Graphic Control

4440a

Graphic Control

4441a

Graphic Control

4442a

Graphic Control

Graphic Control

Graphic Control

Graphic Control

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

....., *Director*

State: Florida

DESCRIPTIVE REPORT

Topographic / ~~*Hydrographic*~~ *Sheet No.* A.B.&C. 4440a 4441a 4442a

LOCALITY

East Coast, Cape Canaveral

Mosquito Lagoon 4440a

Mosquito Lagoon to De Soto Beach-4441a

De Soto Beach to Cocoa Beach-4442a

*192*9

CHIEF OF PARTY

E.A. Deily

GOVERNMENT PRINTING OFFICE

Graphic Control

SHORE PARTY

EAST COAST OF FLORIDA

Graphic Control

Descriptive Report

To Accompany Topographic Sheets

"A" "B" "C"

Earle A. Deily

Jr. H. & G. E., U.S.C.& G.S.

Chief of Party

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEETS

"A" - "B" - "C"

EAST COAST OF FLORIDA

TURTLE MOUND TO COCOA BEACH

Authority:

The authority for the work embraced by these sheets was embodied in the instructions of the Director to Lieutenant (j.g.) Earle A. Deily, dated December 4, 1928 and in the instructions to the Commanding Officer, U.S.Coast and Geodetic Survey Ship "LYDONIA", dated December 3, 1928.

Purpose:

The general purpose of the work in sheet "A" was to make a connection with the work of the previous year, to locate sufficient signals for hydrographic work along that section of the coast, to locate the shore line, and to give measurements and an accurate delineation of the topography adjacent to marked stations so that the control points for the Aero-Photographs of this section could be readily spotted on the pictures.

Sheets "B" and "C" were executed with like purpose except for item one.

General Description of the Coast:

The general appearance of the coast from off-shore is a low sand beach backed by a equally low line of trees.

There are no sand dunes of any height on Sheet "A".

4441a

There is a ridge of sand dunes on sheet "B" between latitudes 28 - 39 and 28 - 41. The dunes have an average height of approximately 25 feet and rise fairly steeply from the high-water line.

A low ridge of sand dunes with an average height of 10 feet extends along the coast from the south end of sheet "C" to latitude 28°- 22'.

4442a

The back area in general on all sheets is covered with a dense growth of scrub palmetto.

There are few land marks along this section of the coast which show an apperciable distance off-shore. A list is attached to this report.

Control:

The control for all of the topography was furnished by triangulation of third order accuracy. Where no old stations could be recovered new stations were established with like accuracy.

Traverses:

A topographic traverse was run with the plane table from triangulation station Deer 1928 northward to triangulation Bear and then on to topographic station Unis. Frequent resections on stations on the opposite side of the Mosquito Lagoon were possible so that no final adjustmant was necessary for this section.

A plane table traverse was run between triangulation stations Chester 1929 and Goon 1929 and closed within the allowable discrepancy and was adjusted on the sheet.

Topographic Station End was located by the last mentioned traverse. A steel tape traverse was measured westward along the Titusville -Beach road from a point"A" just north of Station End to the intersection of that road with the one leading northward to Allenhurst. A plane table resection was made at point "C" on this traverse (see sheet "B") using signals Chester 1929, End, and Goon 1929. The scaled distance "A" to "C" was checked by the tape measurement and thus giving an additional check on the traverse Chester 1929 to Goon 1929. The azimuth of this road has been laid down on sheet "B" but the traverse has not been completely plotted. Measurements were made with a 300'steel tape.

4441a

4442a

A 300' steel tape traverse was measured westward along the main road begining at point "B" (see sheet "C") at Canaveral Beach and ending at the high-water line of the Banana River. This traverse was primarily for photo-control. The azimuth line is laid down on the sheet but no distances have been plotted.

A short plane table traverse was run westward along the main street of Canaveral Harbor to its intersection with the main north and south road. This was also for photo- control.

Supplemental Work:

A small amount of topography was run at all recovered and new stations on Mosquito Lagoon and Banana River in order to be able to spot them on the photographs.

New Names:

The following new names are shown on the sheets and are those generally used in the vicinity.

De Soto Beach	Lat. 28 - 32
Canaveral Beach	Lat. 28 - 29
Canaveral Harbor	Lat. 28 - 26
Cocoa Beach	Lat. 28 - 19

Changes in Coast Line:

The south side of False Cape appears to have built up considerably. All of the hydrographic signals from Soto 1929 to Chester 1929 when taken from the topographic sheet and plotted on the chart (No. 161) of this section fell outside the high-water line as shown on that chart. This may be distortion of the chart. A definite check on the accuracy of the present work was given by the recovery of station De Soto 1876 in correct azimuth and stadia distance from triangulation station Cap.

Changes were noted at the south side of the point of Cape Canaveral. Residents report that there are considerable changes with each storm but that the Cape as a whole is building up. The old lighthouse was supposed to be near the high-water line and in danger of washing away. It was therefore moved to its present position. The foundation of the old lighthouse is now 63 meters inshore from the high-water line.

Magnetic Declination:

Determinations of magnetic declination with the declinatoire were made on each sheet and were found to be in quantity as follows:.

Sheet " A", At triangulation station "Bear", February 5, 1929.

N 00 41 E

Sheet "B" At triangulation station "Cap" , May 30, 1929, 10:10 am.

N 01 16 E

Sheet "C" At triangulation station "Real", May 27, 1929, 12:00 noon.

N 00 55 E

At triangulation station "Midway" May 22, 1929, 10:00 am.

N 01 33 E

Magnetic Declination with the declinometer was measured at station Cap on May 30, 1929 and was found to be: N 00 54 E.

The declinatoire used is in very poor condition which may account somewhat for the range shown above.

Personnel:

The personnel of the party consisted of the following:

Lieut.(j.g.) Earle A. Deily, Chief of Party and topographer.

Four enlisted men from the Str. LYDONIA:

C.L.Raulerson, Sea. a.b., truck driver.
Raymond Shannahan, Sea. a.b., rodman
Patrick J. Butler, Sea. a.b., rodman
Robert Ellis, Sea. a.b., Umbrella.

The first two mentioned seamen rendered exceptionally good service.

Cost Data:

No exact figures can beegiven as to the actual cost of the topography as the party was also engaged in triangulation and signal building for hydrography and all of the work was carried forward simultaneously. The apportionment shown here has been made with regard to the number of days actually spent in topographic field work.

Salary, Commissioned Officers	$ 173
Accrued Leave, Comm. Officers	11
Pay, Officers and Men, etc.	156
Subsistence, Crew.	56
Party Expenses	217
Total:	613
Cost per statute mile of shore line	$ 13.04
Cost per statute mile of shore line, including rivers, etc.	9.37

Thru:

The Commanding Officer,
U.S.C.&.G.S.S.LYDONIA.

Respectfully submitted:

Earle A. Deily,
Lieut.(j.g.), U.S.C.& G.S.
Chief of Party

The work on the Three sheets conforms to the general and specific instructions.

44408 covers almost identically the same area as T. 4345, the reason for the duplication being explained in par. 2 of the descrip. report.

There is a continuous dotted line parallel to and inside the high water line on 44428. The meaning of this line is not clear, but it is interpreted as the base of the sand dunes forming a storm high water line.

The character of the surveying and drafting are excellent and no further surveying is required. E. Deily, July 1930

Sheet "A"

Name	Latitude	meters	Longitude	meters	Description
Leo	28 52	1223 (624)	80 47	564 (1042)	Tripod and Target Concrete filled tile.
Ellis	28 50	834 (1015)	80 45	1529 (98)	Tripod and Target Concrete filled tile
Eta 2 1929	28 49	591 (1256)	80 45	362 (1265)	Pole and Target Concrete filled tile
Pat	28 47	1754 (93)	80 44	524 (1103)	Tripod and Target Concrete filled tile.
Tak	28 46	98 (1769)	80 43	84 (1543)	Tripod and Target no mark

Sheet "B"

Name	Latitude	meters	Longitude	meters	Description
Lo	28 44	1254 (595)	80 42	121 (1507)	Pole and Target
Cat	28 44	627 (1220)	80 41	1322 (506)	Pole and Target
Hal	28 45	1220 (627)	80 41	445 (1183)	Pole and Target
Rab	28 43	343 (1504)	80 40	1450 (178)	Pole and Target
Lam	28 42	858 (989)	80 40	485 (1145)	Pole and Target
Gut	28 41	1700 (147)	80 39	1428 (209)	Pole and Target
Wang	28 41	419 (1428)	80 39	538 (1091)	Pole and Target
Hung	28 40	1692 (155)	80 39	103 (1526)	Pole and Target
Dune	28 40	816 (1031)	80 38	1144 (485)	Tripod and Target Concrete block
Bord	28 40	107 (1740)	80 38	735 (893)	Board and Target
Wild	28 39	1089 (758)	80 38	195 (1435)	Pole and Banner Concrete block Std. Hydro. Disc.
Low	28 39	536 (1311)	80 37	1486 (144)	Pole and Target
On	28 38	1643 (204)	80 37	1039 (591)	Pole and Target
End	28 38	1045 (802)	80 37	677 (955)	Tripod and Target Std. Hydro. Disc. Concrete filled tile
Lee	28 38	542 (1295)	80 37	304 (1266)	Pole and Target
Ah	28 37	1852 (15)	80 36	1595 (25)	Pole and Target

Drag	28	37	1041 (-806)	80	36	993 (637)	Tripod and Target Std. Hydro Disc. Concrete filled tile
Por	28	37	678 (1169)	80	36	688 (942)	Pole and Target
Gal	28	37	187 (1660)	80	36	350 (1280)	Pole and Target
Ban	28	36	1398 (-449)	80	36	554 (1276)	N. End Gable, Main part Canaveral Club
Bla	28	36	125 (1722)	80	35	486 (1144)	Pole and Target
Oran	28	35	1271 (-276)	80	34	1571 (59)	S.E. Corner, Orange House.
Top	28	34	1795 (- 54)	80	34	906 (725)	Pole and Target
Met	28	34	1188 (659)	80	34	703 (928)	Pole and Target
Pol	28	33	1523 (-324)	80	34	312 (1319)	Target on Telephone Pole
Clear	28	33	1097 (750)	80	34	223 (1408)	S.E. Corner house
	28	36	1370 (-477)	80	35	1567 (- 69)	Middle, N. End, Chester Sheal Coast Guard station.

Name	Latitude	Meters	Longitude	Meters	Description
Jan	28 32	1151	80 33	1565	Pole and Banner
Cas	28 32	595	80 33	1439	S.E. Corner, Casino, De Sota Beach
Feb	28 31	1738	80 33	1197	Pole and Banner.
Mar	28 30	1544	80 33	401	S. E. Corner House.
Ape	28 30	569	80 32	1542	Pole and Banner.
Ril	28 29	134	80 32	491	Telegraph Pole and Banner.
May	28 28	1302	80 32	217	Telegraph Pole and Banner.
No	28 27	1816	80 31	1265	Pole and Banner.
Need	28 27	1297	80 31	1032	Pole and Banner.
Tip	28 27	79	80 31	1135	Pole and Banner.
Fus	28 26	1283	80 33	143	Pole and Banner.
Sam	28 26	1089	80 33	686	Pole and Banner.
Der	28 26	807	80 33	1113	Derrick.
Arch	28 26	102	80 34	405	Center of Arch. Canaveral Harbor.
Totem	28 26	116	80 34	497	Totem Pole, Canaveral Harbor.
Wes	28 25	1259	80 34	981	Pole and Banner.
Eve	28 25	745	80 34	1343	Pole and Banner.
Adam	28 24	1512	80 35	332	Pole and Banner.
Plug	28 24	691	80 35	752	Tripod, pole and banner, plug in concrete filled tile
Over	28 23	1614	80 35	1088	Overturned house.

Name	Latitude	Meters	Longitude	Meters	Description
Turt	28 23	100	80 35	1551	Pole and Banner.
Egg	28 22	837	80 36	179	Pole and Banner.
Cam	28 21	1051	80 36	527	Pole and Banner.
Able	28 21	218	80 36	615	Pole and Banner.
Ho	28 20	526	80 36	754	Pole and Banner.
Rah	28 19	1475	80 36	796	Pole and Banner.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 21

STATISTICS OF FIELD WORK

Statistics of field work executed by Earle A. Reily

Date of original instructions Dec. 4, 1928 Dates of supplemental instructions Dec. 3, 1928 To Comdg. Off. St. Lydonia

Date and place of beginning field work December 6, 1928, Titusville, Florida

Date and place of closing field work June 4, 1929, Jacksonville, Florida

	Fiscal year ending June 30, 192..			Fiscal year beginning July 1, 192..		
	Precise.	Primary.	Secondary.	Precise.	Primary.	Secondary.
RECONNAISSANCE, for triangulation or traverse:						
Length of scheme in statute miles						
Area in square statute miles						
Number of points selected for main scheme						
BASE LINES:						
Names and lengths of, in statute miles						
TRAVERSE:						
Length of, in statute miles						
Principal stations occupied for horizontal measures, number of						
Supplementary stations occupied for horizontal measures, number of						
Geographic positions determined, total number of						
TRIANGULATION:						
Length, along axis of arc						
Area, in square statute miles						
Signal poles erected, number of						
Signals built, number of						
Signals built, aggregate height of						
Stations in main scheme occupied for horizontal measures, number of						
Stations in supplemental schemes occupied for horizontal measures, number of						
Stations occupied for vertical measures, number of						
Geographic positions determined, total number of						
Elevations determined trigonometrically, number of						
LEVELING:						
Permanent bench marks established, number of						
Secondary bench marks established, number of						
Lines of leveling, length of, in statute miles						
LATITUDE, LONGITUDE, AZIMUTH, AND GRAVITY:						
Latitude stations occupied, names of						
Longitude differences, precise, number of, and names of stations						
Azimuth stations, names of						
Gravity stations occupied, names of						

11—8093

MAGNETIC WORK:	Fiscal year ending June 30, 192..			Fiscal year beginning July 1, 192..		
	D	I	H	D	I	H
Observations on land, number of results						
New primary stations, number of						
New auxiliary stations, number of						
Old stations reoccupied, number of						
New stations in old localities, number of						
Meridian lines established, number of						
Observations at sea, number of results						
Ship swings, number of						
Course observations, number of						
Observatory work						
Absolute observations, number of days						
Magnetograph in operation, number of days						
Seismograph in operation, number of days						
Meteorological observations, number of days						

TOPOGRAPHY:	Fiscal year ending June 30, 1929	Fiscal year beginning July 1, 192..
Area surveyed in square statute miles		
Length of detailed shore-line in statute miles	46.7	
Length of shore-line of rivers in statute miles	18.7	
Length of shore-line of creeks in statute miles		
Length of shore-line of ponds in statute miles		
Length of roads in statute miles	12.6	
Topographic sheets finished, number of	3	
Topographic sheets, scales of	1:20,000	

Topographic sheets, limits and localities of:

Fiscal year ending June 30, 1929 Turtle Mound – Latitude 28°-56' to Cocoa Beach, Latitude 28°-19'

Fiscal year beginning July 1, 192

HYDROGRAPHY:	Fiscal year ending June 30, 192..	Fiscal year beginning July 1, 192..
Area dragged, in square statute miles		
Area sounded in square statute miles		
Number of miles (statute) run while sounding		
Number of positions determined (double angles)		
Number of positions determined (wire drag)		
Number of soundings		
Number of tidal stations established		
Number of specimens of bottom preserved		
Current stations, number of		
Hydrographic sheets finished, number of		
Hydrographic sheets, scales of		

HYDROGRAPHY—Continued:

Hydrographic sheets, limits and localities of:

Fiscal year ending June 30, 192____

Fiscal year beginning July 1, 192____

PHYSICAL HYDROGRAPHY:	Fiscal year ending June 30, 192..	Fiscal year beginning July 1, 192..
Number of soundings on cross-sections		
Current stations, number of		
Deep-sea *current* stations, number of		
Deep-sea surface current observations, number of		
Deep-sea subsurface current observations, number of		
Number of observations of density of water		
Number of observations of temperature of water		
Tidal stations established, number of		
Miles (statute) run in deep-sea soundings		
Number of deep-sea soundings		
Number of specimens of bottom preserved		

Locality of work; results, how shown, etc.:

Fiscal year ending June 30, 192____

Fiscal year beginning July 1, 192____

UNFINISHED FIELD RECORDS AND SHEETS (detailed statement required by paragraph 27 of the Regulations):

Means of transportation (if vessel, give name):

GOVERNMENT PRINTING OFFICE

Form 537a

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 44402

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 Letter A

REGISTER NO. 44402

State Florida

General locality East Coast, Cape Canaveral

Locality Mosquito Lagoon

Scale 1:20,000 Date of survey January, 1929

Vessel Shore Party, East Coast of Florida

Chief of Party Earle A. Deily, Jr. H.& G.E.

Surveyed by Earle A. Deily, Jr. H.& G.E.

Inked by Earle A. Deily, Jr. H.& G.E.

Heights in feet above to ground to tops of trees

Contour, Approximate contour Form line interval feet

Instructions dated December 4, 1928

Remarks:

U. S. GOVERNMENT PRINTING OFFICE, 1928

Form 537a

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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 Letter B

REGISTER NO. 4441a

State Florida

General locality East Coast, Cape Canaveral

Locality Mosquito Lagoon to De Soto Beach

Scale 1:20,000 Date of survey March & April, 1929

Vessel Shore Party, East Coast of Florida

Chief of Party Earle A. Deily, Jr. H.& G.E.

Surveyed by Earle A. Deily, Jr. H.& G.E.

Inked by Earle A. Deily, Jr. H.& G.E.

Heights in feet above _____ to ground to tops of trees

Contour Approximate contour Form line interval _____ feet

Instructions dated December 4, 1928

Remarks: _____

U. S. GOVERNMENT PRINTING OFFICE: 1928

Form 537a

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY
L & A
AUG 16 1929
Acc. No.

REG. NO. 4442a

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 Letter C

REGISTER NO. 4442a

State Florida

General locality East Coast, Cape Canaveral

Locality ~~Cape Canaveral~~ DeSoto Beach to Cocoa Beach

Scale 1:20,000 Date of survey April & May, 1929

Vessel Shore Party, East Coast of Florida

Chief of Party Earle A. Deily, Jr. H.& G.E.

Surveyed by Earle A. Deily, Jr. H.& G.E.

Inked by Earle A. Deily, Jr. H.& G.E.

Heights in feet above ____ to ground to tops of trees

Contour Approximate contour Form line interval ____ feet

Instructions dated December 4, 1928

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1928

4440b 4441b 4442b

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

C. & G. SURVEY
L. & A.
MAY 6 1930
Acc. No.

State: Florida

DESCRIPTIVE REPORT

Air Photo.
Topographic
~~Hydrographic~~ } Sheet No. 4440 b
4441 b
4442 b

LOCALITY

East Coast of Florida

Mosquito Lagoon to Indian River

Vicinity of False Cape

Cape Canaveral to Cocoa Beach

1928

CHIEF OF PARTY

O. S. Reading

U. S. GOVERNMENT PRINTING OFFICE: 1930

4440b 4441b 4442b

DESCRIPTIVE REPORT TO ACCOMPANY AIR PHOTO TOPOGRAPHIC SHEETS

Register No. 4440b. Field No. 4 E.C. Mosquito Lagoon to Indian River
Register No. 4441b. Field No. 6 E.C. Vicinity of False Cape
Register No. 4442b. Field No. 7 E.C. Cape Canaveral to Cocoa Beach

The "A" sheets of the same register numbers show a beach traverse for hydrographic signals and photo control executed by a party from the Ship LYDONIA in 1929. These three "b" sheets are a compilation of Army Air Corps photographs Nos. 808 to 819 taken from 10:05 to 10:15 and Nos. 843 to 924 taken from 10:25 to 10:55 A.M. on April 30, 1928. The airplane flew southward along the coast to Photo 810 then swung inshore down the Indian River to just below Titusville. The airplane then returned to the coast and resumed its flight southward with photograph 843. An area about one-half mile in extent was left unphotographed in Latitude 28° 52' Longitude 80° 47' when the flight was resumed. A Loening Amphibian with Liberty motor was piloted by Lieutenant J. A. Dexter at an altitude of about 10,000 feet giving an approximate average scale of 1:19000 to the photographs. The tide tables predicted a low tide of -0.03 foot at Cape Canaveral at 11:12 A.M. The photographs were taken with the four lens Air Corps T 2 Camera No. 26-1. The transverse level vial on top of the camera was broken during the previous flight. A hand level was substituted for this flight but unfortunately was out of adjustment with the axis of the camera and a constant tilt to the right resulted. The photographs of this roll are further distorted by the hooking of the film over a collimation notch in the margin plate of the "A" wing camera. This caused the film to sag so badly that only half of the "A" prints could be used and the "B" prints were partly out of focus.

Control. The coast side of the photographic strip was controlled by the high water line signals and culture located by the traverses shown on the "A" sheets. The shoreline of the inside passages from the topographic survey of 1876 was found to be quite accurate except for minor sketching and was used for control of the inner portions of the photographs. A steel tape road traverse with solar azimuths was also run at Oak Hill when inspecting the photographs for interpretation of culture. The turning points of this traverse are shown on the sheets by small red circles. Triangulation and third order traverse stations have been shown with black triangles in order to have them appear on the chart paper prints of the photo sheets intended for public distribution. Only the control stations recovered and used in the compilation are shown on these sheets.

Compilation. 1:20,000 projections were laid down on celluloid, the control was plotted on them and the former surveys traced in blue except for the coast line of the "A" sheets which was accepted and traced in black. The photographs were so distorted by film sag and constant tilt that they were rephotographed in the photostat camera with tilt and scale reduction enough to bring them into approximate agreement with the control and former topography. The rectified photostats were then plotted as well as possible from the radials in the B C and D prints adhering to the control and the for-

mer topography. The plotting of the areas shown on the "A" prints was by proportional adjustment between the topography and control. The position of detail in these inshore areas is therefore quite weak but it is believed to be as good as the average planetable stadia traverse inshore without control. As it was impossible to make a complete radial plot, the accuracy of the photo sheets depends upon the accuracy of the former topography. The former topography agrees well with the photographs in all important unchangeable features and with subsequent control.

Differences From Former Topography

The high water line from the "A" sheets shows an erosion to the north and an accretion to the south of both False Cape and Cape Canaveral. It would appear that these capes are gradually working southward. The old beach lines are marked by successive sand ridges covered with palmetto six to eight feet above long narrow grassy depressions. The trend of these former beach lines is shown clearly on the photographs and has been indicated on the photosheets by the vegetation symbols. The lines to the northward of the capes are cut by the present beach line indicating marked erosion. Those to the south of the capes parallel to the beach indicating accretion. By joining sheets 44416 and 4442b a remarkable picture of the travel of the capes may be obtained. In passing it may be noted that these ridges were sketched and generalized in the original plane table survey to follow the shoreline thus completely obscuring this evidence of change.

In general, the remaining differences from former topography are due to the development of the country and to sketching in the original surveys.

A few small islets shown in the former surveys do not appear in the photographs and have not been shown on the sheets. Islets of less than ten meters in diameter would not be visible under unfavorable lighting conditions particularly when surrounded by mud flats. The photographs do not therefore disprove such islets.

The high water line through mud flats and marsh is difficult to interpret from the photographs. The limiting line of vegetation has been shown and usually it agrees very well with the former surveys.

Names. The names appearing on these sheets are those appearing on the "A" sheets, the charts and the Florida State Highway map. No new names have been assigned.

Symbols. The standard topographic symbols were used together with the following special symbols in order to show special features of the locality: A single full line for ditches as well as streams, a double full line for all improved, graded and paved roads, a double dashed line for all unimproved but graded roads and a single dashed line for trails. An attempt was made to distinguish between marsh which usually has water standing on it by tracing

its limits by a fine full line from marsh of indefinite extent and condition which was left unbounded. The photo lithographic printing obscured the difference between a fine line limiting tidal flats from a heavier high water line in places. Dotted lines will be used for this purpose on future sheets.

The culture was noted on the photographs from the principal highways and from the roads traversed during a limited field inspection. At inaccessible places the culture was interpreted in the office from similarity with that noted during the field inspection.

O. S. Reading
O. S. Reading
Chief of Party.

- -

The work on the three sheets conforms to the general instructions.

On 4440b and 4442b a narrow white strip was generally left between the high water line and the marsh ruling to add to the distinctiveness of the shoreline. In charting the marsh should be extended to the shoreline.

A small area on 4440b at Lat. 28° 52' was not photographed. This area should be surveyed when opportunity offers.

The representation of trails on these sheets is identical with fences. This is in accordance with the standard symbols, but it is suggested that in future trails be shown by short heavy dashes and fences by long light dashes.

The character of the work is excellent.

E. P. Ellis

APPROVED

K. T. Adams
FIELD RECORDS (C)

July 18, 1930

L. O. Colbert
Chief, Division of Charts

Chief, Section Field Work

Chief, Div. of Hyd'y and Top'y

Form 567

DIVISION OF CHARTS, FILE NO._____

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

O. S. Reading
Washington, D. C.

May 1, 1930

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

O. S. Reading
Chief of Party.

DESCRIPTION	POSITION						METHOD OF DETERMINATION	CHARTS AFFECTED
	Latitude			Longitude		Datum		
	° ′	D. M. meters		° ′	D. P. Meters			
Casino (N.W.Corner)	28 19	170.6		80 36	815.6	N A	Tri	161

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaffs and like objects are not sufficiently permanent to chart.

GOVERNMENT PRINTING OFFICE

Form 537a

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

PHOTO-TOPOGRAPHIC TITLE SHEET

REG. NO. 4440b

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

Field Letter 4 E C

REGISTER NO. 4440b 4440b

State Florida

General locality East Coast

Locality Mosquito Lagoon ~~to Indian River~~ and Head of Indian River

Scale 1:20,000 Date of survey April 30, 19 28

Vessel Army Air Corps Loening Amphibian Airplane

Chief of Party O. S. Reading

Surveyed by E. L. Jones

Inked by E. L. Jones

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

Contour Approximate contour Form line interval -- feet

Instructions dated ~~Dec. 3, 1928 and June 6~~, 19 29

Remarks: Compilation of four lens air photographs Nos. 808 to 819 and 843 to 864. Reduced to 1:20,000 and printed by photolithographic process in Printing Section.

U. S. GOVERNMENT PRINTING OFFICE: 1929

Form 537a

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4441b

PHOTO-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 Letter 6-E-C

REGISTER NO. 4441b 4441b

State Florida

General locality East Coast

Locality Mosquito Lagoon to Banana River
~~Vicinity of False Cape~~

Scale 1:20,000 Date of survey April 30, 1928

Vessel Army Air Corps Loening Amphibian Airplane

Chief of Party O. S. Reading

Surveyed by M. Hecht

Inked by Hecht

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

Contour Approximate contour Form line interval -- feet

Instructions dated Dec. 3, 1928 and June 6, 1929

Remarks: Compilation of four lens air photographs Nos. 865 to 887. Reduced to 1:20,000 and printed by photolithographic process in Printing Section.

U. S. GOVERNMENT PRINTING OFFICE: 1929

Form 537a

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

REG. NO. 4442 b

4442b

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

Field Letter T E.C.

REGISTER NO. 4442 b 4442b

State Florida

General locality East Coast

Locality Cape Canaveral to Cocoa Beach

Scale 1:20,000 Date of survey April 30, 1928

Vessel Army Air Corps Loening Amphibian Airplane

Chief of Party O. S. Reading

Surveyed by E. L. Jones

Inked by E. L. Jones

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

Contour Approximate contour Form line interval -- feet

Instructions dated Dec. 3, 1928 and June 6, 1929

Remarks: Compilation of four lens air photographs Nos. 887 to 924. Reduced to 1:20,000 and printed by photolithographic process in Printing Section.

U. S. GOVERNMENT PRINTING OFFICE: 1926