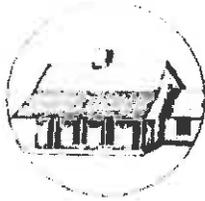


Original
 Update



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **BR02014**
Field Date 10-10-2011
Form Date 2-21-2013
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) Parachute Refurbishment Facility Multiple Listing (DHR only) _____
Survey Project Name Parachute Refurbishment Facility HAER 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

Street Number Bldg M7-657 Direction _____ Street Name Avenue E Street Type _____ Suffix Direction _____
Address: _____
Cross Streets (nearest / between) 3rd Street
USGS 7.5 Map Name ORSINO USGS Date 1976 Plat or Other Map _____
City / Town (within 3 miles) Kennedy Space Center In City Limits? yes no unknown County Brevard
Township 23S Range 37E Section 5 ¼ section: NW SW SE NE Irregular-name: _____
Tax Parcel # N/A Landgrant _____
Subdivision Name N/A Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 534809 Northing 3154812
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) Not Applicable

HISTORY

Construction Year: 1964 approximately year listed or earlier year listed or later
Original Use Other From (year): 1964 To (year): 2011
Current Use Other From (year): _____ To (year): _____
Other Use Parachute processing for NASA programs From (year): _____ To (year): _____
Moves: yes no unknown Date: _____ Original address _____
Alterations: yes no unknown Date: 1-1-1968 Nature Interior modifications
Additions: yes no unknown Date: 1-1-1978 Nature Additions for Space Shuttle program
Architect (last name first): Wellman-Lord Engineering Builder (last name first): unknown
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 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. (dormers etc.) 1. _____ 2. _____
Windows (types, materials, etc.) Not Applicable

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 auxiliary storage warehouse to the west of the building that was constructed in 1996.

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	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, p. 2</i>)				

DESCRIPTION (continued)

Chimney: No. 0 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) There is a double pedestrian door on the south elevation.

Porch Descriptions (types, locations, roof types, etc.) Not Applicable

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

Narrative Description of Resource The PRF is a one-story, concrete-block manufacturing building with irregular footprint and painted white exterior. It contains 35,758 square feet, including a 2,100 sq. ft. high bay and a 2,025 sq. ft. central office bay (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) NASA, John F. Kennedy Space Center Archives

Bibliographic References (give FMSF manuscript # if relevant, use continuation sheet if needed) (see Continuation Sheet)

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) Eligible to the NRHP under Criterion A in the context of U.S. Space Shuttle Program. The building received, cleaned, and refurbished the pilot, drogue, and main parachutes of the Shuttle orbiter and Solid Rocket Boosters (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. 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. PL-8-11-Q
 2) Document type Photographs Maintaining organization National Aeronautics and Space Administration
 Document description Parachute Refurbishment Facility 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.

CONTINUATION SHEET

DESCRIPTION OF RESOURCE:

The Parachute Refurbishment Facility (PRF) was built in stages to receive, wash, inspect, repair, and pack the parachutes used on the Space Shuttle SRBs. It is located at the southwest corner of 3rd Street and Avenue E in the Kennedy Space Center (KSC) Industrial Area. The building is bordered on the north and east by road shoulders and drainage ditches, and on the south and west by undeveloped wetlands. There is a 5,100-square foot Ground Storage Equipment (GSE) building on the west side of the PRF.

The PRF is a one-story, concrete-block manufacturing building with an irregular footprint and painted white exterior. It contains 35,758 square feet of workspace, including a 2,100 square-foot high bay and 2,025 square foot central office bay. There is an overhead monorail system throughout the building to transport the parachutes from one area to another.

The building has six main sections, including: the central office bay; the high bay; the east parachute refurbishment area (Aisles 1-3); west refurbishment area (Aisle 4); the materials testing area; and the defoul deck. The entire building, except the defoul deck, has a concrete block construction with flat, built-up roofs. The defoul deck is a rectangular, covered, outdoor space that stretches across the north end of the building and beyond its west side to create an L-shaped footprint. It has a reinforced cast concrete structure and built-up roof.

Transportation to the building is accomplished via a pair of entrance drives off of Avenue E. There are parking areas on the east, south, and west sides of the building. There are security gates that restrict access from the parking areas to the defoul deck loading area and the west (rear) side of the building.

EXPLANATION OF EVALUATION:

The Parachute Refurbishment Facility (PRF) was built in 1964 to process parachutes for Project Gemini. In 1968, the building was modified into the NASA News Center to house journalists and public relations activities. The building was modified and expanded in 1978 for the U.S. Space Shuttle Program (SSP) to receive, clean, inspect, store, and refurbish the pilot, drogue, and main parachutes used on the Solid Rocket Boosters (SRBs) and shuttle orbiter drag parachute. The PRF also refurbished thermal blankets and tested the materials used to repair the parachutes.

The PRF is 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 SSP (1969-2011) under Criterion A in the area of Space Exploration and Transportation. Because it achieved significance within the past 50 years, Criterion Consideration G also applies. The PRF played an essential role in the re-usability of the Space Shuttle orbiter and SRBs as a Parachute Manufacturing Facility.

CONTINUATION SHEET

BIBLIOGRAPHIC REFERENCES:

Burns and Roe Industrial Services Corporation.

- 1985 "Parachute Refurbishment Facility Modifications." Kennedy Space Center, Florida. Construction drawings.

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.

Harm, Gene.

- 1984 "Reducing Water Usage in Parachute Refurbishment" *Spaceport News*. April 24, 1998, 4.

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- 1967 "Technical Facilities Catalog." NHB 8800.5 (II). Kennedy Space Center, Florida. On file at the Kennedy Space Center Library Archives.
- 1968 "NASA News Center (Mods to Parachute Bldg.)." Kennedy Space Center, Florida. On file at the Kennedy Space Center Library Archives.
- 1974 "Technical Facilities Catalog, Volume II," NHB 8800.5 A (II). Kennedy Space Center, Florida. On file at the Kennedy Space Center Library Archives.
- 1968 "NASA News Center (Mods to Parachute Bldg.)" Kennedy Space Center, Florida: On file at the KSC Library Archives.
- 2006 *NASA Facts: Solid Rocket Boosters and Post-Launch Processing*. FS-2004-07-012-KSC. Kennedy Space Center, Florida.
- 2010 "Kennedy Space Center: Resource Encyclopedia." Kennedy Space Center, Florida.
- n.d. *NASA Facts: The Press Site at KSC*. Kennedy Space Center. Available at <http://www-pao.ksc.nasa.gov/kscpao/nasafact/pdf/PressSite06.pdf>. Accessed February 24, 2012.
- 1988 "National Space Transportation System Reference: Volume 1, Systems and Facilities." On file at the Kennedy Space Center Library Archives.

CONTINUATION SHEET

- 1982 "SRB Complex Work Begins on Site North of VAB," *Spaceport News*, Volume 21, No. 17, August 19, 1982.
- 2001 "Inside the Parachute Refurbishment Facility," *Spaceport News* (March 2, 2001), 4.
- 1978 "Parachute Facility Ready for Shuttle," *Spaceport News* (November 10, 1978), 3.
- 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/51cover.htm>.

Sanders and Thomas, Inc.

- 1979 "Shuttle Parachute Facility Modifications." Kennedy Space Center, Florida. Construction drawings.

United Space Alliance.

- n.d. "Marine Operations, Revision J." MO-1. Kennedy Space Center, Florida.
- "Materials and Processes Revision J." Kennedy Space Center, Florida.
- "Parachute Operations, Revision J." Kennedy Space Center, Florida.
- "Structures Assembly Buildup Operations, Revision J." Kennedy Space Center, Florida.

United Technologies/United Space Boosters (USBI).

- n.d. "SRB Recovery Subsystem Reference Trajectory Sequence." No publication information, no date, no page number. On file at the Kennedy Space Center Library Archives.

Wellman-Lord Engineering, Inc.

- 1965 "MSC Parachute and Paraglider Building, Phase I." Kennedy Space Center, Florida. Construction drawings.

CONTINUATION SHEET

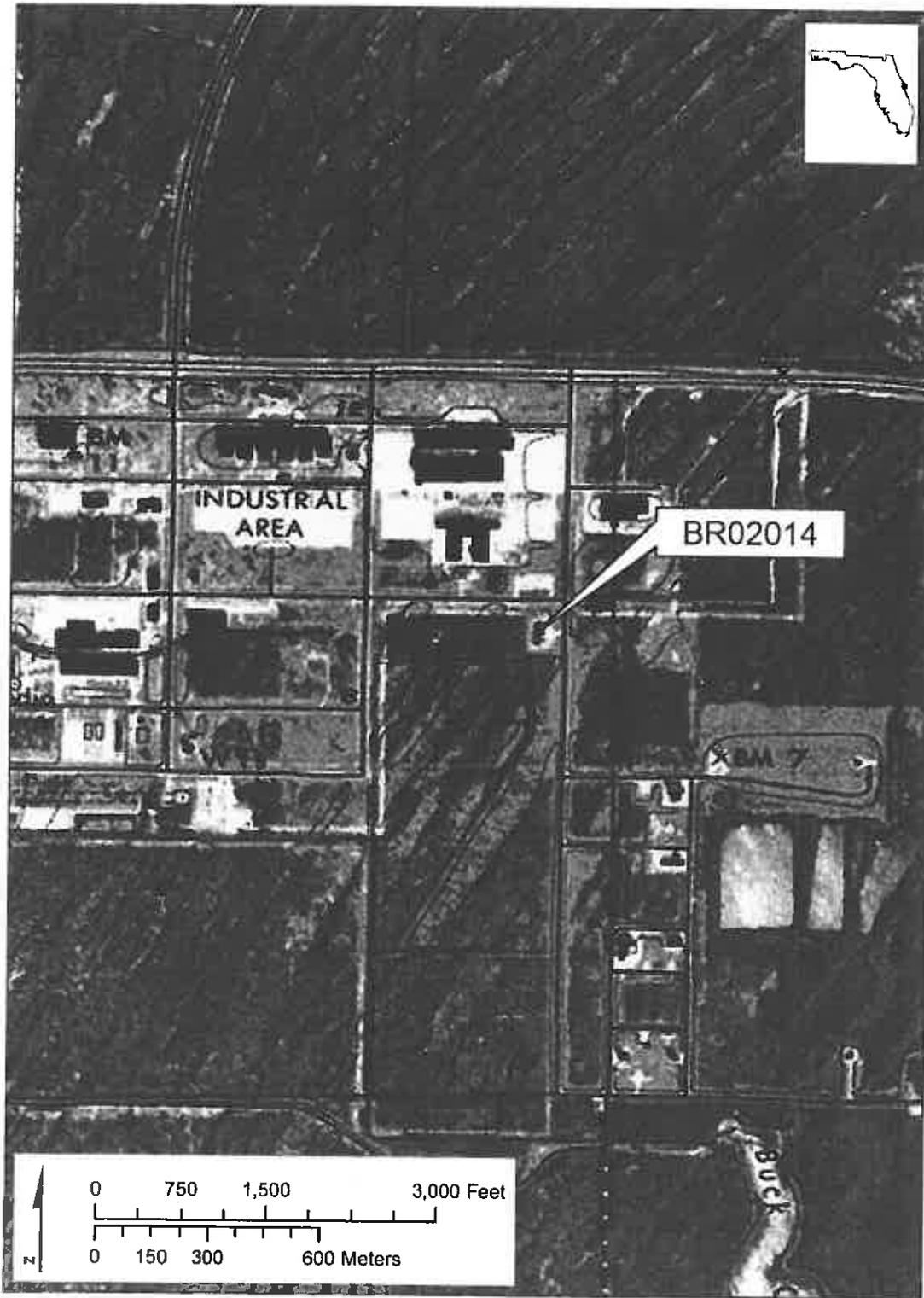
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Site # 8BR02014

Young, Dick.

1977 "Florida Firm Awarded Contract for Shuttle Parachute Facility," *NASA News* (October 26, 1977), KSC Release No. 163-77.

USGS MAP

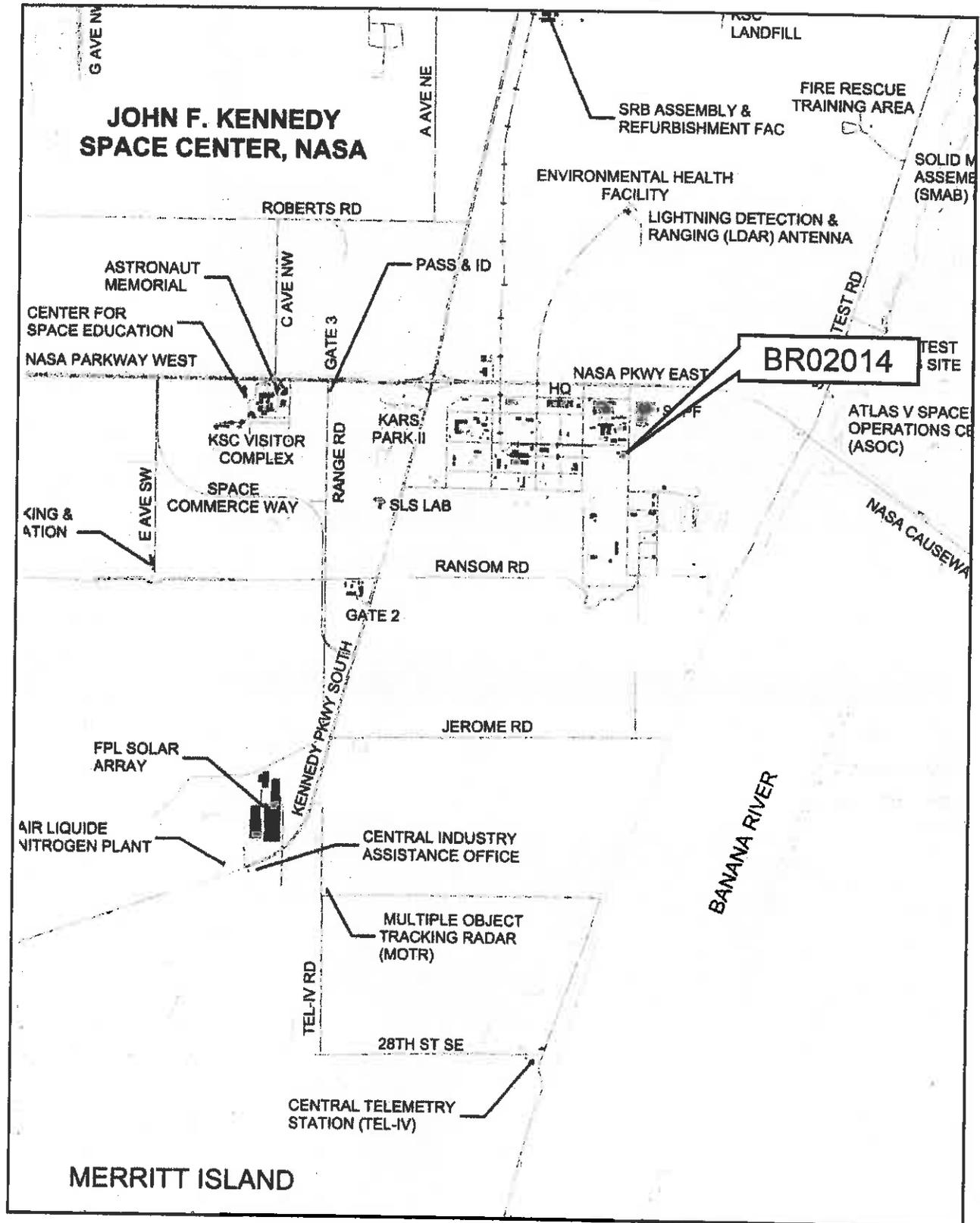


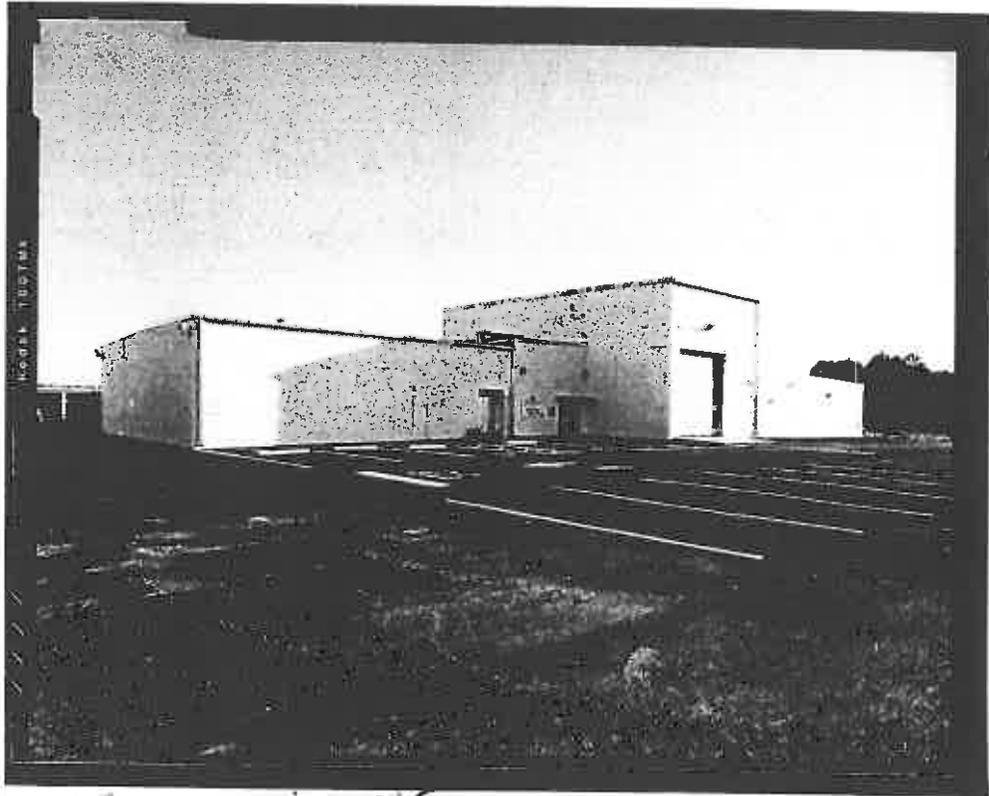
Source: USGS Orisino, Florida Quadrangle, 1976

HISTORICAL STRUCTURE FORM

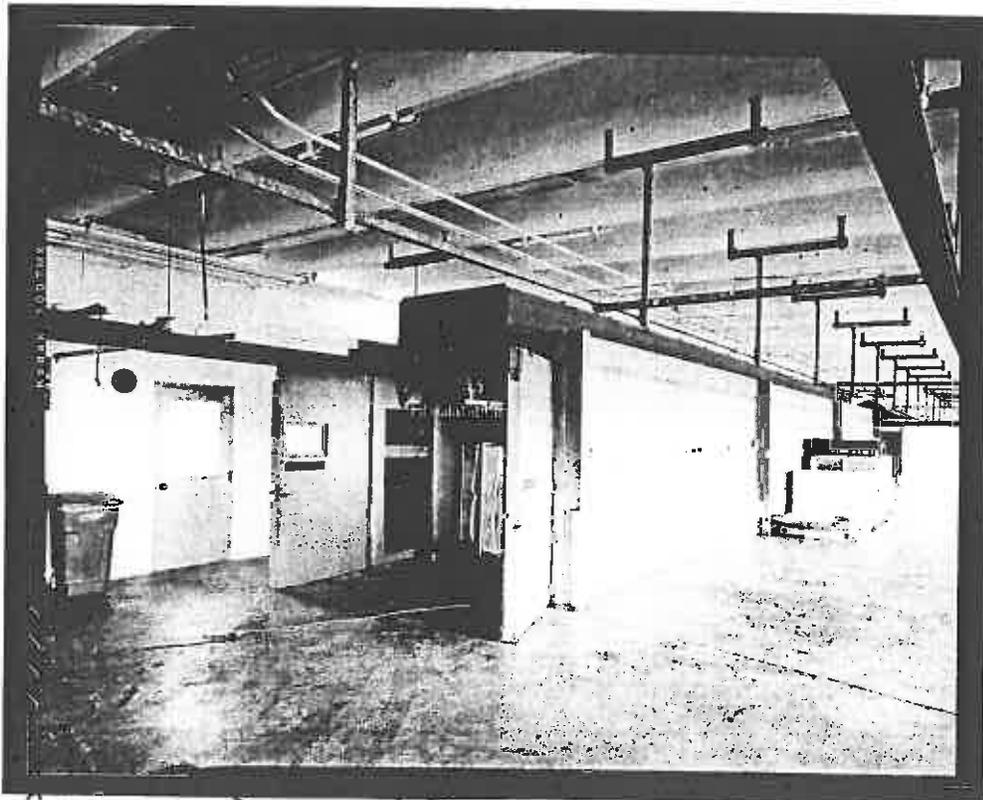
Site # 8BR02014

LOCATION MAP

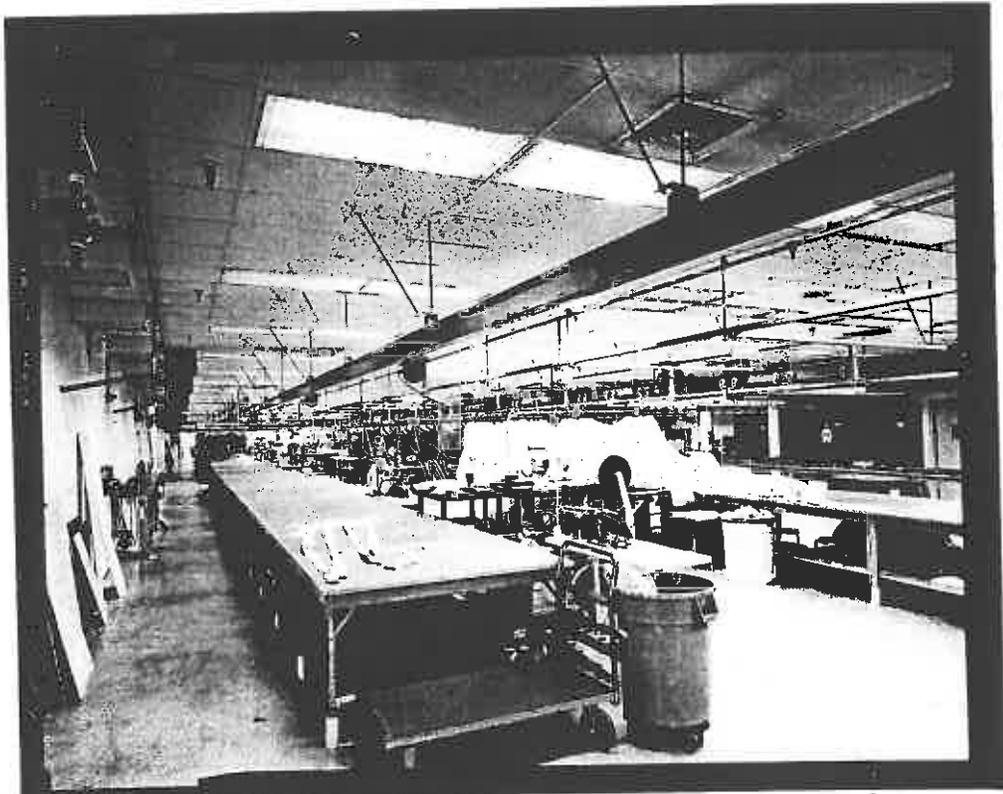




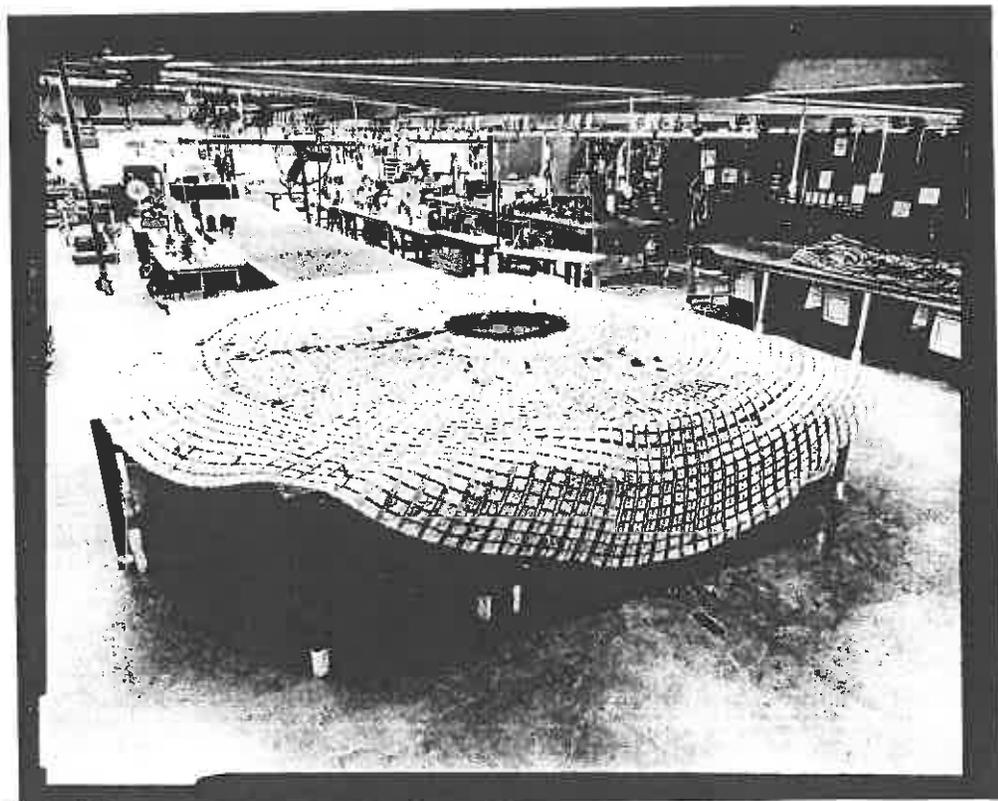
SW Corner , View NE



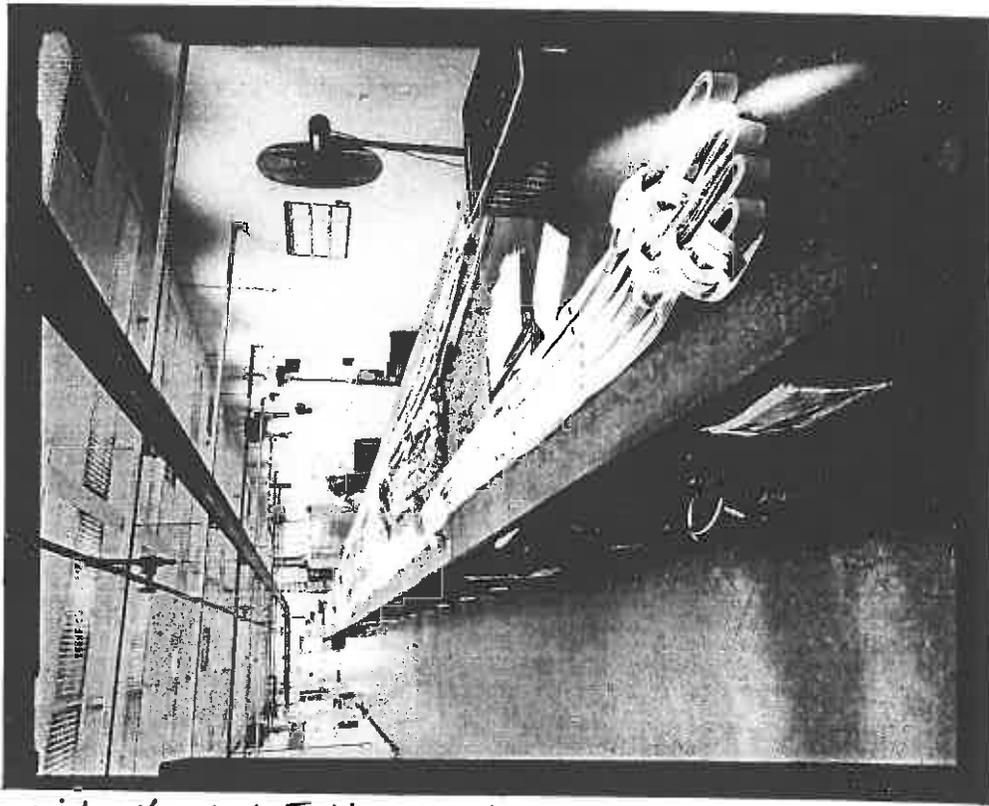
Parachute Dryer w/ Doors Open
View SW



Parachute Refurbishment : Repacking Aisles 1-3
View SW



Damaged Parachute in Aisle 2
View SW



Aisle 4 Work Table , View SW