Ground Based Strategic Deterrent (GBSD) and other related Intercontinental Ballistic Missile (ICBM)

Image sources: Burns & McDonnell (2022)

# Hill AFB | Mission Integration Facility



140,000SF secured multi-story mixed-use facility and 315,000SF parking garage, providing laboratory and administrative support for the integration, testing and development of highly classified workloads to accommodate approximately 700 military, civilian and contractor personnel

**Hill AFB**

**Software Sustainment Center**



182,836SF multi-story secured facility, providing laboratory and administrative support for the integration, testing and development of highly classified workloads to accommodate approximately 560 military, civilian and contractor personnel

Image sources: Burns & McDonnell (2022)

# Hill AFB | Technology and Collaboration Center

78,490SF two-story secured facility, providing various size, reconfigurable, and flexible workspaces for workgroup and team collaboration of approximately 300 military, civilian and contractor personnel



Image sources: Burns & McDonnell (2022)

# On Base Construction at Vandenberg SFB

## FY22-30

On-base Actions at Vandenberg SFB would include new construction and renovation to support GBSD maintenance, training, storage, and support facilities:

**FY22**

### Stage Processing Facility (SPF)

16,352SF Single-story secured maintenance facility

- Awarded May 2022

**FY23**

### Re-Entry Vehicle Facility (RS/RV)

24,000SF Single-story secured maintenance facility

- In procurement phase

**FY23**

### Consolidated Maintenance Facility (CMF)

148,000SF multi-story secured building

- In RFP development phase

**FY25**

### AETC Formal Training Unit (FTU)

- In RFP development phase

# On Base Construction at Vandenberg SFB



# Vandenberg SFB: Stage Processing Facility



16,352 SF single story facility to accommodate a missile maintenance crew, a rail system to process Stage 1 and Stage 2/3 combinations or a full booster, and be sited for HD 1.3 explosives

Image sources: Burns & McDonnell (2022)

# Vandenberg SFB: Re-Entry Vehicle Facility



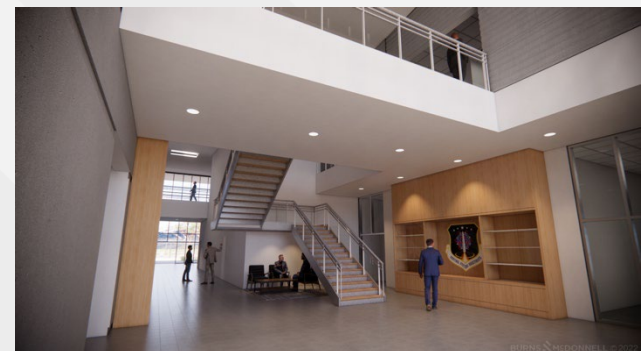
23,105 SF single story explosive-sited facility to accommodate a missile maintenance crew to perform mission critical maintenance and post boost maintenance for the new GBSD Intercontinental Ballistic Missiles

Image sources: Burns & McDonnell (2022)



# Vandenberg SFB: Consolidated Maintenance Facility

148,420 SF two story facility to accommodate the Flight Test Squadron to support Ground Based Strategic Deterrent Test, Launch Operations, and accommodate a crew of 250 personnel



# Questions

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The background of the image is a dark blue, monochromatic aerial view of a city at night. The city lights are visible, and a complex network of glowing blue lines and nodes is overlaid on the scene, suggesting a global or digital network. The lines form a grid-like pattern with curved connections, and several bright blue nodes are scattered throughout the image, particularly in the upper half.