

# 8413

Diag'd. on Diag. Ch. No. 1247

# 8413

|   |                  |
|---|------------------|
| Form 504  |                  |
| U. S. COAST AND GEODETIC SURVEY<br>DEPARTMENT OF COMMERCE   |                  |
| <b>DESCRIPTIVE REPORT</b>   |                  |
| Type of Survey  | TOPOGRAPHIC      |
| <b>"HOBE SOUND"</b>   |                  |
| Field No.   | T-8413           |
| Office No.  |                  |
| LOCALITY  |                  |
| State   | FLORIDA          |
| General locality  | MARTIN COUNTY    |
| Locality  | HOBE SOUND       |
| 1947-1948   |                  |
| CHIEF OF PARTY<br>Ross A. Gilmore, Chief of Field Party<br><del>Lieut. Comdr. George E. Morris Jr., Chief of Photogrammetric Office</del> |                  |
| LIBRARY & ARCHIVES  |                  |
| DATE  | November 5, 1948 |

## DATA RECORD

T- 8413

Quadrangle (II): Hobe Sound

Project No. (II): CS-312 A

Field Office: Stuart, Florida Chief of Party: Lt. Comdr. Ross A. Gilmore

Compilation Office: Tampa, Fla. Chief of Party: Lt. Comdr. G. E. Morris, Jr.

Instructions dated (II III): ~~Aug. 3, 1944~~ <sup>25 May 1945</sup> Copy filed in Office Files, Div. of  
 Supplemental Inst. 21, Oct, 1946 Report No. T- (VI) Photogrammetry  
 " " 10, Dec. 1946  
 " " 16 Jan. 1946  
 Completed survey received in office: May 24, 1948

Reported to Nautical Chart Section:

Reviewed: 2 July 48 Applied to chart No. Date:

Redrafting Completed:

Registered: 20 Aug 48 Published:

Compilation Scale: 1,20,300 Published Scale: 1:24000

Scale Factor (III): 0.98522

Geographic Datum (III): North American 1927 Datum Plane (III): MSL

Reference Station (III): Hobe, 1934

Lat.: 27° 01' 04."171 (128.4 meters) Long.: 80° 06' 41."992 (1157.6M) Adjusted  
~~128.4 meters~~

State Plane Coordinates (VI): Florida East Zone

X = 789, 226.05 Feet Y = 976, 627.78 Feet

Military Grid Zone (VI)



STATISTICS (III)

Land Area (Sq. Statute Miles): 6.5

Shoreline (More than 200 meters to opposite shore): 14.9

Shoreline (Less than 200 meters to opposite shore): 1.0

Number of Recoverable Topographic Stations established: 11

Number of Temporary Hydrographic Stations located by radial 0  
plot:

Leveling (to control contours) - miles: 14

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:





FIELD INSPECTION REPORT

TO ACCOMPANY

QUADRANGLE 8413  
HOBE SOUND (HS)

PROJECT - CS- 312 A

7 FEBRUARY 1947

1 - DESCRIPTION OF AREA:

This  $7\frac{1}{2}$  minute quadrangle lies within Martin County on the East Coast of Florida. It is bounded on the south by Lat.  $27^{\circ} 00' N.$  on the west by Long.  $80^{\circ} 07' 30''$  and on the north and east by the Atlantic Ocean. The area contains 6.5 square statute miles of land with elevations ranging from sea level to 86 feet on the highest of numerous sand dunes near the southwest corner of the quadrangle.

Near the southwest corner of the quadrangle are several square miles of dune type terrain which required most of the effort and cost of contouring this quadrangle.

The principal cultural features are the Florida East Coast Railroad (double track), U. S. Highway No. 1, Old Dixie Highway, Florida State Highway 1A, and the Intracoastal Waterway, all of which run roughly north and south and parallel to the Atlantic Ocean beach, through the area. U. S. Highway No. 1 is the principal road and the only first class road in the quadrangle. Florida State Highway 1A is a second class road, but of narrow width which crosses the Intracoastal Waterway at Hobe Sound and runs close to the beach through this quadrangle. No incorporated towns fall within the limits of this quadrangle. However, a portion of the settlement known as Hobe Sound falls within this area. A highly developed portion of Jupiter Island falls within the limits of this quadrangle. This area is made up of private winter homes except for the Jupiter Island Club which is maintained by and for the use of local winter tourists.

No natural drainage worthy of note is found in this quadrangle. There is a large body of water in this area known as Hobe Sound, averaging about 1,500 feet in width running parallel to the ocean beach and separating Jupiter Island from the mainland, through which the Intracoastal Waterway passes.

There is no cultivation of commercial nature in this area.

The vegetation is composed of pine, palm, palmetto and grass with mangrove bordering all of the inland tidal water. The higher ridges are covered with a species of pine which has no commercial value and is known locally as spruce pine or slash pine. The flat areas

\* This work started as a planimetric  
mapping project and later converted to  
~~photogrammetric~~ topographic mapping.  
1977



contain long leaf yellow pine, palmetto, grass with patches of scrub brush, with cypress in some of the intermittent ponds.

The work in this quadrangle was carried on when the ponds contained about an average amount of water and no difficulty should be encountered in interpreting classification of ponds by comparison with labelled examples.

## 2 - COMPLETENESS OF FIELD INSPECTION:

The field inspection was done in accordance with instructions dated 21 October 1946 and 10 December 1946. A large portion of the inspection was done during planimetric inspection in August 1944. This old inspection was, in general, very good. The shoreline was reinspected by C. H. Bishop, Photo. Aid, showing his notes in blue ink. The remainder was done by Harold A. Duffy, Photogrammetrist. The roads and vegetation were reclassified on new prints. New houses showing on single lens prints were circled. New houses not shown on any print were located on either the new nine lens prints or single lens prints, or on the contour prints.

*Instr. filed in Div. of Photogrammetry  
Office Files.*

The only field inspection left for the field edit party is possibly Camp Murphy near the southwest corner of the area. Camp Murphy, a former U. S. Army training camp, is in the process of being razed. Ownership of the land is uncertain and which buildings are to be left standing has not been determined at this time. Therefore, it is recommended that only the road layout be delineated in this particular area until it can be reinspected by the field edit party by which time the final disposition of the camp area and its buildings will have possibly been settled. See paragraph 17, BOUNDARY MONUMENTS AND LINES.

## 3 - INTERPRETATION OF PHOTOGRAPHS:

The color tone varies from almost black in deep water and small spots of muck to white in clear sand areas. Heavy growth of pine appear smooth and have a dark steel tone; heavy palm is of lighter tone with a pebbly texture; grass is a light gray tone; brush is a dark gray tone with a mottled texture; and palmetto gives a light gray tone with velvety texture. Intermittent ponds vary from light gray in sand and grass bottoms to almost black in the ones with deep water or muck bottoms. In every case, a well defined berm outlines these intermittent ponds.

## 4 - HORIZONTAL CONTROL:

All horizontal control was recovered during planimetric inspection in 1944, except that noted in paragraph 12, HYDROGRAPHIC CONTROL.

5 - VERTICAL CONTROL:

All of the U.S.C. & G.S. bench marks were searched for or recovered during planimetric inspection 1944. Only two bench marks were used to establish vertical control in this quadrangle, both of which fall outside the limits of the area. Using these bench marks as a base, fly level lines were run with a Wye Level along the principal roads to give a well distributed vertical base for planetable contouring. Along these lines temporary bench marks were established at identifiable picture points at about 1/2 mile intervals and marked with a bottle cap. All level lines were run well within the required accuracy and records carefully checked. All level points are shown on the contour prints with a cross, and labeled with the quadrangle designation letters BS and numbered consecutively in blue ink with the proper elevation shown to the nearest tenth.

6 - CONTOURS AND DRAINAGE:

The contouring was done in accordance with instructions for this project, on nine lens photographs 11863A and 11864A using standard planetable methods, supplemented in numerous cases, for a short distance, by pacing and handleveling.

Due to the extreme relief, and dune type of terrain in a one mile strip of land parallel and adjoining Hobe Sound on the west, it was found to be impractical to maintain a contour interval of 5 feet. The 5 foot interval was used in the strip of land between Hobe Sound and U. S. Highway No. 1 and it was found that at this scale the 5 foot interval was too close to show legible inked elevations and the true expression of relief. A 10 foot interval was resorted to in the area between U. S. Highway No. 1 and the F.E.C.R.R. and northwestward to an unbroken 5 foot contour line or the quadrangle limits. It is believed that with the elevations shown and with the 10 foot contours established in the field and diligent use of a good stereoscope, the 5 foot interval can be shown through this area by the compilation office much more economically than could be done by the field party.

All planetable traverses of 3 setups or more were tied back to level points with a closure of 0.3 foot or less.

7 - MEAN HIGH-WATER LINE:

The 1944 field inspection of the mean high water line was checked from a boat run close to the shore. Additions and corrections were made with blue ink in order to differentiate between the 1944 and 1946 shoreline inspection.

Frequent checks on the mean high water line were made by short stadia shots. In general, it parallels the five foot contour at

a distance of between five and ten meters.

8 - LOW-WATER LINE:

The 1944 inspection of the low water line on the Atlantic Ocean shore was checked and found to be correct. The low water line in the Intracoastal Waterway is, in general, not more than two meters from the mean high water line. Exceptions were outlined with green ink on the field prints.

9 - WHARVES AND SHORELINE STRUCTURES:

The only shoreline structures on the ocean beach are retaining walls, which have been outlined and labeled on the photographs. There are numerous small piers and boat houses along the Intracoastal Waterway. These have been delineated on the photographs.

10 - DETAILS OFFSHORE FROM HIGH-WATER LINE:

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

11 - LANDMARKS AND AIDS TO NAVIGATION:

Landmarks and aids to Navigation were field inspected by Charles H. Bishop, Photo. Aid, and made the subject of a special report dated February 1947, Project CS-312 A. *Filed in Div. of Nautical Charts as Chart Letter # 372 (1948). Refer to carbon copy covering T-8413 attached to this report.*

12 - HYDROGRAPHIC CONTROL:

In Hobe Sound, which is traversed by the Intracoastal Waterway, and along the Atlantic Ocean Beach, enough topographic stations were established along with permanent natural objects, triangulation stations, and U.S.E.D. control, to give a spacing of approximately one mile between recoverable stations. All established topographic stations were submitted on Form 524. Since the accuracy of the U.S. E.D. control is considered less than 3rd order in this area these stations have been classified as topographic stations. The U.S.E.D. control in this area is to be re-run by that department with the intention of raising its order but it is unknown at this time when this will be done.

*Form 524's filed in Div. Photogrammetry General Files.*

13 - LANDING FIELDS AND AERONAUTICAL AIDS:

No landing fields or aeronautical aids fall within the limits of this quadrangle.

14 - ROAD CLASSIFICATION:

Roads were reclassified in accordance with instructions for this project.

15 - BRIDGES:

Bridge clearances were checked and shown on the field print with classification as to type during the 1944 inspection. These were verified in 1947. (See attached Bridge Data).

16 - BUILDINGS AND STRUCTURES:

The field inspection of 1944 was verified in 1947. New structures were shown on either the new 9 lens prints or the single lens prints to give an up-to-date map.

17 - BOUNDARY MONUMENTS AND LINES:

All section corners were searched for. In cases where these were not found, 1/4 corners were searched for.

To supplement public land line markers there are U.S.E.D. stations set on section lines. Only in one case were any of these picked on the photograph. ED 34 is the section corner marker for  $\frac{35}{2} \frac{36}{1}$ .

T 39 S R 42 E. The following U.S.E.D. stations fall on public land  
T 40 S

lines and were recovered, but not picked on the photographs; ED 28  
( $\frac{12}{13}$  T 40 S, R 42 E); FRM 1 (USE) on the south line of Gomez Grant.

Using the local grid coordinates from the U.S.E.D. layouts these stations will aid in tying down public land lines.

Camp Murphy in the southwest corner of the quadrangle is being dismantled. The land has been turned over to the War Assets Administration who has turned it over to Federal Land Bank of Columbia, South Carolina, for disposal since it has been classified as farm land. Due to these findings, nothing was done to recover the boundary of Camp Murphy reservation, but this matter should be investigated further by the field edit party by which time final disposition of the land shall have possibly been settled. This situation was brought to the attention of the Washington Office and approval of this procedure was sanctioned.

~~(See attached data)~~

18 - GEOGRAPHIC NAMES:

See special report on Geographic Names By Lowell I. Bass, Eng. Aid, dated July - August 1944.

*Oh file, in Geographic Names Section,  
Div. of Nautical Charts,*

Respectfully Submitted:

*Harold A. Duffy*  
Harold A. Duffy  
Photogrammetrist

*Charles H. Bishop*  
Charles H. Bishop  
Photo. Aid

Approved and Forwarded:

*Ross A. Gilmore*  
Ross A. Gilmore  
Chief of Party 2-21-47

MAIN RADIAL PLOT  
PROJECT 312A (PARTIAL)  
QUADRANGLES, T-8411, T-8412, T-8413  
T-8414 AND T-8415

This plot consisted of five quadrangles; T-8411, T-8412, T-8413, T-8414, and T-8415. The projections for these quadrangles were received in this office 7 September, 1944. Control was plotted and checked by members of the control section using the beam compass and meter bar methods. The control to be used in the main radial plot was then transferred to the base grid by matching the map manuscript grid with the base grid.

A circle of 14 inch radius was drawn upon each photograph to facilitate use of the central portions of the photographs in preference to the outer extremities, which may be affected to a marked degree by excessive paper distortion. A circle of 14 inch radius was also drawn on each of the templates to assist in evaluating rays where, because of insufficient photographic coverage, it has been necessary to use the entire photograph.

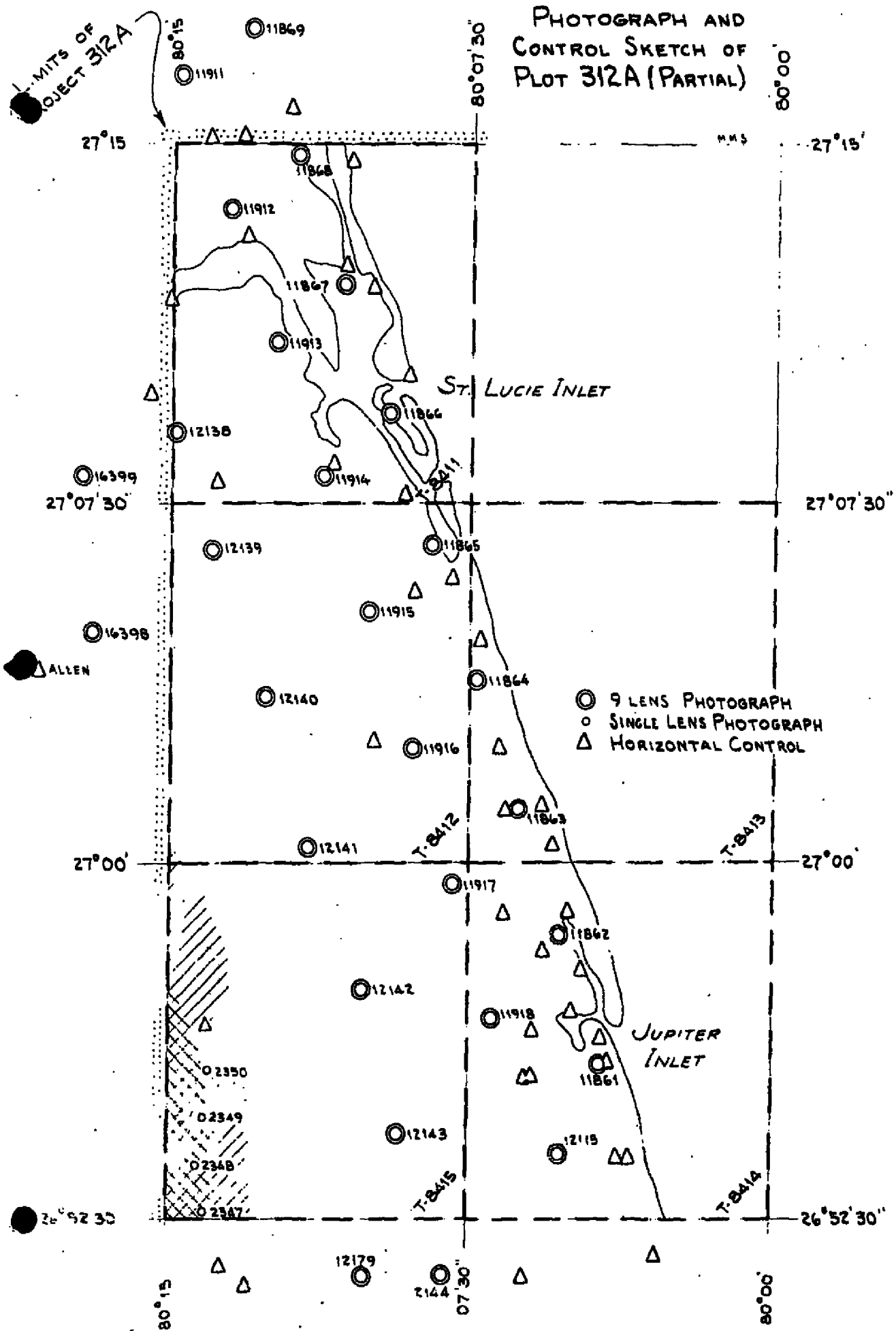
Control was marked on the photographs without reference to the 14 inch radius circle. All the control on the photographs was used on the template. Azimuths and gross azimuths were established with the stereoscope and radial liner method.

Pass points were selected in a regular quadrilateral scheme in order to strengthen the graphic control scheme as represented by the main radial plot. In areas of sufficient photographic coverage the marking of pass points was confined within the 14 inch radius circle.

All photographs used in this plot were printed on unmounted acetate impregnated paper, thus necessitating treatment for the effect of paper distortion. This was done by adjusting vinylite templates, inked to coincide with the metal distortion template, to the photographs.

A flight of single lens photographs, C-2346 to C-2355, taken 18 April, 1945 were furnished to supplement the nine lens photograph coverage for delineating in the western area of T-8415 and the south west corner of T-8412. Photographs C-2347 to C-2350 inclusive were fixed by selecting points common to the nine lens and single lens photographs and locating the points on the map manuscript using the nine lens photographs. This was necessary because ground control was insufficient to fix the smaller photographs.

PHOTOGRAPH AND CONTROL SKETCH OF PLOT 312A (PARTIAL)

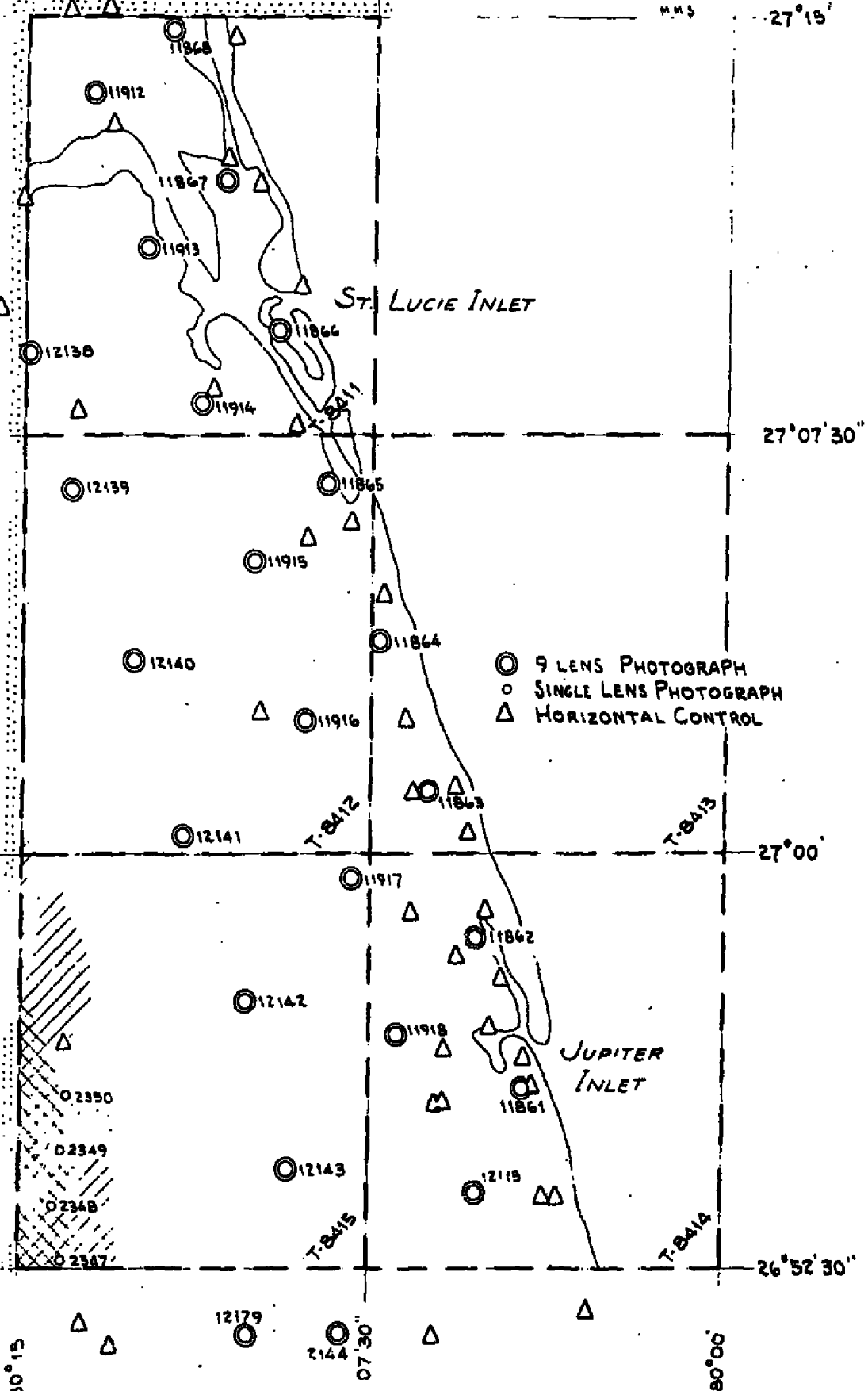


- ⊙ 9 LENS PHOTOGRAPH
- SINGLE LENS PHOTOGRAPH
- △ HORIZONTAL CONTROL

LIMITS OF OBJECT 312A

ALLEN

26° 52' 30"



The sketch, which is a part of this report, shows the distribution of control and the photographs used in this main radial plot.

Discussion of the main radial plot follows:

(A) CONTROL:

As shown in the accompanying sketch the control recovered and used is considered sufficient to control the main radial plot. In areas with abundant control some of the triangulation was not transferred to the base grid and the intersections of cuts for these stations coincided satisfactorily with the plotted positions.

In one portion of the plot, the south west area of T-8412, it would have been desirable to have a control station. By recovering and pricking ALLEN 1934, and using photographs 16398 and 16399 it is felt that a satisfactory plot was achieved without the cost of traverse for additional control.

One control station, SUBSTITUTE STATION SNAKE 1930, was not used in the plot. The character of the mangrove as shown on the 1942 nine lens photograph on which the station was pricked in August 1944 underwent such a radical change as shown on the March 1945 single lens photographs as to cast considerable doubt on the identification of the station. Because sufficient control had been recovered in the area the station was not used.

(B) PHOTOGRAPHS:

With the exception of the western portion of T-8415 photograph coverage for this plot was good. In the western portion of T-8415, cross hatched area in accompanying sketch, photograph coverage at best gave two cut intersections for pass points. Along the project limits, double cross hatched in the sketch, there is an area whose photographic coverage for the radial plot is considered of reconnaissance order only.

Nine lens photographs furnished were:

|                         |   |
|-------------------------|---|
| 12138 - 12144 inclusive |   |
| 12911 - 11918           | " |
| 11861 - 11869           | " |

12115, 12179, 16398 and  
16399.



Single lens photographs C-2346 to C-2355 inclusive.

No tilt sufficient to interfere with the accuracy of the main radial plot was observed.

All the photographs used in the radial plot were examined for poor chamber junctions. The examination disclosed erratic chamber junctions and wing chambers radially displaced with the center chamber. These were noted on the photographs and adjustments used where possible. The poor chamber junctions were also marked on the templates to assist in evaluating the information on the templates. It is felt that these operations helped to achieve a satisfactory plot.

(C) CLOSURE AND ADJUSTMENT:

The plot was laid in the usual manner; the templet with the strongest fix on control was laid first, then templates with progressively weaker fixes following in order.

The southeast portion of T-8414, T-5578 of Project GS-308, had been completed in October 1944. The Main Radial Plot for T-5578 was done in June and July of 1944 by Bennis H. Lyon. Very good agreement was had in the location of identical pass points and photograph centers between this main radial plot and the plot of which T-5578 was a part.

Satisfactory junctions were obtained with the radial plot for the quadrangle to the south. This plot was carried north and west beyond the limits of T-8411 far enough to insure good junctions with later work.

(D) AREAS OF QUESTIONABLE ACCURACY:

With the exception of the area in western part of T-8415, discussed fully in (B) PHOTOGRAPHS, it is believed that all parts of this plot fall within the prescribed limits of accuracy.

(E) GENERAL:

The pass points were pricked and circled on the back of the map manuscript with double red inked circles of 1.5mm. and 3.0mm. radii. The pass points located by two cut intersections are identified by ticks on the outer circle to the photograph centers.

The photograph centers are shown on the back of the map manuscript with double inked circles of 3.0mm. and 5mm radii; red for nine lens photographs and blue for the single lens.

Respectfully submitted,

*Milton M. Slavney*

Milton M. Slavney,  
Photogrammetric Engineer

Approved and Forwarded by:

*George E. Morris, Jr.*  
George E. Morris, Jr.  
Chief of Party.

COMPILATION REPORT  
TO ACCOMPANY  
HOBE SOUND QUADRANGLE NO. T.-8413

26 & 27 CONTROL & RADIAL PLOT:

A special report prepared by M. M. Slavney, Photogrammetric Engineer, is being submitted with this report.

28. DELINEATION:

Both nine lens and single lens photographs were used for the delineation of this map manuscript.

There was very little change noted in the shoreline since the date of the 1942 photographs. Such changes as occurred were noted on the 1945 single lens photographs by the field inspector and delineated accordingly.

Woodland areas and cultural features were outlined and symbolized according to the latest instruction. Attention, however, is called to the labeling of woodland areas. These areas have been labeled as shown by the field inspector who combined the symbols in the form of "S & B" or "W & B". The compiler has left the final interpretation of this type of field notes to the discretion of the Washington Office. *See review report.*

An examination of the photographs gave the compiler no substantial or conclusive information as to which form of vegetation was predominant.

The green ink used for outlining the vegetation is not outstanding from a color standpoint and some difficulty may be experienced by the smooth draftsmen in seeing the outlining particularly in the areas of congested contouring.

The many buildings shown on the photographs in the vicinity of Camp Murphy have been either destroyed or in the progress of being destroyed and referred to the field editor for further inspection. See paragraph two of "Field Inspection Report".

29. SUPPLEMENTAL DATA:

No supplemental data was used.

30. MEAN HIGH WATER LINE :

The mean high water line has been shown according to field inspection notes.

31. LOW WATER AND SHOAL LINES:

Shown according to field inspection notes.

32. DETAILS OFFSHORE FROM THE HIGH WATER LINE:

None recovered.

33. WHARVES AND SHORELINE STRUCTURES:

There are no outstanding shoreline structures. Small docks, piers or boat slips indicated by the field inspector have been delineated.

34. LANDMARKS AND AIDS TO NAVIGATION:

*Special Report on Landmarks has not been received as of this date. 21 May 47.*  
~~No land marks were recovered. (Reference paragraph 11, Field Inspection Report).~~  
*Any landmarks recovered in this quadrangle will be incorporated at time of Field Edit. w.a.R. Also See field edit report.*

Three non-floating aids to navigation were recovered by the field inspector. These have been located on the map manuscript by radial plot and are being submitted on forms 524 and 567.

35. HYDROGRAPHIC CONTROL:

All hydrographic control recovered by the field inspector has been shown.

See paragraph 12 of the Field Inspection Report for further information.

36. LANDING FIELDS AND AERONAUTICAL AIDS:

No landing fields or aeronautical aids fall within the limits of this quadrangle.

37. BRIDGES:

Hobe Sound Bridge is the only bridge within the limits of this quadrangle. It has been shown and the horizontal and vertical clearances as determined by the field inspector have been shown by label.

38. SECTION CORNERS:

See paragraph 17 of Field Inspection Report. ~~A special report on public land lines will be submitted by William A. Reese, Photogrammetric Engineer and submitted after field edit.~~

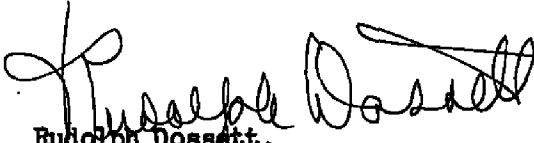
44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

No topographic quadrangles of this area was available for a comparison.

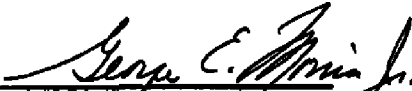
45. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with U. S. Coast and Geodetic Survey nautical chart number 846 bearing print date 1 December, 1945. No changes were noted.

Respectfully submitted,

  
Rudolph Dosselt,  
Photogrammetric Aide.

Approved and Forwarded:

  
George E. Morris, Jr.  
Chief of Party.

SUPPLEMENTARY COMPILATION REPORT  
TO  
ACCOMPANY T-8413 AND T-8414

CONTOURS:


This office was furnished (by the field editor) six topographic sheets of the Camp Murphy Area having a one-foot contour interval. (see Field Edit Report). A pantographic reduction of these sheets was made to a scale of 1: 20,300 with a 5-foot contour interval and then applied to the map manuscripts.

The map manuscripts were returned to the field editor for further edit and corrections in areas of new development. Such areas were corrected and applied directly to the map manuscript.

Respectfully submitted,

  
Rudolph Dossett  
Cartographer ( Photo).

Approved and Forwarded:

  
Ross A. Gilmore  
Lieut. Comdr. USC&GS  
Chief of Party.

P. O. Box 1445  
Vero Beach, Florida

8 March 1948

To: Officer in Charge  
Tampa Photogrammetric Office  
U. S. Coast and Geodetic Survey  
P. O. Box 1689  
Tampa, Florida

Subject: Contours, Camp Murphy Area, Quadrangles  
T-8413 and T-8414

During field edit of the subject area, the contouring was found, in many instances, to be outside of the allowable error. This condition is apparently due to the rough, broken nature of the terrain, and the scale employed; whereas, a small error in horizontal position would make a great difference in vertical accuracy. It was noted, under stereoscopic review, that a number of contours were horizontally displaced from their true position.

During the course of checking this topography, contour maps of a one foot interval were found, covering the entire Camp Murphy Area. A visual check in the field indicated that these contours were of a much greater accuracy than ours.

This work consists of 6 sheets on a scale of 1 to 2400. A vertical accuracy test was run on each sheet and gave very good results. Resultant profile elevations from these accuracy tests are shown in red ink on the sheets.

It is suggested that the Tampa Photogrammetric Office pantograph these sheets to the scale of the map manuscript and correct the areas of greatest discrepancy. Upon completion of this, an ovalid print of the corrected map manuscript should be furnished the field party for subsequent re-examination.

Areas in error, falling outside the coverage of these sheets, have been corrected on the photographs and will be covered in the field edit report.

George E. Morris, Jr.  
Lt. Comdr. U.S.C. & G.S.  
Chief of Party

JDW/c

cc: Chief, Division of Photogrammetry

C  
O  
P

y/rb/3-12-48

\* BRIDGE DATA \*

QUADRANGLE

NO T-8413

DATE 14 Feb. 1947



| BRIDGE NAME                                   | BRIDGE BOOK PAGE | LAT.<br>LONG.      | TYPE | SPAN | HOR. CLEARANCE |                   |              |
|---|------------------|--------------------|------|------|----------------|-------------------|--------------|
|   |                  |                    |      |      | MAXIMUM        | NORMAL TO CHANNEL |              |
|   |                  |                    |      |      |                | Meas.             | Bridge Book. |
| Hobe Sound                                    | 216              | 27 03.9<br>80 07.3 | B    | 5    | 88             | 87                | 87           |
| Overhead Power Line<br>(At Hobe Sound Bridge) | not listed       |                    | F    | 1    |                |                   |              |

All measurements in feet  
R-right, L-left, C-center, EST.-estimated MHW, T-predicted tide.

VERTICAL CLEARANCE

Measured at  
center EST, MHW  
or predicted  
tide.

High Water  
Bridge Book

Est. 10.7

11.0

Due to Jupiter Inlet being closed and the constricted passage of water to the St. Lucie Inlet, the MHW tends to be higher than if free tide action reached this bridge. The U.S.E.D., and local residence call this bridge "Olympia Bridge", but it is better known as the Hobe Sound Bridge.

Est. 85

The 1944 field inspection gave 100 feet for this clearance. However, it appears that lower wires have been added since that inspection.

The Field Editor was instructed to check this clearance; he gives 92 feet as the clearance.



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

**NON-FLOATING AIDS/OR LANDMARKS FOR CHARTS**

**TO BE CHARTED**  
~~TO BE DELETED~~

STRIKE OUT ONE

Vero Beach, Florida 17 February, 1948

I recommend that the following objects which have ~~(Mts/Hb)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(dfffff/ffff)~~ the charts indicated.

The positions given have been checked after listing by Rudolph Dossett, Tampa Photogrammetric Office

*Rudolph Dossett*  
*Rose A. Gilmore*  
Rose A. Gilmore  
Chief of Party

| CHARTING NAME    | STATE | FLORIDA | DESCRIPTION   | SIGNAL NAME | POSITION     |              | DATUM | METHOD OF LOCATION SURVEY No. | DATE OF LOCATION | HARBOUR CHART | INSHORE CHART | OFFSHORE CHART | CHARTS AFFECTED |
|------------------|-------|---------|---|-------------|--------------|--------------|-------|-------------------------------|------------------|---------------|---------------|----------------|-----------------|
|                  |       |         |   |             | LATITUDE     | LONGITUDE    |       |                               |                  |               |               |                |                 |
|                  |       |         |   |             | D. M. METERS | D. P. METERS |       |                               |                  |               |               |                |                 |
| TANK, ELEV.      |       |         | Elevated water tank, wooden, light green, 40 ft. high                   |             | 27 00        | 553          | 80 05 | 1445                          | NA 1927          | T-8413        | Feb. 1948     | x              | 846             |
| TWIN TANKS ELEV. |       |         | Elevated twin water tanks, wooden, light green, 25 ft. high (East Tank) |             | 27 00        | 1316         | 80 06 | 269                           | "                | "             | "             | x              | "               |
| TWIN TANKS ELEV. |       |         | Elevated twin water tanks, wooden, light green, 25 ft. high (West Tank) |             | 27 00        | 1316         | 80 06 | 278                           | "                | "             | "             | x              | "               |
| TANK, ELEV       |       |         | Elevated water tank, wooden, light green, 40 ft. high.                  |             | 27 01        | 766          | 80 06 | 780                           | "                | "             | "             | x              | "               |
| EAST GABLE       |       |         | East gable, large green building, parabolic roof                        |             | 27 01        | 257          | 80 06 | 1063                          | "                | "             | "             | x              | "               |
| TANK, ELEV       |       |         | Elevated water tank, wooden, light green, 35 ft. high                   |             | 27 00        | 1194         | 80 05 | 1107                          | "                | "             | "             | x              | "               |
| TANK, ELEV       |       |         | Elevated water tank, wooden, white, 45 ft. high.                        |             | 27 01        | 542          | 80 05 | 1579                          | "                | "             | "             | x              | "               |
| TANK, ELEV       |       |         | Elevated water tank, wooden, dark green, 65 ft. high.                   |             | 27 01        | 1021         | 80 06 | 70                            | "                | "             | "             | x              | "               |
| BEACH HOUSE      |       |         | Center of small beach house. Red and white stripes.                     |             | 27 00        | 1124         | 80 05 | 898                           | "                | "             | "             | x              | 1247            |

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *non-floating aids* to navigation, if re-determined, 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-8413

"HOBE SOUND"

PROJECT CS-312-A

The field edit of this quadrangle was completed during January 1948 by John D. Weiler, Photogrammetrist.

46. METHODS

In field editing the map manuscript, all roads were traversed by truck. Because of the plethora of roads to Hobe Sound the area along the Intracoastal Waterway and the Atlantic Ocean was also edited by truck.

All data added to the map manuscript were either plotted from topographic features or cut in by planetable methods.

47. ADEQUACY OF THE MAP MANUSCRIPT

The map manuscript was not too well compiled. A number of houses and roads on Jupiter Island were omitted. Quite a few contours were interpolated on the wrong side of substantiating elevations.

Attention is called to the following items that may need clarification:

Camp Murphy has been acquired by the "State Board of Forestry and Parks", and is to be converted into a public park and game refuge. It had not been named at the time of the field edit. The boundary has been changed slightly from the original Camp Murphy boundary and is shown on the map manuscript. No corrected legal description is available. The buildings to be shown in this area are circled in red ink on photograph 11863 B. These will remain as park buildings. All others have been demolished.

*Has been named  
"Jupiter State Park".  
See correspondence  
in Desc. Report of T-8412,*

One underground telephone line has been continued from quadrangle T-8412 to a point where it runs parallel with U. S. Highway No.1.

The golf course on Jupiter Island is a part of the Jupiter Island Club.

There is a rock pile just north of Hobe Sound Lt. 51 that was omitted during the original shoreline inspection. It has been plotted on the field edit sheet.

All roads were reclassified according to Photogrammetry Instructions No.10 and Amendment dated 24 October 1947.

Nine landmarks were identified on the photographs. *Filed in Nautical Forms 524 and 567 are submitted. Chart Division as Chart Letter #293(1948). See Photostat in appendix.*

One third order U.S.E.D. station, ED 28, USE, 1939, was identified. Form 526 and a pricking card are submitted.

Numerous discrepancies were found in checking contours along the coastal ridge, and it is felt that there are probably other areas which are not within the allowable limits of accuracy. However, six sheets of contour maps on a one foot interval, prepared by the U.S.E.D. cover the roughest part of the area. Vertical accuracy tests on these sheets were run with very good results. These have been transmitted to the Tampa Photogrammetric Office for pantographing to 1:20,000 scale. These will be compared with contours on the map manuscript and corrections made where necessary. This may necessitate a small amount of re-edit, but appears to be the most expeditious way of handling the situation.

*See also correspondence attached to this report.*

48. VERTICAL ACCURACY TESTS

No vertical accuracy tests were specified for this quadrangle, however, random tests were run. (reference last paragraph, item 47.) *Summary made in Review Report.*

49. PUBLIC LAND LINES

The reconstructed section lines appear to tie in well with cultural features.

Station ED 28, U.S.E., 1939, has been identified on photograph 11863 B and appears to fall where plotted. A 3 inch iron pipe was also recovered 6 feet east of this station, evidently another point on the section line. The line should be changed to conform with the station as shown.

There is a rock pile just north of Hobe Sound Lt. 51 that was omitted during the original shoreline inspection. It has been plotted on the field edit sheet.

All roads were reclassified according to Photogrammetry Instructions No.10 and Amendment dated 24 October 1947.

Nine landmarks were identified on the photographs. *Filed in Nautical Forms 524 and 567 are submitted. Chart Division as Chart Letter #293(1948). See Photostat in appendix.*

One third order U.S.E.D. station, ED 28, USE, 1939, was identified. Form 526 and a pricking card are submitted.

Numerous discrepancies were found in checking contours along the coastal ridge, and it is felt that there are probably other areas which are not within the allowable limits of accuracy. However, six sheets of contour maps on a one foot interval, prepared by the U.S.E.D. cover the roughest part of the area. Vertical accuracy tests on these sheets were run with very good results. These have been transmitted to the Tampa Photogrammetric Office for pantographing to 1:20,000 scale. These will be compared with contours on the map manuscript and corrections made where necessary. This may necessitate a small amount of re-edit, but appears to be the most expeditious way of handling the situation.

*See also correspondence attached to this report.*

48. VERTICAL ACCURACY TESTS

No vertical accuracy tests were specified for this quadrangle, however, random tests were run. (reference last paragraph, item 47.) *Summary made in Review Report.*

49. PUBLIC LAND LINES

The reconstructed section lines appear to tie in well with cultural features.

Station ED 28, U.S.E., 1939, has been identified on photograph 11863 B and appears to fall where plotted. A 3 inch iron pipe was also recovered 6 feet east of this station, evidently another point on the section line. The line should be changed to conform with the station as shown.

on the section line discrepancy print.

The map manuscript was reviewed by Mr. George E. Southard, in charge of the Camp Murphy area for the War Assets Administration, the last two years. He found no errors.

Submitted by:

*John D. Weiler*

John D. Weiler  
Photogrammetrist

SUPERVISED:

*William A. Rasure.*

William A. Rasure  
Photogrammetric Engineer

APPROVED AND FORWARDED:

*Ross A. Gilmore*

Ross A. Gilmore  
Chief of Party

*Para. 47 should be qualified somewhat.  
Several houses on Jupiter Id. were obscured  
by trees and the Field Editor was asked by  
the compiler to outline them.  
The contouring in this area was particularly difficult  
due to the un-pattered dune-like terrain. It is believed  
that the topographer may have placed too much emphasis  
on stereoscopic interpretation and not enough <sup>time on</sup> original field  
contouring. RAG*



GEOGRAPHIC NAMES

Survey No. T-8413

HOBE SOUND, Fla. 7<sup>th</sup> quad

Name on Survey

|                                | On Chart No. | On previous survey No. | On U. S. quadrangle Maps | From local information   | On local Maps | P. O. Guide or Map | Rand McNally Atlas | U. S. Light List |      |    |
|--------------------------------|--------------|------------------------|--------------------------|--|---------------|--------------------|--------------------|------------------|------|----|
|                                | A            | B                      | C                        | D  | E             | F                  | G                  | H                | K    |    |
| <u>Florida</u>                 |              |                        |                          |  |               |                    |                    |                  | USGB | 1  |
| <u>Martin County</u> ✓         |              |                        |                          |  |               |                    |                    |                  |      | 2  |
| <u>Atlantic Ocean</u> ✓        |              |                        |                          |  |               |                    |                    |                  |      | 3  |
| <u>Intracoastal Waterway</u> ✓ |              |                        |                          |  |               |                    |                    |                  | USGB | 4  |
| <u>Florida East Coast</u> ✓    |              |                        |                          |  |               |                    |                    |                  |      | 5  |
| <u>U.S. No. 1</u> ✓            |              |                        |                          |  |               |                    |                    |                  |      | 6  |
| <u>State A1A</u> ✓             |              |                        |                          |  |               |                    |                    |                  |      | 7  |
|                                |              |                        |                          |  |               |                    |                    |                  |      | 8  |
| <u>Hobe Sound</u> ✓            |              |                        |                          | (water area)   |               |                    |                    |                  |      | 9  |
| <u>Hobe Sound</u> ✓            |              |                        |                          | (town: a portion of it here)                                     |               |                    |                    |                  |      | 10 |
| <u>Jupiter Island</u> ✓        |              |                        |                          |  |               |                    |                    |                  |      | 11 |
| <u>Jupiter State Park</u> ✓    |              |                        |                          |  |               |                    |                    |                  |      | 12 |
| <u>Harbor Island</u> ✓         |              |                        |                          |  |               |                    |                    |                  |      | 13 |
| <u>Jupiter Island Club</u> ✓   |              |                        |                          |  |               |                    |                    |                  |      | 14 |
| <u>Hobe Sound Bridge</u> ✓     |              |                        |                          |  |               |                    |                    |                  |      | 15 |
| <u>Lake Francis</u> ✓          |              |                        |                          |  |               |                    |                    |                  |      | 16 |
| <u>Bonair Beach</u> ✓          |              |                        |                          | (this is the form in special names report)                       |               |                    |                    |                  |      | 17 |
| <u>Gomez Grant</u> ✓           |              |                        |                          | (note that only a small part of it lies in this quadrangle area) |               |                    |                    |                  |      | 18 |
|                                |              |                        |                          |  |               |                    |                    |                  |      | 19 |
|                                |              |                        |                          |  |               |                    |                    |                  |      | 20 |
|                                |              |                        |                          |  |               |                    |                    |                  |      | 21 |
|                                |              |                        |                          |  |               |                    |                    |                  |      | 22 |
|                                |              |                        |                          |  |               |                    |                    |                  |      | 23 |
|                                |              |                        |                          |  |               |                    |                    |                  |      | 24 |
|                                |              |                        |                          |  |               |                    |                    |                  |      | 25 |

Names underlined in red are approved. 7/1/48. L. H. ...

Division of Photogrammetry  
Review Report of  
Topographic Map Manuscript T-8413

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

26 Control:

Two U. S. E. third order horizontal control stations will not be shown on the published map because of the proximity of other control stations.

28 Detailing:

The symbol "S" for scattered trees was used on this quadrangle but on the adjoining quadrangles T-8412 "B" was ~~not~~ used. The symbolization of the vegetation will not match at the junction of the manuscripts but will match on the published maps. Areas marked "B" or "S" will both be shown with the green tint.

43 Comparison with Previous Surveys:

In common areas, this survey supersedes:

T-1640 (1883) 1:20,000  
T-4458 (1930) 1:20,000.

45 Comparison with Nautical Charts:

Chart No. 846 4/26/48 1:40,000

A rock pile that bares 2 feet at M.H.W. is shown on the chart with the rock awash symbol. It is in Hobe Sound at Lat. 27°01'.

The pipeline area on the chart should be moved 900 meters north.

A submarine cable area should be shown on the chart at Lat. 27°01'.

A small island on the chart at Lat. 27°01!6' Long. 80°06.2' should be deleted.

The elevated tanks listed in the chart letter No. 293 (1988) are not charted.

There is a <sup>difference</sup> ~~discrepancy~~ in the clearance of the overhead cable at Hobe Sound Bridge as shown on the chart and as obtained by the Field Edit~~ing~~. The chart indicates a clearance of 78 feet and the Field Edit Sheet 92 feet.

48 Accuracy:

A vertical accuracy test indicated that this map complies with national map accuracy standards, as 93% of all the points tested were within a half contour interval.

This map complies with national map accuracy standards.

49 Overlay:

An overlay has been prepared for the Drafting Section showing control, road classification, etc. and the new format for quadrangles. This map will be edited and published 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:

Reviewed under direction of:

Jack L. Rihn  
Lena F. Stevens Jack L. Rihn  
Cartographer (Photogrammetrist)

S. V. Griffith  
S. V. Griffith  
Chief, Review Section

Approved by:

B. J. Jones  
Technical Asst. to the Chief,  
Div. of Photogrammetry

J. C. Pauling  
Chief, Nautical Chart Br.  
Division of Charts

B. J. Jones  
Chief, Div. of Photogrammetry

C. J. Green  
Chief, Div. of Coastal Surveys