

United States Department of the Interior
National Park ServiceNational Register of Historic Places
Inventory—Nomination FormSee instructions in *How to Complete National Register Forms*
Type all entries—complete applicable sections

For NPS use only

received APR 9 1984

date entered MAY 16 1984

1. Name

historic (Schooner) WESTERN UNION

and/or common N/A

2. Location

street & number Pier A, Truman Annex

N/A— not for publication

city, town Key West

N/A— vicinity of

state Florida

code 12

county Monroe

code 087

3. Classification

Category	Ownership	Status	Present Use
☐ district	☐ public	☒ occupied	☐ agriculture
☐ building(s)	☒ private	☐ unoccupied	☐ commercial
☐ structure	☐ both	☐ work in progress	☒ educational
☐ site	Public Acquisition	Accessible	☒ entertainment
☒ object	☐ in process	☒ yes: restricted	☐ government
	☐ being considered	☐ yes: unrestricted	☐ industrial
	N/A	☐ no	☒ transportation
			☐ other:

4. Owner of Property

name World/Life Explorations, Inc.

street & number 222 Greene Street

city, town Key West

N/A— vicinity of

state Florida

5. Location of Legal Description

courthouse, registry of deeds, etc. United States Coast Guard Documentation Office

street & number 801 Customs House

city, town Philadelphia

state Pennsylvania

6. Representation in Existing Surveys

title N/A

has this property been determined eligible? ☐ yes ☒ no

date N/A

☐ federal ☐ state ☐ county ☐ local

depository for survey records N/A

city, town N/A

state N/A

7. Description

Condition

☐ excellent
☒ good
☐ fair

☐ deteriorated
☐ ruins
☐ unexposed

Check one

☐ unaltered
☒ altered

Check one

☐ original site
☒ moved date _____

Describe the present and original (if known) physical appearance

The 130-foot wooden vessel WESTERN UNION is an auxiliary coasting schooner launched at Key West, Florida, on April 7, 1939. The WESTERN UNION typifies and is a prime example of the traditional American coasting schooner, a type and form prevalent in U.S. shipbuilding from 1800 to 1939 when this vessel, the last true example, was built. The original appearance of the hull is unaltered. Constructed of madiera framing, the keel, deck beams, planking and decking are of long-leaf yellow pine. The two-masted schooner has a clipper bow and an overhanging counter at the stern. Her basic dimensions are as follows: Length on deck: 92 feet; Length Water Line: 86 feet; Length Overall: 130 feet; Extreme Beam: 23 feet, 6 inches; Height of Main Topmast Truck: 94 feet.

The schooner WESTERN UNION is an auxiliary coasting schooner of heavy wooden carvel construction which was launched at Key West, Florida, on April 7, 1939. It is typical of the "Chesapeake" type of American coasting schooner which predominated in the coasting and cargo trades between 1800 and 1939. The schooner was employed to maintain and repair undersea telegraph cables in the Gulf of Mexico, the Caribbean and adjacent waters from 1939 until 1973. This work was done with bolt-on equipment which at no time required the structure of the vessel to be changed for such work. The schooner was berthed at Key West, Florida.

The WESTERN UNION appears much today as she did when launched. She carried two masts with fore-and-aft gaff-headed sails on each mast plus 3 headsails on the forward stays. Construction is of madiera framing in double-sawn sets with a long-leaf yellow pine keel, deck beams, planking and decking. She has a "clipper" bow and an overhanging counter at the stern. Deck structures include a foiclse companionway, "caboose" galley, main cargo hatch, engine room companionway, great cabin trunk and lazarette hatches. Below deck the WESTERN UNION has a chain locker, foiclse, cargo hold (with temporary berths for 20 persons), engine room, great cabin and lazarette. The vessel carries twin diesel auxiliary propulsion.

The original paint colors have been retained or duplicated. All paint and varnish is replaced on a regular schedule. Only the varnished undersides of the overhead beams in the great cabin retain the original coating. The hull is painted white with a black sheer stripe and black boot toppings. The cabin and companionway tops are buff and cap rails are cream colored.

The exterior appearance of the hull of the WESTERN UNION has never been altered. The original appearance of the schooner itself remains unchanged with two exceptions: the original galley "caboose" has been replaced by one which is somewhat larger, and the cargo hatch is covered by a companionway for passengers. The hatchway is scheduled to be restored to its original configuration with traditional hatch board and a canvas cover in 1983. The original interior layout remains unaltered, except for the addition of temporary berthing in the cargo hold. (This addition is scheduled to be removed, leaving the cargo hold intact for general cargo.) The original interior bulkheads were of "joiner" construction. The original "joiner" bulkheads between compartments below deck have been replaced with new watertight bulkheads which appear like the originals and are faced with original lumber and are in the original location.

Bolt-on cable handling equipment (installed in 1961) has been removed, leaving the schooner intact as built. As this equipment was bolted to the deck, no structural changes either in installing it or removing it were required or made. This equipment, being of "modern" design, was the only thing which detracted from the original form of the schooner, and was removed in order to restore the original deck layout and appearance, which is that of the American coasting schooner.

8. Significance

Period	Areas of Significance—Check and justify below			
☐ prehistoric	☐ archeology-prehistoric	☐ community planning	☐ landscape architecture	☐ religion
☐ 1400-1499	☐ archeology-historic	☐ conservation	☐ law	☐ science
☐ 1500-1599	☐ agriculture	☐ economics	☐ literature	☐ sculpture
☐ 1600-1699	☐ architecture	☐ education	☐ military	☐ social/
☐ 1700-1799	☐ art	☐ engineering	☐ music	☐ humanitarian
☐ 1800-1899	☐ commerce	☐ exploration/settlement	☐ philosophy	☐ theater
☒ 1900-	☒ communications	☐ industry	☐ politics/government	☒ transportation
		☐ invention		☒ other (specify)
				Naval Architecture

Specific dates 1939 **Builder/Architect** Herber Elroy & Loxley Arch

Statement of Significance (in one paragraph)

Constructed in 1939 as an undersea telegraph cable vessel, the WESTERN UNION is a rare extant example of the American Coasting Schooner, the first distinctive type of American-built and designed sailing craft. It was modelled after the 1886 GEORGE T. GARRISON and was built by two Grand Cayman Island brothers, Herber and Loxley Arch in Key West, Florida. The ship was leased to the Western Union telegraph company from 1939-73 and functioned to maintain the shore-to-shore communication links throughout the Caribbean area. She evolved from the "Chesapeake" variety of schooner and also incorporates the distinctive "Bahama Banks" trait of kingplanks.

The evolution of the sailing ship was a significant development in the history of American shipbuilding. The coasting schooner was the first distinctive type of an American-built and designed sailing craft. The WESTERN UNION is significant as a rare example of such an American coasting schooner and exemplifies the basic continuum of design over a 200-year period. In terms of hull shape, rigging, layout below deck and fastenings, the WESTERN UNION is of the Chesapeake type of schooner. Her sailing rig is specifically Chesapeake with bowed masts and a stove-down bowsprit. The ship also incorporates a distinctive Bahama Banks trait: kingplanks, or thicker planting down the center of the deck. This detail is not typical of American schooners and further specialized the craft.

The WESTERN UNION was constructed in Key West in 1939 according to the terms of an agreement between the Thompson Fish Company of Key West and the Western Union Telegraph Company. The ship was built following a half-hull model; no drawings or plans were utilized by its Grand Cayman Island builders, Herber Elroy and Loxley Arch. The schooner was launched on April 7, 1939, and then leased to the Western Union Telegraph Company for the purpose of laying and maintaining undersea telegraph cables from Key West to Havana, Cuba. The ship continued in this service until 1974 and is the last remaining sailing ship built for this purpose.

A total of eleven telegraph cables were laid between Key West and Havana from 1867 to 1931. The WESTERN UNION played no part in laying the cables; rather, the cable ship was instrumental in the maintenance of what was then called the "southern group" of cables. According to Cable Ships and Submarine Cables, Cable 1, completed in 1867, was laid by NARVA for International Ocean Telegraph Company, and Cable 2 was finished in 1868 by the same company. In 1873 Cable 3 was laid by DACIA for the Western Union Telegraph Company, Cable 4 was laid in 1899, and Cables 5, 6, and 7 were placed in 1921 by the ship COLONIA. Cables 8, 9, and 10 were laid in 1923 by AT & T's STEPHAN and Cable 11 was laid in 1931. In 1873 the Western Union Telegraph Co. took over nine of the above cables which were still in service. These were maintained by the WESTERN UNION from 1939 to 1973.

In 1950 a telephone cable was laid from Key West to Havana. While the WESTERN UNION did not lay that cable, she did maintain it. The WESTERN UNION had a part in testing this new kind of cable which was used after proving itself for the first transatlantic telephone cable. The cable utilized a repeating system that restored the quality of the signal to the original. Later the same type of cable was utilized for downrange missile tracking stations out of Cape Canaveral, which the WESTERN UNION helped lay at the shallow shore ends.

9. Major Bibliographical References

(See Continuation Sheet)

10. Geographical Data

Acreage of nominated property less than 1 acre

Quadrangle name Key West

Quadrangle scale 1:24,000

UTM References

A

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Zone Easting Northing

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Zone Easting Northing

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Verbal boundary description and justification

The object itself is the nominated area.

Schooner WESTERN UNION

List all states and counties for properties overlapping state or county boundaries

state N/A code N/A county N/A code N/A

state N/A code N/A county N/A code N/A

11. Form Prepared By

name/title Sharon Wells/Michael Zimny, Historic Sites Specialist

organization Florida Division of Archives date April 2, 1984

street & number The Capitol telephone (904) 487-2333

city or town Tallahassee state Florida

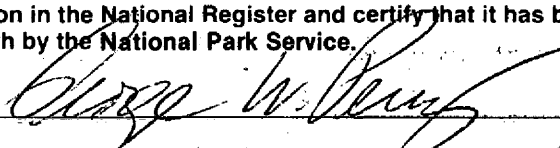
12. State Historic Preservation Officer Certification

The evaluated significance of this property within the state is:

☐ national ☐ state ☒ local

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

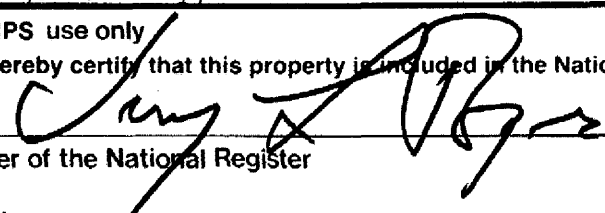
State Historic Preservation Officer signature



title George W. Percy, State Historic Preservation Officer date 4/2/84

For NPS use only

I hereby certify that this property is included in the National Register



date 5/16/84

Keeper of the National Register

Attest:

date

Chief of Registration

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The WESTERN UNION functioned as the primary cable repair ship for the southern group of cables. These included cables from Key West to Havana, Key West to Punta Rassa, Key West to Miami, Galveston to Tampico to Puerto, Mexico, and those to the Barbados. She was "on call" to depart within 24 hours to repair the cables of the Western Union Telegraph Company and other companies throughout the Gulf of Mexico, the northeast coast of South America and the Bahamas.

From time to time the WESTERN UNION was called upon to lay "inshore" ends of cables in shallow waters where larger, deeper draft cable ships could not go. Included in the "laying" jobs were the shore ends of cables connecting downrange tracking stations from Cape Canaveral east to San Salvadore. Additionally, some research and development work was accomplished in the testing of "multiple carriers" and updated types of "repeaters" for undersea cable.

During World War II, the duties of the WESTERN UNION remained unchanged. It was felt that her job was of prime interest and importance to national security and that, being a wooden sailing ship which could do her job quietly in the presence of enemy submarines, she was best suited to continue as usual. It is not known if any armament was put aboard. Crew identity was carefully checked by Navy, Coast Guard and U.S. Immigration agencies.

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(See Continuation Sheet)

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UNPUBLISHED MATERIAL

Adams, A.M. to N.W. Tracey. Letter, August 2, 1937. On file at the Historic Key West Preservation Board, Key West, Florida.

Adams, A.M. to A.L. Winn. Letter, February 1, 1939. On file at the Historic Key West Preservation Board, Key West, Florida.

Agreement between the Western Union Telegraph Company and Thompson Fish Co. August 29, 1932. On file at the Historic Key West Preservation Board, Key West, Florida.

Elroy, Heber and Loxley Arch. By H.E. Ross. Interview, Georgetown, Grand Cayman, 10 November, 1982.

Steadman, Capt. R.T. by John Kraus. Interview, Key West, Florida, 20 March 1980.

Thompson Fish Co., Inc., to N.W. Tracey Letter, September 9, 1938. On file at the Historic Key West Preservation Board, Key West, Florida.

Appendix I

PHOTOGRAPHS & DESCRIPTIONS

In photo #1, it is evident that the WESTERN UNION is flush-decked (the main deck being at one level with no raised or depressed portions). This was an item of significance in the evolution of the American coasting schooner which allowed long cargo, such as lumber, piles and the like to be carried on deck.

Also in photo #1, the two masts, on centerline with "fore-and-aft" sails on both masts are visible. This sail arrangement became known as the "schooner rig" around 1717. It became the chosen rig of the American coasters, and the rig of the WESTERN UNION is a prime example of the rig in general, with specific gear and fittings of the "Chesapeake" or "Southern" variety.

In photo #2, notice the "clipper" bow, a specific departure from the northern fishing schooners. This type of bow was an earlier innovation than the northern fisherman's "spoon bow."

In photos #3, and 3A, the masts are "raked" only a few degrees, as opposed to earlier types such as the "Baltimore Clippers" (See PRIDE OF BALTIMORE, a replica fast clipper type, built for speed, requiring a larger crew, and capable of carrying less cargo, though the length on deck is almost the same.) Also note that the masts, and especially the main topmast, are actually bent forward with rigging tension. This made a stronger, more stable rig and was made possible with the invention of wire rope and bottle screws for setting up, or "tuning" the rigging. Note here as well that only one topmast is carried--again, a difference between "northern" and "southern" type rigs.

In photo #4, the "sheer" (curve of the rail) is shallow compared to northern schooners. Note here the position of the galley "caboose."

In photo #5, note the boat davits. These are relatively low compared to most davits, where heavy "yawls," or pushboats, were carried. The WESTERN UNION, being powered, had no need to carry a large, heavy boat. Thus, her dingy can be carried on deck in heavy seas, making high davits unnecessary.

In photos #5 and #6, you can see a prime example of fancy ropework on the boat davits--a highly traditional occupation of sailing seamen throughout history to spend time at sea "servicing" parts of ships with ropework.

Photo #7. All sails aboard the WESTERN UNION are of cotton canvas and handmade by the crew and apprentices aboard. The present suit was made in 1982 here in Key West and is still a current project.

Photo #8. Wooden quarterbits were generally discontinued around 1800 in favor of patent iron cleats. As you see, some innovations were passed up in favor of earlier ones. In this case, it was due, most likely, to economic and/or practical (replacement) considerations.

In photo #9, you see a detail of the worm steering gear aboard the WESTERN UNION. This gear was taken off the ATKINS and put aboard the WESTERN UNION when she was built. Its exact vintage is not known, but this particular make of gear was introduced about 1850. The ATKINS was launched in 1886, and it is likely that this particular gear was new at that time. It is still in perfect working order and is used whenever the schooner is underway.

Photo #10 shows the compass binnacle which is of unknown origin. It has a serial number, and the name of a British company which we have not been able to make contact with. This binnacle was taken off the ATKINS as well, and was purchased sometime between 1932 and 1930 from Curry and Son's Chandlery in Key West. The original compass is still the main steering compass.

Photos #11, 12 and 13 show the great cabin companionway hatch. Frames, sill, and slides are of Madiera mahogany, as are the ship's frames. The doors have been replaced (1979). They are exact duplicates of the originals, which once again came off the ATKINS. Hinges and metal fittings are original.

In the great cabin, there are 7 ports (photo #14), which are bronze and came from the Curry and Son's Chandlery. These ports are probably wrecker's ware. (Interior detail of this port, photo #33).

Photo #15 shows the engineroom companionway, the lower part of the mainmast, boom and gaff jaws and the "fife" rail around the mainmast. Note also, the "kingplanks" (thicker planking down the center of the deck) which was rarely raised as this is. Here is a detail which is not typical of American schooners, but of "Bahama Banks" shipbuilding, and further specializes the influence of Key West builders and shipwrights. (The master shipwrights who built the WESTERN UNION came from Grand Cayman).

The hand bilge pump detailed in photo #16 was introduced in 1876 by the Edson Manufacturing Company of Boston. This one was put aboard the WESTERN UNION when she was built and is still in use today.

Photo #17 shows a pair of details which are special to the WESTERN UNION. Note the stars cut in the ends of the foreboom and fore gaff. These are "yankee" evidence of tradition usually found only on northern types of schooners. Also note the sheeve cut into the end of the boom. This is for use in light winds where it is sometimes advantageous to set the sail "loose footed," a British (and early-American) detail which was rare in American schooners.

Lightboards (photo #18) are wooden, of traditional design, again from the ATKINS, and are on the main rigging rather than the fore-rigging where sailing ships without power usually carried their sidelights.

The galley "caboose," and the cargo hatch cover in photo #19 are to be replaced as original. This is the only coasting schooner left which carries the galley "caboose." This arrangement of having the

galley on deck in its separate house is an interesting part of the ship's evolution: The galley was placed on deck to conserve space below for cargo, that space being premium in small coasting ships. Next, the galley was detached and fastened to the deck with turnbuckles so that it could be placed on top of deck loads. As crews became smaller with the advent of mechanical winches for raising sails (the WESTERN UNION has none), the galley stove was often moved below in the great cabin, but the caboose then housed the "donkey engine" for the winches. It remained, however, a place where the person on watch forward could be out of the weather but still stand his watch on deck. When sail went out of use, and the helmsman no longer needed to be out in the open to see the sails, this became the preferred place for the wheelhouse and remains the chosen place on ships today.

Photo #20 shows the starboard, forward pinrail and the turnbuckles setting up the fore-rigging. The pinrails and the turnbuckles are the original ones with which the ship was first rigged. Also, note the bulwarks and the bulwark stanchions, which are Madiera, as are the frames throughout the ship. This type of mahogany has been noted as "one of the very best shipbuilding materials of the world." It is virtually impervious to rot in either salt or fresh water. It is extremely hard and dense (the heartwood of it does not float) and it holds fastenings superbly. This particular mahogany was grown on the builder's property in the Caymans. It is virtually non-existent today, and has not been imported to the United States for some years.

Note (photo #21) the detail of semi-fancy fastenings for the halliards, which are built in conjunction with the boom saddle around the mast.

In photo #22, a second companionway, built similarly to the one at the engine room and the great cabin, is evident. Also note the anchor cathead extending over the starboard rail. (In most schooners; there was another over the port rail.) The WESTERN UNION has none on the port side, as it would have been in the way when working cables over side.

In photo #23; the anchor windglass of the WESTERN UNION has been replaced with an exact duplicate found in a fishing village on the Delaware River. The original was in poor condition. The present one is of the same vintage, and made at the same foundry as the original. It is in excellent condition and is used regularly. Also note the bronze bow chocks cut into the bufalow rail. They were cast especially for the WESTERN UNION.

The typical American bowsprit/jibboom arrangement can be seen in photo #24.

Photo #25 shows a distinctive "knob" at the forward end of the cutwater, and the lack of trailboards, which were normally on southern schooners.

The foremast head (photo #26) is somewhat longer than usual and is set up with an extra pair of shrouds. This was presumably done to aid in carrying a "fisherman" staysail in light winds and to provide room for lifting gear in cable work.

The mainmast head (photo #27) is exactly like the typical "Chesapeake" arrangement from the ATKINS. It features swing spreaders for the main topmast stays making running backstays unnecessary.

In photo #28, note that the depths (vertical length) of the main and fore sails are relatively shallow. This was once again, a southern innovation, especially suited for the wind patterns in the islands and the Gulf of Mexico. It allows sailing in the relatively high winds without reefing, and the use of large topsails for times when the tradewinds are not in evidence.

The layout of the great cabin below is typical of the American coasting schooner throughout the period represented. There is a small separate cabin for the Captain, a head, and four bunks around the perimeter, with the center open. The view in photo #30, is forward, showing the chart table where the navigating is done. Note the use of yellow pine wainscoting on the bulkheads. The door shown went into the engine room, but is now generally secured for Coast Guard requirements. It can be opened, retaining the original secondary entrance to the engine room.

Photo #31 shows the port, aft corner of the great cabin and two of the original bunks, plus the original ladder, bench and corner shelf.

Photo #32 shows two unusual distinctive marks: the carved mahogany placard "WASHROOM" (original equipment), which is unusual because historic ships never had "washrooms," but rather, heads; and the horizontal grain in the door panels.

Photos #38 and 39 show the cargo hold forward and aft, respectively. According to law, American ships must have their net tonnage and their official number carved in the "main beam" (the longest deck beam in a ship). Here, it is in the beam directly under the forward edge of the cargo hatch combing. In photo #39, note the sawn curvature of the deck beams.

The doors and walls seen in these photos, including the upright 6" x 6" beams are for passenger accomodation. They are not structural and can be removed easily, leaving the original open cargo area.

Photo #40 shows two of the bunks in the cargo hold.

In the fo'csle, (photo #42) the layout is original, but all bunks and wooden fittings have been rebuilt because of previous poor condition. This ladder is original. Note the foot of the foremast extending down through the deck and the table. Photo #45 shows the foremast step and its butt.

Note in photo #43 the vent holes in the ceiling (inside planking) for ventilation of the planking and frams. Separations between bunks are open at the top to aid ventilation in the bunks because the ship was built to operate in warm southern latitudes.

Photo #46 shows the starboard side of the bosun's locker where the utensils of maintainence are kept.

THE WESTERN UNION TELEGRAPH COMPANY

INCORPORATED

REPAIR OF Punta Rassa - Key West #4 CABLE

C. S. Western Union

NAVIGATOR'S REPORT

Section Repair No. 35

Ships Operation No. 151

Port or operation Sailing from Key West Florida.

Ships Date & Time	Greenwich Civil Date & Time	REMARKS
June 26th 1939	June 26th 1939	Received orders to proceed on repair to the Punta Rassa cable faulty 906.7 shms, 97.67 NM from Key West cable hut. Lat. 26 08 20 N Long. 82 02 30 W. Estimate # 151-0-39. Signed on crew, took on provisions, stores, etc. Finished taking on stores, and putting ship in commission. Electrician Hopkins reported aboard from Miami Beach cable office. 4 gallons of gasoline used from ships main tank for the Delee Electric plant.
June 27th AM	June 27th	
June 28th 9.00 AM 10.00 AM	June 28th 1400 1500	Ready for sea. Cleared the FEC dock for Smiths sheals. To pick up spare cable for the repair. No type B cable left in the cable tanks. Weather clear, wind light NW. Bar 30.08 On ground off Smith sheals to grapple for spare cable Will pick up the 2.140 NM type B 130/130BT 12/6 lying near the sheals for storage. Grappels down, dragging W for the sth end of cable. Missed end, turn ship and drag E. Hooked cable, and underrun to end for picking up. Commence picking up, using the crab winch recently recd from Halifax depot. Commence picking up and lay to cable for the night. Weather cloudy, Wind SE mod. Bar 30.07. Used 2 gallons gas for Delee, and 5 gals for winch
1.55 PM	1855	
2.00 PM	1900	
2.20 PM	1920	
3.40 PM	2040	
7.25 PM	June 29th 0025	
June 29th 6.00 AM 6.55 AM 8.20 AM 9.05 AM XXXXXX 7.45 PM	1100 1155 1320 1405 June 30th 0045	Weather cloudy, wind light SSE Bar. 30.05. Commence picking up. North end of the 2.140 NM cable aboard. Left Smiths sheals for Naples. Course N mag. Anchored off Naples for the night. Weather cloudy, wind light WNW, Bar 30.07. 2 gals gas used on Delee
June 30th 6.00 AM 7.55 AM	1100 1255	Weather cloudy, wind light SW. Bar 30.04. Underway for cable ground. Course 273 deg mag. distance 13 NM. On cable ground. Mark buoy moored in 7fm. Lat 26 08 14 N Long 82 02 30 W. Grappels down, drag W. Turn ship and drag E. Hooked cable. Cable to surface. Type D, 15/12 1/2. Underrunning W. Cable looks to be in good condition. End aboard. Total break on rock bottom. Cable end put in set to speak Key West. Unable to raise Key West. D.R. Test to Key West shows cable earthed. CR gives 936 shms Int. Still unable to raise Key West office as cable put in set with #2 buoy, and ship goes to recover N end.
10.40 AM	1540	
10.53 AM	1553	
11.08 AM	1608	
11.21 AM	1621	
11.25 AM	1625	
1.15 PM	1815	
1.30 PM	1830	
1.46 PM	1846	
2.20 PM	1920	

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June 30 Contd. 2.48 PM 2.59 PM 3.04 PM 3.40 PM 4.00 PM 4.10 PM 4.35 PM 6.00 PM July 1st 6.00 AM 6.55 AM 7.14 AM 8.30 AM 8.58 AM 9.35 AM 11.35 AM 2.35 PM 2.45 PM 4.40 PM 4.50 PM 7.30 PM July 2nd 6.00 AM 6.43 AM 7.47 AM 3.40 PM 4.15 PM 5.10 PM 5.50 PM	June 30 Contd. 1948 1959 2004 2040 2100 2110 2135 2200 July 1st 1100 1155 1214 1230 1358 1435 1635 1935 1945 2140 2150 July 2nd 0030 1100 1143 1247 2040 2115 2210 2250	Grapnels down, Drag E. Hooked cable. Cable to the surface. Type B 12/6 120/130BT. T 1 1 .38 NM laid in 1934. Underway to Sth splice. Sth splice aboard. Opened for test towards Punta Rasa Unable to raise Punta Rasa. Cable shows open t. Heavy squall bearing down from the West, so cable put to sea with #1 buoy, and ship anchored off cable li e. Heavy squall from the NW with much rain. Weather cloudy, wind fresh NW. Bar 30.04. 2 gals gasoline used on Delee. Weather cloudy wind light WSW. Bar 30.06. Anchor up and under way for #2 buoy on the Key out on Sth end aboard, we try to speak Key West. Same re ult as yesterday afternoon. Another OK taken gives same result. 936 ohms int. steady. Secaled sth end and put it to sea with #2 buoy. S 1 now goes to Nth end again. Nth end aboard. We try to speak Punta Rasa. Same s ul as yesterday. DR Nth gives .016 mega. Variable. Nth end put to sea with #1 buoy, and ship stands i for Naples to find out if any thing wrong with ffi o apparatus. Anchored close to Naples dock. Send ships boat ash with Electrician Hopkins, and Seaman R. Stedman t send wires to Key West and Ft Myers offices. Electrician Hopkins returns to the ship, and report XX Key reports trouble apparently in arresters in the cabl hut. Ft Myers reports the cable shows steady cart t them. It is decided to return to the cable ground, and try another test towards Punta Rasa, and if not abl to get results, to go to Rasa and make locatio t s from there. Underway for cable ground. Picked up #1 buoy on Nth end. Tests showed same re ul .018 mega varying. Unable to make capacity test as t. IC of the type D cable not given in the splice li t. Cable slipped to sea with #1 buoy, and ship heads f r Sanibel bell buoy. Course 20 mag. Distance 16 1/2 NM. Passed bell buoy and anchored near black channel l y. 2 gallons gasoline used for Delee. Weather clear, wind light ESE. Bar 30.08. Underway for dock at Rasa. Did not enter harbor previous night on account of the hardness of mesquit s which come aboard when under the lee of the lan . Tied up at Rasa dock. Sent Electrician and apparatus to cable office for testing. Series of Kennellys place 110 ohms from Rasa office. It was not known at t e time that there were 3 or 4 other faults besides t e original one in the cable. Cleared dock at Rasa, under way for the Nth fault. Pass the black buoy off Sanibel, and lay course f r t cable ground. Course 197 mag. Distance 6 1/2 NM. On ground. 5 1/2 Pms. Put XXI #4 buoy over for mark, and proceeded to grapple for cable. Using two centiped s in tandem. Bottom mud and cable buried. After making several unsuccessful drags, and not hooking cable, decid t change to mud grapnel. Heavy squall and rain beari g down from the NE so abandon work for the day, an

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July 2nd Contd. 6.15 PM 7.45 PM	July 2nd Contd. 2315 July 3rd 0045	stand by for squall. Squall struck with very heavy rain. lasted approx. 1 hour. Anchored for the night. Weather clear, wind light NW. Bar 30-11 2 gallons gasoline used for Delee, 5 gallons for ships winch.
3rd July 3rd 6.00 AM 7.10 AM 7.53 AM 8.05 AM 8.40 AM 9.40 AM 10.34 AM 11.40 AM 1.16 PM 2.10 PM 4.00 PM 6.00 PM	1100 1210 1253 1305 1340 1440 1534 1640 1816 1910 2100 2300	Weather clear Wind light SE Bar 30.10. Grapple over, drag W. Using 200 lb mud grapple. Hooked cable. Sounding 6 1/2 fms. Cable to surface. This is the 1.31 NM type B laid by the Field in 1927. Underrun Nth. leaving #5 buoy on cable at point where grappled. Have underrun approx 2 NM nth, all cable good. Put cable to sea, and stand up for #5 buoy to underrun #5 buoy and cable aboard. Underrunning 8th. Have underrun 8th to the Field splice of 1927, open for test. Splice opened for test. Test shows cable grounds NT approx 62 ohms. Start splice. Splice Finished. Cable put to sea. Under way to grapple for cable north at new position of fault. Anchored for the night. Weather cloudy wind mod Bar 30.10. 2 gallons gasoline used for Delee.
July 4th 6.00 AM 7.00 AM 8.30 AM 9.48 AM 10.03 AM 10.11 AM 10.46 AM 10.53 AM 1.00 PM 1.35 PM 1.40 PM 1.50 PM 2.44 PM 3.00 PM 3.31 PM 4.15 PM 4.40 PM 5.45 PM 6.15 PM 7.15 PM	July 4th 1100 1200 1330 1448 1503 1511 1546 1553 1800 1835 1840 1850 1944 2000 2031 2115 2140 2245 2315 July 5th 0015	Weather clear, Wind light NW Bar 30.03. Lying at anchor while repairs being made to wire. Preparing to grapple. Will pick up cable close to the splice of 10/1 to 12/6. Lat. 26 23 40 N Long 81 58 58 Grapple lowered drag W. Using 200lb mud grapple. Hooked cable, but slipped off hook while raising. Grapple down drag E. Missed cable, turn and drag W Hooked cable. Cable to surface. Type A 10/1. very taut. Condition perfect. Heavy wind and rain squall bearing down from the N. We suspend work till it passes over. Underrun 8th to splice of 10/1 to 12/6. Splice comes aboard, continue UR 8th. Bad place in armor comes over, stop and place #5 buoy on it. Broken end comes aboard. Speak Ft Myers, and the put cable to sea with #5 buoy. Grapple down, drag W. 2 centipedes in tandem. Hook cable, and on raising find it to be an old piece of abandoned cable. Grapnels lowered again and run Hooked cable Cable aboard, and underrun Nth. Splice of .80 NM 12/6 to 3.86 NM 12/6 aboard. Marry cable from held to this splice, and lay out to #5 buoy on the Nth end. #8 buoy left on the married end. Paying out towards #5 buoy. At Nth end, #5 buoy, and Nth end aboard. #5 buoy has been left on the bad spot in the armor to the Nth of buoy #3. Cable laid married to Nth end and put to sea with #5 buoy. Anchored for night. Weather cloudy wind light NW Bar 30.00. 2 gallons gasoline used on Delee.

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Ship's Date & Time	Greenwich Civil Date & Time	REMARKS
July 5th 6.00 AM 7.50 AM 9.07 AM 9.13 AM 10.30 AM 11.35 AM 11.58 AM 1.24 PM 2.17 PM 4.15 PM 4.55 PM 7.15 PM July 6th 6.00 AM 7.05 AM 9.05 AM 9.30 AM 10.00 AM 2.36 PM 6.30 PM July 7th 6.00 AM 7.00 AM 12.45 PM 1.00 PM 4.05 PM 7.00 PM July 8th 5.45 AM 6.00 AM 11.00 AM 12.44 PM 12.49 PM 1.15 PM	July 5th 1100 1250 1407 1413 1530 1625 1658 1824 1917 2115 2153 July 6th 0015 1100 1205 1405 1430 1500 1936 2330 July 7th 1100 1200 1745 1800 2105 2400 July 8th 1045 1100 1600 1744 1749 1815	Weather cloudy wind light SW Raining. Bar 29.96. Pick up #5 buoy on Nth married ends. Prepare to make Nth splice. Speak Ft Myers and get IR of .17 mags. It is raining at Ft Myers and this IR is over 20 miles of landline. Start Nth splice. Joint finished. XXXXXXXXXX. Raining heavily. Splice finished. Underrun to married ends at SF. Married ends and #8 buoy aboard. Open ends for test and splice. Speak Ft Myers, and get IR. of .45 mags. This not satisfactory, so request that man be sent to Rassa cable office to open cable for test. Atlanta office advised of progress. Rassa cable office in, and he frees and catches for 1st DR ship to Rassa office 17 mags. OR 70.59 chas. Rassa released and prepare to make final splice this position. Splice finished, and cable clipped to sea. Pick up #3 buoy, and underway for the original break south. Anchored near wreck buoy at first break, weather cloudy, wind light S. Bar. 29.96. 2 gallons gasoline used for Delee plant. Weather cloudy wind fresh NW. Bar 29.96. #2 buoy on the 8th end aboard, picking up to good sea. The type D cable here is on rock bottom and in poor condition. Picked up to the 5th end of the .42 NM type B 12/8 laid in by the Atkins Sept 1931. This cable in good condition. This end put to sea with #7 buoy. Weather is threatening, and strong wind and rain equal. Dumped all bad cable picked up off cable line. Pick up #1 buoy on the Nth end and call Ft Myers. Unable to raise them. Test taken shows cable open north of the ship. Wind has changed to strong South, with heavy sea and rain. Work suspended waiting for change of weather. Went to 8th and picked up cable to speak Key West. IR taken to Key West office 1.3 mags. Atlanta advised of conditions. Cable put to sea with #7 buoy. Ship anchored to wait better weather. Weather clear, wind fresh S heavy sea. Bar 29.96. 2 gallons gasoline used for Delee plant. Weather raining heavy, wind fresh SSE. Heavy sea. Bar. 29.91 Wind and sea increasing. Ship straining at anchor. Wind strong SSE. Heavy sea. Anchor up and stand in for the land under sail, for better anchorage. Anchored in 4 1/2 fms off Naples. Raining. Weather cloudy wind Fresh SE Bar 29.94. 2 gallons gasoline used for Delee plant. Weather cloudy wind SSE med. Considerable sea. Bar 29.96 Underway for cable ground. Undersail only. Radio receiving set went out of order. No more weather reports. Wind and sea have abated somewhat. Now prepare to grapple to the north of #1 buoy which is on the 3TH end of the .38 Type B cable. Will then underrun Nth towards op N. Grapnels down, drag W. Two centipedes in tandem. Heel cable. Cable aboard. Underrunning Nth.

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Ship's Date & Time	Greenwich Civil Date & Time	REMARKS
July 8th Contd. 1.20 PM 1.50 PM	July 8th Contd. 1830 1850	Splice passed over Type B ath to Type D Nth. Cable parted on deck. South end lost. Pick up Nth 1 good cable, and try Ft Myers. Cable still shows eye 3th, but now with DR of 1.4 megs. Put the Nth end to sea with #2 buoy and go to grapple for the 3th end. Grapple down, drag w. Hook cable. Cable aboard, and pick up south to good cable where cable lying on sand. Cable put to sea with #3 buoy, and stand ath to lay in cable at first break. Pick up #7 buoy on ath end of first break. Get Key West and take DR 1.5 megs. Haul cable from tank to 3th end and prepare to pay out north to #5 buoy. Start paying out. Finished paying out. .96 NM type B cable here. #5 buoy aboard, married, and cable put to sea with #5 buoy. Anchored for night. Weather clear, wind light S Bar. 29.98. 5 gallons gasoline used for winch.
2.54 PM 2.58 PM 2.15 PM 3.45 PM 4.20 PM 4.43 PM 4.55 PM 5.40 PM 6.20 PM	1934 1958 2013 2045 2102 2143 2155 2240 2320	July 9th. 0008 Weather cloudy, wind mod SSE. Bar 29.96. Putting patron on ship's work boat. Picked up #5 buoy on Nth married cable to make nth splice. Raining. Put up awnings. Start splice. Heavy SW squall and rain. Splice finished, and cable slipped to sea. More squalls and rain. Stand by. Picked up #5 buoy on the SF married ends. Open cable ends and prepare for splice. Speak Key West. Tests to Key West are. DR 1.8 megs CR 942 CHS HAU Test to sealed end nth show int. Start splice. Splice finished and cable slipped to sea. Proceed 1 mile mark buoy to new position north. Mark buoy with moorings aboard, proceed north to new position. Mark buoy moved new position. Now proceed south to pick up approx 1/4 NM type B cable which was out of the .38 NM type B on July 28th and left on buoy 1. The best of this cable can be used to repair cable at position where it parted at 1.50 PM July 8th. Picked up #1 buoy and cable.
7.08 PM July 9th 6.00 AM 7.17 AM 9.10 AM 10.43 AM 2.00 PM 2.23 PM 2.45 PM 4.30 PM 5.40 PM 6.23 PM 6.36 PM 7.18 PM 7.30 PM	0008 July 9th. 1100 1217 1410 1542 1900 1923 1945 2130 2240 2323 2335 July 10th 0018 0030	Finished picking up cable. Approx .25 NM anchored for the night. Weather clear, wind mod. E Bar 30.00 2 gallons gasoline used on Deice plant.
July 10th 6.00 AM 7.10 AM 7.52 AM 8.06 AM 10.45 AM	1100 1210 1252 1306 1545	Weather cloudy, wind light SSE. Bar 30.00 Pick up #3 buoy on the ath end of break, and marry on the end of the recovered cable. Type B - 12/6 130/130 RT. Start paying out to #2 buoy on the nth end. Nth end and #2 buoy aboard. Test taken to the north still shows cable open to ship, with DR of 1.6 megs. Haul cable ends together, and proceed to under-run cable nth. Under-running Nth. now in rotten cable Type D 15/14. Most of cable under-run since starting nth has been good. Cable parted over stern. Commenced picking up Nth and cable parted over bow. Prepare to grapple for Nth end.

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Ships Date & Time	Greenwich Civil Date & Time	REMARKS
July 10th Contd.	July 10th Contd.	
1.45 PM	1848	Grapple down, drag E & centipodes in tandem. mi se
1.55 PM	1855	Turn ship and drag W. Missed cable.
2.08 PM	1908	Turn and drag E.
2.14 PM	1914	Hook cable.
2.19 PM	1919	Cable to the surface. Type B 10/6 laid by the atkin
		in Sept 1937. 1.14 NM. As we are close to her SF
		splice will underrun sth to it.
3.45 PM	1945	Atkins SF splice aboard. We out. Test towards Ft j i
		shows heavy earth.
3.49 PM	2049	Unable to raise Ft Myers. Cable put to sea with #2
		buoy. Proceed to grapple for the 3th end.
4.05 PM	2105	Grapple down drag E.
4.14 PM	2114	Hook cable.
4.20 PM	2120	Cable at surface. We out and proceed to pick up scout
4.45 PM	2145	Have picked up to good cable. Cut and buoy using
		#4 buoy. On account of the direction of the wind an
		current, will lay in from the North to South. Proceed
		to #2 buoy on the North end.
5.45 PM	2245	#2 buoy and Nth end aboard. Hauling the cable fr a
		hold to the Nth end. Leave #2 buoy here.
6.20 PM	2320	Paying out south to #4 buoy on the 3th. end.
7.15 PM	0015 July 11th	
		#4 buoy and cable aboard. Haul ends and put to sea
		with #5 buoy.
7.27 PM	0037	Underway south to the insertion made this AM. Will
		make these splices, and return north for finals
8.11 PM	0111	At Mark buoy. Anchored for the night. Weather clear y.
		Wind fresh SSW. Bar 30.07. 3 gallons gasoline for 1
July 11th		
6.00 AM	1100	Weather clear, wind Light SE. Bar 30.08.
6.57 AM	1157	Underway for #7 buoy on married ends.
7.33 AM	1233	#7 buoy and cable aboard, getting ready for splice.
8.00 AM	1300	Speak Key West and test. DR ship to Key West 1.6 mgs.
		CR 956 ohms.
8.25 AM	1325	Start splice.
9.40 AM	1444	Splice finished. Underrun to Nth married ends .13 M
		away, to make splice. Stop on way to serve several
		places on the armor of recovered cable laid in.
10.53 AM	1553	Nth married ends aboard. Open for splicing.
11.23 AM	1633	Speak Key West take DR. 1.6 mgs.
12.10 PM	1710	Start Splice.
1.29 PM	1829	Splice finished and cable clipped to sea. Now stand on
		north for #5 buoy on the south ends of cable laid i
		7.15 PM July 10th.
2.13 PM	1913	#5 Buoy and cable aboard. Opening ends for splice.
2.55 PM	1955	Speak Key West. DR to Key West 1.4 mgs.
		CR to " " CR 965.4 ohms.
3.24 PM	2024	Start Splice.
4.40 PM	2140	Splice finished. Cable clipped to sea. Head for #2
		on the Nth married ends.
5.11 PM	2311	#2 Buoy and cable aboard. Opening ends for splice.
6.30 PM	2330	Unable to raise Ft Myers. cable shows heavy earth.
6.40 PM	2340	Speak Key West and ask him to get Biscere released i
		Varley test.
7.00 PM	2400	Key West advises Biscere released, and cables 4 and
		leaped at Ft Myers and Key test for Varley test.
		Loop is for 30 minutes. Electrician advises unabl
		get test. Cables are either not leaped or there i
		something wrong at one of the offices. Will have t
		wait until 7.30 to contact Key West.
7.30 PM	0030 July 12th	
		Key West in. no report to him no loop. He says that
		Russa cables are in the block at back of the suite
		board wrong, and asks if loop through front of th
		board will do. We tell him yes.

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July 11th	July 12th	
		We try for loop again several times without success. Send message to Ft Myers via Key West and request that man be sent to Rassa office to loop cables there, as we suppose that there is trouble on the 20 miles of landlines between Rassa & Myers.
8.21 PM	0131	Man now at Rassa office. Reports that cables are looped there. Loop is for 15 minutes. Test still no good. Unable to get loop. Test set is gone over and found to be in perfect shape.
8.47 PM	0147	Get Key West and advise that conditions are the same and that we are getting no loop. He tries loop at back of the board, and then at the front of the board to see if he can give us loop.
8.57 PM	0157	Get loop OK. Proceeded with Varley measurement. Varley places fault 62 ohms north of the ship. Advise Key West that Bloore is released, and also release man at Rassa office. Take MK to Key West.
9.29 PM	0229	1.4 megs.
10.06 PM	0256	Start splice.
		Splice finished, ship is pulled ahead clear of the splice, before slipping as it is intended to under-run north next day to the fault 62 ohms distant.
11.25 PM	0425	Cable slipped to sea with #2 buoy.
11.40 PM	0640	Anchored for the night. Weather clear sea calm. Bar. 30.10
		2 gallons gasoline taken from tanks for Dolce plant.
July 12th		
6.00 AM	1100	Weather cloudy, wind light variable, Bar. 30.00
7.12 AM	1212	Pick up #2 buoy and cable.
7.25 AM	1225	Under-running Eth.
11.20 AM	1620	Splice aboard. 1.31 NM - B to .21 NM - B. This is close to measurement. Will open for test.
		Splice opened, and fault found under the butt.
		Deteriorated Cutta Percha.
11.47 AM	1647	Speak Key West and test. Get DR of 1.4 megs.
11.59 AM	1659	Speak Ft. Myers. As it is raining at Ft Myers and this is the final splice, request that man be sent to Rassa to open cable for MK test.
1.07 PM	1857	Get Rassa cable office, and they open for our test. MK ship to Rassa 16 megs. CR 106.3 ohms.
		Release man at Rassa and prepare for splicing.
		Atlanta office advised now making final splice and that ship will go into Punta Rassa for some provisions and fuel.
		NM
		at this splice of .21 - B - 12/6 north, to 1.31 - B - 10/6 south, the 1.31 NM - 10/6 is listed on the splice list as being 130/130 BT. This is an error. The cable is 120/140BT.
3.15 PM	2015	Start splice.
4.05 PM	2155	Splice finished and cable slipped to sea.
5.14 PM	2214	Underway for Punta Rassa.
7.00 PM	2400	Anchored in the stream opposite dock at Punta Rassa. Weather raining, wind light NE, Bar 30.05.
		2 gallons gasoline used for Dolce plant,
July 13th	July 13th.	
6.00 AM	1100	Weather clear, wind light variable, Bar 30.00
9.05 AM		Moved to the dock to take on provisions and fuel. Provisions and fuel aboard, clear for cable grounds to pick up Mark buoy.