

OCT 23 2000

1402

**NATIONAL REGISTER OF HISTORIC PLACES  
REGISTRATION FORM**

NATIONAL REGISTER, HISTORY  
& EDUCATION  
NATIONAL PARK SERVICE

**1. Name of Property**

historic name: JOSEPHINE  
other names/site number: 13806 (Official Number); JCNF (Signal Letters); 22HR843 (Site Number, preferred)

**2. Location**

street & number \_\_\_\_\_ not for publication   
city or town \_\_\_\_\_  
vicinity \_\_\_\_\_

**3. State/Federal Agency Certification**

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this  nomination \_\_\_\_\_ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property  meets \_\_\_\_\_ does not meet the National Register Criteria. I recommend that this property be considered significant \_\_\_\_\_ nationally  statewide \_\_\_\_\_ locally. (\_\_\_\_ See continuation sheet for additional comments.)

Kenneth H. P. Paul

SEPT. 29, 2000

Signature of certifying official

Date

Deputy State Historic Preservation Officer

State or Federal agency and bureau

In my opinion, the property \_\_\_\_\_ meets \_\_\_\_\_ does not meet the National Register criteria. (\_\_\_\_ See continuation sheet for additional comments.)

Signature of commenting or other official

Date

State or Federal agency and bureau

**4. National Park Service Certification**

I, hereby certify that this property is:  
 entered in the National Register,  
\_\_\_\_ See continuation sheet.

\_\_\_\_ determined eligible for the  
National Register

\_\_\_\_ See continuation sheet.

\_\_\_\_ determined not eligible for the  
National Register

\_\_\_\_ removed from the National Register

\_\_\_\_ other (explain): \_\_\_\_\_

Signature of the Keeper

Date of Action

Elson H. Beall

11/22/00

**5. Classification**

**Ownership of Property:**  
PUBLIC-STATE

**Number of Resources within Property:**  
(Do not include previously listed resources in the count)

**Category of Property:**  
STRUCTURE

Contributing

Noncontributing

1

1

buildings  
sites  
structures  
objects  
Total

**Name of related multiple property listing**  
(Enter "N/A" if property is not part of a multiple property listing.)

**Number of contributing resources previously listed  
in the National Register**

N/A

**6. Function or Use****Historic Functions:**

COMMERCE/TRADE/merchant shipping  
TRANSPORTATION/water related  
GOVERNMENT/mail transport

**Current Functions:**

NOT IN USE

**7. Description****Architectural Classification(s):**OTHER: sidewheel merchant steamship; mid to late 19<sup>th</sup> century**Materials:**

foundation: N/A

roof: N/A

walls: N/A

other: iron hull; wood superstructure

**Narrative Description:**

See Continuation Sheets

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DESCRIPTION OF PROPERTY

The iron-hull sidewheel steamer *Josephine* was built in 1867 by the Harlan and Hollingsworth Company of Wilmington, Delaware. Designed for use along the U.S. Gulf coast, the ship was built for New York businessman Charles Morgan's Louisiana and Texas Railroad and Steamship Company (L&TR&S). While no plans have been identified for this vessel, she was registered at 1,282.53 tons, 235 feet long, 34 feet wide, with an 18.5' depth of hold. Though she operated primarily between New Orleans, Louisiana, and Galveston, Texas, the *Josephine* foundered in a storm in 1881 while enroute to New Orleans from Havana, Cuba. The wreck was identified by archaeologists from the U.S. Department of the Interior's Minerals Management Service (MMS) in 1997.

The iron hull of the vessel is buried, but appears to be mostly intact from the keel to the waterline (Figure 2). Included in the wreckage of the *Josephine* are the remains of her walking beam engine (Figure 3), built by the Morgan Iron Works Company of New York City.

Few specifics have been identified about the construction of the sidewheel steamer *Josephine*. However, the following information is available. The vessel's official registration number was 13806 (Lytle 1952:103). Advertised as a low-pressure steamship, she was powered by a 50-inch diameter engine with an 11-foot stroke. The *Josephine* had a round stern, two decks, and two masts (Figure 4). These design features were similar to most of the sidewheel steamers constructed along the Atlantic Coast during the middle 1800s. The ship included two cabins and could transport up to 250 passengers (Hall 1884:21; Gause 1886:382).

MS divers carried out investigations on this wreck during the summers of 1997 and 1999. These investigations were limited to just a few days, with the primary purpose of photo-documenting the site. The investigations also aimed to collect as much information as possible to confirm the identification of the vessel using non-invasive techniques.

At present, much of the iron hull of the wreck is buried. The upper hull is gone. This observation is based on the position of the attachment points

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for the paddlewheels, which are still intact, and the iron spokes of the paddlewheels, some of which survived (Figure 5). The authors surmise that the hull is intact from the keel to the waterline. The bow of the vessel is completely buried, but the line of the hull may be followed with only short interruptions to the vessel's rudder.

One of the most dramatic features of the wreck is the walking beam, the diamond-shaped feature that connected the engine piston to the eccentric of the paddlewheels, which lies collapsed against the starboard side (Figure 6). Both paddlewheel shafts are still mounted in their pillow blocks (Figure 7). By measuring the paddlewheel eccentrics MMS divers were able to derive the stroke of the engine: 11 feet, the same dimension published for the *Josephine's* engine. The engine cylinder itself does not appear to be extant, or it may have toppled and lies buried inside the hull. What appears to be a small piston cylinder just forward of the paddlewheels may be the engine's air pump, which drew water condensed from steam from the main piston cylinder and pumped it back to the boiler. The sidescan image collected in 1997, when the interior of the hull was slightly more exposed, shows two cylinders lying forward of the paddlewheels. These have been interpreted as twin boilers. Only the upper surfaces of these features were visible in 1999. In between the two boilers is the large, baffled base of the smokestack (Figure 8).

Based on observations made by the MMS scientific dive team -- the iron hull, the stroke of the engine, the design of the walking beam that is identical to the 19th century photograph of the ship, and the position of the wreck with respect to its position on an 1883 navigation chart -- the authors are confident in identifying the wreck, which has been assigned site number 22HR843, as Morgan's *Josephine*.

8. Statement of Significance

Applicable National Register Criteria

- A Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B Property is associated with the lives of persons significant in our past.
- X C Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- X D Property has yielded, or is likely to yield information important in prehistory or history.

Areas of Significance

ENGINEERING  
MARITIME HISTORY  
TRANSPORTATION

Period of Significance

1867-1881

Significant Dates

1867  
1868  
1875  
1881

Significant Person(s)

Cultural Affiliation(s)  
EUROPEAN/AMERICAN  
Architect/Builder  
HARLAN AND HOLLINGSWORTH  
MORGAN IRON WORKS

Criteria Considerations:

Property is:

- A owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or a grave.
- D a cemetery.
- E a reconstructed building, object, or structure.
- F a commemorative property.
- G less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance: See continuation sheets.

9. Major Bibliographical References

Bibliography See continuation sheet.

Previous documentation on file (NPS)

- preliminary determination of individual listing (36 CFR 67) has been requested.
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey  
# \_\_\_\_\_
- recorded by Historic American Engineering Record  
# \_\_\_\_\_

Primary Location of Additional Data

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other
- Name of repository:  
MINERALS MANAGEMENT SERVICE

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STATEMENT OF SIGNIFICANCE

**OVERVIEW:**

Owned by New York businessman Charles Morgan, one of the foremost figures in the development of the steamship trade along the Gulf Coast of the United States, the merchant steamship *Josephine* provided regular service between New Orleans, LA and Galveston, TX. The vessel was built at the Harlan and Hollingsworth Company (one of the premier companies to manufacture merchant steamers in the 19<sup>th</sup> century), and was supplied with a vertical walking-beam engine from the Morgan Iron Works (one of the leading producers of marine engines in the 19<sup>th</sup> century). The *Josephine* therefore meets the requirements for nomination under Criterion C. The potential for information that can be gathered from the shipwreck site of the *Josephine* also qualifies the site for nomination under Criterion D.

**HISTORICAL SKETCH:**

In 1867 Charles Morgan contracted the Harlan and Hollingsworth Company to construct the iron-hull sidewheel steamer *Josephine*. Completed in early 1868, the vessel first arrived at New Orleans on February 29, 1868, having departed from Wilmington, Delaware, on February 6. The *Josephine* made stops in Havana, Cuba, and Key West, Florida, along the way.

Among the passengers on her maiden voyage were the vessel's owner, Charles Morgan, and several members of his family. A contemporary account described the vessel as "...the most beautiful and elegant of any that have entered the port of Havana" (*Daily Picayune* 1868). The newspaper article also described the presence of a model of the vessel that was on board until her arrival at Havana. The model was depicted as being approximately three feet in length, constructed of gold and silver, with an estimated value of \$3,000. Beneath the model was a music box. Apparently the paddlewheels of the model rotated when the music played. According to the article, the model was removed in Havana and taken to "the Palace that our chief in authority may examine it and see its merits." No other reference to this model has been found.

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Upon arrival in the Crescent City, the *Josephine* was assigned to run a new route from Brashear City (later renamed Morgan City in honor of Charles Morgan), Louisiana, to Galveston, Texas. In addition to carrying passengers and freight, the *Josephine* also served as a mail carrier between these cities. According to newspaper advertisements, the *Josephine* ran this route between two and three times per week.

Three events that were recorded in local newspapers during the *Josephine's* run between Louisiana and Texas are worth mentioning here. Shortly after beginning service along the Gulf coast in 1868, the steamer was almost lost when she ran aground at Brazos Bar, off the Texas coast. After about two weeks she was removed from the bar, taken back to New Orleans and placed in dry dock at the Vallette Dry Dock facility in Algiers. A copy of the marine surveyor's report, dated April 15, 1868 testified to the durability of this vessel:

...after having been so long ashore on the bar at Los Brazos de Santiago, and, as far as we can discover, not a single rivet has been started, and not a single drop of water came out of any part of her bottom.

This grounding apparently had little effect on the steamer, other than allowing people the opportunity to see the under side of the vessel, as the account continues by saying:

It is the intention of Mr. Morgan to allow his noble vessel to remain in the dock during to-day (Saturday), in order that those of our citizens who feel so inclined may have an opportunity of observing her out of water.

A contemporary photograph of the *Josephine* in dry dock may have been made to immortalize this occasion (Figure 9).

In June 1874 there was an account of the *Josephine* transporting the entire New Orleans Mechanic's Fire Company, No. 6, along with their steam engine, to Galveston and back, charged at standard excursion rates (*Daily Picayune* 1874). This event is significant only because it is symbolic of yet another major industry made possible by the regular and predictable schedules of the steam packets ... tourism.

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The following year, in March 1875, the *Josephine* played a role in Texas history by functioning as a refuge vessel for the citizens of Corpus Christi when Mexican bandits raided the town (Sutherland 1916:46).

Around January 15, 1881, the *Josephine* was transferred to the New Orleans to Havana route, replacing the steamer *Morgan*, another vessel built by the Harlan and Hollingsworth Company. This was to be her last voyage.

On January 27, the *Josephine* left New Orleans, and arrived in Havana a few days later. On February 2 she departed Havana with several passengers and a cargo of tobacco and cigars (Irion 1989:8). Among the passengers was a family of musicians led by Professor Herman Franko.

According to Professor Franko's account of the foundering, the steamer began her return trip to New Orleans at 5 p.m. on February 2. She arrived in Key West the following afternoon and departed for Cedar Key that evening, arriving on the morning of Friday the fourth. At Cedar Key the *Josephine* picked up several more passengers. Included among the new passengers were 14 members of an Italian crew that had recently survived the sinking of their lumber ship, originally bound for London from Pensacola (*Daily Picayune* 1881).

The *Josephine* left Cedar Key around 4 p.m. Friday enroute to New Orleans, evidently sailing without incident until sometime Sunday when it was noticed that the vessel was leaking. Passengers and crew worked to bail water, but could not control the leak. Therefore, arrangements were made to abandon ship. Prior to the Captain giving the order however, the leak began to subside. Not long after, the seas picked up and the vessel began to take on water once more. On Monday evening the Captain again had the crew prepare to abandon ship. By 3 a.m. Tuesday morning all had escaped, and the vessel began to heel to one side. Though all passengers and crew were able to escape the sinking, the Franko family lost all of their band instruments. This included six trunks, six valises, two packages of costumes, and three violins, one of which he valued at \$1,000. Professor Franko estimated his total loss at \$15,000. Additionally, it was reported that the Captain's black dog was unable to make it off the vessel (ibid.).

According to another passenger's account of the sinking, the *Josephine* ran into a hurricane sometime Saturday afternoon, which did not let up until Monday. "On Sunday



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morning it was discovered that the pressure of the water against the side of the ship opened the seams and the water was pouring in at a fearful rate" (ibid.). This incident was reported as the first serious accident to a Morgan Line vessel in eleven years. The loss of the *Josephine* was valued at \$75,000.

Though it was described as a hurricane by one of the survivors, the time of the foundering was in early February, well after hurricane season ends on the Gulf coast. Nevertheless, it must have been a very severe winter storm, for several accounts of storm damage were detailed in the February 10, 1881, edition of the New Orleans *Daily Picayune*. Included in the reports was an account that most of the buildings at Pass Manchac were destroyed. Damage was also incurred at least as far east as Pensacola, Florida.

**Discovery of the *Josephine*:**

In 1997 the *Josephine* came to the attention of the U.S. Department of the Interior's Minerals Management Service (MMS) as a result of a sonar survey performed by Klein and Associates nearly a decade earlier. Although its identity had long been forgotten, the location of this wreck was well known to locals as a good fishing spot.

Utilizing a newly acquired high-resolution sidescan sonar, the wreck site was investigated by archaeologists with the MMS as part of the Seafloor Monitoring Program (Figure 10). The MMS archaeologists running the survey were astonished by the excellent state of preservation of what was clearly a sidewheel steamship with a walking beam engine. Subsequent research, which included the discovery that the wreck was labeled on an 1883 navigation chart, identified the vessel as the *Josephine*, an iron-hulled steamer built in 1867 for the Morgan Line.

**ELIGIBILITY UNDER CRITERION C:**

At the time of the *Josephine*'s construction, the Harlan and Hollingsworth Company had already earned a reputation for manufacturing high quality iron hull vessels (Hall 1884:204). The company, which began building ships around 1844, played an integral role in the development of merchant ship design in the United States, and was

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eventually purchased by the Bethlehem Steel Corporation in 1906. Two of the first iron-hull vessels built in the United States, the *Ashland* and the *Ocean*, were constructed at the Harlan and Hollingsworth yard. In 1883 they also built the first steel-hull vessel, the *Olympian* (Pearson and Simmons 1995:65). Construction on the *Josephine* began at the Harlan and Hollingsworth yard in 1867 and was completed in early 1868.

The Morgan Iron Works, located in New York City, became one of the leading producers of marine steam engines in the United States in the mid 19<sup>th</sup> century. The company provided steam engines for numerous Atlantic coastal steamers. It also equipped most of the ships employed by Charles Morgan, as well as many of the American-owned steamships operating in China. At its peak, the company employed over 1,000 men (Dayton and Adams 1970[1925]:384-386).

The remains of the *Josephine* provide an excellent example of the type of construction that was carried out by both the Harlan and Hollingsworth Company and the Morgan Iron Works. The quality of workmanship at these companies was well respected and has been thoroughly documented (c.f. Hall 1884; Baughman 1968). It is believed that the remains of the hull [REDACTED] are intact. Evidence of the vertical walking beam is also present. Therefore, the vessel is eligible for nomination to the National Register under Criterion C.

**ELIGIBILITY UNDER CRITERION D:**

Of the 117 steamships owned by Charles Morgan or his corporate enterprises between 1833 and 1885, the wrecks of three have been discovered in the Gulf of Mexico or contiguous waters. One of these, the *Mary* (built in 1866, sunk in 1876), was recorded by archaeologists off Aransas Pass, Texas, in 1995 (Pearson and Simmons 1995). The U.S. Department of the Interior's Minerals Management Service (MMS) has documented two others, the *New York* (built in 1837, sunk in 1846) and the *Josephine*. Taken together, these vessels represent the span of steamships employed by the Morgan Line and document the changing technology of steam navigation in the United States.

The remains of the *Josephine* are very well preserved, much more so than its contemporary the *Mary* in Corpus Christi, which also suffers from being located in

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waters that make data recovery extremely hazardous (Pearson and Simmons 1995:130). Pearson wrote of the *Mary* that she was "a ship that played a central and critical role in the economic history of the Gulf coast region (and) serves as a model for understanding the workings of a critical element of the nineteenth century Gulf Coast trade and as a point of departure for studies of that trade" (Pearson and Simmons 1995:131). Not only are these words also true for the *Josephine* but because of its excellent state of preservation and the relatively benign environmental conditions at the site, its research potential is far higher. The *Josephine* is therefore eligible for National Register status under Criterion D.

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**BIBLIOGRAPHICAL REFERENCES**

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Pearson, Charles E. and Joe J. Simmons. 1995. *Underwater Archaeology of the Wreck of the Steamship Mary (41NU252) and Assessment of Seven Anomalies, Corpus Christi Entrance Channel, Nueces County, Texas.* Prepared for U.S. Army Corps of Engineers, Galveston District. Coastal Environments, Baton Rouge.

Sutherland, Mary A. 1916. *The Story of Corpus Christi.* Rein and Sons, Houston, TX.

**10. Geographical Data**

Acreage of Property: [REDACTED]

UTM References:	Zone	Easting	Northing	Zone	Easting	Northing
	A	[REDACTED]	[REDACTED]	C	[REDACTED]	[REDACTED]
	B	[REDACTED]	[REDACTED]	D	[REDACTED]	[REDACTED]

\_\_\_ See continuation sheet.

**Verbal Boundary Description** See continuation sheet.

**Boundary Justification:** See continuation sheet.

**11. Form Prepared By**

name/title: DAVE BALL/MARINE ARCHAEOLOGIST; DR. JACK IRION/CHIEF, SOCIAL SCIENCES UNIT	date: APRIL 27, 2000
organization: MINERALS MANAGEMENT SERVICE	telephone: (504) 736-2859
street & number: 1201 ELMWOOD PARK BLVD., MS 5411	zip code: 70123
city or town: NEW ORLEANS	state: LA

**Additional Documentation**

Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7.5 or 15 minute series) indicating the property's location.

A sketch map for historic districts and properties having large acreage or numerous resources.

Photographs

Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

**Property Owner(s)**

name: State of Mississippi

street & number:

city or town:

state: MS

telephone:

zip code:

**Paperwork Reduction Act Statement:** This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

**Estimated Burden Statement:** Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

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**VERBAL BOUNDARY DESCRIPTION**

The boundary for the site consists of the area immediately around the shipwreck. A small buffer area (approximately 7.5 feet wide) has been added to the known dimensions of the vessel to comprise the site boundary.

**BOUNDARY JUSTIFICATION**

The boundary of the shipwreck is slightly larger than its recorded dimensions in order to include associated material that may have settled nearby as a result of the wrecking process, or through natural decay.