Form 504
U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey: Topographic
Field No.: T-8847
Office No.: 8

LOCALITY
State: Florida
General locality: Martin and St. Lucie County
Locality: Jensen Beach: Eden

1947-48

CHIEF OF PARTY
Lieut. Comdr. Ross A. Gilmore

LIBRARY & ARCHIVES

DATE: January 19, 1949
DATA RECORD

T- 8847

Quadrangle (II):


Completed survey received in office: 27 July 48

Reported to Nautical Chart Section:

Reviewed: 20 Oct 48 Applied to chart No. Date: 

Redrafting Completed:

Registered: 5 Nov 48 Published:

Compilation Scale: 1: 20,000 Published Scale: 1:24,000

Scale Factor (III): None

Geographic Datum (III): N. A. 1927 Datum Plane (III): M. S. L.

Reference Station (III) POPONELL, 1934

Lat.: 27° 19' 18.311" (557.4m) Long.: 80° 13' 38.431" (1056.6m) Adjusted

Unadjusted

State Plane Coordinates (VI): Florida East Zone

\[ x = 750,881.84 \text{ ft} \quad y = 1,086, 843.36 \text{ ft} \]

Military Grid Zone (VI)
PHOTOGRAPHS (III)

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>16360</td>
<td>27 April, 1946</td>
<td>10:49</td>
<td>1:20,000</td>
<td>Atlantic MLW Ind.Riv.0.2</td>
</tr>
<tr>
<td>16361</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>16362</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>16396</td>
<td>&quot;</td>
<td>12:03</td>
<td>&quot;</td>
<td>0.4 &quot;</td>
</tr>
<tr>
<td>C1671 to 1677</td>
<td>11 May 45</td>
<td>9:30</td>
<td>1:20,000</td>
<td>MLW</td>
</tr>
</tbody>
</table>


Atlantic Ocean

Mean Range: Indian River: 85

Spring Range: Indian River: 1.0

Camera: (Kind or source) U.S. C. and G.S. Nine-lens camera, 81/4⁴ focall length

Field Inspection by: H.G. Murphy date: 11-19, Aug. 1947

Field Edit by: J.D. Weigel date: May 1948

Date of Mean High-Water Line Location (III): 17-22 July, 1947

Projection and Grids ruled by (III) T.L.J. (Wash. O.) date: 23 Oct. 1947

" " " " checked by: T.L.J. (Wash. O.) date: 23 Oct. 1947

Control plotted by: R. Dossett date: 12 Nov. 1947

Control checked by: E.C. Andrews, M.M. Slavney date: 21 Nov. 1947

Radial Plot by: M.M. Slavney date: 9 Jan. 1948

Detailed by: B.F. Lampton date: 13 Feb. - 16 Mar. 1948

Reviewed in compilation office by: J.A. Giles date: March 1948

Elevations on Map Manuscript checked by: J.A. Giles date: March 1948
STATISTICS (III)

Land Area (Sq. Statute Miles): 6

Shoreline (More than 200 meters to opposite shore): 23.0 Statute miles

Shoreline (Less than 200 meters to opposite shore): 1.25 Statute miles

Number of Recoverable Topographic Stations established: 22

Photo-hydro
Number of Temporary Photographic Stations located by radial plot: None required for this project

Leveling (to control contours) - miles: 5

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION</th>
<th>DATUM</th>
<th>LATITUDE OR y-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS</th>
<th>N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEMETERY, 1905</td>
<td>G.P. PP 157</td>
<td>N.A. 1927</td>
<td>27 15 08.115</td>
<td>249.8 (1596.9)</td>
<td>7.5 (1643.1)</td>
<td></td>
</tr>
<tr>
<td>DRAW, 1930</td>
<td>PP 714</td>
<td>''</td>
<td>27 15 10.358</td>
<td>318.8 (1527.9)</td>
<td>287.4 (1363.1)</td>
<td></td>
</tr>
<tr>
<td>JEN, 1930</td>
<td>PP 181</td>
<td>''</td>
<td>27 15 42.705</td>
<td>1314.4 (532.3)</td>
<td>1647.0 (3.5)</td>
<td></td>
</tr>
<tr>
<td>JEN 2, 1934</td>
<td>PP 157</td>
<td>''</td>
<td>27 15 42.031</td>
<td>1293.7 (553.0)</td>
<td>46.2 (1604.3)</td>
<td></td>
</tr>
<tr>
<td>SPENT, 1930</td>
<td>PP 715</td>
<td>''</td>
<td>27 15 08.344</td>
<td>199.3 (1651.4)</td>
<td>99.4 (852.2)</td>
<td></td>
</tr>
<tr>
<td>FERNELL, 1934</td>
<td>PP 129</td>
<td>''</td>
<td>27 19 18.111</td>
<td>557.4 (1289.3)</td>
<td>1056.6 (592.9)</td>
<td></td>
</tr>
<tr>
<td>THIN, 1930</td>
<td>PP 181</td>
<td>''</td>
<td>27 19 17.542</td>
<td>539.9 (1306.8)</td>
<td>1009.1 (640.4)</td>
<td></td>
</tr>
</tbody>
</table>
FIELD INSPECTION REPORT

TO ACCOMPANY
QUADRANGLE T-8847
" EDEN SW "
PROJECT Ph-9(46)
18 AUGUST 1947

1. DESCRIPTION OF THE AREA

This 7½ minute quadrangle is located on the East Coast of Florida in Martin and St. Lucie Counties. It is bounded on the North by Lat. 27°22'30", on the South by Lat. 27°15' 00", on the West by Long. 80°15'00", and on the East by Long. 80°07'30". The area contains about 7 square statute miles of land. Elevations range from sea level to 80 feet on a hill in the southwestern portion of the quadrangle.

Parts of the Florida East Coast Railroad, Florida State Highway 707, and portions of the Intracoastal Waterway and the Atlantic Ocean appear in this quadrangle.

A dirt road runs generally north and south on Hutchinson Island from the southern part of the quadrangle to the northern limits.

The area west of the Indian River in general is hilly and covered with scattered trees and brush. This area is rather thickly settled.

The land on Hutchinson Island is flat, except for a sand ridge along the beach, and covered by a dense jungle growth of palms, palmetto and mangrove.

2. COMPLETENESS OF FIELD INSPECTION

The field inspection was done in accordance with project instructions dated 23 May 1947 and pertinent, general instructions; it is believed to be complete.

The photographs of this area were taken in April, 1946, and there has been little change since that time. Several clearings and new houses were shown on the photographs using planetable methods.

In the northeastern portion of the quadrangle there is a cleared area that was formerly a Coast Guard Station and is now abandoned; as far as can be determined it is no longer a government reservation.
The field inspection was done on the following photographs: 16360 and 16361.

3. **INTERPRETATION OF PHOTOGRAPHS**

The land immediately west of the Indian River appears on the photographs as white, mottled with gray. This is due to sand with brush and scattered trees growing on it. To the West of this sand area are a number of pevennial ponds known locally as "The Savannas". On Hutchinson Island, east of the Indian River, mangrove appears as a dark gray, mottled texture, while the palmetto shows a smooth, lighter gray. A number of abandoned farms are outlined by heavy lines of trees; these are Australian pines used as windbreaks.

4. **HORIZONTAL CONTROL**

The horizontal control for this quadrangle consists entirely of U.S.C. & G.S. triangulation; a search was made for all stations and each station recovered was identified on the photographs for control of the radial plot. See also paragraph 19 regarding U.S.E.D. control in this area.

5. **VERTICAL CONTROL**

There is one U.S.C. & G.S. bench mark in this quadrangle. This bench mark was recovered and used to establish additional vertical control.

Fly levels were run on State Highway 707 to give a distributed base for planetable contouring. All level lines were closed within the required accuracy and the records carefully checked. All level points are shown on the photograph with a cross, labeled with the quadrangle designation letters "ED", and numbered consecutively in blue ink with elevations shown to the nearest tenth.

6. **CONTOURS AND DRAINAGE**

The contouring was done by a four-man planetable party in accordance with instructions for this project, at an interval of five feet on Hutchinson Island. An area in the western portion of this quadrangle was contoured at an interval of 10 feet because of the congestion of contours; sufficient information is shown to enable the compiler to draft the intermediate contours.

The maximum vertical closure of any planetable traverse in this quadrangle was 0.5 foot, with the general closure running from 0.1 to 0.2 foot.
A planable traverse was run from South to North on Hutchinson Island, and due to lack of vertical control in this area occasional ties were made to the side waters of the Indian River, with no closure greater than 0.5 foot. The contouring was done on the following photographs; 16360, 16361 and 16362.

7. MEAN HIGH-WATER LINE

An attempt was made to inspect the MHWL on the mainland by boat, but due to shallow water the boat could not be brought close enough to shore for accurate inspection, and it was inspected from closely spaced docks and walking along the shore.

The shoreline on the west side of Hutchinson Island was inspected by boat, and is predominately apparent shoreline.

The MHWL on the outside beach on Hutchinson Island was shown by taking rod shots and by measuring from a definite grassline. A very faint gray line shows on the photographs and these measurements prove this to be the MHWL.

Shoreline is shown on the following nine lens photographs; 16360, 16361 and 16362.

8. LOW-WATER LINE

The low-water line is approximate only. A barely discernible, light gray line follows the shore on the mainland. This line was checked in several places and found to be the approximate low-water line; it has been indicated by a dotted green line.

Along the east side of the Indian River the low-water line is coincident with or inside the apparent shoreline. Occasional stretches of white or light gray on the edge of the mangrove are sand bars covered at low-water.

The low-water line along the ocean was checked by measurement at intervals and indicated on the photographs.

9. WHARVES AND SHORELINE STRUCTURES

There are numerous wharves and piers on the Indian River, all of which have been noted on the photographs. One wharf was found in ruins with piling projecting above water. These pilings were indicated on photograph 16360.

10. DETAILS OFFSHORE FROM HIGH-WATER LINE

Along the entire shoreline on the ocean beach of Hutchinson Island in this quadrangle, there is an almost unbroken line of small rocks, some baring 0.2 to 1.0 foot at MLW, the rest covered at MLW, extending from the MHWL offshore. The width of this foul area could not be determined by this survey. These rocks appear on the photographs as an outer line of
surf and are too numerous to be delineated individually on the photographs.

Along the Intracoastal Waterway channel there are numerous indications of old spoil. This spoil has settled until it is little above the general river bottom; the parts of the spoil which show well on the photographs appear so because they are sand, while the balance of the river bed is generally covered with grass.

No other details requiring investigation by a hydrographic party were observed.

11. LANDMARKS AND AIDS TO NAVIGATION

There is only one light in this area, and it was discernible on the photograph. Two planetable cuts proved the identification of the light.

No landmarks were recommended in this quadrangle.

12. HYDROGRAPHIC CONTROL

No hydrographic signals required in this project.

13. LANDING FIELDS AND AERONAUTICAL AIDS

No landing fields nor aeronautical aids fall within the limits of this quadrangle.

14. ROAD CLASSIFICATION

All roads have been classified in accordance with the latest instructions, dated 14 April 1947.

15. BRIDGES

All bridge information for the area covered by this report as listed in the U.S. Engineers "List of Bridges Over Navigable Waters in the U.S.", dated July 1, 1941, was verified in the field, all clearances were carefully measured with a steel tape, and the published description and clearance were found to be correct.

There is one bridge in this area, at Jensen Beach; clearances have been noted on photograph 16360. Horizontal clearances are indicated for both east and west passages, but at present the west side is closed to boat traffic due to rotting pilings in the fenders. According to the bridge tender a new draw span will be constructed in the near future, and this situation will then be remedied.
16. BUILDINGS AND STRUCTURES

All buildings to be shown have been circled in red on the photographs and buildings not to be shown have been deleted in green.

17. BOUNDARY MONUMENTS AND LINES

Precinct and county boundary lines have been shown on the photographs, and a legal description of these boundaries will be submitted in a Special Report on Boundaries, Project Ph-9(46). A very thorough search was made for all section corners; in cases where those could not be found ¼ and 1/16 corners were searched for.

Four corners and one county boundary marker were found, identified on the photographs and described on Form 524.

18. GEOGRAPHIC NAMES

This will be the subject of a Special Report, Project Ph-9(46).

Filed in Geographic Name Section, Div. of Nautical Charts.

19. TOPOGRAPHIC STATIONS

Along both shores of the Indian River and on the Atlantic Ocean beach, sufficient topographic stations were established, along with existing triangulation stations, to give a spacing of approximately one mile between recoverable stations. All established stations were described on Form 524. Since the accuracy of the U.S.E.D. control in this area is considered less than third-order these stations have been classified as topographic stations, and identified and described accordingly.

20. JUNCTIONS

A junction was made with T-8411 to the South and T-8846 to the West. All junctions were in good agreement. There are no adjoining quadrangles to the North or East.

Supervised:  
Lewis V. Evans, III  
Lieut. (jg), USCGS

Approved and Forwarded:  
Ross A. Gilmore  
Chief of Party

Herschel G. Murphy  
Photogrammetric Aid
26 AND 27. CONTROL AND RADIAL PLOT:

A special report will be submitted by H.M. Slavney, Photogrammetric Engineer. The nine-lens photographs were clear and of reasonably good scale. The field inspection was satisfactory.

The contours shown on the photographs were not in complete agreement with the ponds and low areas on the map manuscript. Wherever it was evident that the field party was showing a contour along a berm, the contour was moved to follow the berm, since it is believed that its correct position can be determined more accurately by examination with the large stereoscope in this office.

In cases where a contour follows the berm of a pond, intermittent pond or low area, the contour is indicated by a series of brown ticks on the lower side of the berm. It is believed that this will be easier to follow than labels. Depression contours have been labeled.

In some areas, contours were shown on the field photographs with a ten-foot interval because of a large amount of relief. The five-foot contours were interpolated on the map manuscript with the aid of the stereoscope and the spot elevations shown on the field photographs. The interpolated contours should be given a visual inspection during field edit.

Along the Atlantic shoreline, the measurements given from the mean high-water line to the five-foot contour were so small that it was necessary to displace the five-foot and sometimes the ten-foot contour to keep the lines separate. The five-foot contour was kept as close to the shoreline as possible.
The contours on the field photographs have been checked under the stereoscope in the compilation office. On the northern part of the mainland, between the Florida East Coast Railroad and the Indian River, there are serious discrepancies between the contours and the relief visible under the stereoscope. It is believed that this area should be recoultored, preferably on photograph 16396, to keep relief displacement as small as possible. It will be necessary that the field editor be furnished with a copy of this photograph, as it was not used in the original field work. The ridge and saddle lines as determined under the stereoscope have been indicated on field photograph 16361. Yellow ink was used for ridges and orange ink for saddles.

29. SUPPLEMENTAL DATA:

None.

30. MEAN HIGH-WATER LINE:

The mean high-water line has been delineated according to field inspection notes. The berm of the mean high-water line along the Atlantic shore was clearly visible on the office photographs.

31. LOW-WATER AND SHOAL LINES:

The low-water line has been delineated according to field inspection notes. A small area in the Indian River that uncovers at mean low water has been delineated according to the outline visible on the photographs.

The spoil area in the Indian River at the south edge of the quadrangle was recovered on the field photographs for quadrangle T-8411. It was delineated from photograph 11868, as it was not clearly visible on the later photographs.

The limits of the foul area along the Atlantic shore were located by placing each photograph covering the area under the map manuscript and showing the outer limit of surf visible on each, as breakers occurred in different places on each photograph. When this was done, the limits of the foul area were seen to be an almost unbroken line offshore. The limits have been generalized somewhat on the map manuscript. It was impossible to locate accurately individual rocks on the photographs.
32. DETAILS OFFSHORE FROM THE HIGH-WATER LINE:

None that require further investigation.

33. WHARVES AND SHORELINE STRUCTURES:

Wharves and shoreline structures have been delineated according to field inspection notes.

34. LANDMARKS AND AIDS TO NAVIGATION:

One non-floating aid to navigation has been located by radial plot methods, and is being submitted on form 524 and form 567.

In the field inspection report it is stated that no landmarks were recommended in this quadrangle. However, there is a landmark (a house) shown on Nautical Chart 1247 for which form 567 recommending deletion has not been submitted. There is no house at present in the exact position shown on the nautical chart and there are some other houses in the area, so that its value as a landmark is doubtful. It is requested that the field editor submit form 567 for this landmark, with his recommendation. Copies of 567 attached.

35. HYDROGRAPHIC CONTROL:

No hydrographic control was established.

36. LANDING FIELDS AND AERONAUTICAL AIDS:

There are no landing fields or aeronautical aids in the quadrangle.

37. RECOVERABLE TOPOGRAPHIC STATIONS:

Twenty-two recoverable topographic stations, including one non-floating aid to navigation, have been radially located and are submitted on form 524. All were located by radial plot methods except SERPENT, 1930, R.M. 1, which was located by distance and azimuth given in its description.

Station YELLOW TANK, 1947, was recovered on photograph 11868. This photograph was taken before the tank was built and the tank was located by measurements. However, the tank was visible on the newer photographs so that it was not necessary to use the measurements.
38. GEOGRAPHIC NAMES:

The geographic name report had not been received at the time of completion of the quadrangle. All names shown on Nautical Charts 846 and 1247 have been applied to the map manuscript. The name "Eden" was taken from the General Highway and Transportation Map of St. Lucie County. List of approved names attached.

39. SECTION LINES AND BOUNDARIES:

The field inspection report states that a special report on boundaries will be submitted from the entire project. This report had not been received at the time of completion of the quadrangle.

Section lines were shown according to corners recovered by the field inspector and plats obtained from the General Land Office. The lines are believed to be shown accurately on the mainland and on the southern portion of the island between the Indian River and the Atlantic Ocean. In the northern part of the quadrangle, no control for section lines has been recovered, and the lines shown at the present are tentative. It is requested that the field editor attempt to recover any points along section lines in this area. Unless more control can be recovered, it is believed that the section lines in this area cannot be located with sufficient accuracy to be shown on the published quadrangle.

An Ozalid print of the map manuscript has been prepared with notes showing discrepancies in the section lines for the field editor.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

Comparison was made with Planimetric Maps 4542 and 4543. There is a large amount of cultural change. There are some minor discrepancies in position. A small island off the point north of Snake Island has disappeared. No other important discrepancies were noted.

45. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Nautical Chart 1247, print date January 27, 1947 and Intracoastal Waterway Charts 845, print date March 3, 1947, and 846, print date February 24, 1947.
Several small islands in the southern part of the Indian River have disappeared. There is a small area in the position of one of the islands that uncovers at mean lowwater. The shoal areas along the Intracoastal Waterway are stated by the field inspector to be little above the general river bottom.

There are a number of changes in the piers along the west side of the Indian River.

The full extent of the foul area along the Atlantic shore is not shown on the nautical chart.

The landmark on Chart 1247 is discussed under paragraph 34.

Respectfully submitted,

B. Frank Lampton, Jr.

Approved and Forwarded:

Ross A. Gilmore
Lieut. Comdr. USCG
Chief of Party
I recommend that the following objects which have not been inspected from seaward to determine their value as landmarks be deleted from the charts indicated.

The positions given have been checked after listing by

John H. Metcalf

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE</th>
<th>D.M. METERS</th>
<th>LONGITUDE</th>
<th>D.P. METERS</th>
<th>METHOD OF LOCATION AND SURVEY</th>
<th>DATE OF LOCATION</th>
<th>CHART AFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>BD</td>
<td>House has been destroyed</td>
<td></td>
<td>27 15.6</td>
<td>80 11.9</td>
<td></td>
<td></td>
<td>NA1927 Visual May 1948</td>
<td></td>
<td>X 1247</td>
</tr>
<tr>
<td>YELLOW TANK</td>
<td>Not visible from ocean</td>
<td></td>
<td>27 15.3</td>
<td>80 11.8</td>
<td></td>
<td></td>
<td>NA1927 Visual May 1948</td>
<td></td>
<td>X 1247</td>
</tr>
</tbody>
</table>
I recommend that the following objects which have been inspected from seaward to determine their value as landmarks, be charted on the charts indicated.

The positions given have been checked after listing by B. Frank Lampton, Jr.

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>METHOD OF LOCATION AND SURVEY</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT. 279</td>
<td>Indian River South Light 279. Black square daymark with yellow border on pile structure.</td>
<td>27 18 583 80 14 1384</td>
<td>N.A. 1927</td>
<td>Radial Plot May 1948</td>
<td>845, 846</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.
I recommend that the following objects which have not been inspected from seaward to determine their value as landmarks, be charted on the charts indicated.

The positions given have been checked after listing by

B. Frank Lampton, Jr.

George E. Morris, Jr.

Chief of Party.

<table>
<thead>
<tr>
<th>STATE</th>
<th>FLORIDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARTING NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>TOWER</td>
<td>White wooden Coast Guard tower on piles, pyramidal roof, 30 ft. high</td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.
FIELD EDIT REPORT
QUADRANGLE T-2847
"EDEN SW"
PROJECT PH-9(46)

Field edit of this quadrangle was completed during May 1948 by
John D. Weiler, Photogrammetrist.

46. METHODS

In field editing the map manuscript all roads were traversed by
truck. Because of roads adjacent to the shoreline, this feature
was also checked by truck. All data added to the manuscript was
either plotted from distinguishable topographic features or cut
in by planitable methods.

47. ADEQUACY OF THE MAP MANUSCRIPT

The original field work was poorly done.

It was necessary to recontour a considerable portion of the sand
ridge along the west side of the Indian River. The elevations
shown by the original field party are mostly correct but the
sketching and stereoscopic interpretation very inaccurate.

Indian River South Light 279 was incorrectly located and has been
relocated on photograph No.16361. The shoreline inspection along
the Atlantic Ocean was poorly done. The area was inspected at low
tide and no rocks were uncovered as stated on the field photographs.
The line of demarcation shown parallel to the beach is merely a
breakers line and varies according to the stage of the tide and
direction and velocity of the wind. It should be removed from the
map manuscript. The character of the foreshore, as requested on
the discrepancy overlay, is exclusively mixed sand and smooth shell
along the entire length of the quadrangle.

Attention is called to the name "Jensen". The name destination
outside the south border of the quadrangle shows Jensen 0.5 miles
south. However, the area at the west end of the Jensen Bridge is
"Jensen Beach" still within the limits of the town and the name should be shown.

Attention is called to the name "Hutchinson Island". Local infor-
mation indicates that the possessive "s" is not used.
Topographic station "Yellow Tank 1947" is a very poor station visibly. It should never have been picked, inasmuch as there is a dominating Coast Guard Tower only 300 feet north.

The house charted as a landmark on Chart No. 1247 (Lat. 27°15.3', Long. 80°11.3') has been destroyed and form 567 for this deletion is submitted. Carbon copies of 567s prepared by Field Editor follow this report. Original filed as Chart Sette, No. 767 (1948)

48. PUBLIC LAND LINES in Div. of Nautical charts.

No new section corners were recovered. An intensive search was made for any marks or records that would tie down the lines on Hutchinson Island. The only material found was a map of an old traverse run along the beach road by Mr. Frank Engler, Surveyor and Engineer of Fort Pierce, Florida, on which he had referenced section lines by points on traverse. An attempt was made to fit this to the map manuscript but the total distance along the road from the north line of T36S (which falls on quadrangle T-8845) to the south line of T36S does not check. A sketch of the traverse has been drawn in purple ink on the field edit sheet, but it is believed that it will be of little value.

The reviewer is correct in his assumption that the section corner N1411 T37S, R44E is incorrectly located. This corner falls approximately where the lines are delineated and the recovered corner is a meander corner on the east-west line.

The corner recovered on the county line, just west of the Florida East Coast Railroad is a 1/16 corner.

The map manuscript was reviewed by Mr. Frank Engler, for nearly thirty years an Engineer and Surveyor at Fort Pierce, Florida. He is highly familiar with the area from his own survey work; he found no errors.

\[Signature\]

Approved and forwarded:

\[Signature\]

George E. Morris, Jr.
Chief of Party
SUPPLEMENTARY COMPILATION REPORT AFTER FIELD EDIT

to Accompany

QUADRANGLE T-8847

Indian River South Light 279 was relocated by
planetable on photograph 16361. Since this light is
located at some distance from any point that could be
located by radial plot methods, considerable difficulty
was encountered in transferring the position of the
light to the map manuscript. The light is located near
the western limit of the quadrangle. It was impractical
for the field editor to locate it directly on the field
edit sheet, as most of the usable planetable positions
were outside the limits of the quadrangle. The method
of transferring the position was as follows: The plane-
table set ups were not indicated on the photograph; so
the set ups were assumed to be at certain positions
which fell along the extensions of the planetable cuts.
Two of these fell outside the limits of the quadrangle.
These were transferred to the margin of the map manu-
script from the adjoining map manuscript. The cuts on
the photographs were extended through the set up points.
The photograph was placed under the map manuscript and
the light was located in the manner of a three-point
fix. This is not believed to be very accurate and the
position of the light should be considered weak.

In applying the information to the field edit sheet
that the section corner common to sections 26, 27, 34,
and 35, T36S, R41E was 175 feet east of the centerline
of the road, the field editor evidently assumed that
the east-west section line shown on the map manuscript
was correct, since he placed the point on the line, but
did not ink the line. Any movement north or south of
this line would also cause the north-south section line
to move, since the road runs northwest and southeast.
Other information indicates that the position of the
east-west line originally shown is incorrect.

On the other hand, the traverse furnished but not
recommended by the field editor seems to be very good.
The north boundary of T36S at the end of the traverse
was poorly controlled on quadrangle T-8845 and was
constructed by projecting the line from the mainland.
When the traverse was scaled on the map manuscripts,
the discrepancy at the end was very small. Since the
north line was uncontrolled, the traverse has been
accepted as the best material available. It also agrees
well with the General Land Office plat.
The north-south section lines on Hutchinson Island are very poorly controlled. The line mentioned above was constructed through a point on the east-west line as determined by the traverse, 175 feet east of the centerline of the road. The other two north-south lines were constructed one mile to each side of this. Since no information as to azimuth was available, they were drawn true north-south.

The field editor was requested to clear up the discrepancy in road classification between T-8847 and T-8411 on the beach road (Fla. 705). This information was not furnished, except for a red checked mark.

Paragraph 33, Photogrammetry Instructions No. 17 calls for the character of the mean low-water area to be indicated on the map manuscript. This information for the west shore of the Indian River was requested on the discrepancy overlay prepared in this office, but the request was not transferred to the discrepancy print furnished the field editor.

Respectfully submitted,

B. Frank Lampton, Jr.

B. Frank Lampton, Jr.

Approved and forwarded:

Lt. Comdr. Ross A. Gilmore
Chief of Party
<table>
<thead>
<tr>
<th>Name on Survey</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indian River*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Jensen Beach</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Henderson Pond</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Eden</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Lake Eden</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Atlantic Ocean*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Florida*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Saint Lucie County</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Martin County</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Hutchinson Island</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Nettles Island</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Harman Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Pumpkin Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Big Mud Creek</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>State Highway 705</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>State Highway 707</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>State Highway 51</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Florida East Coast R.R.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
</tbody>
</table>

* - Decis. of B.O.N.

Underlined names approved.

10-14-43.

A. J. C.
DIVISION OF PHOTOGRAMMETRY
Review Report of
Topographic Map Manuscript T-8847

Subject numbers not used in this report have been adequately covered in other parts of the descriptive report.

28 Detailing

The unconventional symbol for contours in the southwest corner of the sheet has been changed to its proper form. Small irregularities in the shoreline have been corrected.

42 Comparisons with Previous Surveys

In common areas, this survey supersedes:
T-1650 (1883) 1:20,000  T-4542 (1930) 1:20,000
T-1652 (1883) 1:20,000  T-4543 (1930) 1:20,000
except for the rocks shown along the ocean shore at approximately latitude 27° 20'. The field editor inspected the shore at low tide and saw no rocks. However, there may be submerged rocks in this area.

48 Accuracy

This map complies with national map accuracy standards.

49 Overlay

An overlay has been prepared showing the control, road classifications and the new format for quadrangles. This map will be published and edited by the Geological Survey.

50 Application to Nautical Charts

This survey has not been applied to nautical charts as of the date of this review.

Reviewed by:

Jack L. Rihn, 20 Oct. 1948

Approved by:

Chief, Review Section
K.T. Adams

Chief, Div. of Photogrammetry

Chief, Nautical Chart Branch
Edmonton

Div. of Charts

Chief, Div. of Coastal Surveys
Green