

Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Reset Form

Site #8 **BR02006**
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) SRB Paint 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. 66310 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 540503 Northing 3151032
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) Cape Canaveral Air Force Station (CCAFS)

HISTORY

Clear History Values

Construction Year 1984 approximately year listed or earlier year listed or later
Original Use Other From (year): _____ To (year): _____
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): Burns and Roe Builder (last name first): unknown
Ownership History (especially original owner, dates, profession, etc.) NASA is the original and current 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. Metal 2. _____ 3. _____
Roof Type(s) 1. Gable 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 _____	Init. _____		
<input type="checkbox"/> Owner Objection	KEEPER - Determined eligible: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Clear Check Boxes	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 Descriptive Values

Chimney: No. _____ Chimney Material(s): 1. _____ 2. _____
 Structural System(s): 1. Steel skeleton 2. _____ 3. _____
 Foundation Type(s): 1. slab 2. _____
 Foundation Material(s): 1. Poured Concrete Footing 2. _____
 Main Entrance (stylistic details) Single-light, metal pedestrian entrance. See continuation sheet.

Note: you may use the last box in each field to type in an answer that does not appear in the list provided

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

Condition (overall resource condition): excellent good fair deteriorated ruinous

Narrative Description of Resource This is a one-story corrugated metal building with a lightly-pitched gable roof, rectangular footprint. The interior contains staging areas and paint cells for priming and painting SRB frustums, aft skirts, and forward skirts. See continuation sheet

Archaeological Remains Not Applicable Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

FMSF record search (sites/surveys) library research building permits Sanborn maps
 FL State Archives/photo collection city directory occupant/owner interview plat maps
 property appraiser / tax records newspaper files neighbor interview Public Lands Survey (DEP)
 cultural resource survey (CRAS) historic photos interior inspection 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-9 and see continuation sheet.

OPINION OF RESOURCE SIGNIFICANCE

Clear Significance Values

Appears to meet the criteria for National Register listing individually? yes no insufficient information

Appears to meet the criteria for National Register listing as part of a district? yes no insufficient information

Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) The SRB Paint 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.xsc.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-9

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 Solid Rocket Booster (SRB) Paint Building is a one-story metal industrial-type building with a lightly pitched gable roof. There are metal ventilation stacks projecting from the roof. The main portion of the building has a rectangular footprint with a reinforced concrete foundation. Extending out from this main portion are additional rooms and equipment stacks, including a mechanical room, electrical room, and ventilation equipment.

The entire building is clad in corrugated aluminum siding. The north elevation features a pair of metal roll-up doors and a double pedestrian entrance. The west elevation is the building's most complex, containing the following components: a metal "lean-to" on the north end that covers the building's main pedestrian entrance and electrical equipment; a metal platform holding ventilation equipment and compressed air tanks over the projecting electrical room near the middle of the building; and a projecting mechanical room at the south end of the elevation. The east elevation features a non-original two-story projecting section that contains bathrooms on the ground floor and office space above. As on the west elevation, there is a metal platform structure that supports ventilation equipment. The south elevation features a single metal roll-up door and a double pedestrian entrance. There is a louvered metal vent over the pedestrian entrance.

The interior floor plan of the SRB Paint Building is organized according to the workflow as SRB segments go through the paint process. It is roughly divided into four sections: the blast booth/logistics area, the wash area, the spray booths, and the cure area. The blast and spray booth areas stand as separate structures within the overall building. They have their own independent structural systems that are not integrated into the steel framing of the surrounding building. The walnut blast booth use was discontinued with the construction of the Multi-Media Blast Facility. It was converted to use as a mechanical buildup room. Adjacent to the walnut blast booth is a multi-function area in the southeast corner of the building.

The wash area is an open bay between the walnut blast booth and the spray booths with a concrete floor. There are water/detergent and alodine drains embedded in the floor. The cure area on the north end of the building is an open work area with a concrete floor. The ceiling and walls are unfinished and reveal the building's metal structural system. There are two metal roll-up doors on the north wall, and an overhead 15-ton bridge crane that runs over the room from north to south.

EXPLANATION OF EVALUATION:

The SRB Paint Building was added to the Hangar AF Complex in 1984. It was completed to house the application of alodine and paint primer to the SRB frustums, forward skirts, and aft skirts after they had been disassembled and stripped of all paint and Thermal Protection System (TPS). The demated SRB segments entered the SRB Paint Building through the roll-up doors on the south or west elevations of the building. From there they were wheeled into the former walnut blast booth in the southwest corner of the building. Although glass beads are used now, until about 2000 this booth used ground walnut shells as a blast medium to strip the exterior of SRB segments down to bare metal.

**Historic Structure Form
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From the blast booth, the SRB segments were moved into the area labeled "wash area" on the original construction drawings, where they were washed with water and then coated with alodine, an anti-corrosion primer that formed the first layer of protection for the segments.

Once cleaned and coated with alodine, the SRB segments were wheeled into one of the building's two spray booths, labeled on the construction drawings as "spray booth no. 1" and "spray booth no. 2." These booths have square floor plans with concrete floors and drywall walls. They are lit by fluorescent fixtures embedded in the ceiling. Here, the SRB segments receive coats of primer and a top coat of hypalon paint. These layers serve as the base for the later application of TPS.

Once primed and painted, the SRB segments were removed from the spray booth to the northernmost room of the facility called the 'cure area' where the finish dried and hardened. At that point the SRB segment refurbishment at Hangar AF was complete and they awaited shipment to the SRB ARF Manufacturing Building for further refurbishment and assembly

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 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 SRB Paint 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

Burns and Roe. "Solid Rocket Booster Paint Building - Modification to Existing High Pressure Wash Building." Kennedy Space Center, Florida. Construction drawings, 1983.

Interviews

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

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Office of the Director Shuttle - ARES Transition Office. Interview with author.
September 27, 2011.

Price, David. Hangar AF Facility Manager, United Space Alliance. Interview with the
author. September 27, 2011.

Sources

Burns and Roe. "History and Legacy." http://www.roe.com/about_legacy.htm. Accessed
December 20, 2011.

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
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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.

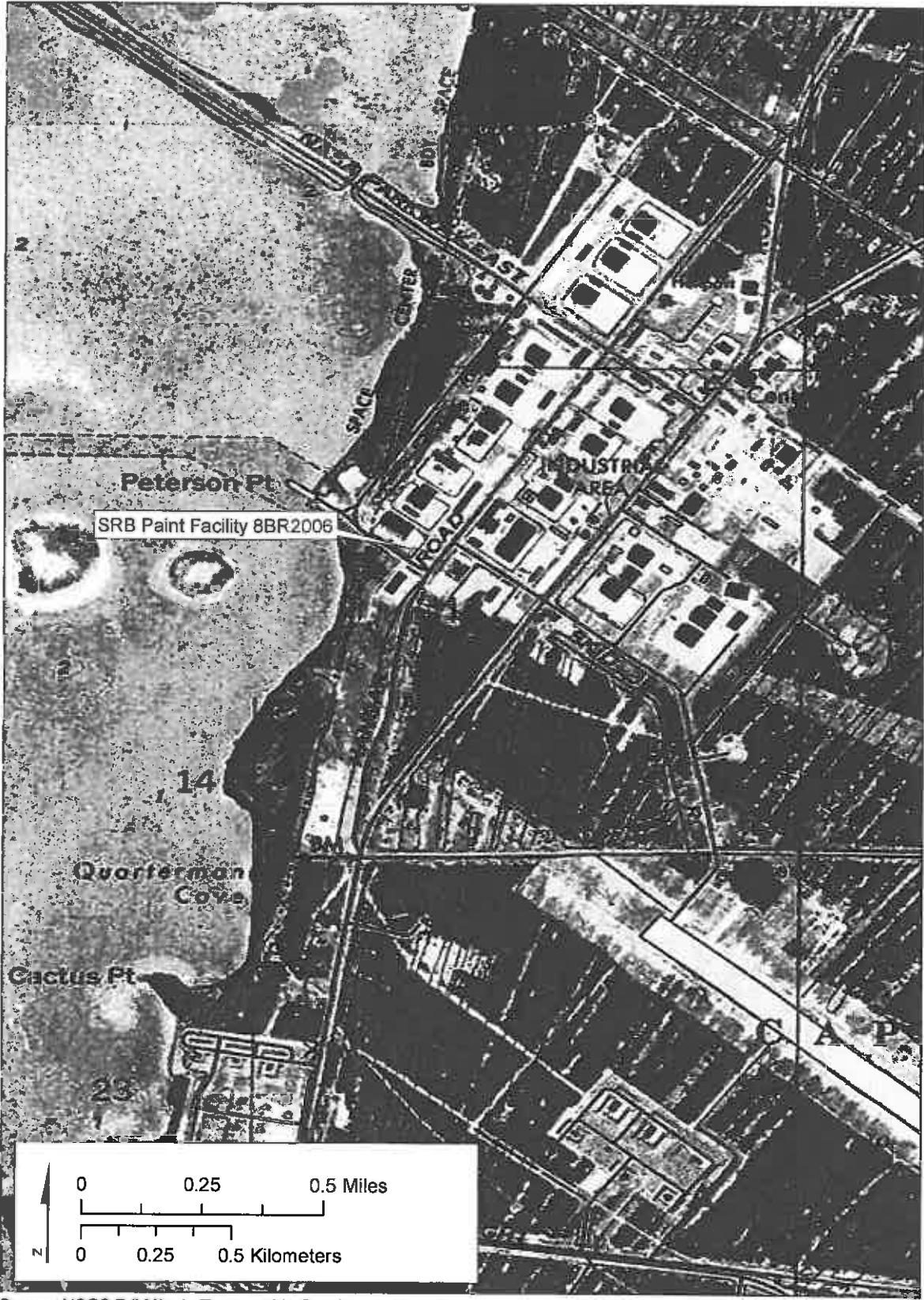
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United Space Alliance

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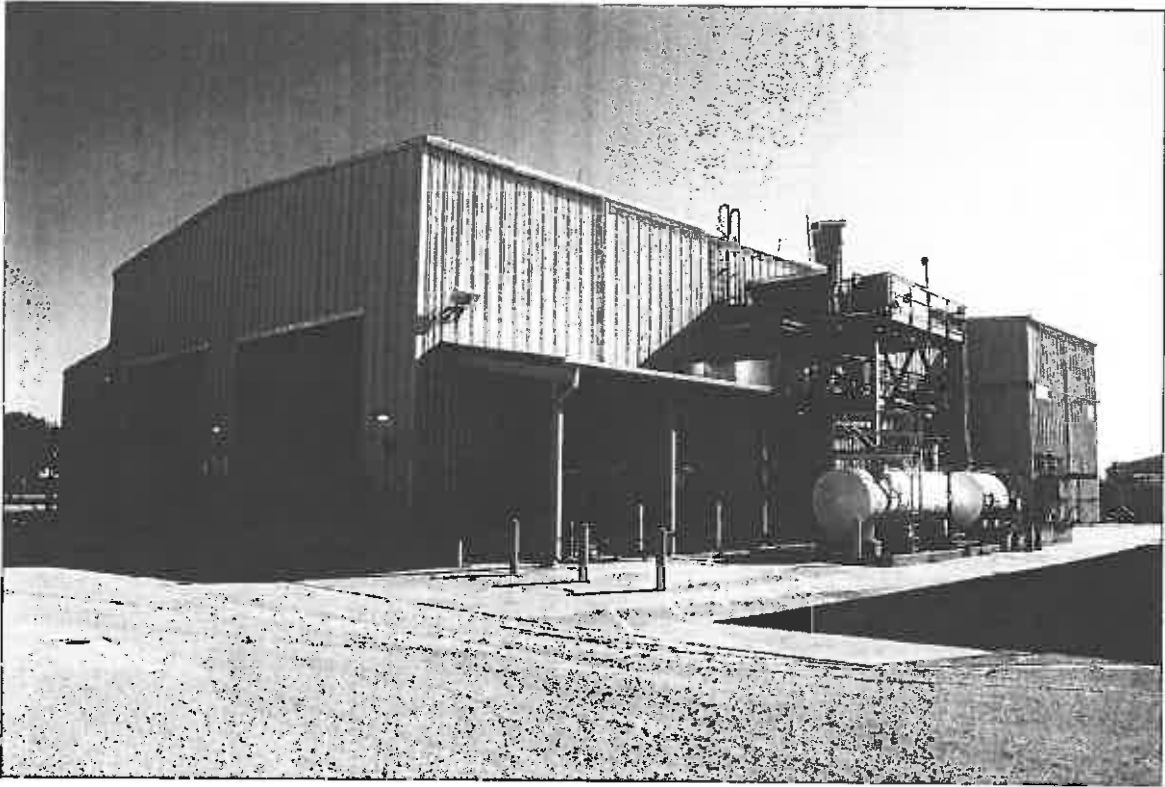
Source: USGS 7.5 Minute Topographic Quadrangle Map, Orsino, FL (1976)

**Historic Structure Form
Continuation Sheets**



Source: ESRI Resource Data, Imagery Layer

**Historic Structure Form
Continuation Sheets**



SRB Paint Facility, Exterior