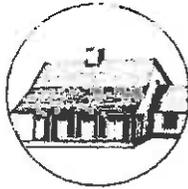


Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Reset Form

Site #8 BR02005
Field Date 5-13-2013
Form Date 7-30-2013
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 Recovery Slip 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 66244 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 # _____ Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 540119 Northing 3151228
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 1979 approximately year listed or earlier year listed or later
Original Use Other From (year): 1979 To (year): 2013
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): Sverdrup & Parcel and Assoc. Builder (last name first): _____
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 No style Exterior Plan T-shaped Number of Stories N/A
Exterior Fabnc(s) 1. Concrete-poured 2. _____ 3. _____
Roof Type(s) 1. _____ 2. _____ 3. _____
Roof Material(s) 1. _____ 2. _____ 3. _____
Roof secondary strucs. (dormers 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 checked="" 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 Description Values

Chimney: No. ___ Chimney Material(s): 1. ___ 2. ___ 3. ___
Structural System(s): 1. Cast-in-place concrete 2. ___ 3. ___
Foundation Type(s): 1. ___ 2. ___
Foundation Material(s): 1. ___ 2. ___
Main Entrance (stylistic details) Not Applicable
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.) Not Applicable

Condition (overall resource condition): [] excellent [x] good [] fair [] deteriorated [] ruinous
Narrative Description of Resource This is a T-shaped concrete slip at the water's edge with an opening 25 ft. wide, 96 ft long, and 12 ft. deep used to receive the SRB's after retrieval. 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-2 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 SRB Recovery Slip 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. Transportation 5.
2. Science 4. Engineering 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 Documentation 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-3

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) Recovery Slip is located on the Banana River at the far western edge of the Hangar AF Complex. The T-shaped slip is used to lift the SRBs out of the water after they are recovered and towed in from sea. It is located immediately north of Hangar AF's original concrete pad, which was used to receive Saturn rocket components.

The slip consists of a concrete bulkhead facing the water and a perpendicular slip opening, into which the SRBs are floated for recovery. Once inside the slip, a 200-ton capacity gantry crane straddles the slip and lifts the SRBs out of the water. The bulkhead is approximately 100 feet long from north to south and is faced with marine rubber fenders. Marine cleats positioned at regular intervals along the top of the bulkhead allow the retrieval ships to tie up once they are in port.

The slip's opening is 25'-0" wide, 96'-0" long, and 12'-0" deep. There are marine rubber fenders at the mouth and terminal end of the slip, but the majority of its length is lined with 4" x 8" timber fenders. The eastern end of the slip features a pair of circular or cylinder-shaped marine rubber fenders. There is a 1'-0" concrete curb extending around the top perimeter of the bulkhead and slip. The ground surface surrounding the slip is concrete pavement. There are capstans (hydraulic machines used to tighten ship lines and cables) mounted on either side of the slip mouth and one at its terminal end.

EXPLANATION OF EVALUATION:

The SRB Recovery Slip was constructed in 1979. The disassembly and refurbishment process began at the SRB Recovery Slip on the west end of the complex, where the SRBs were towed by the *Freedom Star* and *Liberty Star* ships. The SRBs were then floated, one at a time, into the slip. A mobile 200-ton capacity gantry crane then lifted the SRBs out of the slip and placed them onto specially-designed rail cars, or dollies, which moved along tracks embedded in the paved surface of the complex. The dollies resemble flatbed rail cars, each of which is equipped with a series of eight semi-circle "cradles" that hold the SRBs. The cradles all have belts and rollers along their inside surface that allow workers to rotate the SRBs into correct position using control panels mounted on the sides of the dollies.

The two sets of dolly rail tracks extend all the way from the slip area through the wash bays of the First Wash Building and then into Hangar AF where both SRBs were processed at the same time. The SRBs weighed approximately 190,000 pounds at the beginning of the refurbishment process. After the SRBs were removed from the slip, the booster frustums and parachutes were offloaded from the ships, placed on transport trailers, and taken to Hangar AF for processing.

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

**Historic Structure Form
Continuation Sheets**

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 Recovery Slip, 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.

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Photograph negative number 108-KSC-81PC-459. 1983. On file at Kennedy Space Center Archives.

Photograph negative number 116-KSC-383C-1256. 1983. On file at Kennedy Space Center Archives.

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Photograph negative number 108-KSC-379C-1060/1. 1979. On file at Kennedy Space Center Archives.

Interviews

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

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NASA Facts: Solid Rocket Boosters. Kennedy Space Center, Florida. IS-2004-09-014-KSC, Revised 2006.

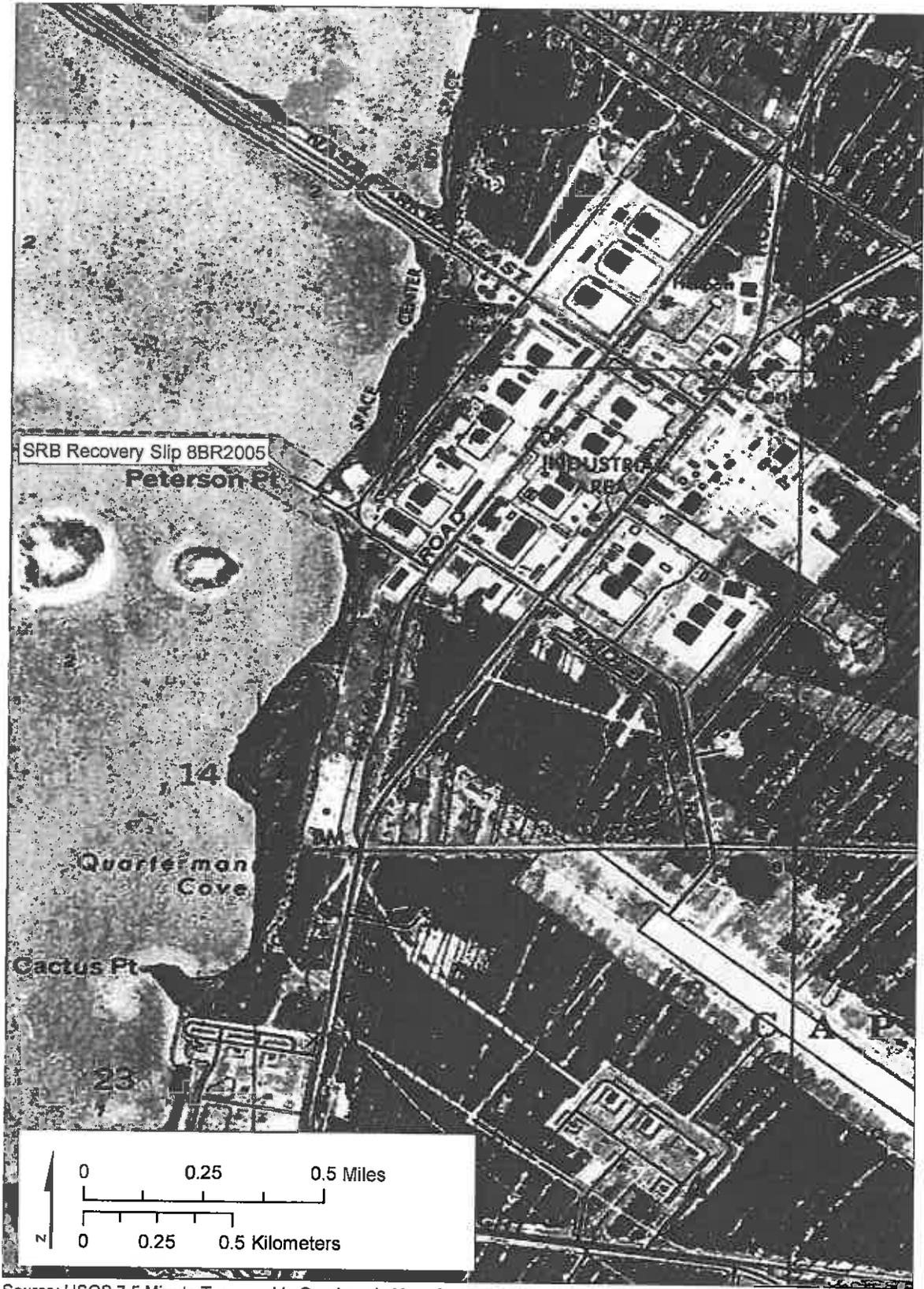
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United Space Alliance

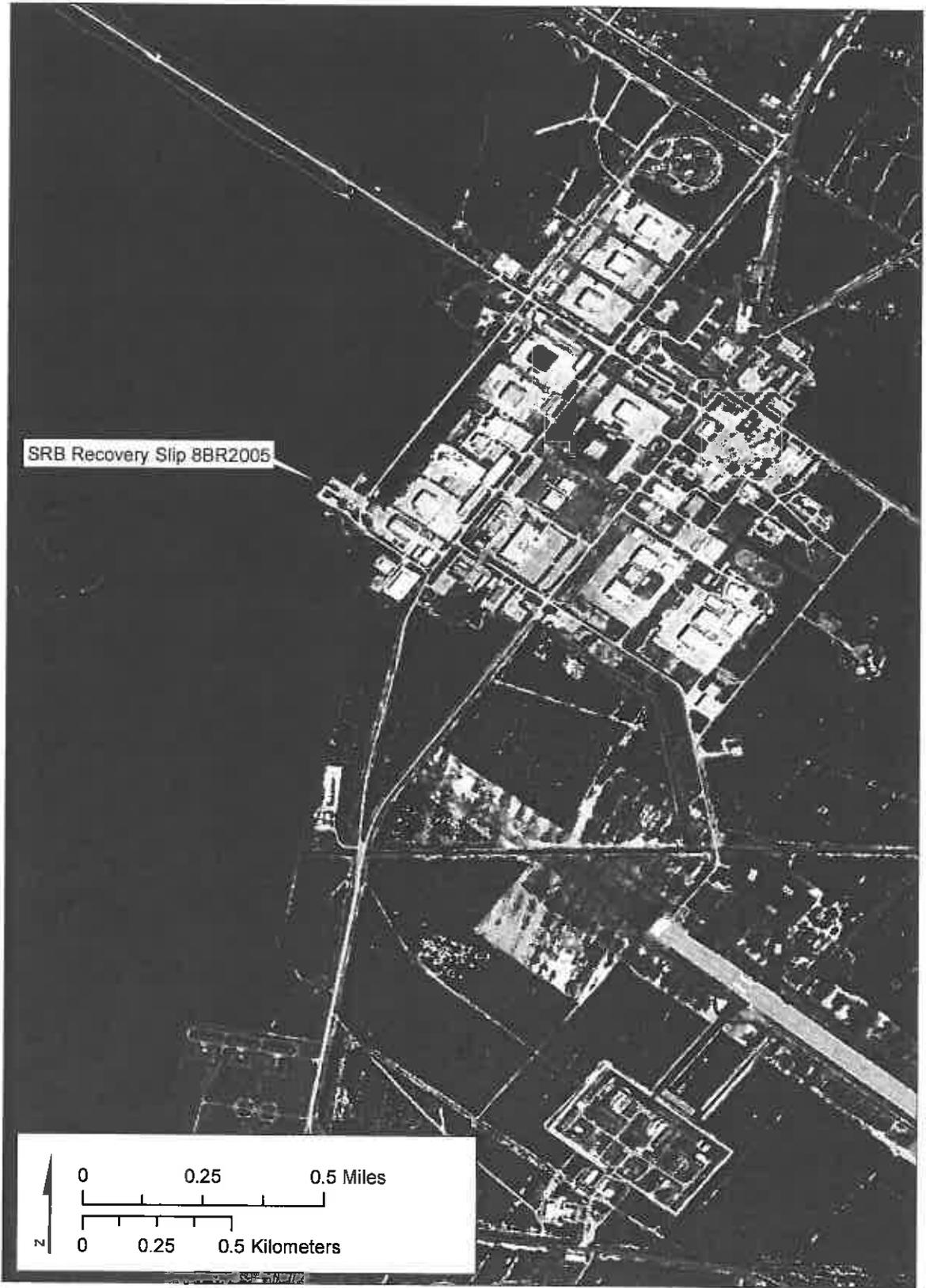
“Marine Operations, Revision J.” (John F. Kennedy Space Center, n.d.), MO-1.

Historic Structure Form
Continuation Sheets



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 Recovery Slip, Exterior