WHITE SANDS SPACE HARBOR AREA 1,             HAER No. NM-28-Q
CRASH/RESCUE STANDBY SUPPORT GPS BUILDINGS
(Space Shuttle Landing Facility Area 1, Crash/Rescue Standby Support
GPS Buildings)
White Sands Missile Range
East side of Runway 17/35, approximately 2,650 feet north of
intersection with Runway 23/05
White Sands vicinity
Doña Ana County
New Mexico

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
U.S. Department of the Interior
Intermountain Regional Office
12795 Alameda Parkway
Denver, CO 80225-0287
HISTORIC AMERICAN ENGINEERING RECORD

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U.S.G.S. 7.5 Minute Las Cruces, New Mexico,
Quadrangle, Universal Transverse Mercator Coordinates
(center of runways): E 32.944408 N 106.41993 Zone 13S,
NAD 1983.

Construction: ca.1992

Architect: Not known

Builder: Not known

Present Owner: Commander, U.S. Army White Sands Missile Range,
New Mexico 88002-5018

Present Use: Vacant

Significance: The Crash/Rescue Standby Support GPS Buildings were an
essential component of the White Sands Space Harbor
(WSSH) from 1992-2011. It is considered to have
national significance and is eligible for listing in
the National Register of Historic Places (NRHP) under
Criterion A for its association with the NASA Space
Shuttle Program (SSP) with a period of significance of
1976-2011. Because it achieved significance within
the past fifty years, Criterion Consideration G also
applies.
List of Acronyms

- **ABGR**: Alamogordo Bombing and Gunnery Range
- **ABS**: Anti-lock Braking System
- **ACHP**: Advisory Council on Historic Preservation
- **ACI**: Archaeological Consultants, Inc.
- **AIAA**: American Institute of Aeronautics and Astronautics
- **APE**: Area of Potential Effects
- **ATC**: Air Traffic Control
- **BTT**: Basic Training Target
- **CCC**: Civilian Conservation Corps
- **CIT**: California Institute of Technology
- **CONEX**: Container Express
- **DC-X**: Delta Clipper, Experimental
- **DoD**: Department of Defense
- **GPS**: Global Positioning System
- **HAFB**: Holloman Air Force Base
- **HPO**: Historic Preservation Officer
- **HPWG**: Historic Preservation Working Group
- **HUB**: Harbor Utility Building
- **IGS**: Inter Glide Slope
- **IHA**: InoMedic Health Applications, LLC
- **JSC**: Johnson Space Center
- **KSC**: Kennedy Space Center
- **LC**: Launch Complex
- **MD**: McDonnell Douglas
- **MSBLS**: Microwave Scanning Beam Landing System
- **MSFC**: Marshall Space Flight Center
- **NASA**: National Aeronautics and Space Administration
- **NAVAIDS**: Navigational Aids
- **NEPA**: National Environmental Policy Act
- **NHL**: National Historic Landmark
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NHPA  National Historic Preservation Act
NPS  National Park Service
NRHP  National Register of Historic Places
NSA  New South Associates
OCC  Operations Control Center
ORD  Army Ordinance Department
PAPI  Precision Approach Path Indicator
RFP  Request for Proposal
SCAPE  Self Contained Atmospheric Protective Ensemble
SHPO  State Historic Preservation Officer
SSP  Space Shuttle Program
SSRT  Single Stage Rocket Technology
STA  Shuttle Training Aircraft
STS  Space Transportation System
TACAN  Tactical Air Navigation
TAL  Transoceanic Abort Landing
UHF  Ultrahigh Frequency
USAAF  United States Army Air Force
USAF  United States Air Force
VITT  Vehicle Integration Test Team
WPA  Works Progress Administration
WSMR  White Sands Missile Range
WSNM  White Sands National Monument
WSPG  White Sands Proving Ground
WSSH  White Sands Space Harbor
WSTF  White Sands Test Facility
PART I. HISTORICAL INFORMATION

A. PHYSICAL HISTORY

1. DATE OF CONSTRUCTION

The Crash/Rescue Standby Support GPS Buildings were installed ca.1992.

2. ENGINEER

Not known.

3. BUILDER/CONTRACTOR/SUPPLIER

Not known.

4. ORIGINAL PLANS

Not available.

5. ALTERATIONS AND ADDITIONS

All electronic equipment was removed once the facility was vacated in 2011. The U.S. Army initiated occupation and reuse of the facility in the summer of 2012.
PART II. STRUCTURAL/DESIGN INFORMATION

A. GENERAL DESCRIPTION

1. CHARACTER

The Crash/Rescue Standby Support GPS Buildings include a rectangular, prefabricated portable steel trailer on a concrete pad, as well as a square, prefabricated metal building. Both were used to store crash/rescue and GPS equipment. A GPS antenna is located in the southwest corner where the two buildings adjoin. Both were installed around 1992. Both featured solid metal doors and featured a red and white checkerboard paint scheme. The facility was vacated in 2011.

2. CONDITION OF FABRIC

When documented in March 2012, the Crash/Rescue Standby Support GPS Buildings had been abandoned for over six months, but were in fair condition. The interior equipment had been removed and the exterior was showing signs of neglect due to the harsh desert environment, which requires that facilities are constantly maintained and repaired due to shifting sands, flash floods, and extreme temperature variations.

B. CONSTRUCTION

The Crash/Rescue Standby Support GPS Buildings consisted of two prefabricated metal buildings on concrete pads.

C. MECHANICAL/OPERATION

The Crash/Rescue Standby Support GPS Buildings featured electricity to power interior lights, electronic navigational equipment, and a wall-mounted Air Conditioning unit.
PART III. SOURCES OF INFORMATION

A. ENGINEERING PLANS AND DRAWINGS

There are no known engineering plans or drawings of the Crash/Rescue Standby Support GPS Buildings.

B. INTERVIEWS

The following NASA and WSMR employees were interviewed for this documentation.

Robert E. Mitchell, WSTF Manager, September 2011.

Frank Offutt, WSSH Manager, September 2011.

Timothy Davis, WSTF Historic Preservation Officer, September 2011 and March 2012.

Bill Godby, WSMR Historic Preservation Officer, September 2011.

Doyle Piland, WSMR Museum Archivist, September 2011.


C. BIBLIOGRAPHY


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D. LIKELY SOURCES NOT YET INVESTIGATED

Research was conducted at WSSH and WSTF using primary and secondary sources. Sources that were not investigated that may contain secondary information are archived at NASA’s Lyndon B. Johnson Space Center in Houston, Texas.

Additional oral history interviews with other engineers and technicians could also prove useful.
PART IV. PROJECT INFORMATION

In 2011-2012, New South Associates (NSA), under contract with InoMedic Health Applications, LLC (IHA) of Kennedy Space Center, Florida, and in coordination with NASA and the U.S. Army, conducted background research and a historic architecture survey of resources at the NASA WSSH. The survey included the documentation and evaluation for NRHP eligibility for seventy-two resources located in four distinct areas. Based on this research, NSA determined that no properties remain at WSSH from the period prior to NASA acquisition in 1963 except for the footprint of the packed gypsum Runway 17/35.¹

NSA recommended that the three NASA WSSH Runways and the Control Tower in Area 1 were individually eligible for listing in the NRHP and eligible as contributing resources to the “WSSH Shuttle Landing Facility District” under Criterion A and Criterion Consideration G for their association with the NASA SSP. None of the other sixty-eight inventoried properties were recommended individually eligible for listing in the NRHP due to lack of historical association with the NASA SSP or other historic contexts, lack of unique design or construction features, or insufficient integrity; however, nineteen of these properties, all of which lie within Area 1, were recommended as contributing resources to “WSSH Shuttle Landing Facility District,” even though they were not recommended individually eligible for the NRHP. The historic district contains a total of twenty-eight resources: twenty-three are contributing and five are non-contributing.

After formally ending the SSP on August 31, 2011, NASA disposed of the WSSH and released use of the property to the U.S. Army WSMR. The property transfer was a federal undertaking on federally-owned property and subject to compliance with Section 106 of the NRHP Act of 1966, as amended. The undertaking

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resulted in an Adverse Effect to the NRHP-eligible WSSH Shuttle Landing Facility District. To mitigate the adverse effects, NASA completed HAER Level II documentation of the historic district and relocated the Control Tower to the WSMR Museum for conservation, exhibition, and public interpretation.

The mitigation plan was defined in a Memorandum of Agreement (MOA), executed between NASA, the U.S. Army, and the NM-SHPO in August 2012. The properties within the historic district were documented with large format photography in March 2012.
APPENDIX- LOCATION MAPS
Range roads north of U.S. Highway 70 are closed to the public except for special events.

Figure 1. Map of White Sands Military Reservation showing White Sands Space Harbor (Source: U.S. Army).
Figure 2. Map of WSSH showing location of the Crash/Rescue Standby Support GPS Buildings in Area 1, which delineates the NRHP boundaries of the WSSH Shuttle Landing Facility District (Base Map Source: NASA WSTF).
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David Diener, Photographer
March 27-29, 2012

NM-28-Q-1 VIEW OF CRASH/RESCUE STANDBY SUPPORT GPS BUILDINGS, LOOKING NORTHEAST ON EAST SIDE OF RUNWAY 17/35 APPROXIMATELY ½-MILE NORTH OF THE INTERSECTION WITH RUNWAY 23/05.