WHITE SANDS SPACE HARBOR AREA 1, HAER No. NM-28-R
CRASH/RESCUE STANDBY AREA TRAILER
(Space Shuttle Landing Facility Area 1, Crash/Rescue Standby Area Trailer)
White Sands Missile Range
East side of Runway 17/35, adjacent to Crash/Rescue Standby Support GPS Buildings
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.1995

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 Area Trailer was 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.
Report
Prepared by: Robbie D. Jones, Senior Historian
New South Associates
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Nashville, TN 37206

Date: September 2013

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
MSBLBS 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
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 Area Trailer was installed ca. 1995.

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 Area Trailer is a rectangular, prefabricated steel portable trailer on a concrete pad used for storing crash/rescue and GPS equipment. The trailer was manufactured by Jackson Mfg., Inc., of Chickasha, Oklahoma. Facing east, the metal hitch is located at the north elevation and a solid pedestrian door on the east elevation. Tinted glass windows are located on the north, east, and west elevations. Generators and electrical transformers housed in detached, prefabricated metal structures are located to the east alongside the access road.

2. CONDITION OF FABRIC

When documented in March 2012, the Crash/Rescue Standby Area Trailer was had been abandoned for over six months, but was 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 Area Trailer is a prefabricated trailer on a concrete pad.

C. MECHANICAL/OPERATION

The Crash/Rescue Standby Area Trailer 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 Area Trailer.

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


Bergenson, Paul. “Jack (John Knudson) Northrop.” Published online in 2003 at website


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 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
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 Area Trailer 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-R-1       VIEW OF CRASH/RESCUE STANDBY AREA TRAILER AND
GENERATOR, LOOKING SOUTHWEST ON EAST SIDE OF
RUNWAY 17/35 APPROXIMATELY ½-MILE NORTH OF THE
INTERSECTION WITH RUNWAY 23/05.