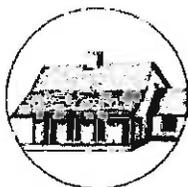


Original  
 Update



# HISTORICAL STRUCTURE FORM

## FLORIDA MASTER SITE FILE

Version 4.0 1/07

Reset Form

Site #8 **BR02007**  
Field Date 5-13-2013  
Form Date 7-31-2013  
Recorder # \_\_\_\_\_

Shaded Fields represent the minimum acceptable level of documentation.  
Consult the *Guide to Historical Structure Forms* for detailed instructions.

Site Name(s) (address if none) Robot Wash Building Multiple Listing (DHR only) \_\_\_\_\_  
Survey Project Name Survey of NASA-Owned Facilities CCAFS Ind. Area Survey # (DHR only) \_\_\_\_\_  
National Register Category (please check one)  building  structure  district  site  object  
Ownership:  private-profit  private-nonprofit  private-individual  private-nonspecific  city  county  state  federal  Native American  foreign  unknown

### LOCATION & MAPPING

Clear Location Values

Street Number Bldg. 66320 Direction \_\_\_\_\_ Street Name Hangar Street Type Road Suffix Direction \_\_\_\_\_  
Cross Streets (nearest / between) Industrial Bypass Road  
USGS 7.5 Map Name CAPE CANAVERAL USGS Date 1976 Plat or Other Map \_\_\_\_\_  
City / Town (within 3 miles) Cape Canaveral In City Limits?  yes  no  unknown County Brevard  
Township 23S Range 37E Section 13 1/4 section:  NW  SW  SE  NE Irregular-name: \_\_\_\_\_  
Tax Parcel # N/A Landgrant \_\_\_\_\_  
Subdivision Name \_\_\_\_\_ Block \_\_\_\_\_ Lot \_\_\_\_\_  
UTM Coordinates: Zone  16  17 Easting 540429 Northing 3151065  
Other Coordinates: X: \_\_\_\_\_ Y: \_\_\_\_\_ Coordinate System & Datum \_\_\_\_\_  
Name of Public Tract (e.g., park) Cape Canaveral Air Force Station

### HISTORY

Clear History Values

Construction Year 1987  approximately  year listed or earlier  year listed or later  
Original Use Other From (year): 1987 To (year): 2012  
Current Use Abandoned/Vacant From (year): \_\_\_\_\_ To (year): \_\_\_\_\_  
Other Use SRB processing From (year): \_\_\_\_\_ To (year): \_\_\_\_\_  
Moves  yes  no  unknown Date: \_\_\_\_\_ Original address \_\_\_\_\_  
Alterations:  yes  no  unknown Date: \_\_\_\_\_ Nature \_\_\_\_\_  
Additions:  yes  no  unknown Date: \_\_\_\_\_ Nature \_\_\_\_\_  
Architect (last name first): Wolfberg/Alvarez/Taracido Builder (last name first): unknown  
Ownership History (especially original owner, dates, profession, etc.) NASA is the original owner.

Is the Resource Affected by a Local Preservation Ordinance?  yes  no  unknown Describe \_\_\_\_\_

### DESCRIPTION

Clear Description Values

Style Industrial Vernacular Exterior Plan Rectangular Number of Stories 1  
Exterior Fabric(s) 1. Concrete block 2. \_\_\_\_\_ 3. \_\_\_\_\_  
Roof Type(s) 1. Flat 2. \_\_\_\_\_ 3. \_\_\_\_\_  
Roof Material(s) 1. Built-up 2. \_\_\_\_\_ 3. \_\_\_\_\_  
Roof secondary strucs. (domers etc.) 1. \_\_\_\_\_ 2. \_\_\_\_\_  
Windows (types, materials, etc.) See continuation sheet.  
Distinguishing Architectural Features (exterior or interior ornaments) See continuation sheet.

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) See continuation sheet.

DHR USE ONLY		OFFICIAL EVALUATION		DHR USE ONLY	
NR List Date	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date	_____	Date	_____
<input type="checkbox"/> Owner Objection	KEEPER – Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date	_____	Date	_____
	NR Criteria for Evaluation: <input type="checkbox"/> a <input type="checkbox"/> b <input type="checkbox"/> c <input type="checkbox"/> d (see <i>National Register Bulletin 15</i> , p. 2)				

DESCRIPTION (continued) Clear Description Values

Chimney: No. \_\_\_\_\_ Chimney Material(s): 1. \_\_\_\_\_ 2. \_\_\_\_\_
Structural System(s): 1. Concrete block 2. \_\_\_\_\_ 3. \_\_\_\_\_
Foundation Type(s): 1. Slab 2. \_\_\_\_\_
Foundation Material(s): 1. Poured Concrete Footing 2. \_\_\_\_\_
Main Entrance (stylistic details) single-light metal pedestrian entrances. See continuation sheet.

Porch Descriptions (types, locations, roof types, etc.) N/A

Condition (overall resource condition): [ ] excellent [x] good [ ] fair [ ] deteriorated [ ] ruinous
Narrative Description of Resource This is a one-story concrete block building with a flat built-up metal roof, aluminum cornice, and a reinforced concrete foundation. The main bay contains the robot wash machine and has a concrete block structural system. See continuation sheet.
Archaeological Remains Not Applicable [ ] Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

- [x] FMSF record search (sites/surveys) [ ] library research [ ] building permits [ ] Sanborn maps
[ ] FL State Archives/photo collection [ ] city directory [x] occupant/owner interview [ ] plat maps
[ ] property appraiser / tax records [x] newspaper files [ ] neighbor interview [ ] Public Lands Survey (DEP)
[x] cultural resource survey (CRAS) [x] historic photos [x] interior inspection [x] HABS/HAER record search
[ ] other methods (describe) \_\_\_\_\_

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) SRB Disassembly and Refurbishment Complex HAER Documentations FL-8-11-S and FL-8-11-S-6 and see continuation sheet.

OPINION OF RESOURCE SIGNIFICANCE Clear Significance Values

Appears to meet the criteria for National Register listing individually? [ ] yes [x] no [ ] insufficient information
Appears to meet the criteria for National Register listing as part of a district? [x] yes [ ] no [ ] insufficient information
Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) The Robot Wash Building is a contributing resource in the NRHP-eligible SRB Disassembly and Refurbishment Complex Historic District, and also contributes to the larger NASA-owned CCAFS Industrial Area Historic District. See continuation sheet.
Area(s) of Historical Significance (see National Register Bulletin 15, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. Other 3. Engineering 5. \_\_\_\_\_
2. Science 4. Transportation 6. \_\_\_\_\_

DOCUMENTATION Clear Documentation Values

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents
1) Document type Photographs Maintaining organization National Aeronautics and Space Administration
Document description HAER photography and Narrative Context File or accession #'s http://mediaarchive.ksc.nasa.gov/search
2) Document type Photographs Maintaining organization National Park Service, Region One
Document description Hangar AF File or accession #'s HAER Nos. FL-8-11-S and FL-8-11-S-6

RECORDER INFORMATION

Recorder Name David L. Price Affiliation New South Associates
Recorder Contact Information 118 S. 11th St. Nashville, TN 37206; dprice@newsouthassoc.com; 615-262-4326
(address / phone / fax / e-mail)

Required Attachments
1 USGS 7.5' MAP WITH STRUCTURE LOCATION PINPOINTED IN RED
2 LARGE SCALE STREET, PLAT OR PARCEL MAP (available from most property appraiser web sites)
3 PHOTO OF MAIN FACADE, ARCHIVAL B&W PRINT OR DIGITAL IMAGE FILE
If submitting an image file, it must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital image must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

**Historic Structure Form  
Continuation Sheets**

**DESCRIPTION OF RESOURCE:**

The main portion of the Robot Wash Building is a painted concrete block bay with a flat built-up metal roof, aluminum cornice, and a reinforced concrete foundation. This bay contains the robot wash machine and has a concrete block structural system. It is surrounded on the south and west sides by one-story wraparound portions with steel frame structural systems that are clad in aluminum. The wraparound portion contains a hydraulic pump room on the west side and the control room/tech room/dressing room on the south side.

The east elevation features the robot bay roll-up door, roof-access ladder, and the aluminum clad end of the control room. The north elevation features a pedestrian entrance at ground level. Over this entrance is a rack of ventilation and compression equipment used by the interior wash robot. The south elevation features two ventilation louvers and the south face of the control room with two pedestrian entrances. The west elevation features a metal "lean-to" structure that houses additional ventilation and compression equipment.

The interior floor plan of the building includes four rooms: a blast room, containing the high-pressure wash robot; a control room; a tech room; and a dressing room. The robot bay has painted concrete block interior walls and a concrete floor with a 16'-0" diameter floor turntable. The ceiling is concrete. There is an observation window between this room and the control room. The robot includes a single movable arm that can be positioned to wash both the interior and exterior of the SRB segments. It blasts water at 17,500 psi. It travels diagonally across the blast bay on a steel overhead track that is supported by two concrete pillars.

**EXPLANATION OF EVALUATION:**

The Robot Wash Building was completed in 1987 to house an automated high-pressure water system used to blast Thermal Protection System (TPS) material off of the Solid Rocket Booster (SRB) segments. It is located just south of Hangar AF and the High Pressure Gas Building. Once they were demated in Hangar AF, the SRB segments were transferred to the High Pressure Wash or the Robot Wash buildings where the TPS was stripped. In the Robot Wash Building, an SRB segment was placed on the in-floor turntable that rotated while the automated high-pressure spray machine (the "robot") moved up and down, left to right, inside and outside to remove the TPS material. A computer operator in the adjacent control room controlled the automated robot.

The entire Hangar AF Complex (SRB Disassembly and Refurbishment Historic District) functioned as a one-of-a-kind facility that is considered eligible for listing in the National Register of Historic Places (NRHP) in the context of the Space Shuttle Program (SSP) (1969-2011) under Criterion A in the area of Space Exploration. The complex is a significant historic property for its association with the Space Transportation System (STS), commonly known as the "space shuttle." The STS was a unique breakthrough in the history of the U.S. Space Program, because it was based on a design that made most of its major components re-usable, a model that decreased program costs, and helped make orbital space flight a routine endeavor. Along with the orbiter spacecraft, the SRBs were two of the shuttle's primary re-usable elements. The SRBs' re-usability was made possible by a number of facilities at Kennedy Space Center (KSC) and CCAFS, including the SRB Disassembly and Refurbishment Complex. The complex

**Historic Structure Form  
Continuation Sheets**

is the first place to which the SRBs were brought after their recovery from sea and where they were disassembled, cleaned, and processed before they were moved to other KSC facilities for buildup and assembly. Because it achieved significance within the past 50 years, Criteria Consideration G also applies. The Robot Wash Building, as one component of this complex, is considered a contributing resource to the SRB Disassembly and Refurbishment Historic District as it played an essential role in the re-usability of the SRBs.

**BIBLIOGRAPHIC REFERENCES:**

Photographs and Drawings

Wolfberg/Alvarez/Taracido & Associates. "Robot Operated High Pressure Wash Facility." Kennedy Space Center, Florida. Construction drawings, 1985.

Interviews

Christy, Howard, RPSF Manager, Personal Communication, February 24, 2010.

Morales, Art. George C. Marshall Space Flight Center  
Office of the Director, Shuttle - ARES Transition Office. Interview with author.  
September 27, 2011.

Pappalardo, David. United Space Alliance, TVC Technician. Interview with author.  
October 11, 2011.

Price, David. United Space Alliance, Hangar AF Facility Manager. Interview with the  
author. October 11, 2011.

Sources

Deming, Joan, and Patricia Slovinac. *NASA-Wide Survey and Evaluation of Historic Facilities in the Context of the U.S. Space Shuttle Program: Roll-Up Report*. Submitted to the National Aeronautics and Space Administration, Environmental Management Branch. Sarasota, Florida: Archaeological Consultants, Inc. February 2008, revised July 2008.

National Aeronautics and Space Administration (NASA)  
*NASA Facts: Solid Rocket Boosters*. Kennedy Space Center, Florida. IS-2004-09-014-KSC, Revised 2006.

*NASA Facts: Solid Rocket Boosters and Post-Launch Processing*. Kennedy Space Center, Florida. FS-2004-07-012-KSC (Rev. 2006).

United Space Alliance

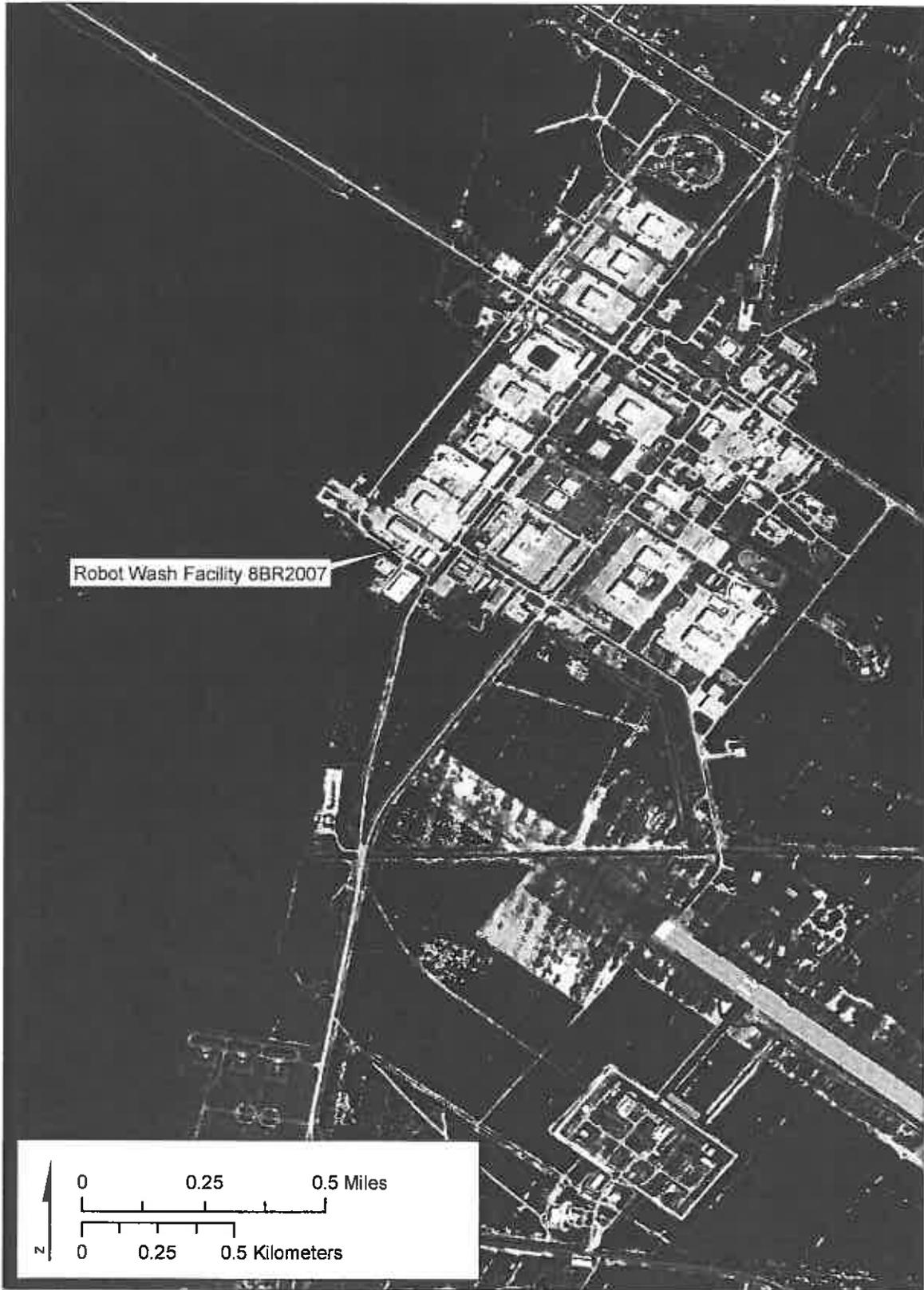
"Marine Operations, Revision J." (John F. Kennedy Space Center, n.d.), MO-1.

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“Structures Assembly Buildup Operations, Revision J” (John F. Kennedy Space Center, n.d.).

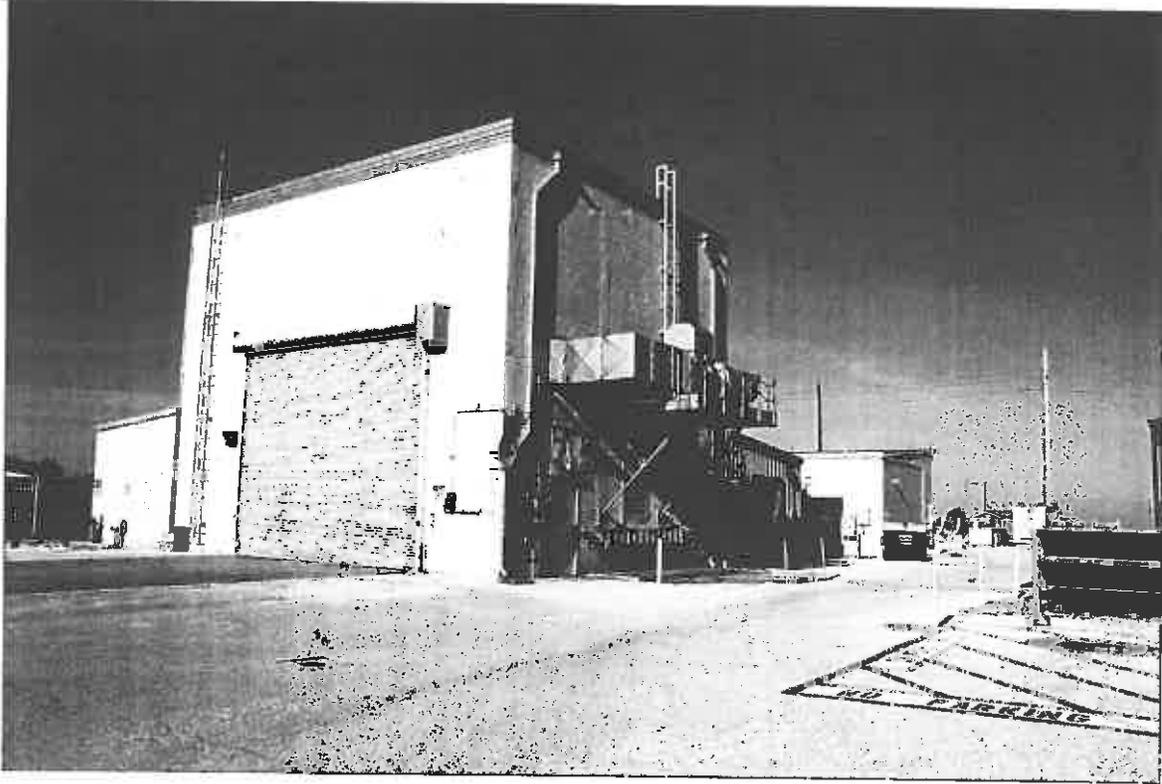


**Historic Structure Form  
Continuation Sheets**



Source: ESRI Resource Data, Imagery Layer

**Historic Structure Form  
Continuation Sheets**



**Robot Wash Facility, Exterior**