



HISTORICAL STRUCTURE FORM

FLORIDA MASTER SITE FILE

Version 4.0 1/07

Site #8 **BR03042**
Field Date 1-24-2012
Form Date 11-13-2012
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) NLAX 171 Multiple Listing (DHR only) _____
Survey Project Name Historic Survey of NASA Railroad System 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 _____ Direction _____ Street Name _____ Street Type _____ Suffix Direction _____
Address _____ Contractor _____ Road _____
Cross Streets (nearest / between) Schwartz Road and Saturn Causeway
USGS 7.5 Map Name ORSINO USGS Date 1976 Plat or Other Map _____
City / Town (within 3 miles) Fitusville 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 # _____ Landgrant _____
Subdivision Name _____ Block _____ Lot _____
UTM Coordinates: Zone 16 17 Easting 533794 Northing 3160101
Other Coordinates: X: _____ Y: _____ Coordinate System & Datum _____
Name of Public Tract (e.g., park) _____

HISTORY

Construction Year 1985 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 Railcar 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): _____ Builder (last name first): Davidson-Kennedy
Ownership History (especially original owner, dates, profession, etc.) NASA, 1985-present

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

DESCRIPTION

Style Not applicable Exterior Plan Not applicable Number of Stories NA
Exterior Fabric(s) 1. Steel 2. _____ 3. _____
Roof Type(s) 1. _____ 2. _____ 3. _____
Roof Material(s) 1. _____ 2. _____ 3. _____
Roof secondary strucs. (dormers etc.) 1. _____ 2. _____
Windows (types, materials, etc.) _____

Distinguishing Architectural Features (exterior or interior ornaments) _____

Ancillary Features / Outbuildings (record outbuildings, major landscape features; use continuation sheet if needed.) _____

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</i> , p. 2)				

DESCRIPTION (continued)

Chimney No. _____ Chimney Material(s): 1. _____ 2. _____
 Structural System(s): 1. _____ 2. _____ 3. _____
 Foundation Type(s): 1. _____ 2. _____
 Foundation Material(s): 1. _____ 2. _____
 Main Entrance (stylistic details) _____

Porch Descriptions (types, locations, roof types, etc.) _____

Condition (overall resource condition): excellent good fair deteriorated ruinous
 Narrative Description of Resource See continuation sheet

Archaeological Remains _____ Check if Archaeological Form Completed

RESEARCH METHODS (check all that apply)

- | | | | |
|--|--|--|--|
| <input checked="" type="checkbox"/> FMSF record search (sites/surveys) | <input checked="" type="checkbox"/> library research | <input type="checkbox"/> building permits | <input type="checkbox"/> Sanborn maps |
| <input type="checkbox"/> FL State Archives/photo collection | <input type="checkbox"/> city directory | <input checked="" type="checkbox"/> occupant/owner interview | <input type="checkbox"/> plat maps |
| <input type="checkbox"/> property appraiser / tax records | <input checked="" type="checkbox"/> newspaper files | <input type="checkbox"/> neighbor interview | <input type="checkbox"/> Public Lands Survey (DEP) |
| <input type="checkbox"/> cultural resource survey (CRAS) | <input checked="" type="checkbox"/> historic photos | <input checked="" type="checkbox"/> interior inspection | <input type="checkbox"/> HABS/HAER record search |
| <input type="checkbox"/> other methods (describe) _____ | | | |

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) 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. <u>Other</u> | 3. _____ | 5. _____ |
| 2. <u>Transportation</u> | 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 <u>All materials at one location</u> | Maintaining organization <u>Archaeological Consultants Inc</u> |
| Document description _____ | File or accession #'s <u>P9026Q</u> |
| 2) Document type _____ | Maintaining organization _____ |
| Document description _____ | File or accession #'s _____ |

RECORDER INFORMATION

Recorder Name Trish Slovinac Affiliation Archaeological Consultants Inc
 Recorder Contact Information 8110 Blaikie Court, Suite A, Sarasota, FL 34240/941-379-6206/ACIFlorida@comcast.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**

NLAX 171 (8BR3042) is a 70-ton aft skirt railroad car within the NASA Kennedy Space Center (KSC) Railroad System. The steel flatcar is 66' long, weighs 70 tons, and features a double well design. The car rests on four axles, and two steel vertical bulkhead beams approximately 12' tall with supports are located at both ends (KSC-TO, Folder No. 6670-5-170).

NLAX 171, along with NLAX 170 (8BR2908), was built for NASA specifically to transport solid rocket booster (SRB) components. Davidson-Kennedy Company of Atlanta, Georgia, was awarded the contract to build the car on July 22, 1983, and they subcontracted the carbody design to Nelson Associates of Springfield, Virginia. The railcars were slow to receive Association of American Railroad approval, likely because of their uncommon design. NLAX 171 cost \$84,571 and arrived at the KSC on April 19, 1985 (KSC-TO, Folder No. 6670-5-171). It was designed to hold one frustum, one forward skirt, and two aft skirts. Boxes that contained the ground support equipment used to load, transport, and off load SRB components were strapped to the car's deck. According to correspondence dated July 30, 1987, the car traveled from NASA's Marshall Space Flight Center and McDonnell Douglas Astronautics Company West in Huntington Beach, California, where the SRB components were manufactured, to KSC. Before NLAX 170 and NLAX 171, these four SRB components required three trucks and a railcar for transport. They are the only two of their kind in the world, and the NASA Railroad crew referred to them as "Carnival Cars" because of their unique appearance.

According to NASA KSC Transportation Office correspondence, NLAX 171 was leased to United Space Boosters Inc. for cross-country conveyance in the late 1980s (KSC-TO, Folder No. 6670-5-170).

Explanation of Evaluation

NLAX 171 is considered eligible for listing in the National Register of Historic Places as a contributing resource to the NASA KSC Railroad System Historic District (8BR2932), which is eligible in the context of the U.S. Space Shuttle Program (ca. 1969-2011). The car is significant because it is one of only two railcars within the NASA KSC Railroad System commissioned by NASA and designed for a specified use. The railcar is also significant because of the role it played in support of the Space Shuttle Program in the transport of SRB components; it could carry four irregularly shaped SRB components that would have otherwise required three trucks and a railcar to transport. Thus, the cars offered a great deal of time and financial savings to NASA in their more than two decades of service. NLAX 171 has retained a high level of integrity and appears nearly identical to its original appearance.

Bibliographic References

NASA KSC, Transportation Office (KSC-TO)

Var. Folder No. 6670-5-170: NLAX 170 SRB Components Railcar

Var. Folder No. 6670-5-171: NLAX 170 SRB Components Railcar

Stephens, Mike (KSC Railroad technician)

2012 Email interview by Christopher Berger. March 7, 2012. Notes on file at Archaeological Consultants Inc.



PHOTOGRAPHS



NLAX 171, 70-Ton Aft Skirt, side



NLAX 170 and NLAX 171, 70-Ton Aft Skirt railcars, top



USGS

Orsino

Township 22 South, Range 37 East, Section 19
National Geographic Society (2011) *USA Topo Maps.*

