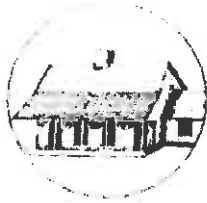


Original  
 Update



# 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 _____	<input type="checkbox"/> Owner Objection	SHPO – Appears to meet criteria for NR listing: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> insufficient info	Date _____	Init. _____
		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. Concrete block 2. Slab
Structural System(s): 1. Concrete block 2. Slab 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 [x] 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)

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

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

National Aeronautics and Space Administration (NASA)

- 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/511cover.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

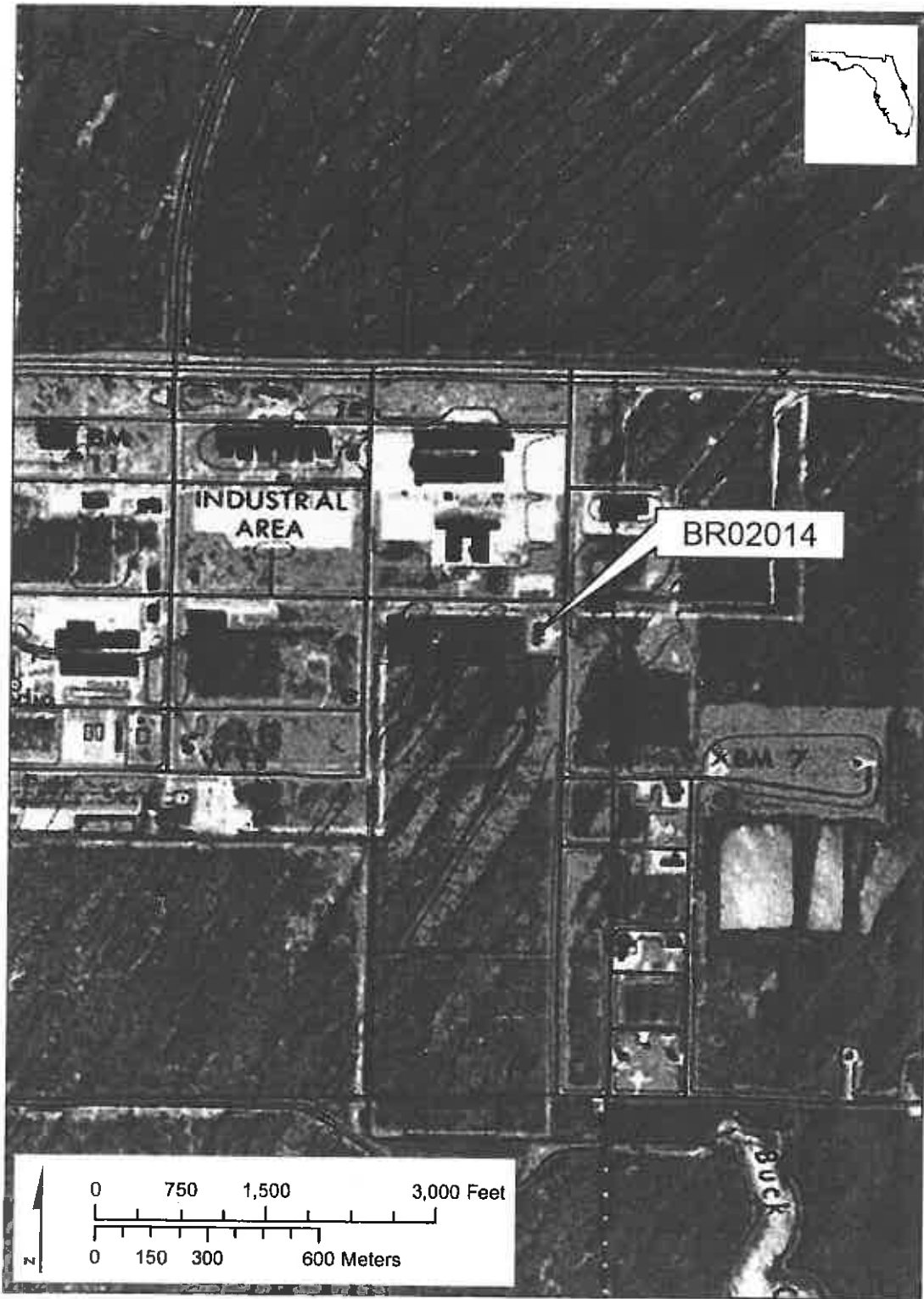
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Site # 8BR02014

Young, Dick.

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

USGS MAP

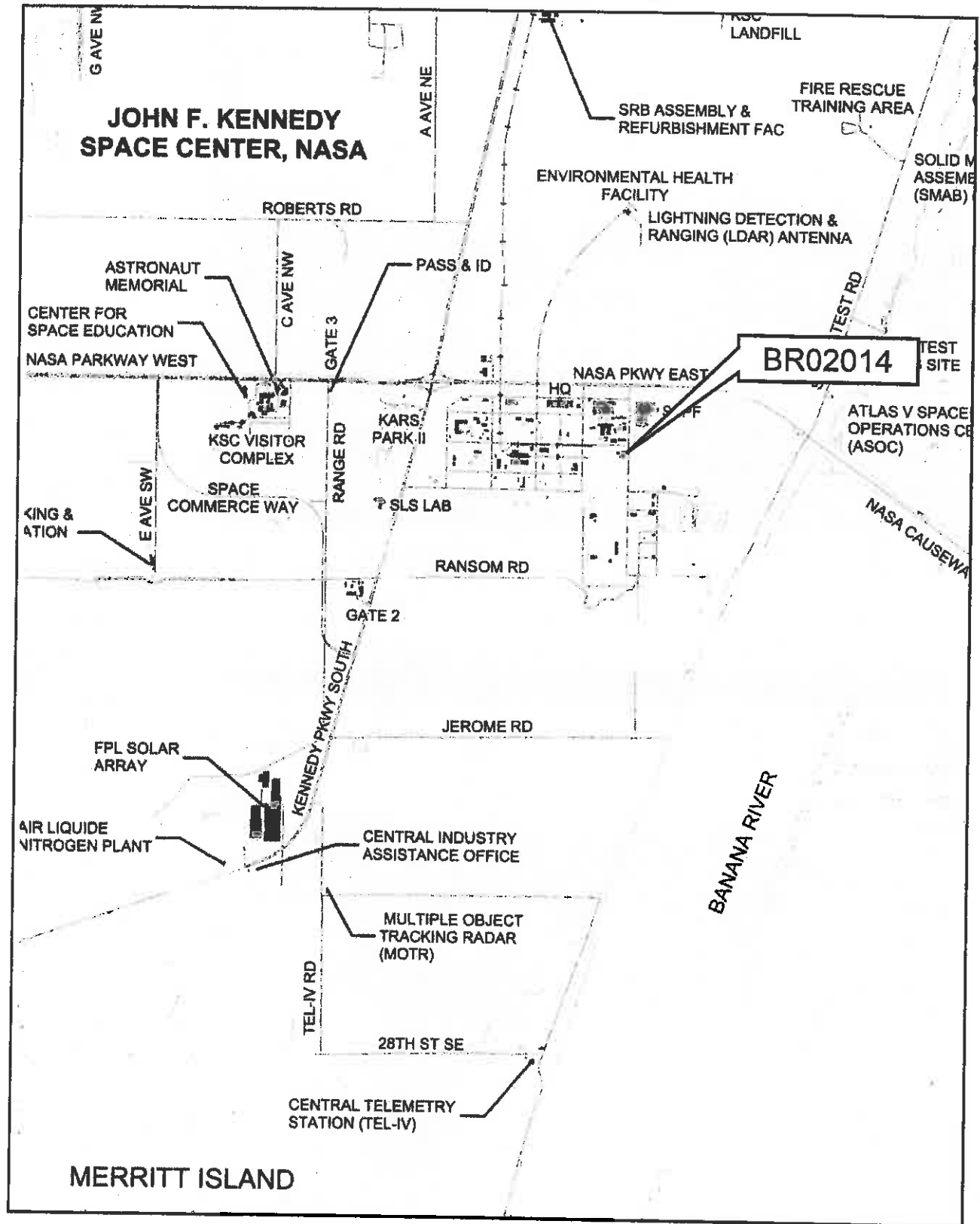


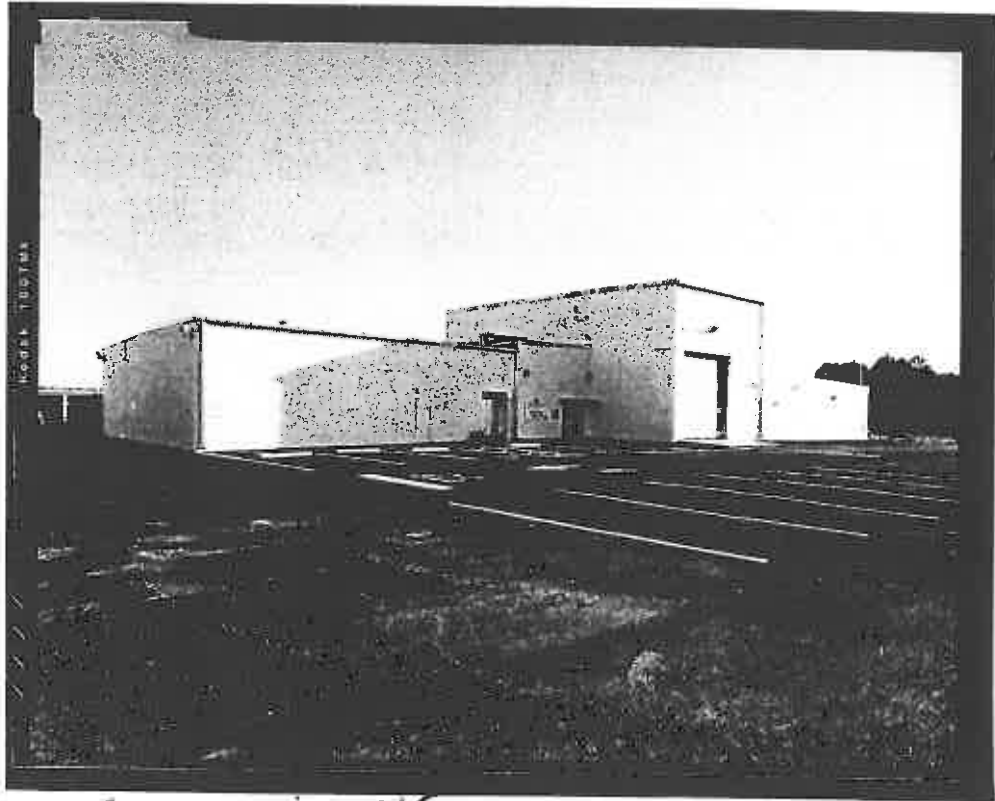
Source: USGS Orisino, Florida Quadrangle, 1976

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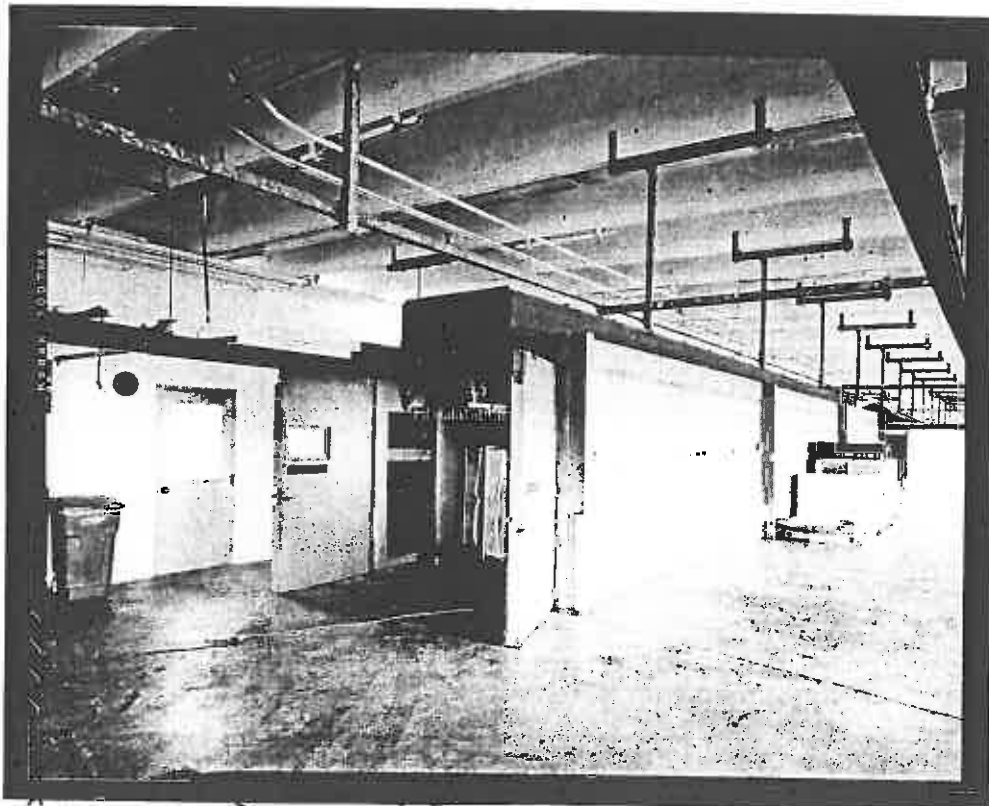
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## LOCATION MAP

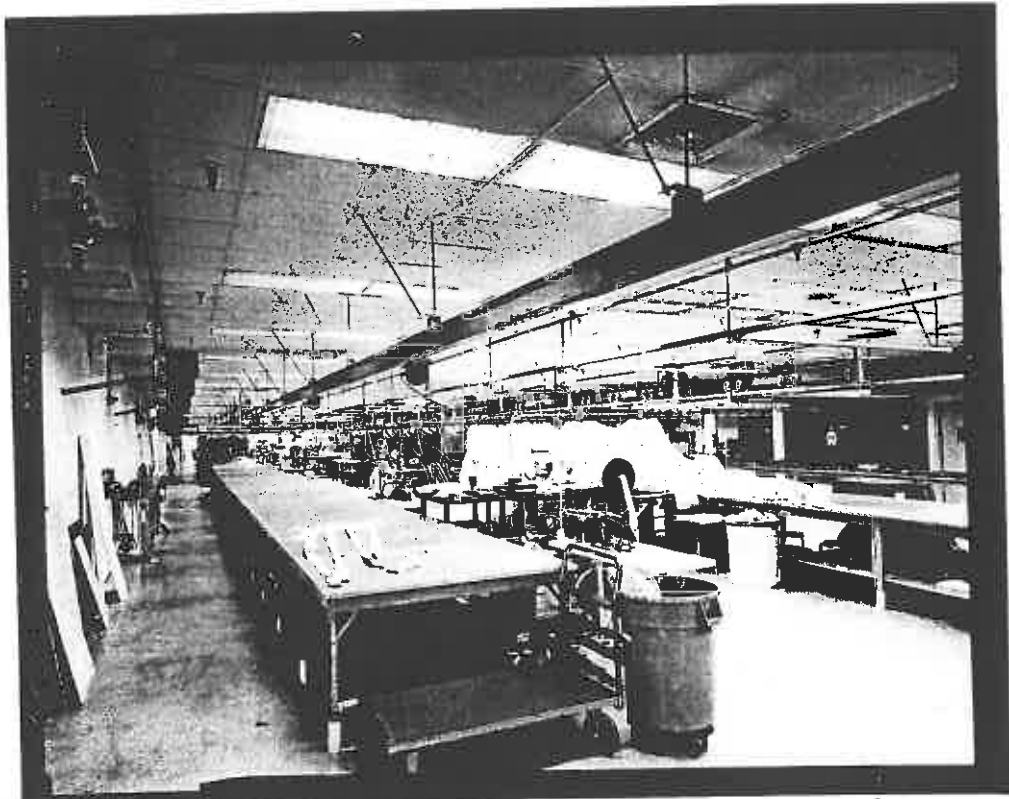




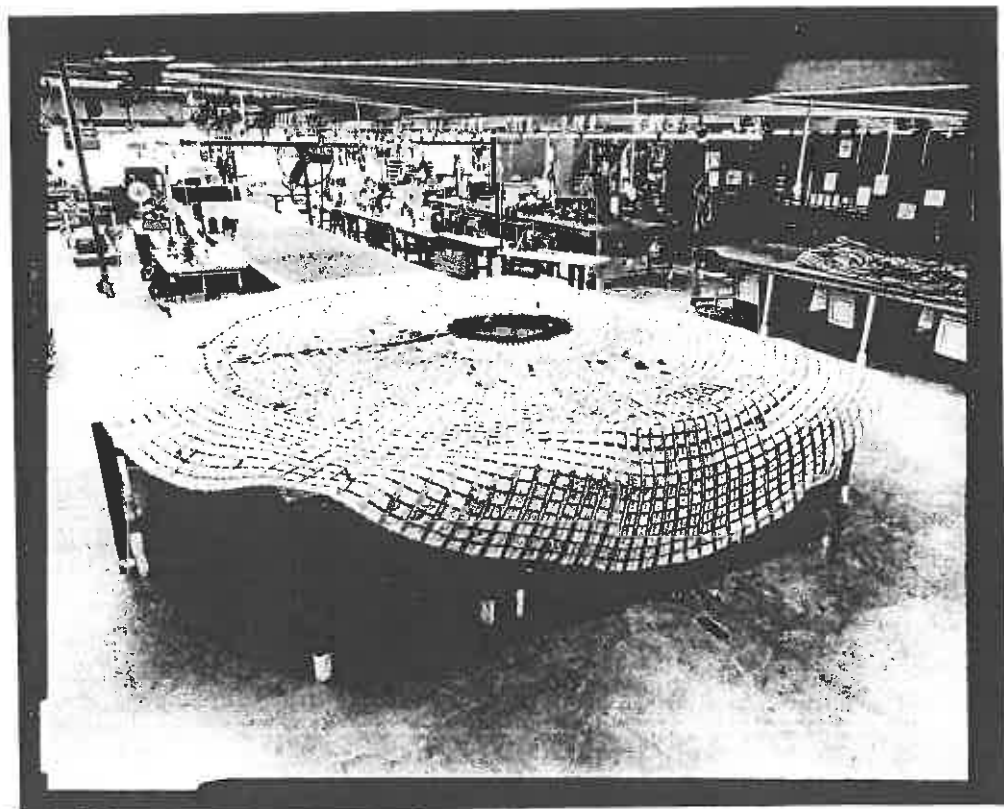
SW corner, view NE



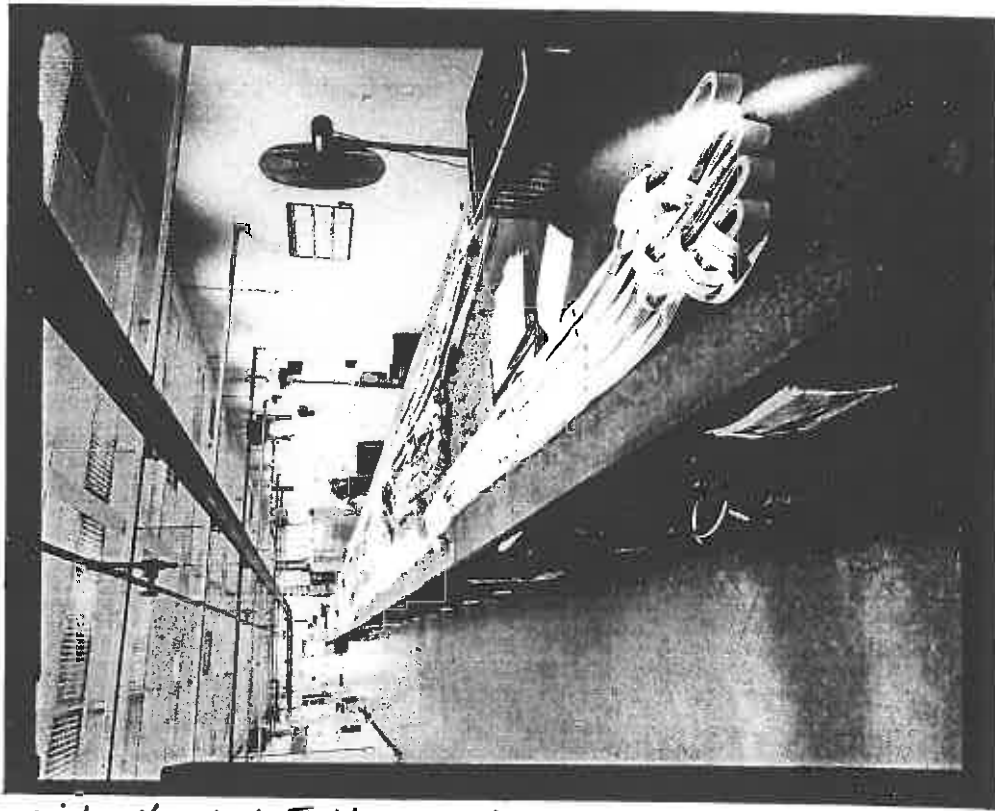
Parachute Dryer w/ Doors open  
View SW



*Parachute Refurbishment ; Repacking Aisles 1-3  
View SW*



*Damaged Parachute in Aisle 2  
View SW*



*Aisle 4 Work Table , View SW*