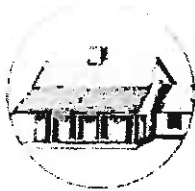


Original  
 Update



# HISTORICAL STRUCTURE FORM

## FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site # BR01989  
Field Date 4-12-2010  
Form Date 4-11-2011  
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) Mate-Debate Device Multiple Listing (DHR only) \_\_\_\_\_  
Survey Project Name HAER Documentation: Shuttle Landing Facility 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 J6-2262 Direction \_\_\_\_\_ Street Name Shuttle Landing Facility 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 36E Section 01 ¼ section:  NW  SW  SE  NE Irregular-name: \_\_\_\_\_  
Tax Parcel # N/A Landgrant \_\_\_\_\_  
Subdivision Name \_\_\_\_\_ Block \_\_\_\_\_ Lot \_\_\_\_\_  
UTM Coordinates: Zone  16  17 Easting 531349 Northing 3163767  
Other Coordinates: X: \_\_\_\_\_ Y: \_\_\_\_\_ Coordinate System & Datum \_\_\_\_\_  
Name of Public Tract (e.g., park) \_\_\_\_\_

### HISTORY

Construction Year: 1979  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 \_\_\_\_\_  
Additions:  yes  no  unknown Date: \_\_\_\_\_ Nature \_\_\_\_\_  
Architect (last name first): Connell Associates, Inc Builder (last name first): Beckman 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 No style Exterior Plan Not applicable Number of Stories \_\_\_\_\_  
Exterior Fabric(s) 1. Not applicable 2. \_\_\_\_\_ 3. \_\_\_\_\_  
Roof Type(s) 1. Not applicable 2. \_\_\_\_\_ 3. \_\_\_\_\_  
Roof Material(s) 1. \_\_\_\_\_ 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.) 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) not applicable

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

Condition (overall resource condition): [x]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) [ ]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 [ ]HABS/HAER record search
[ ]other methods (describe) \_\_\_\_\_

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 P9026I
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:**

The Mate-Demate Device (MDD) is located at the northeast corner of the parking apron at the SLF. Its overall dimensions are 105 ft in length (east-west axis), 93 ft in width (north-south axis), and 105 ft in height. The open steel truss frame rests on a concrete base and utilizes open grating for the six deck levels, located at 4 ft, 20 ft, 40 ft, 60 ft, 80 ft, and 100 ft above grade. The MDD features two orbiter access arms, which can be raised and lowered within the first 60 ft. Between these arms is the orbiter sling back, which is connected to the orbiter in order to lift it with the use of three 50-ton hoists. There are also two sets of moveable platforms at 15-ft 7-in and 44 ft 3-in above grade. These are shaped around the orbiter's nose, and are hinged to raise and lower vertically. At the northeast and southeast corners are open-grate metal stairs, which extend from ground level to the highest deck. The original navigation equipment for the runway sat at the top of the MDD until early 2006.

**Explanation of Evaluation:**

The Mate-Demate Device is considered eligible for listing in the NRHP in the context of the U.S. Space Shuttle Program (1969-2010) under Criterion A in the areas of Space Exploration and Transportation and under Criterion C in the area of Engineering. Because it has achieved significance within the past 50 years, Criteria Consideration G applies. Under Criterion A, it is significant as one of only two such devices constructed with the specific purpose of enabling the attachment and detachment of the Space Shuttle Orbiter and the Boeing 747 Shuttle Carrier Aircraft. Under Criterion C, the MDD clearly embodies the distinctive characteristics of its type and method of construction. The MDD maintains a high level of integrity with regards to location, design, setting, materials, workmanship, feeling and association.

The MDD is also considered a contributing resource to the Shuttle Landing Facility Area Historic District (8BR1986).

## 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.

Liston, Elaine and Dawn Elliott. *History of the Shuttle Landing Facility at Kennedy Space Center*. Proceedings of the 2003 Space Congress, 2003.

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.

**Websites**

"Countdown! NASA Launch Vehicles and Facilities, Shuttle Landing Facility." NASA Facts Online. John F. Kennedy Space Center, 2000.  
<http://www-pao.ksc.nasa.gov/kscpao/nasafact/count3slf.htm>

"Shuttle Landing Facility (SLF)." <http://science.ksc.nasa.gov/facilities/slf.html>

PHOTOGRAPHS



# HISTORICAL STRUCTURE FORM

## STREET OR PLAT MAP

Source: NASA John F. Kennedy Space Center,  
Facility Utilization Chart,  
July 1, 1995,  
Chart B

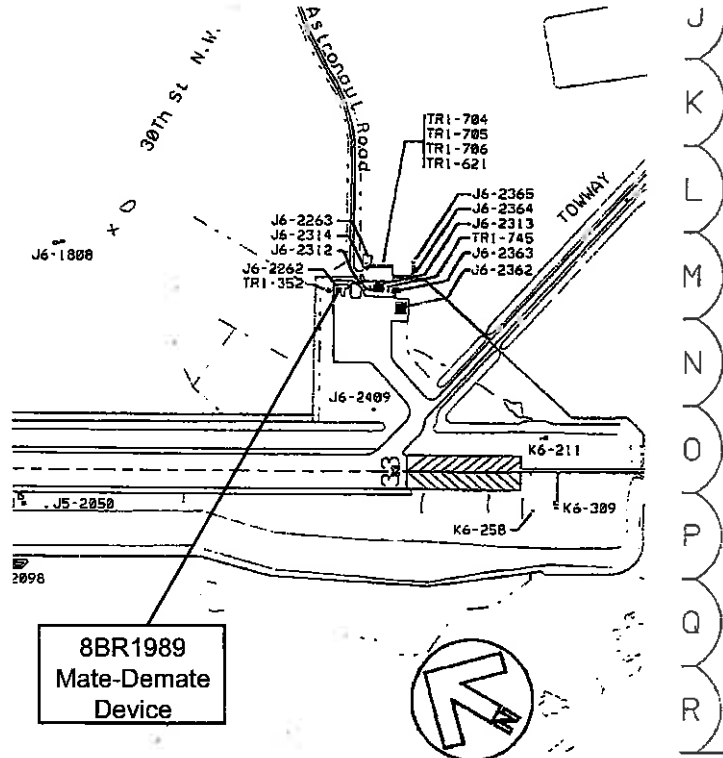


CHART B

USGS MAP

Township 22 South, Range 36 East, Section 1  
Orsino, Fla. 1976

