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U. S. COAST & GEODETIC SURVEY
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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

U. S. COAST & GEODETIC SURVEY
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DEC 17 1935
Acc. No.

State: Alabama

DESCRIPTIVE REPORT

Topographic
~~Hydrographic~~ } Sheet No. T 5497 and T 5498
Air Photo Compilations

LOCALITY

T 5497

Vicinity of Mobile Bay

Oyster Bay and Intracoastal Waterway

T 5498

Vicinity of Wolf Bay

Portage Creek and Intracoastal Waterway

1934

CHIEF OF PARTY

M. H. Reese

U. S. GOVERNMENT PRINTING OFFICE: 1929

5497
5498

Form 537a
Ed. Nov. 1929

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 26

REGISTER NOS. T-5497 & T-5498

State Alabama

General locality ~~Bon Secours Bay~~

Locality Oyster Bay to Wolf Bay

Scale 1:10,638 Date of ~~survey~~ photographs July 11 + 16 1934

~~Vessel~~ Air Photo Compilation Party No. 24, Pensacola, Fla.

Chief of party M. H. Reese

Surveyed by See data sheet in descriptive report.

Inked by C. Carter Brown & F. A. Donadieu

Heights in feet above ------ to ground to tops of trees

Contour, Approximate contour, Form line interval ---- feet

Instructions dated June 7, 19 34

Remarks: Compiled on scale of 1:10,638. Enlarged and printed by Photolithography on scale of 1:10,000. Scale factor 0.94.

T 5497
Vicinity of Mobile Bay
Oyster Bay and Intracoastal Waterway

T 5498
Vicinity of Wolf Bay
Portage Creek and Intracoastal Waterway

- STATISTICS -

on

SHEET, FIELD NO. 26, REG. NOS. T-5497 & T-5498

PHOTOS, NO. 432 258 TO NO. 453 280

DATE OF PHOTOGRAPHS 7/16/34 7/11/34 TIME 8:30 a.m. 3:30 p.m.

	BY	DATE FROM	DATE TO
ROUGH RADIAL PLOT	H. C. Smith	11/22/34	
SCALE FACTOR (0.94)	H. C. Smith	11/22/34	
SCALE FACTOR CHECKED	E. P. Hernandez, Jr.	11/22/34	
PROJECTION	E. P. Hernandez, Jr.	11/23/34	
PROJECTION CHECKED	H. C. Smith	11/23/34	
CONTROL PLOTTED	F. A. Donadieu	11/24/34	
CONTROL CHECKED	E. P. Hernandez, Jr.	11/27/34	
TOPOGRAPHY TRANSFERRED			
TOPOGRAPHY CHECKED			
SMOOTH RADIAL LINE PLOT	M.B.Gill,Jr. & H.C.Smith	12/14/34	
RADIAL LINE PLOT CHECKED	E. P. Hernandez, Jr.	12/15/34	
DETAIL INKED Shoreline:	F. A. Donadieu	12/17-21 & 12/27/34-1/1/35	
DETAIL INKED Detail:	C. Carter Brown	1/1 - 1/19/35	
PRELIMINARY REVIEW OF SHEET	E. P. Hernandez, Jr.	2/1/35	

AREA OF DETAIL INKED 59.9 sq. Statute Miles (Land Area)

AREA OF DETAIL INKED _____ sq. Statute Miles (Shoals in Water Area)

LENGTH OF SHORELINE (more than 200 m. from nearest opposite shore)
36.5 Statute Miles

LENGTH OF SHORELINE (rivers and sloughs less than 200 m. wide)
62.4 Statute Miles

GENERAL LOCATION ~~Bon Secours Bay~~ } See Title Sheet

LOCATION ~~Oyster Bay East to Wolf Bay~~

T 5497 Station Sylvia 1934
Lat. 30° 15' 23.151" (712.9m)
Long. 87° 44' 19.461" (520.3m)

DATUM North American 1927 ~~Adjusted~~ Unadjusted

T 5498

STATION Moon 1934

Latitude 30°15'09.314" (286.8 m.)

Longitude 87°39'21.300" (569.4 m.)

COMPILER'S REPORT

FOR

PHOTO TOPOGRAPHIC SHEETS NOS. T-5497 & T-5498

FIELD NO. 26

I. GENERAL INFORMATION:

Instructions dated June 7, 1934.

The information used in the compilation of this sheet was obtained from the notes and sketches on the field photographs and from members of the field inspection party in areas in which the draftsman could not determine the exact nature of the detail from the photographs.

The area covered by this sheet is for the greater part grass land with scattered pines and broadleaved trees. The western section of the sheet is dominated by Oyster Bay and Bon Secours River, both of which have marshy land along their shores. The southern area of the sheet, particularly the southeastern area, consists of marsh land with scattered trees throughout the marshes. Also in the southeastern area are several fresh water lakes. The area around the northern part of Oyster Bay and along Bon Secours River is well populated. Running east and west along the central part of this sheet is the Intracoastal Waterway Canal.

The range of normal tide along Intracoastal Waterway Canal, Oyster Bay, and Bon Secours River is so small (approximately 1 ft.) that the high water line as traced from field prints was used in showing shorelines.

The area covered by this sheet was traced from photographs made by the Aero Service Corporation with their H.U.I.-33 five-lens camera. Photographs Nos. 258 to 280 were taken running approximately east and west along the central portion of the sheet. Photographs Nos. 432 to 453 were taken running approximately east and west along the southernmost section of land shown on the sheet.

The only bridges over navigable streams are the two pontoon bridges over the Intracoastal Waterway Canal. These bridges have no clearance.

Detail along the northern edge of the sheet is only approximate due to the fact that this portion is covered only by the extreme tip of the wing photographs.

Concerns T-5497

Locations of canal bank line and of beacons (day and light) have been checked with existing plane table sheets of the hydrographic party under Lieut. I. E. Rittenburg.

II. CONTROL:

(A) Sources.

The following sources of control were used in the compilation of this sheet:

(a) Triangulation by M. H. Reese, 1934.
(b) Triangulation by G. L. Anderson, 1934.

The geographic positions of these stations were computed ~~on~~ on the North American 1927 ~~Datum~~ Datum. ~~Datum~~ from Field Computations on NA 1927. ~~used. These positions computed from office adjusted positions of old triangulation.~~

(B) Errors.

There were no errors in control used in the compilation of this sheet.

(C) Discrepancies.

There were no discrepancies in the compilation of this sheet.

III. COMPILATION:

(A) Method.

The five-lens radial line method of plotting was used in the compilation of this sheet.

(B) Adjustment of plot.

There was no excessive tilt in the photographs used in tracing this sheet, but the difference in scale between photographs and projection was such that it was necessary to make continuous adjustments while tracing.

(C) Interpretation.

The graphic symbols used are those approved by the Board of Surveys and Maps (1932), except the symbol (⦚) that was used to designate brush.

An indefinite shoreline along the southeastern shore of Oyster Bay was indicated by a broken line.

* T-5498 has a probable error of 0.3 to 0.5 for intersected points and 0.3 to 0.8 for other detail.
T-5497 is considered correct within 0.3 to 0.5 m.m for intersected points and 0.3 to 0.8 for other detail except along the Bon Secour River East of Mag 87°44' where the possible error must be increased to 1.6 m.m. See Review.

(D) Information from other sources.

All U.S.E. stations and beacons were located according to positions supplied by the hydrographic party under Lieut. I. E. Rittenburg, with the following exceptions:

(a) Light Beacon 105, U.S.E. O.B. 32-A, U.S.E. 31 - located by radial line intersection.

(b) Light Beacons 91, 95, 12, 14, and 119 - located by triangulation.

(E) Conflicting names.

There are no conflicting names on the various charts of this area.

(F) List of new names.

Shelby Lakes (fresh water). (Well-established local name.)
Romar Beach (U.S. Engineers' print of this area.)

IV. COMPARISON WITH OTHER SURVEYS:

The junction of this sheet with sheet No. T-5495 to the east is satisfactory.

General details check in shape with Chart 1266. Omissions on Chart 1266 which are shown on this sheet are Intracoastal Waterway Canal and Shelby Lakes. The large difference in scale between this sheet and Chart 1266 makes an accurate check of this area impossible. Wharves and residences around Oyster Bay are shown with more detail and accuracy than on Chart 1266. Bank lines of Intracoastal Waterway Canal checked with those shown on aluminum sheet of Lieut. Rittenburg's hydrographic party.

V. LANDMARKS:

Landmarks of aid to navigation in this area will be submitted by the hydrographic party.

* VI. To the best of my knowledge, this sheet is complete in all detail of importance for charting purposes, and no additional survey is required.

C. Carter Brown

Submitted by: C. Carter Brown,
Draftsman.

M. H. Reese

Approved by: M. H. Reese,
Chief of Party.

	Remarks	Decisions
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M 234		

GEOGRAPHIC NAMES
Survey No. T-5497

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Bon Secour River	✓									1
Alabama State Highway No. 3										2
Oyster Bay	✓									3
Intracoastal Waterway	✓									4
Little Lagoon	✓									5
Gulf of Mexico	✓									6
Childress Point										7
										8
										9
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M 234

Survey No. T-5498

Date. 8/20/35

GEOGRAPHIC NAMES

Chart No. 1266

Diagram No.

Approved by the Division of Geographic Names, Department of Interior. ✳

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	Alabama State Highway No. 3				
	Intracoastal Waterway				
	Gulf of Mexico				
	Shelby Lakes		✓		
	Romar Beach	U.S. ENGINEERS' PRINT	✓		
	Portage Creek	(chart 1265)			
		Names approved	Dec. 9	1935.	
		O.H. Egner			

(M-136)

REVIEW OF AIR PHOTO COMPILATION T 5497

Scale 1:10,000

Comparison with Graphic Control Surveys

(a) T 6253b (1935), scale 1:10,000, covers western part of area.

Several docks and numerous piles and platforms shown on T 5497 are not shown on T 6253b.

Sixteen recoverable stations were transferred from T 6253b to T 5497 by F. G. Erskine and checked by L. A. McGauvin.

All detail shown on T 6253b is on T 5497 except magnetic meridian and temporary plane table stations.

(b) T 6255 (1935), scale 1:10,000, covers area adjacent to intracoastal waterway canal. No discrepancies.

Swing pontoon bridge shown on this sheet, high water clearance 5.7 ft., horizontal clearance 80.0 feet, width of roadway, 10.0 ft.

All detail for the area covered shown on T 6255 is on T 5497 except magnetic meridian and temporary plane table stations.

(c) T 6254b (1935), scale 1:10,000. Covers extreme southwest part of area. No discrepancies.

The two stations "WINDMILL G. S. INN" and "UPRIGHT WATER TANK" shown on T 6254b by the triangulation station symbol are not filed in Geodesy as triangulation stations.

All detail for the area covered shown on T 6254b is shown on T 5497 except temporary plane table stations.

Comparison with Previous Topographic Surveys

Miscl. 2 (1845), 1:200,000 - Reconnaissance
T 277 (1849), 1:20,000
T 1042 (1867), 1:10,000
T 2088 (1892), 1:20,000
T 3712 (1918), 1:40,000
T 3714 (1918), 1:40,000

There have been changes in the shoreline ranging up to 100 meters since the oldest of these surveys. There has not been much change since the 1918 surveys. T 3714 shows an entrance to Little Lagoon from the Gulf of Mexico which is now closed.

T 5497 is adequate to supersede the above surveys over the common area.

Comparison with Contemporary Hydrographic Surveys

H 5707 (1935), scale 1:10,000; covers western part of area. No conflicts with hydrography.

H 5730 (1935), scale 1:20,000; covers shoreline along Gulf of Mexico in eastern part of area. No conflicts with hydrography.

Stations MEL and BURP shown in extreme southwest part of area covered by H 5730 are not triangulation stations.

Comparison with Chart 1266

The small island at the east end of Little Lagoon no longer exists.

The entrance to Little Lagoon from the Gulf at lat. 30° 14.7', long. 87° 42.1' is closed.

T 5497 shows all docks which now exist.

At lat. 30° 17.8', long. 87° 45' the chart has the word "piles". These piles in addition to many other piles are shown on T 5497.

All lights and beacons shown on the chart in this area and recommended by the field parties are shown on this survey.

There are no landmarks on the chart in this area and none have been recommended.

Junction with T 5528

With a few minor corrections the shoreline of Bon Secour River east of long. 87° 44' on T 5528 (1:20,000) was accepted as corredt. This shoreline was transferred to T 5497 (1:10,000) with the shoreline projector. Practically all of the piling and platforms shown in the river on both surveys were taken from the 1:10,000 photographs. The shoreline of the river on T 5528 is considered correct within 0.3 to 0.8 mm. but on T 5497 east of long. 87° 44' this possible error must be increased to 1.6 mm. West of long. 87° 44' on T 5497 the shoreline may be considered correct within 0.3 to 0.8 mm.

July 30, 1935
April 9, 1936

H. D. Reed

Frank G. Erskine

REVIEW OF AIR PHOTO COMPILATION T 5498

Comparison with Graphic Control Surveys

(a) T 6254b (1935), scale 1:10,000, covers shoreline along Gulf of Mexico. Several discrepancies were found due to the constantly changing shoreline. (See letter filed in descriptive report, T 5494.) The compilation shoreline is accepted as of July 1934.

All detail shown on T 6254b is on T 5498 except temporary plane table stations.

(b) T 6255 (1935), scale 1:10,000, covers area adjacent to Intracoastal Waterway. No discrepancies.

Two swing pontoon bridges are shown on this sheet. At lat. 30° 17.4', long. 87° 38.3': horizontal clearance, 88.0'; high water clearance, 5.5'; width of roadway, 10.0'. At lat. 30° 16.7', long. 87° 41.1': horizontal clearance, 80.0'; high water clearance, 5.7'; width of roadway, 10.0'.

All detail for the area covered, shown on T 6255, is on T 5498 except the magnetic meridian and temporary plane table stations.

Note: T 6253a (1935), 1:10,000. See Form 524 cards, T 6253a, for described stations along Intracoastal Waterway canal from Bn. 89 east.

Comparison with Previous Topographic Surveys

(a) T 1042 (1867), scale 1:10,000, covers Gulf Coast line and adjacent area.

The change in the shoreline along the Gulf of Mexico ranges up to about 35 m. maximum.

The beach has widened considerably since T 1042 was made and most of the trees, brush, etc. shown on T 1042 in this area have disappeared.

A comparison of Shelby Lakes on the two surveys shows that they have increased considerably in area since T 1042 was made.

T 5498 is considered adequate to supersede T 1042 for the area covered.

(b) T 2088 (1892), scale 1:20,000, covers Gulf Coast line. The change in the shoreline averages from 10-15 m. for all points.

T 5498 is considered adequate to supersede T 2088 for the area covered.

(c) T 3714 (1918), scale 1:40,000, covers Gulf Coast. The change in the shoreline averages from 5 to 10 m. for practically all points.

T 3714 shows an opening into the Gulf of Mexico from the eastern of the two Shelby Lakes. This opening is no longer in existence.

T 5498 is considered adequate to supersede T 3714 for the area covered.

Comparison with Contemporary Hydrographic Surveys

(a) H 5730 (1935), scale 1:20,000, covers shore line of Gulf of Mexico. No conflicts with hydrography.

Comparison with Charts

Chart 1266, scale 1:80,000, covers shoreline along Gulf of Mexico.

Corrections to the chart as a result of this survey are discussed in the descriptive report, page 4 and under Comparison with Previous Surveys.

Landmarks and Aids to Navigation

No landmarks have been submitted for this area.

All aids to navigation submitted with the graphic control surveys are shown on this survey.

July 30, 1935.

H. D. REED

Frank G. Evelyn

Note T 5498 Registered 12/10/35
T 5497 held for additional work
and to be registered later
B.G.J.

REVIEW OF AIR PHOTO COMPILATION NOS. T5497 & T-5498

Chief of Party: M. H. Reese Compiled by: C. Carter Brown

Project: Florida Compilation Instructions dated: June 7, 1934

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b,c,d,e,g and i; 26; and 64)

   Yes.

2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g,n)

   Discussed in Descriptive Report under "General Information".

3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d,e)

   None were used to supplement this plot.

4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28)

   None ~~used~~ were submitted

5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report.

   Mentioned under Paragraph IV of descriptive report.

6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c,h,i)

   Mentioned in descriptive report.

7. High water line on marshy and ~~mangrove~~ sandy coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

   H.W.L. was drawn as indicated by field inspection party on field photographs.* See special report & concerning H.W. offshore shoreline

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs."

* Special Report included in descriptive report T-5494.

8. The representation of low water lines, ~~rocks, coral reefs and rocks, and legends pertaining to them~~ and sand bars is satisfactory. (Par. 36, 37, 38, 39, 40, 41)

Due to small difference in low and high water marks and scale in the photographs, only the H.W.L. was shown.

9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)

~~By hydrographic party.~~ Filed under T-6253a, T-6253b, T-6255

10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)

By hydrographic party.

11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c)

None but pontoon bridges.

12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k)

Mentioned in descriptive report and indicated on overlay tracing.

13. The geographic datum of the compilation is N.A.1927 Adjusted and the reference station is correctly noted.

Yes.

14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)

Yes.

15. The drafting is ~~satisfactory~~ fair and particular attention has been given the following:

Yes.

1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report.

2. The degrees and minutes of Latitude and Longitude are correctly marked.

3. All station points are exactly marked by fine black dots.

4. Closely spaced lines are drawn sharp and clear for printing.

5. Topographic symbols for similar features are of uniform weight.

6. All drawing has been retouched where partially rubbed off.

7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground.

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. No additional surveying is recommended at this time.

17. Remarks:

18. Examined and approved;

M. H. Reese,
Chief of Party

19. Remarks after review in office:

Reviewed in office by: Frank G. Evelyn

Examained and approved:

E. K. Green
Chief, Section of Field Records

F. S. Borden
Chief, Section of Field Work

L. O. Colbert
Chief, Division of Charts

G. Wade
Chief, Division of Hydrography and Topography.

Applied to Ebb 1266-1265 Apl. 1936 H. J. Saunders
Applied to I.W.W. #872 Oct. 1946 A. J. H. rwab 3/8/48