

HISTORICAL STRUCTURE FORM
FLORIDA MASTER SITE FILE
Version 4.0 1/07

Site #8 BR01998
Field Date 10-10-2011
Form Date 2-21-2013
Recorder #

Original
Update

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 ARF Manufacturing Building
Survey Project Name SRB ARF Manufacturing Building HAER
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

Address: Schwartz Road
Cross Streets (nearest / between) Contractors Road
USGS 7.5 Map Name ORSINO USGS Date Plat or Other Map
City / Town (within 3 miles) Kennedy Space Center In City Limits? yes no unknown County Brevard
Township 22S Range 37E Section 19 1/4 section: NW SW SE NE Irregular-name:
Tax Parcel # N/A Landgrant
Subdivision Name N/A Block Lot
UTM Coordinates: Zone 16 17 Easting 533781 Northing 3159229
Other Coordinates: X: Y: Coordinate System & Datum
Name of Public Tract (e.g., park) Not Applicable

HISTORY

Construction Year: 1986 approximately year listed or earlier year listed or later
Original Use Other From (year): 1986 To (year): 2011
Current Use Other From (year): To (year):
Other Use SRB Assembly and Refurbishment 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): Reynolds, Smith and Hills Builder (last name first): Booster Production Co.
Ownership History (especially original owner, dates, profession, etc.) National Aeronautics and Space Administration

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

DESCRIPTION

Style No style Exterior Plan Irregular Number of Stories 3
Exterior Fabric(s) 1. Metal 2. Concrete block 3.
Roof Type(s) 1. Flat 2. 3.
Roof Material(s) 1. Built-up 2. 3.
Roof secondary strucs. (dormers etc.) 1. 2.
Windows (types, materials, etc.) Double-light, horizontal sliding windows with tinted tempered glass.
Distinguishing Architectural Features (exterior or interior ornaments) Not Applicable

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) There is an air chiller building adjacent to the north end of the ARF Manufacturing Building.

DHR USE ONLY OFFICIAL EVALUATION DHR USE ONLY
NR List Date SHPO - Appears to meet criteria for NR listing: yes no insufficient info Date Init.
KEEPER - Determined eligible: yes no Date
Owner Objection NR Criteria for Evaluation: a b c d (see National Register Bulletin 15, p. 2)

## DESCRIPTION (continued)

Chimney: No. 0 Chimney Material(s): 1. \_\_\_\_\_ 2. \_\_\_\_\_  
 Structural System(s): 1. Steel skeleton 2. Concrete block 3. \_\_\_\_\_  
 Foundation Type(s): 1. Continuous 2. \_\_\_\_\_  
 Foundation Material(s): 1. Poured Concrete Footing 2. \_\_\_\_\_  
 Main Entrance (stylistic details) There is a double pedestrian entrance with metal doors on the north elevation.  
 Porch Descriptions (types, locations, roof types, etc.) Not Applicable

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

Narrative Description of Resource Steel and concrete block manufacturing building containing 168,014 square feet, which includes a high bay flanked on the north and south by three-story wings. Designed to manufacture, assemble, and refurbish Space Shuttle solid rocket booster components.

Archaeological Remains \_\_\_\_\_  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) NASA, John F. Kennedy Space Center Archives

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) Solid Rocket Booster Assembly and Refurbishment Facility Manufacturing Building HAER

## OPINION OF RESOURCE SIGNIFICANCE

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 ARF is individually NRHP eligible under Criterion A in the context of the U.S. Space Shuttle Program in the area of Space Exploration. Because it has achieved significance in the last 50 years Criterion G applies.

Area(s) of Historical Significance (see *National Register Bulletin 15*, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)

1. Science 3. Engineering 5. \_\_\_\_\_  
 2. Transportation 4. Other 6. \_\_\_\_\_

## DOCUMENTATION

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 Park Service, Region One  
 Document description HAER Photography and Narrative Context File or accession #'s HAER NO. FL-8-11-R  
 2) Document type Photographs Maintaining organization National Aeronautics and Space Administration  
 Document description Parachute Refurbishment Facility Manufacturing Building File or accession #'s http://mediaarchive.ksc.nasa.gov/search

## RECORDER INFORMATION

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

<b>CONTINUATION SHEET</b>
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## DESCRIPTION OF RESOURCE:

The Solid Rocket Booster (SRB) Assembly and Refurbishment Facility (ARF) Manufacturing Building is an industrial processing facility designed to manufacture, assemble, and refurbish the non-propellant components of the Space Shuttle SRBs, including the forward and aft skirts, frustums, and nose caps. The steel and concrete block building has a total floor space of 168,014 square feet, which includes a high bay work area flanked on the north and south by three-story wings. The building contains a wide variety of process areas and office space, including:

- a 60-foot tall high bay with two 15-ton capacity bridge cranes;
- an Ordnance Build Up room;
- three TVC Build Up rooms;
- a 9,260-square foot TVC conditioned clean area;
- two TPS robotic paint cells with air-powered floor turntables;
- two TPS cure cells;
- an over 10,000-square foot TPS high bay conditioned finish area;
- a 5,800-square foot Electronics and Instrumentation (E&I) conditioned electronics lab area;
- a machine shop for fabricating metal parts;
- and office and conference room space.

The building is also equipped with a variety of mechanical and utility systems, including chilled water, 480 volt/60 hertz electrical service, potable water, compressed air, gaseous nitrogen, gaseous helium, and uninterruptable power supplies.

## EXPLANATION OF EVALUATION:

The SRB and ARF Manufacturing Building played an essential role in the re-usability of the SRBs as it housed the refurbishment and assembly activities for the inert or non-propellant SRB elements, including the forward and aft skirts, frustums, and nose caps.

## CONTINUATION SHEET

The ARF Manufacturing Building is considered eligible for listing in the NRHP in the context of the U.S. Space Shuttle Program (SSP) (1969-2011) under Criterion A in the area of Space Exploration. Because it has achieved exceptional significance within the past 50 years, Criterion Consideration G also applies.

## BIBLIOGRAPHIC REFERENCES:

Curie, Michael, Kyle Herring, and Candrea Thomas

- 2011 "NASA's Proud Space Shuttle Program Ends With Atlantis Landing," NASA press release. Available at:  
[http://www.nasa.gov/home/hqnews/2011/jul/HQ\\_11-240\\_Atlantis\\_Lands.html](http://www.nasa.gov/home/hqnews/2011/jul/HQ_11-240_Atlantis_Lands.html). Accessed on March 8, 2012.

Deming, Joan, and Patricia Slovinac

- 2008 *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.

Kennedy Space Center

- 2010 *Resource Encyclopedia* KHB-1863, Edition 1 (December 2010): 239. On file at the Kennedy Space Center Library Archives.

Reynolds, Smith and Hills

- 1985 "Solid Rocket Booster Assembly and Refurbishment Facility." Kennedy Space Center, Florida. Construction drawings.

National Aeronautics and Space Administration (NASA)

- 1986 Presidential Commission. *Report of the Presidential Commission on the Space Shuttle Challenger Accident, June 6, 1986*. Washington, D.C. Steven J. Dick, NASA Chief Historian, Steve Garber, NASA History Web Curator. National Aeronautics and Space Administration, NASA History Office. Accessed on August 1, 2010 at <http://history.nasa.gov/rogersrep/511cover.htm>.

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

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

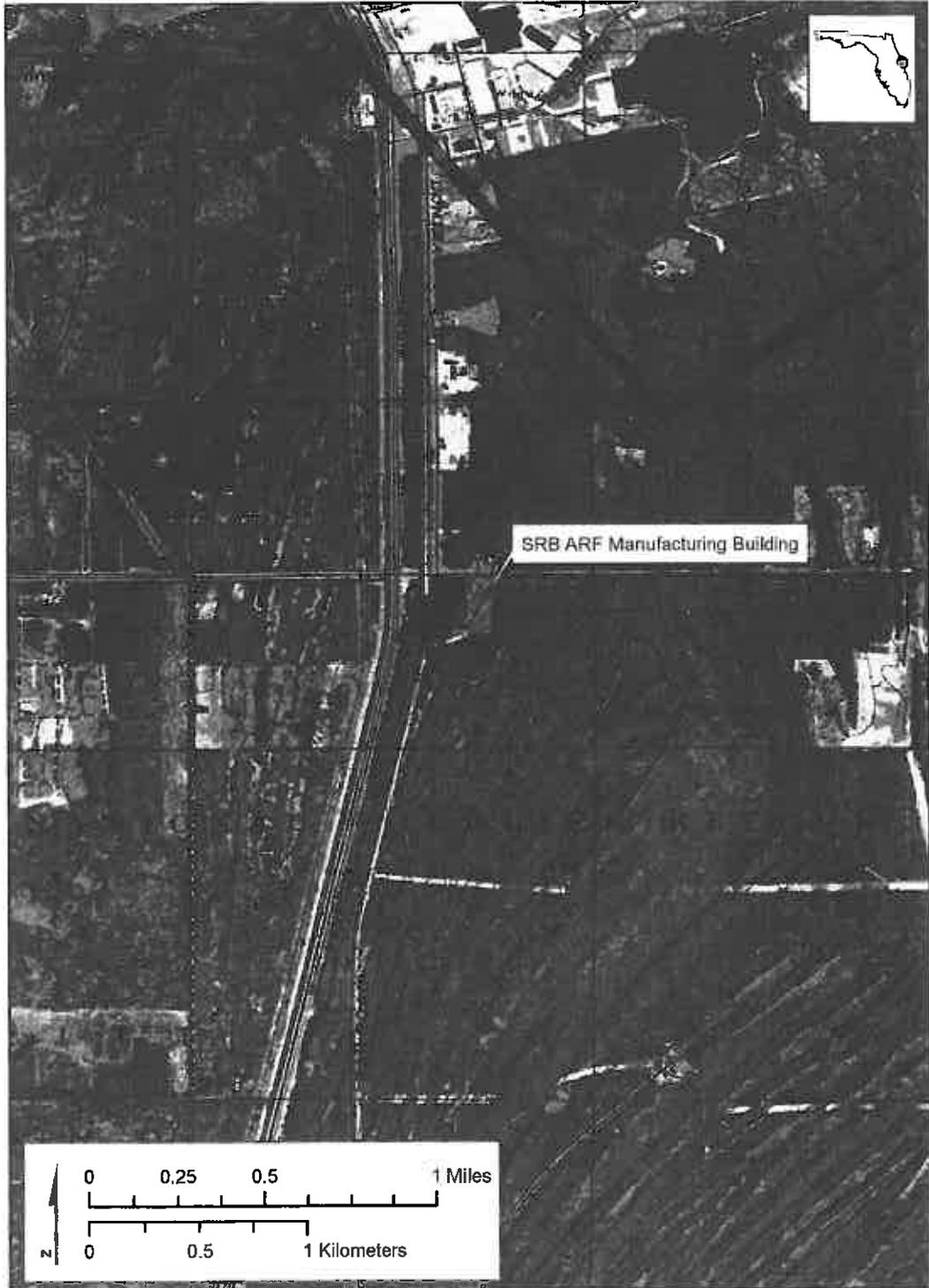
United Space Alliance

n.d. "Marine Operations, Revision J." MO-1. Kennedy Space Center, Florida.

n.d. "Materials and Processes Revision J." Kennedy Space Center, Florida.

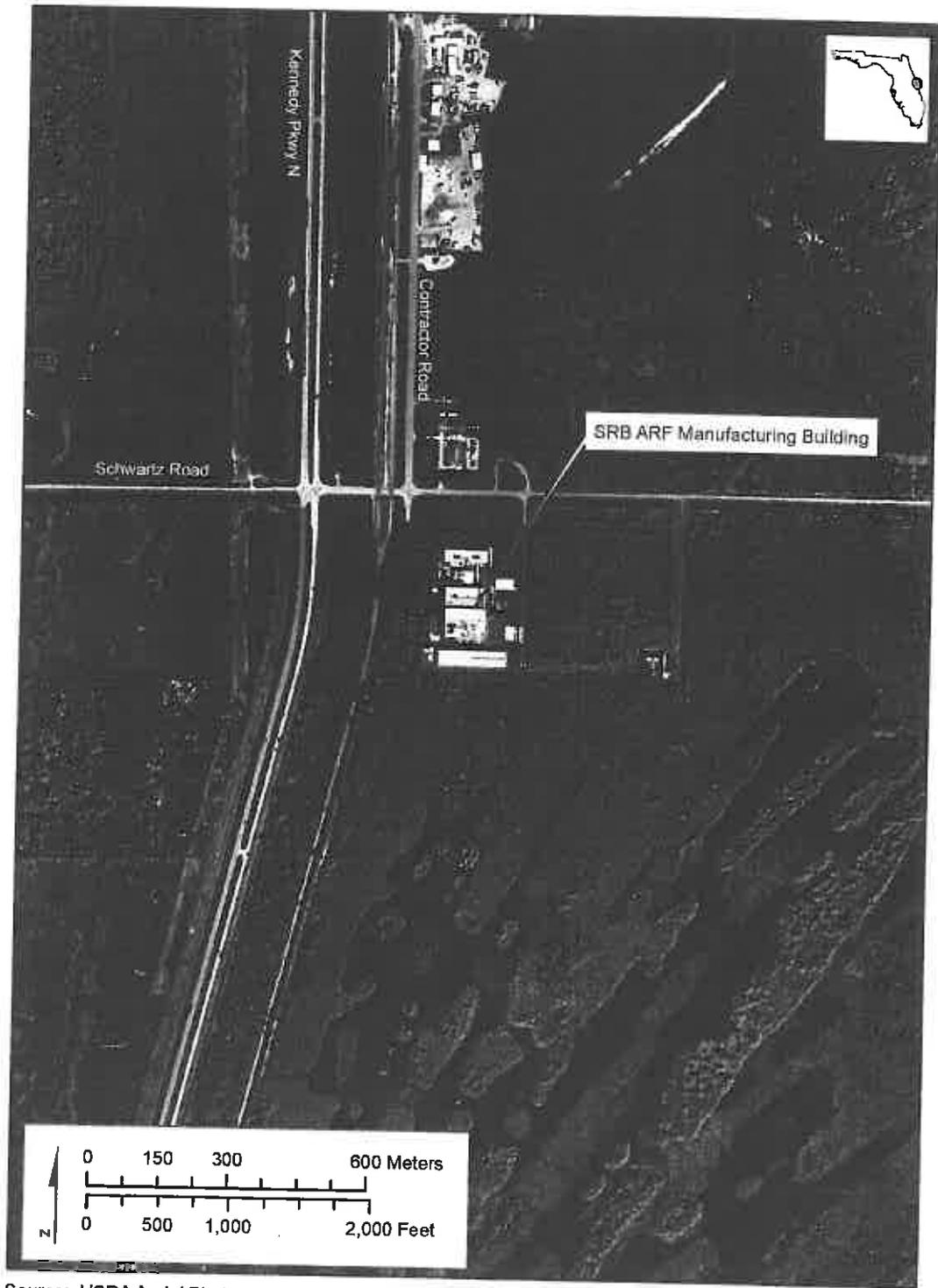
n.d. "Structures Assembly Buildup Operations, Revision J." Kennedy Space Center, Florida.

USGS MAP



Source: USGS Orsino, Florida Quadrangle

LOCATION MAP



Source: USDA Aerial Photograph