**U.S. COAST AND GEODETIC SURVEY**
DEPARTMENT OF COMMERCE

**DESCRIPTION REPORT**

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>TOPOGRAPHIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No.</td>
<td>T-8880</td>
</tr>
<tr>
<td>Office No.</td>
<td></td>
</tr>
</tbody>
</table>

**LOCALITY**

<table>
<thead>
<tr>
<th>State</th>
<th>Florida</th>
</tr>
</thead>
<tbody>
<tr>
<td>General locality</td>
<td>East Coast</td>
</tr>
<tr>
<td>Locality</td>
<td>Brevard County</td>
</tr>
</tbody>
</table>

**1947-49**

**CHIEF OF PARTY**

G.E. Morris, Jr., Chief of Field Party
R.A. Gilmore, Tampa Photo. Office

**LIBRARY & ARCHIVES**

DATE June 16, 1950
DATA RECORD
T-8880

Quadrangle (II): Project No. (II): Ph-19(47)

Field Office: Cocoa, Fla. Chief of Party: George E. Morris, Jr.

Compilation Office: Tampa, Florida Chief of Party: Ross A. Gilmore

Instructions dated (II III): October 21, 1946 Copy filed in Descriptive May 28, 1947 Report No. T- Photographery Office Files (VI)

Completed survey received in office: 4-26-49

Reported to Nautical Chart Section: 4-29-49

Reviewed: 19 Jan 1950 Applied to chart No. Date:

Redrafting Completed:

Registered: 11 May, 1950 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): 0000, 1930 BEACHY 1929 See item 67

Lat.: 29°17'.31" N37.89(743.2m) Long.: 88°35'.36" N36.708(793.9m) Adjusted
28 19 18.379 (565.8) 80 36 30.725 (837.0) Unadjusted

State Plane Coordinates (VI): Flu. East Zone

X = 625,947.63 Y = 1449, 839.09

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>473-549</td>
<td>12-8-47</td>
<td>12:20</td>
<td>1:20,000</td>
<td>0.9</td>
</tr>
<tr>
<td>473-550</td>
<td>&quot;</td>
<td>12:21</td>
<td>&quot;</td>
<td>0.9</td>
</tr>
<tr>
<td>473-551</td>
<td>&quot;</td>
<td>12:22</td>
<td>&quot;</td>
<td>0.9</td>
</tr>
<tr>
<td>473-552</td>
<td>&quot;</td>
<td>12:23</td>
<td>&quot;</td>
<td>0.9</td>
</tr>
</tbody>
</table>

(See Descriptive Report for T-8812 for Tide Curve)

**Tide from (III):** Mayport, Fla. Sub. Sta. Cape Canaveral

**Mean Range:** 3.5  
**Spring Range:** 4.1

**Camera:** (Kind or source) Single-lens camera USCGS

**Field Inspection by:** James A. Clear, Jr.  
**date:** June 1948

**Field Edit by:** James E. Hundley  
**date:** July 1949

**Date of Mean High-Water Line Location (III):** Dec. 8, 1947.  
**Supplemented by surveys June 1948 and July 1949**

**Projection and Grids ruled by (III) T.L.J. (W.O.)**  
**" " " checked by:** T.L.J. (W.O.)  
**date:** 2-3-48

**Control plotted by:** R.R. Wagner  
**date:** May-Aug., 1948

**Control checked by:** Charles A. Baldwin  
**date:** July-Aug., 1948

**R.R. Wagner**

**Radial Plot by:** M.M. Slavney  
**date:** Sept., 1948

**Detailed by:** Enola N. Cross  
**date:** Dec. 9-Jan. 19, 1948-1949

**Reviewed in compilation office by:** Jesse A. Giles  
**date:** Jan. 26, 1949

**Map Manuscript Elevations on Field-Edit-Check checked by:** Jesse A. Giles  
**date:** Jan. 26, 1949
STATISTICS (III)

Land Area (Sq. Statute Miles): 5

Shoreline (More than 200 meters to opposite shore): 25.2 Miles

Shoreline (Less than 200 meters to opposite shore): 12.5 Miles

Number of Recoverable Topographic Stations established: 12

(Number includes boundary and section monuments)

Number of Temporary Hydrographic Stations located by radial plot: None

Leveling (to control contours) - miles: 40 - 7.0

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:
Summary to Accompany T-8880

Topographic map T-8880 is one of ten similar maps in project Ph-19(47) and is the most northeastern map of the project. It covers a portion of the Banana River and extends eastward to the Atlantic Ocean. This is a graphic compilation project. The field operations preceding compilation included complete field inspection, the establishment of some additional horizontal control, and the delineation of contours on the photographs by planetable methods.

The manuscript was compiled at a scale of 1:20,000 and covers 7 1/2' in latitude by 7 1/2' in longitude. The entire map was field edited. The map is to be published by the Geological Survey at a scale of 1:24,000 as a standard topographic quadrangle. Items registered under T-8880 will include a cloth-mounted color print at a scale of 1:24,000 and a cloth-mounted print of the manuscript at a scale of 1:20,000 and the descriptive report.
FIELD INSPECTION REPORT
TO ACCOMPANY
QUADRANGLE T-8330
"MERRITT SE"
N28°22'30" - W80°37'30"
PROJECT PH-19(47)
1 JULY 1948

1. DESCRIPTION OF THE AREA

This quadrangle is located in the eastern section of Brevard County, Florida, and includes the incorporated town of Cocoa Beach and the northern portion of Banana River Naval Air Station. The quadrangle is bordered on the east by the Atlantic Ocean and on the west by Banana River.

The land area is undulating with elevations ranging from sea level to approximately 18 feet. The major portion of this area is covered with dense palmetto, scrub oak and mangrove.

2. COMPLETENESS OF FIELD INSPECTION

Field inspection for the quadrangle is believed to be adequate and complete as to classification of all buildings, roads, boundaries, etc.

3. INTERPRETATION OF THE PHOTOGRAPHS

General photographic features are quite apparent on the photographs. The dark areas are mangrove and classified as same. The light areas are palmetto and classified as brush. All exceptions are clearly noted.

Single lens 1:20,000 scale photographs were used for all phases of field work.

4. HORIZONTAL CONTROL

All existing horizontal control in this area was recovered by James E. Huntley, Cartographer(Photo) and James A. Clear, Jr. Engineering Aid, during the month of June 1948.
Six stations were identified and two supplemental traverse points established on the following photographs:

- PALEMETTO 2 1934, Photo No. 47-J-549
- TUCK 2 1934
- TRAVERSE PT. 47-J-549
- COCOA 1930, Photo No. 47-J-550 (Unmonumented)
- TRAVERSE PT. 47-J-550
- BEACHY 1929 1934, Photo No. 47-J-551
- LUCKY 1929
- VIEW 1929 1934, Photo No. 47-J-553

4A. PRESERVATION OF TRIANGULATION STATION MARKS

Two new reference marks were set for triangulation station PALEMETTO 2 1934.

5. VERTICAL CONTROL

Vertical control consisted of recovery and identification of existing bench marks and establishment of levels.

One bench mark established by U.S.G.&G.S., PALEMETTO 2, was recovered and identified on photograph No. 47-J-549. One bench mark of the Florida State Road Department was recovered and identified on photograph No. 47-J-552.

Approximately 7 linear miles of 4th order levels were completed during the month of June 1948 by James A. Clear, Jr., Engineering Aid. Recordings were to the nearest .01 of a foot. All errors of closure greater than .20 of a foot were prorated throughout the line.

6. CONTOURS AND DRAINAGE

All contouring was done with planitable, directly on 1:20,000 scale single lens photographs. The contour interval was five feet. There were no large closures encountered between vertical control points. The average closures on planetable traverses range from 0 to .3 of a foot. The maximum closure was .4 of a foot.

In the dense mangrove and palmetto areas where it was not considered practical or economical to clear survey lines, contours were sketched in the field and shaped under a stereoscope prior to final inking.

7. MEAN HIGH WATER LINE

There is no evident mean high water line along the east shore of the Banana River in this quadrangle, therefore it has been indicated on the photographs as apparent.
The ocean beach is characterized by a steep slope, extending the entire length of the quadrangle. The mean high water line is near the five foot contour and has been identified on the photographs at intervals by a series of red dashes.

8. **LOW WATER LINE**

Along the shores of the Banana River there is no low water line. The only change in the tide in this section is that caused by the wind.

Along the Atlantic Ocean the mean low water line is close to the mean high water line. No attempt was made to show the low water line. Review report.

9. **WHARVES AND SHORELINE STRUCTURES**

All wharves and shoreline structures have been noted on the photographs.

10. **DETAILS OFFSHORE FROM HIGH WATER LINE**

No details offshore from the high water line were noted for investigation by the hydrographic party.

11. **LANDMARKS AND AIDS TO NAVIGATION**

Three of the most prominent objects in this area have been recommended as landmarks to be charted. They are the following: The northernmost of two elevated water tanks, located at Banana River Naval Air Station and Cocoa Beach Casino at Cocoa Beach, Florida. See 34 Compilation Report.

There are no fixed aids to navigation in this area. Form 567 attached.

12. **HYDROGRAPHIC CONTROL**

No hydrographic signals were required in the quadrangle.

13. **LANDING FIELDS AND AERONAUTICAL AIDS**

The northern portion of Banana River Naval Air Station lies within the boundary of this quadrangle and is located between Eau Gallie and Cocoa Beach, Florida.

It is believed there have been enough boundary monuments pricked on the photographs to enable the compiler to plot the boundary of the airport without difficulty. The boundary was not drawn on the photographs.

There were no aeronautical aids in this quadrangle.
14. **ROAD CLASSIFICATION**

All roads were classified according to Photogrammetry Instructions No.10 and amendment dated 24 October 1947. Roads to be deleted are shown in green ink.

15. **BRIDGES**

There are no bridges over navigable water within the limits of this quadrangle.

16. **BUILDINGS AND STRUCTURES**

All buildings to be shown have been circled in red ink.

Structures other than buildings have been noted on the photographs. Items to be deleted have been crossed out in green ink.

17. **BOUNDARY MONUMENTS AND LINES**

Two section corners and a point on one section line were recovered and identified on the photographs.

There are two precincts that lie within the limits of the quadrangle, Brevard County precincts No.9 and No.22 have been shown on the photographs in brown ink.

There have been three northern boundary monuments of the Banana River Naval Air Station pricked on photograph No.47-J-549, by the photo point method.

The eastern boundary of Banana River Naval Air Station borders the Atlantic Ocean and the western boundary borders Banana River.

18. **GEOGRAPHIC NAMES**

All geographic names information was obtained by Lowell I. Bass, Engineering Aid. This information will be compiled in a special report by Mr. Bass.

19. **TOPOGRAPHIC STATIONS**

A total of four topographic stations were established along the shores of Banana River and the Atlantic Ocean. These consisted of permanent natural objects or standard topographic station monuments.

- **Center of House**, 1948
- **Four (Center of Root)**, 1948
- **Trcc**, 1948
- **Lady (Center of Lookout Tower)**, 1948
20. **JUNCTIONS**

A junction has been made with quadrangle T-3382 to the south. The project limit is to the north. There is no adjoining quadrangle to the east. All junctions are in good agreement.

Submitted by:

James A. Clear, Jr.
Engineering Aid

Approved and forwarded:

George E. Morris, Jr.
Chief of Party
PHOTOGRAMMETRIC PLOT REPORT

Descriptive Report on Main Radial Plot for
Project Ph-19(47) (entire), Florida. Quadrangles
T-3879, T-3880, T-3881, T-3882, T-3883, T-3884, T-3885,
T-3886, T-3887, T-3888.

Filed in Division of Photogrammetry General
Files.
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>LATITUDE OR y-COORDINATE LONGITUDE OR x-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMALL W.T., 1945 (USE)</td>
<td>Plot File</td>
<td>1, 424,598.15, 1, 626,032.75</td>
<td>4,598.15 (5401.85)</td>
<td>14,01.5</td>
<td>Accuracy of Station Fixations, too far from plotted position. Listed by USE as 3rd order accuracy.</td>
</tr>
<tr>
<td>LARGE W.T., 1945 (USE)</td>
<td></td>
<td>1, 425,580.14, 1, 626,277.42</td>
<td>5,580.14 (4419.86)</td>
<td>1700.8</td>
<td></td>
</tr>
<tr>
<td>PALMETTO, 1930</td>
<td>G.Ps.</td>
<td>28 15 08.001</td>
<td>246.3 (1600.7)</td>
<td>219.3</td>
<td>St. lost. ENR</td>
</tr>
<tr>
<td>TUCK, 1930</td>
<td>P.179</td>
<td>28 16 22.616</td>
<td>1531.5 (315.5)</td>
<td>785.4</td>
<td></td>
</tr>
<tr>
<td>TUCK 2, 1934</td>
<td>P. 152</td>
<td>28 16 49.752</td>
<td>692.7 (942.4)</td>
<td>359.1</td>
<td>St. lost. ENR</td>
</tr>
<tr>
<td>COCOA, 1930</td>
<td>P.151</td>
<td>28 17 56.630</td>
<td>1743.2 (103.8)</td>
<td>789.3</td>
<td>See item 67, Review Report</td>
</tr>
<tr>
<td>CASO, 1929</td>
<td>P.752</td>
<td>28 19 04.99</td>
<td>153.6 (1693.4)</td>
<td>818.7</td>
<td></td>
</tr>
<tr>
<td>BEACHY, 1929</td>
<td>P. 126</td>
<td>28 19 18.379</td>
<td>565.8 (1281.2)</td>
<td>837.0</td>
<td></td>
</tr>
<tr>
<td>MIDWAY, 1929</td>
<td>P. 151</td>
<td>28 22 01.626</td>
<td>50.1 (1796.9)</td>
<td>383.4</td>
<td>St. lost. ENR</td>
</tr>
<tr>
<td>PALMETTO 2, 1934</td>
<td>P.151</td>
<td>28 15 08.090</td>
<td>249.0 (1597.9)</td>
<td>411.6</td>
<td></td>
</tr>
<tr>
<td>LUCKY, 1929</td>
<td>P. 151</td>
<td>28 20 42.296</td>
<td>1302.0 (545.0)</td>
<td>687.5</td>
<td></td>
</tr>
<tr>
<td>VIEW, 1929</td>
<td>P.151</td>
<td>28 23 37.214</td>
<td>1145.6 (701.4)</td>
<td>1271.1</td>
<td></td>
</tr>
</tbody>
</table>

1 FT = 3048000 METER

COMPUTED BY: E.C. Andrews
DATE: 23 April, 1948

CHECKED BY: R.R. Wagner
DATE: 28 April 1948

* used in plot, falls outside project.
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR UV-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET OR PROJECTION LINE IN METERS FORWARD</th>
<th>DISTANCE FROM GRID OR PROJECTION LINE IN METERS BACK</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS BACK</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE</th>
</tr>
</thead>
</table>
| W. MON. ON SECTION /
LINE 26
35
35             | Taken from Plat.               | N.A. 1927 | 1,432,613.40 626,132.33 | 2,613.40 (7,386.60)                                           | 6,132.33 (3,867.67)                                      | 1,432,613.40 626,132.33 | 796.6 (2251.6)                                               | 1869.1 (1178.9)                                               | 2064.0 (1004.0)                                         | 2064.0 (1004.0)                                       |
| NW B.OY MK BANANA
RIVER NAVAL AIR STA. " | "                              | "       | 1,432,615.86 626,706.18 | 2,615.86 (7,384.14)                                           | 6,706.18 (3,299.82)                                      | 1,432,615.86 626,706.18 | 797.3 (2250.7)                                               | 1869.1 (1178.9)                                               | 2044.0 (1004.0)                                         | 2044.0 (1004.0)                                       |
| N. B.OY " " "     | "                              | "       | 1,431,628.85 626,453.78 | 1,628.85 (8,371.15)                                           | 6,453.78 (3,546.22)                                      | 1,431,628.85 626,453.78 | 496.1 (2552.0)                                               | 1868.2 (1179.8)                                               | 2064.0 (1004.0)                                         | 2064.0 (1004.0)                                       |
| NE. B.OY " " "     | "                              | "       | 1,431,630.29 626,789.03 | 1,630.29 (8,369.71)                                           | 6,789.03 (3,210.97)                                      | 1,431,630.29 626,789.03 | 496.9 (2551.1)                                               | 1967.1 (1080.9)                                               | 2069.3 (978.7)                                          | 2069.3 (978.7)                                        |
| SEC 3 1/2 and "H" | "                              | "       | 1,427,301.98 626,350.15 | 7,301.98 (2,696.02)                                           | 6,350.15 (3,649.85)                                      | 1,427,301.98 626,350.15 | 2225.6 (822.4)                                               | 1935.5 (1124.5)                                               | 2009.3 (956.7)                                          | 2009.3 (956.7)                                        |
| "A"              | "                              | "       | 1,427,312.99 627,001.63 | 7,312.99 (2,687.01)                                           | 7,001.63 (2,998.37)                                      | 1,427,312.99 627,001.63 | 2229.0 (819.0)                                               | 2134.1 (934.9)                                               | 2217.0 (831.0)                                          | 2217.0 (831.0)                                        |
| "B"              | "                              | "       | 1,427,317.55 627,273.63 | 7,317.55 (2,682.45)                                           | 7,273.63 (2,726.37)                                      | 1,427,317.55 627,273.63 | 2230.4 (817.6)                                               | 2134.1 (934.9)                                               | 2217.0 (831.0)                                          | 2217.0 (831.0)                                        |
| "D"              | "                              | "       | 1,428,639.41 627,118.14 | 8,639.41 (1,360.59)                                           | 7,118.14 (2,881.86)                                      | 1,428,639.41 627,118.14 | 2633.3 (444.7)                                               | 2169.6 (878.4)                                               | 2300.9 (747.1)                                          | 2300.9 (747.1)                                        |
| "E"              | "                              | "       | 1,428,626.88 626,380.36 | 8,626.88 (1,373.12)                                           | 6,380.36 (3,619.64)                                      | 1,428,626.88 626,380.36 | 2629.5 (418.5)                                               | 1944.7 (1103.3)                                               | 2300.9 (747.1)                                          | 2300.9 (747.1)                                        |
| "G"              | "                              | "       | 1,427,295.75 625,981.30 | 7,295.75 (2,704.25)                                           | 5,981.30 (4,018.60)                                      | 1,427,295.75 625,981.30 | 2223.7 (824.3)                                               | 1823.1 (1224.9)                                               | 1712.2 (1335.8)                                         | 1712.2 (1335.8)                                       |
| "R"              | "                              | "       | 1,425,617.44 627,548.82 | 5,617.44 (4,382.56)                                           | 7,548.82 (2,451.18)                                      | 1,425,617.44 627,548.82 | 1712.2 (1335.8)                                               | 1335.8 (747.1)                                               | 2300.9 (747.1)                                          | 2300.9 (747.1)                                        |

1 FT = 0.3048006 METER

COMPUTED BY Enola N. Cross DATE December 19, 1948
CHECKED BY R. R. Wagner DATE December 20, 1948
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR ( y )-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS</th>
<th>DATUM CORRECTION</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>&quot;JI&quot;</td>
<td>Taken from Flat</td>
<td>NA 1927</td>
<td>1,425,858.48</td>
<td>5,858.48 (4,141.52)</td>
<td></td>
<td>1785.7 (1262.3)</td>
<td></td>
</tr>
<tr>
<td>&quot;K&quot;</td>
<td></td>
<td>2</td>
<td>1,424,699.98</td>
<td>4,699.98 (5,300.02)</td>
<td></td>
<td>1432.6 (1615.4)</td>
<td></td>
</tr>
<tr>
<td>&quot;L&quot;</td>
<td></td>
<td>2</td>
<td>1,423,873.56</td>
<td>3,873.56 (6,126.44)</td>
<td></td>
<td>1180.7 (1867.3)</td>
<td></td>
</tr>
</tbody>
</table>

Reference Item 29 A of Compilation Report regarding these stations.

\[ 1 \text{ ft.} = 0.3048006 \text{ meter} \]

Enola N. Cross  
Date: December 19, 1948

R.R. Wagner  
Date: December 20, 1948
26 AND 27. CONTROL AND RADIAL PLOT:

A special report on these items was prepared by M.M. Slavney, Photogrammetric Engineer, and submitted to the Washington Office on December 7, 1948.

28. DELINEATION:

The detail was delineated from 1: 20,000-scale single-lens ratio prints. Because of a haze of clouds on photographs 47J-550 and 47J-551, some difficulty was encountered in determining the detail on these photographs.

As there is only a single flight of photographs south of photo-47J-550, fixed graph 47J-550 and only two triangulation stations in this area that were held in the radial plot, a great deal of difficulty was encountered delineating between latitudes 28° 17' and 28° 15'. Detail points were of little assistance as they could only be held radially—two flat cuts were all that could be obtained. By using the information contained on a photostatic copy of the graphic survey of the U.S. Naval Air Station (see Item 29), this difficulty was minimized. The horizontal control stations established by the U.S. Engineers in 1939 (which fell on this manuscript) were plotted from the plane coordinates taken from this survey. The street system was panto graphed down to 1: 20,000 scale and transferred to the map manuscript. The streets and Florida State Highway AIA were then used as control for the delineation of this area. Triangulation stations LARGE WATER TANK and SMALL WATER TANK could be pricked direct on the photographs and were held for delineation. A road within the boundary of the U.S. Naval Air Station was used for control but has been deleted from the attached map manuscript as it was not of enough importance to be classified.

The vegetation has been classified according to Photogrammetry Instructions No. 21 which were issued after the field inspection had been completed for this project.

The buildings have been delineated as nearly as possible in accordance with Photogrammetry Instructions No. 29 which were issued after the field inspection had been completed for this project. Some changes will necessarily have to be made after the field editor designates the Class II buildings.
Two bench marks established by the USGS (PALMETTO 2 and H 122, 1945) and one bench mark established by the Florida State Road Department have been shown on the map manuscript. (See Field Inspection Report, Item 5.)

The field inspection was adequate for an accurate delineation of the map manuscript.

29. SUPPLEMENTAL DATA:

A. Graphic survey of U.S. Naval Air Station, Banana River. See Geographic Name List, attached to this report.

Nine horizontal control stations established by the U.S. Engineers in 1939 were plotted on the map manuscript from plane coordinates taken from a photostatic copy of this survey. These stations are lettered and are concrete monuments marked "Naval Reservation".

The position of section corner 312 and the positions of two iron pipes were also plotted from plane coordinates taken from this survey. These pipes are set in concrete and are points on the section line 26 (see 37B).

None of these stations were used in the radial plot. It is recommended that the field editor make an attempt to recover these stations and submit the proper forms for them as it is believed that they are of third-order accuracy.

The three northern boundary monuments for the U.S. Naval Air Station were also plotted from plane coordinates taken from this survey. (See Item 37A.)

B. Map of U.S. Naval Air Station, Banana River

This map was used to clarify the shape of the buildings in the U.S. Naval Air Station. See above.

30. MEAN HIGH-WATER LINE:

The mean high-water line was delineated along a definite berm as seen on the photographs and it agrees with the mean high-water line on Planimetric Maps 4556 and 4442b. The field inspection of this line deviates in some instances from the compiler's interpretation of it. It would have been helpful to the compiler if the field inspector had given some measurements from points on shore to the mean high-water line. (See Field Inspection Report, Item 7.)
31. **LOW-WATER AND SHOAL LINES:**

   See Field Inspection Report, Item 8.

32. ** DETAILS OFFSHORE FROM THE HIGH-WATER LINE:**

   See Field Inspection Report, Item 10.

33. **WHARVES AND SHORELINE STRUCTURES:**

   All wharves and shoreline structures have been delineated in accordance with the field inspection notes.

34. **LANDMARKS AND AIDS TO NAVIGATION:** Refer: Nautical Chart Letter 269(49)

   Three landmarks have been recommended to be charted—the two elevated water tanks located at the U.S. Naval Air Station and Cocoa Beach Casino at Cocoa Beach. 

   One non-floating aid—**BANANA RIVER LIGHT** 10, 1948—was recommended for charting.

   See Field Inspection Report, Item 11.

35. **HYDROGRAPHIC CONTROL:**

   See Field Inspection Report, Item 12.

36. **LANDING FIELDS AND AERONAUTICAL AIDS:**

   See Field Inspection Report, Item 13.

37. **BOUNDARY MONUMENTS AND LINES:**

   See Item 72

   **A. U.S. Naval Air Station**

   Forms 524 were submitted for three boundary monuments along the northern limits of the U.S. Naval Air Station to be located by the photo point method; however, these have been plotted from plane coordinates taken from the graphic survey (see Item 29).

   See Field Inspection Report, Item 17.

   *N. Boundary Mark, 1948
   NW  1948
   EE  1948
B. Section and precinct lines.

Section corner 31/2 has been plotted on the map manuscript from plane coordinates taken from the graphic survey (see Item 29). It is recommended that the field editor make an attempt to recover this corner and submit the proper form for it. (See Field Inspection Report, Item 17.)

There is one east-west precinct line between precincts 22 and 9.

The section and precinct lines have been tentatively constructed on the map manuscript in red pencil. A discrepancy print has been made for the field editor's use, and, upon its return from the field, the lines will be made permanent according to his findings.

39. GEOGRAPHIC NAMES:

All geographic names submitted have been applied to the map manuscript.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES AND OTHER MAPS:

There are no topographic quadrangles available in this office for comparison.

In comparison with Planimetric Maps Nos. 4556 and 4442b, the following differences were found:

(a) Addition of U.S. Naval Air Station.
(b) Piers added along Banana River shore.
(c) Concrete bulkhead built along Banana River.
(d) Addition of sand fill which eliminated marsh and mangrove areas along Banana River within U.S. Naval Air Station reservation.
(e) Change in layout of Florida State Highway A1A at Cocoa Beach.
(f) Minor road changes.
(g) Minor changes in shoreline of Thousand Islands.
(h) Deletion of pier on Banana River shore near northern limits of map manuscript.
(i) Addition of causeway and Florida State Highway 520 to Cocoa.
(j) Addition of groves around Cocoa Beach.
45. COMPARISON WITH NAUTICAL CHARTS:

In comparison with nautical chart 1246, bearing the print date of December 15, 1947, the following differences were found:

- (a) Addition of U.S. Naval Air Station.
- (b) Addition of two piers along Banana River shore north of U.S. Naval Air Station. See above
- (c) Change in layout of Florida State Highway A1A at Cocoa Beach.
- (d) Minor road changes.
- (e) Deletion of pier on Banana River shore near northern limits of map manuscript.
- (f) Deletion of causeway across Banana River at Cocoa Beach.
- (g) Deletion of causeway under Florida State Highway 520 and deletion of bridge on this causeway.

In comparison with nautical chart 1245, bearing the print date of March 17, 1948, the following difference was found:

- (a) Deletion of pier on Banana River shore near northern limits of map manuscript.

Respectfully submitted,

Enola N. Cross
Cartographic Aid.

Approved and Forwarded:

Ross A. Gilmore 4/1/49
Chief of Party.
FIELD EDIT REPORT
QUADRANGLE T-8820
PROJECT PH-19(47)

The field edit of this quadrangle was accomplished in compliance with Field Edit Instructions dated August 24, 1945 and Supplement I dated February 4, 1946. Actual field work was started July 6, 1949 and completed July 11, 1949.

46. METHODS:

The field edit was accomplished by traversing, via truck, all passable roads; and by walking to other areas in which the reviewer requested information, or for a general check on the adequacy of the map compilation.

Planimeter, hand level, sextant and tape methods were used to make corrections and additions not shown on the photographs.

On the Field Edit Sheet, red ink was used to show corrections and additions; green ink for deletions; violet ink for contours. Black ink was used for all work on the photographs. Violet ink was used on the Discrepancy Print.

The reviewer's questions are answered on the Discrepancy Prints whenever possible. Other work was shown on the photographs or Field Edit Sheet. All work shown on the photographs is properly referenced on the Discrepancy Print or Field Edit Sheet.

47. ADEQUACY OF COMPILATION:

The map compilation is believed to be adequate with the corrections added by the field editor.

48. ACCURACY TESTS:

No accuracy tests were required for this quadrangle. The map is believed to comply with standard horizontal and vertical accuracy specifications. Information concerning the two nearest map accuracy tests was not available.

49. TOPOGRAPHIC EXPRESSION:

The topographic expression of the quadrangle is considered adequate.
50. BOUNDARY MONUMENTS AND SECTION LINES:

All existing boundary monuments and section lines were thoroughly investigated and the results are recorded either on the Section Line Discrepancy Print or Form 524. Information concerning the irregularity of the north-south lines was not available or adequately explained by the local contacts had by the field editor.

51. ROADS:

All roads in this area have been classified in compliance with Photogrammetry Instructions No. 10, dated 14 April 1947 and amendment dated 24 October 1947.

52. BUILDINGS:

All buildings have been classified in compliance with Photogrammetry Instructions No. 29 dated 1 October 1948.

53. WOODLAND COVER:

All woodland cover has been classified in compliance with Photogrammetry Instructions No. 21, dated 18 August 1948.

54. NAMES:

According to information received from Col. M.M. Willard, Commanding Officer, the Banana River Naval Air Station is now officially known as "Joint Long Range Proving Ground for Guided Missiles".

55. EXAMINATION OF PROOF COPY:

It is believed that Frank P. Schuster, registered land surveyor and county engineer for Brevard County, Titusville, Florida, is best qualified to examine a proof copy of this quadrangle.

Respectfully submitted,

James E. Hundley
Cartographer (Photo)

Approved and Forwarded:

Ross A. Gilmore, 7/27/49
Chief of Party.
I recommend that the following objects which have been inspected from seaward to determine their value as landmarks be charted on the charts indicated.

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>POSITION</th>
<th>METHOD OF LOCATION AND SURVEY No.</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASINO</td>
<td>Large 2 story white stucco building, on beach bank at Cocoa Beach, Florida.</td>
<td></td>
<td>28 19 149° 80 36 828°</td>
<td>NA Radial Plot</td>
<td>June 1946</td>
<td>x x 1246</td>
</tr>
<tr>
<td>TANK (Elev)</td>
<td>Ellipsoidal tank erected atop 100 ft. skeleton steel tower.</td>
<td></td>
<td>28 15 537° 80 36 1290°</td>
<td>Scaled from Y, X Coord Plotted Position Y = 1,425,580.14  X = 626,277.42</td>
<td>U.S.E. May 1948</td>
<td>x x 1246</td>
</tr>
<tr>
<td>TANK (Elev)</td>
<td>Cylindrical water tank erected atop 100-ft. skeleton steel tower.</td>
<td></td>
<td>28 15 259° 80 36 1589°</td>
<td>Scaled from Y, X Coord Plotted Position Y = 1,424,598.15  X = 626,032.75</td>
<td>U.S.E. May 1948</td>
<td>x x 1246</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 (marked) 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

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
<th>METHOD OF LOCATION AND SURVEY</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>BANANA RIVER</td>
<td>Red square on bay on west end of wooden pier, SW corner</td>
<td></td>
<td>38.15</td>
<td>264</td>
<td>80.36</td>
<td>1263</td>
<td>NA</td>
<td>844</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.
MEMORANDUM FOR: DIRECTOR, U. S. COAST AND GEODETIC SURVEY, DEPARTMENT OF COMMERCE

ATTN: Administrative Planning Section

SUBJECT: Classification Clearance

1. Reference is made to your memorandum, file No. 731-est, dated 12 December 1949, forwarding seventeen (17) maps for security clearance. Twelve (12) maps were returned to your agency by Assistant Chief of Staff, O-2 Letter dated 17 March 1950.

2. Forwarded herewith are maps Nos. T-8880, T-8882, and T-8772. There is no objection to the publication of these maps as unclassified.

3. Follow-up action has been taken to expedite the processing of maps Nos. T-8542 and T-8543 which are still outstanding.

FOR THE ASSISTANT CHIEF OF STAFF, O-2:

3 IncIs
1. Map No. T-8880
2. Map No. T-8882
3. Map No. T-8772

ERNEST A. BARLOW
Colonel, USC
Chief, Security & Training Division
Review Report T-8880
Topographic Map
19 January 1950

62. **Comparison with Registered Topographic Surveys:**

<table>
<thead>
<tr>
<th>Survey</th>
<th>Scale</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-1450</td>
<td>1:20,000</td>
<td>1877</td>
</tr>
<tr>
<td>T-4442</td>
<td>1:20,000</td>
<td>1929</td>
</tr>
<tr>
<td>T-4556</td>
<td>1:20,000</td>
<td>1929</td>
</tr>
</tbody>
</table>

T-8880 is to supersede the above surveys for nautical charting for the area included in this survey.

63. **Comparison with Maps of other Agencies:** None

64. **Comparison with Contemporary Hydrographic Surveys:** None

65. **Comparison with Nautical Charts:**

<table>
<thead>
<tr>
<th>Survey</th>
<th>Scale</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1246</td>
<td>1:80,000</td>
<td>49 - 4/4</td>
</tr>
<tr>
<td>1245</td>
<td>1:80,000</td>
<td>48 - 3/17</td>
</tr>
</tbody>
</table>

66. **Adequacy of Results and Future Surveys:**

This map meets the National Standards of Map Accuracy and complies with project instructions.

67. **Control:** According to information from Geodesy Division, Cocoa, 1930 was reset by George E. Morris, Jr. in 1949 at approximately the time of field edit for this survey. Thus, the reference station was changed.

68. **Mean High-Water Line:** Along the east shore of Banana River, where fast land exists, classification of shoreline was changed from apparent to definite. The change is shown in red. During field edit mean high-water line was located along Atlantic Ocean by reference measurements.

69. **Low-Water Line:** The low-water line along the Atlantic Ocean was located by reference measurements during field edit.

70. **Landmarks:** Elevations and heights of the two elevated tanks were changed on the manuscript to conform with information given on Forms 524. This latter information checks closely with that given on the Aeronautical Instrument Approach and Landing Chart for this area.
71. **Section Lines**: The plotted position of section line 26 was confirmed by field edit and is shown as reliable. 35

A monument, approximately 7 meters from the plotted position (by coordinates) of 35, was recovered by field edit. Since positions of 37 to some stations of this survey by U.S.E. were confirmed by this compilation, the original plotted position of 35 was retained on the manuscript. However, 37 section lines adjacent to the section corner are shown as unreliable.

72. **Boundaries**: The corporate limits of Cocoa Beach are omitted because there was not enough data furnished to accurately position the limits.

*Note: This map area is unclassified. Refer to letter, p. 25, of this report.*

Reviewed by:

Everett H. Ramsey

APPROVED BY:

A. V. Griffith  
Chief, Review Section  
Division of Photogrammetry

H. B. Rommerson  
Chief, Nautical Chart Branch  
Division of Charts

O. S. Reading  
Chief, Div. of Photogrammetry

W. M. Stair  
Chief, Div. Coastal Surveys
HISTORY OF HYDROGRAPHIC INFORMATION
T-8880, Florida

Hydrography was applied to this manuscript in accordance with Division of Photogrammetry request of January 24, 1950, and with general specifications of May 18, 1949.

The depths are in feet at mean low water, and originate with the following surveys and chart:

H-1415b (1878) 1:20,000
H-1380 (1876-77) 1:20,000
H-4946 (1929) 1:40,000
H-5034 (1930) 1:40,000
BP. 39926 (1945) 1:10,000 (U.S.E.)
Chart 1246 1:80,000, printed Apr. 4, 1949, corrected Feb. 6, 1950.

The depth curves are drawn at 6, 12, 18, and 30 feet.

The hydrography was compiled by R. E. Elkins and checked by G. F. Jordan.

R. E. Elkins
R. E. Elkins - 2/16/50
Nautical Chart Branch