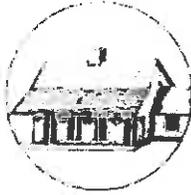


Original  
 Update



# HISTORICAL STRUCTURE FORM

## FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 BR01992  
Field Date 2-23-2010  
Form Date 1-4-2012  
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) Orbiter Processing Facility High Bay 3 Multiple Listing (DHR only) \_\_\_\_\_  
Survey Project Name HAER Documentation: OPF High Bay 3 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 K6-696 Direction \_\_\_\_\_ Street Name VAB Area Street Type \_\_\_\_\_ Suffix Direction \_\_\_\_\_  
Address: \_\_\_\_\_  
Cross Streets (nearest / between) \_\_\_\_\_  
USGS 7.5 Map Name ORSINO USGS Date 1976 Plat or Other Map \_\_\_\_\_  
City / Town (within 3 miles) Titusville In City Limits?  yes  no  unknown County Brevard  
Township 22S Range 37E Section 07 1/4 section:  NW  SW  SE  NE Irregular-name: \_\_\_\_\_  
Tax Parcel # N/A Landgrant \_\_\_\_\_  
Subdivision Name \_\_\_\_\_ Block \_\_\_\_\_ Lot \_\_\_\_\_  
UTM Coordinates: Zone  16  17 Easting 533689 Northing 3162095  
Other Coordinates: X: \_\_\_\_\_ Y: \_\_\_\_\_ Coordinate System & Datum \_\_\_\_\_  
Name of Public Tract (e.g., park) \_\_\_\_\_

### HISTORY

Construction Year 1987  approximately  year listed or earlier  year listed or later  
Original Use Other From (year): \_\_\_\_\_ To (year): \_\_\_\_\_  
Current Use Other From (year): \_\_\_\_\_ To (year): \_\_\_\_\_  
Other Use \_\_\_\_\_ From (year): \_\_\_\_\_ To (year): \_\_\_\_\_  
Moves:  yes  no  unknown Date: \_\_\_\_\_ Original address \_\_\_\_\_  
Alterations:  yes  no  unknown Date: \_\_\_\_\_ Nature see attached  
Additions:  yes  no  unknown Date: \_\_\_\_\_ Nature see attached  
Architect (last name first): Burns and Roe Ind Svcs Corp Builder (last name first): Ivey Construction Company  
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 Industrial Vernacular Exterior Plan Irregular Number of Stories 1  
Exterior Fabric(s) 1. Metal 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.) 1-light, fixed

Distinguishing Architectural Features (exterior or interior ornaments) not applicable

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) not applicable

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</i> 15, p. 2)				

DESCRIPTION (continued)

Chimney: No. \_\_\_ Chimney Material(s): 1. \_\_\_ 2. \_\_\_
Structural System(s): 1. Skeleton-steel 2. \_\_\_ 3. \_\_\_
Foundation Type(s): 1. Slab 2. \_\_\_
Foundation Material(s): 1. Poured Concrete Footing 2. \_\_\_
Main Entrance (stylistic details) double 1-light metal swing door, south elevation

Porch Descriptions (types, locations, roof types, etc.) not applicable

Condition (overall resource condition): [ ] excellent [ ] good [ ] fair [ ] deteriorated [ ] ruinous
Narrative Description of Resource see attached

Archaeological Remains [ ] 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) [ ] other methods (describe)
[x] library research [ ] city directory [x] newspaper files [x] historic photos
[ ] building permits [x] occupant/owner interview [ ] neighbor interview [x] interior inspection
[ ] Sanborn maps [ ] plat maps [ ] Public Lands Survey (DEP) [ ] HABS/HAER record search

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

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? [x] yes [ ] no [ ] insufficient information
Explanation of Evaluation (required, whether significant or not; use separate sheet if needed) see attached

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. Transportation 4. 6.

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents

- 1) Document type All materials at one location Maintaining organization Archaeological Consultants Inc
Document description File or accession #'s P9026M
2) Document type Maintaining organization
Document description File or accession #'s

RECORDER INFORMATION

Recorder Name Slovinac, Trish Affiliation Archaeological Consultants Inc
Recorder Contact Information 8110 Blaikie Court, St A, Sarasota, FL 34240/941-379-6206/ACIFloridaAcomcast.net
(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

**Narrative Description:**

OPF-3 is an Industrial Vernacular style facility, which measures approximately 520 feet (ft) along the east-west axis, 250 ft along the north-south axis, and 95 ft in height, overall. It is composed of a central, two-story low bay, flanked on the west by a high bay (High Bay 3), or hangar, and on the east by the SSMEPF, completed in 1998. As originally constructed, the low bay measured roughly 222 ft in length (north-south), 52 ft in width (east-west), and 30 ft in height. It was built of a structural steel skeleton with insulated metal siding, and has a poured concrete slab foundation and a flat, built-up roof. In 1990, the low bay was renovated and enlarged, extending the plan 150 ft to the east and 25 ft to the south. The southern 25 ft and northern 52 ft became one-story areas, while the remainder of the low bay continued as a two-story structure. This addition used the same building materials as the original facility. High Bay 3 measures approximately 197 ft in length, 150 ft in width, and 95 ft in height. It has a steel skeleton, clad with insulated metal sheeting, a poured concrete slab foundation, and a flat, built-up roof. The SSMEPF to the east has a cross-shaped plan with approximate overall dimensions of 190 ft in length, 169 ft in width, and 50 ft in height. It is built of concrete block faced with pre-finished metal sandwich panels, and has a poured concrete slab foundation and a flat, built-up roof.

Within High Bay 3 is a structure of stationary and moveable platforms; the orbiter was positioned within the hangar so that its nose was at the north end. The low bay, inclusive of the addition, contained the service and support rooms for High Bay 3. The SSMEPF was divided into four main areas, excluding the mechanical and electrical equipment rooms. These include the Ground Support Equipment Maintenance and Storage area, the Horizontal Processing Area, the High Bay, and the Vertical Processing Area.

**Explanation of Evaluation:**

The Orbiter Processing Facility, High Bay No. 3 (OPF-3) is considered eligible for listing in the National Register of Historic Places (NRHP) in the context of the U.S. Space Shuttle Program (1969-2011) under Criterion A in the area of Space Exploration and under Criterion C in the area of Engineering. Because it has achieved significance within the past 50 years, Criteria Consideration G applies. The period of significance for OPF-3 is from 1987, the date of its completed construction, through 2011, the designated end of the Space Shuttle program. OPF-3 is significant as one of only two structures designed and built exclusively for orbiter pre-flight and post-landing processing. Included in this facility is the Space Shuttle Main Engine Processing Facility (SSMEPF), which is a one of a kind facility, designed specifically for the Space Shuttle's main engines. Under Criterion C, OPF-3 contains a large High Bay, with a platform system specifically designed around the shape of the orbiter. This system contains stationary platforms set at various levels, which provide access to the major areas of the orbiter. Each level is also fitted with moveable platforms for access to specific components. In addition, a clean room environment is provided around the payload bay, when the doors are open. Learning from the first OPF (High Bay Nos. 1 and 2), OPF High Bay No. 3 was designed for the easier flow of the ground support equipment to support Shuttle processing. OPF-3 also houses the SSMEPF, which was designed specifically to process the Space Shuttle's main engines. Like the orbiter high bay, it contains platforms that fit around the engine, providing access to the main components. This uniquely designed equipment, rather than the building's exterior shell, provides the basis for the OPF-3's eligibility under Criterion C.

In addition to its individual eligibility, the OPF-3 is considered a contributing resource to the Orbiter Processing Historic District (8BR1990).

## CONTINUATION SHEET

**Bibliographic References:**

Archaeological Consultants, Inc. (ACI). *Survey and Evaluation of the Historic Facilities within the Industrial, Launch Complex 39 (LC-39), Vehicle Assembly Building (VAB), and Shuttle Landing Facility (SLF) Areas of the John F. Kennedy Space Center (KSC), Brevard County, Florida, with a Reassessment of the Existing National Register of Historic Places LC-39 Site*, NASA KSC, 1998.

Jenkins, Dennis R. *Space Shuttle, The History of the National Space Transportation System. The First 100 Missions*. Hong Kong: World Print Ltd., 2001.

National Aeronautics and Space Administration. *America's Spaceport: John F. Kennedy Space Center*, n.d.a

National Aeronautics and Space Administration. *Countdown! NASA Space Shuttles and Facilities*. IS-2005-06-017-KSC, n.d.b

National Aeronautics and Space Administration. *Technical Facilities Catalog* [NHB 8800.5 (II)], March 1967.

National Aeronautics and Space Administration. *Technical Facilities Catalog* [NHB 8800.5A (II)], October 1974.

National Aeronautics and Space Administration. *Space Shuttle Launch Support Equipment Data Handbook*, Engineering Development Directorate, KSC-DD-186 Revision A, March 30, 1993.

National Aeronautics and Space Administration. *Facts: John F. Kennedy Space Center*, 1994.

National Aeronautics and Space Administration. *Basic Information Guide/KSC GP-14-2*, KSC Master Planning, October 2000.

*Spaceport News*

"Another Orbiter Processing Facility Planned at KSC." February 23, 1990:4.

"Ground broken for Shuttle processing building." Volume 35, No. 24, December 6, 1996:4.

"KSC dedicates third Orbiter Processing Facility." Volume 30, No. 18, September 13, 1991: 1.

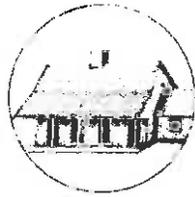
*Websites*

"Boeing Completes First Fully Assembled Shuttle Main Engine at Kennedy Space Center." KSC Release: 61-04. <http://www.nasa.gov/centers/kennedy/news/releases/2004/61-04.html>.

"Facility Detail, OPF High Bay 3"  
[http://sgs.ksc.nasa.gov/sgs/apps/mis/fic/display.cfm?fac\\_id=215](http://sgs.ksc.nasa.gov/sgs/apps/mis/fic/display.cfm?fac_id=215).

"Orbiter Processing Facility." <http://science.ksc.nasa.gov/facilities/opf.html>

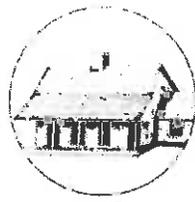
"Space Shuttle Main Engine Processing Facility," NASA Facts On Line, FS-2005-09-030-KSC.  
<http://www-pao.ksc.nasa.gov/kscpao/nasafact/pdf/SSMEPF-06.pdf>.



# Historic Structure Form

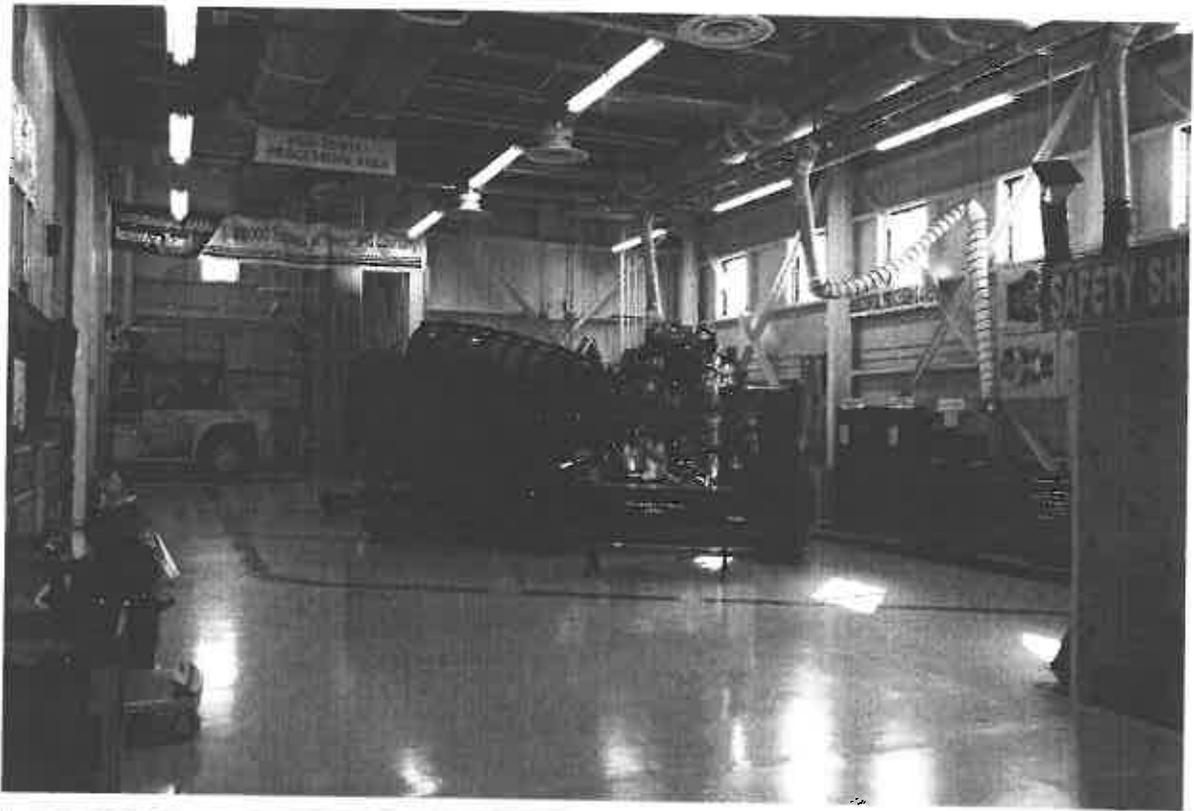
PHOTOGRAPHS

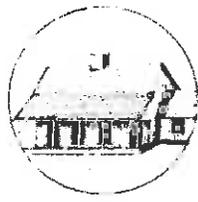




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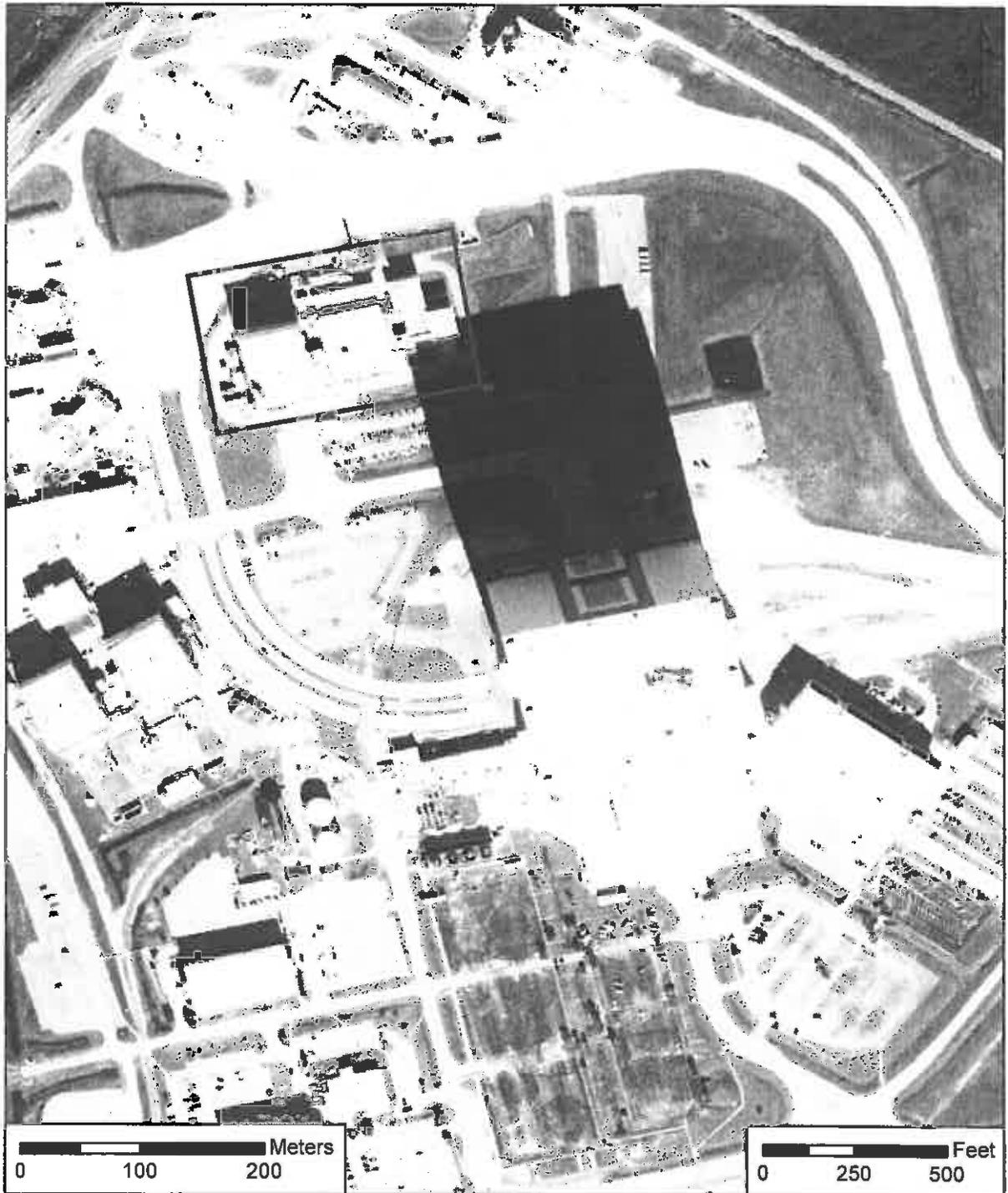
PHOTOGRAPHS





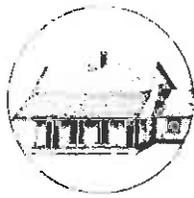
# Historic Structure Form

PHOTOGRAPHS



LABINS q3706ne.sid

**ARCHAEOLOGICAL CONSULTANTS, INC.**



# Historic Structure Form

Site # 8BR1992

USGS MAP

Orsino 1976 - mrg3706.tif

Township 22 South, Range 37 East, Section 7

