

5670

3000

5670

Form 501  
Rev. Dec. 1933  
DEPARTMENT OF COMMERCE  
U.S. COAST AND GEODETIC SURVEY  
R. S. PATTON, DIRECTOR

## DESCRIPTIVE REPORT

Topographic

~~Hydrographic~~

Sheet No. T-5670

State Florida

### LOCALITY

St. Johns River

Dunn Creek and Vicinity

~~Single Lens Flown Nov. & Dec. 1938~~

Nine Lens Flown February 1939

1939

CHIEF OF PARTY

Riley J. Sipe

Applied to Ch 577 -  
Applied to chart 1243.

Oct 1940 -  
March 1941.

P.B.C.  
L.A.M.

# TIME SHEET

Field Sheet No. 3  
Register No. T-5670

The radial plot was nearly finished before time records were begun on this sheet. This is a smooth drafted sheet.

Pricking Points for Plotting-----	22	hrs.
Radial Plot-----	7	"
Pricking Additional Points for Detail-----	45	"
Plotting All Control-----	26	"
Detailing Roads, Buildings, Fences, Trails, etc-----	159	"
Detailing Symbols-----	213	"
Shoreline-----	16	"
Overlay Sheet-----	11	"
Field Inspection-----	106	"
Reports-----	45	"
Field Review of Sheet-----	70	"

Total-----720 Hrs.  
1103

*Time record for this single sheet does not indicate costs for the project as a whole. Work in this area was complicated by the fact that it was first started in 1935, taken up again in 1939 with many changes in topography during the four years. B.G.G.*

# LEGEND TO BE USED ON FIELD INSPECTION AND ROUGH DRAFTING

JULY 1, 1939

## TREES

A - Ash  
Br - Brush  
Cit - Citrus  
Cy - Cypress  
Gum - Gum  
Oak - Oak  
Pal - Palmetto  
Pi - Pine  
Pim - Palis

## ROADS

Rd-1 - 1st class paved  
Rd-1d - 1st class dirt  
Rd-2 - 2nd class  
Tr - Trail

All roads not labeled are  
6m. or less in width.

## VEGETATION

C - Cultivated  
DT - Deciduous trees  
Fl - Flooded area  
Gr - Grass  
TGr - Tropical grass  
HW - Heavily wooded  
M - Marsh  
Mg - Mangrove  
Sw - Swamp  
Sc - Scattered

## PONDS

P - Pond  
CyP - Cypress Pond  
GP - Grassy pond  
IP - Intermittent pond  
PiP - Pine pond

## STREAMS

Ca - Canal (width)  
Cr - Creek  
D - Ditch  
IS - Intermittent Stream  
PDU - Probable drainage unsurveyed  
Str - Stream

## MISC

Bf - Bluff (height)  
Brg - Bridge  
Ch - Church  
Cv - Culvert  
FB - Fire break (width)  
Fn (f) - Fence  
H - House  
Ham - Hammock  
Hdg - Hedge  
HWL - High water line  
LWL - Low water line  
OP - Overpass  
PO - Postoffice  
R - Reef  
RR - Railroad  
S - Sand  
Sch - School  
UP - Underpass

FMP - Florida Mapping Project  
USE - U. S. Engineers

# NOTES ON COMPILATION

Sheet No. 3 (Field)

Register No. T-5670

## PHOTOGRAPHS:

Single Lens	Flight No.	No.	M 192 to M 200
"	"	"	✓ M 211 " M 222
"	"	"	✓ M 233 " M 239
"	"	"	✓ M 258 " M 261
"	"	"	✓ M 279 " M 287
Nine	"	"	✓ 03173 " 03175
"	"	"	✓ 03181 " 03185
"	"	"	✓ 03231 " 03233

Nov + Dec  
1933

Feb. 1939

SCALE PLOT: W. H. Burwell

SCALE FACTOR USED: 1:00

PROJECTION BY: Benson

CONTROL PLOTTED BY: W. M. Crook

CONTROL CHECKED BY: W. H. Burwell and R. J. Moore, Jr.

SMOOTH RADIAL PLOT BY: W. H. Burwell and J. H. S. Billmyer

TOPOGRAPHY TRANSFERRED BY: W. H. Burwell

TOPOGRAPHY CHECKED BY: H. O. F.

SHORELINE INKED BY: W. H. Burwell and J. H. S. Billmyer

DETAIL INKED BY: J. H. S. Billmyer

OVERLAY SHEET BY: J. H. S. Billmyer

DESCRIPTIVE REPORT BY: J. H. S. Billmyer

REVIEWED BY: H. O. Fortin

AREA OF DETAIL INKED: 22.16 Sq. St. Miles.

LENGTH OF SHORELINE (Over 200 m): 37.5 Statue Miles.

LENGTH OF SHORELINE (Under 200 m): 29.2 Statue Miles.

LENGTH OF SHORELINE OF SHIP LINES: 11.6 Statue Miles.

NA. 27

Ref. Sta. Mitchell (1926)

Lat. 30° 22' 24.465 (753.4 M) *adjusted*  
Long. 81° 34' 30.021 (801.6 M)

X coordinate: 318,669.67 Ft.

Y coordinate: 2,196,120.43 Ft.

*Refer to opposite page 1 for  
date of details on this survey.*

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. 3

REGISTER NO. T-5670

T5670

State Florida

General locality St. Johns River

Locality Dunn Creek and Vicinity

Scale 1:10,000 Photographs Nov. and Dec. 1933  
Date of ~~survey~~ February, 1939

Party  
~~Wassak~~ Air Photographic No. 2-A

Chief of party Riley J. Sipe

Surveyed by See notes on compilation

Inked by See notes on compilation

Heights in feet above \_\_\_\_\_ to ground to tops of trees

Contour, Approximate contour, Form line interval \_\_\_\_\_ feet

Instructions dated March 4, 1935

Remarks: U. S. Army A. C. single lens camera and U. S. C. & G.

Survey nine lens camera used. Field Inspection made July and

August 1939 and summer of 1935.

Date of Air Photographic Survey T-5670

Single lens photographs taken November - December 1933

Nine lens photographs taken February 1939

Field inspection in 1935 and in July - August 1939

Work was first started on this survey in 1935 but was left incomplete until after the new nine-lens photographs were taken.

Details on T-5670 are of the date of the nine-lens photographs, February 1939, except as follows:

1. Triangulation and topographic stations for which year of location is shown on the survey. The month of location is also shown on topographic stations which are aids because of the many changes in aids in this area.

2. Shoreline at Lat.  $30^{\circ} 24.7'$ , Long.  $81^{\circ} 36.2'$  (small section at Sta. Drummond) and the three small islands Lat.  $30^{\circ} 24.4'$ , Long.  $81^{\circ} 36.6'$  have been plotted from an Engineer's sheet date of about March 1939.

3. Road under construction Lat.  $30^{\circ} 21'$  and a road under construction at Lat.  $30^{\circ} 26'$  are from field inspection of July - August 1939.

## DESCRIPTIVE REPORT

to accompany

Field Sheet No. 3  
Register No. T-5670

### General.

This smooth map drawing was compiled from air photographs taken by the U. S. Army Air Corps, using a single lens camera, and a nine lens camera, designed by the U. S. Coast and Geodetic Survey.

Unimportant small buildings and those not distinct enough on the photographs to locate accurately were not shown.

The projection was made with a scale factor of 1.00.

Because the single lens were closer to scale they were used whenever possible. The nine lens photographs were used when there occurred a change in the shore line, in detail work, or when the single lens photographs were not as clear as the nine lens, and in the north and southeast edges of the sheet which were not covered by the single lens. The northern edge falls outside of the tracing limits of the nine lens photographs, and it was difficult to obtain accurate radial points, but as this area has very little detail, and as it compares very closely with the adjacent map drawing, it is believed that it is reasonably accurate.

As the northern shoreline and streams were traced in 1934 by the same weight of lines from the single lens, they were changed to agree with the different weight of lines as interpreted from the nine lens. It is practically impossible to make these lines very clear as the celluloid was badly stained beneath the ink, and as all lines had to be scraped thereby making the map drawing quite rough. The southern shoreline was traced directly from the nine lens photographs as this part of the shoreline had changed considerably since the single lens photographs were taken.

*See opposite page*

Since the single and nine lens photographs were taken the shoal water lines have changed so much, due to dredging activities, especially around Dame Point, Drummund Point, and south of Chaseville that they have been omitted from this map drawing.

In several cases the distances from the triangulation stations to the shoreline does not agree with the descriptive cards. The shoreline on this drawing has changed considerably since the triangulation was established, so it is believed that the shoreline is accurately delineated on this map drawing. In several cases the distances from the station to the edge of the bluff were given in the descriptions. The edge of the bluff in each case falls back of the high waterline.

Numerous trails, as shown on the nine lens photographs, are fire breaks, but only the important ones have been shown.

Platforms on small piers are shown open to distinguish from buildings.

### Control:

A total of 90 control stations were plotted on this sheet; 71 of which



fall within the limits of the map drawing. 32 were U. S. Coast and Geodetic Survey triangulation stations; of which 25 were recovered. 14 stations were U. S. Engineer stations; of which 13 were recovered. 38 described topographic stations were taken from graphic control sheets "AA", "BB", "Y" and "Z"; of these 22 were used for controlling the drawing. In addition there were 4 land marks, which were also used in the general control.

All recovered stations on the 9 lens photographs were recovered by Lieutenant R. J. Sipe, Chief of Party, and Lieutenant Henry O. Fortin on field inspection trips.

In some cases the names of the beacons and lights have been changed. Both names are shown on the overlay. The old names that were used on the triangulation descriptions are shown in parenthesis; the other names being taken from the U. S. C. & G. Survey Light List, and checked against U. S. C. & G. Survey chart No. 577. Dates of ~~all fixed~~ location of all fixed aids

are shown on the drawing. (map)

#### Radial Plot.

A radial plot was made directly on the map drawing from the single lens in 1935 and 1936. All of these points that could be identified were pricked on the 9 lens photographs. Many points could not be located on the 9 lens photographs, so it was necessary to plot additional points. Due to insufficient photographs many of the radial points in the southeast and northeast corners of the map drawing had only two radial line intersections. However, they were regarded as sufficient to warrant the drafting of the drawing.

#### Interpretation of the Photographs.

The photographs were clear and no unusual conditions were found with the exception of the north edge of the drawing, which fell outside of the tracing limits of the photographs.

#### Field Inspection and Supplemental Surveys.

Field inspection trips were made in the summer of 1935 and by truck in July and August, 1939, and by boat in August 1939.

The topographic details on T-5670 are of the date of the photographs with the exception of the two roads; one on the northern limits of the drawing and one on the southern limits of the drawing, which are now under construction, were located by measurements and angles taken in the field.

The change in shoreline at triangulation station Drummond Point 1926, and the three sand islets just north of Beacon No. 50, 1926 were traced from the attached print of the U. S. Engineers revised sheet No. 7, and projected down on the drawing. March 1939. See opposite page 1 for

summary of dates of details on Graphic Control Surveys. this survey.

This map drawing is covered by Graphic Control Sheets "AA", "BB", "Y" and "Z". There are quite a number of minor places where the shoreline is not in agreement with that as shown on the Graphic Control Sheets; the largest of which is the marshy west bank of Dunn Creek near its mouth, and on both banks of the same creek north of latitude 30° 26'. These discrepancies were caused by different interpretation of the shoreline and by erosion due to stream flow since the Graphic Control survey was made.

All details on the above graphic control surveys within the areas of this photographic survey are shown on the air photographic survey except:

1. Magnetic Declination.
2. Azimuth of Ranges.
3. Temporary stations for control of hydrography.

*See also review at back where azimuths of ranges are listed.*  
Hydrographic Surveys.

Hydrographic surveys in the areas covered by this map drawing were made prior to the delineation of the shoreline from the air photographs. No shoreline has been transferred to the hydrographic smooth sheets covering this area by this party.  
*See review at back.*

Comparison with Surveys by other Organizations.

Due to the fact that dredging activities have changed the shoreline in several places no true comparison could be made with maps available.

Comparison with Charts Nos. 577 39/2/14 and 1243( date destroyed).

Due to the fact that there were large differences in scales, no accurate comparison of the shoreline or other details could be made. The differences in the location of roads and piers can easily be detected in comparing the charts and the map drawing.

Shore line Methods and Discrepancies.

Since the 9 lens pictures were out of scale on T-5670, tracings were made of Broward Point, Dame Point, and of the three islets southeast of Cedar Creek Beacon No. 17. With control points common to both the tracings and the map drawing, the tracings were delineated on the map drawing through the projector.

Since the shoreline of Broward Point, Cedar Creek, and Dame Point was traced from the single lens photographs, the following discrepancies have been noted where the shoreline was changed to agree with that of the 9 lens photographs, which were flown subsequent to that of the single lens photographs.

	Lat.	Long.		Lat.	Long.
1.	30° 25.3'	81° 36.8'	to	30° 25.5'	81° 36.9'
2.	24.9'	35.6'	"	24.9'	35.7'
3.	24.7'	35.0'	"	24.9'	35.4'
4.	25.0'	35.2'	"	25.0'	35.4'
5.	24.2'	34.6'	"	24.5'	34.8'
6.	24.0'	34.4'	"	24.1'	34.5'
7.	23.8'	34.1'	"	23.9'	34.3'
8.	23.2'	33.6'	"	23.6'	34.0'
9.	23.3'	33.2'	"	23.7'	33.4'

The above data gives the exact position in changing the shoreline between the listed latitudes and longitudes.

Comparison with early Coast and Geodetic Surveys.

No copies of early Coast and Geodetic Surveys of this area were available in this office.

Landmarks and Aids.

All landmarks and aids to navigation, except on the attached forms No. 567, were mailed to the Washington Office in February, 1935. Deletion of landmarks

and aids are also listed on the above attached form No. 567.

*Reported to  
chart standards  
May 20 '40*

Most beacons and lights on this sheet appear to have been moved or destroyed. It is recommended that none of these positions, except as listed on form No. 567, as shown on the map drawing be held as accurate, and a correct list of positions be obtained from the Lighthouse Service. *The dates of location of fixed aids are shown on the map.*

Preparation for Inking.

This drawing was pumiced before the northern shoreline was put on. The remainder of the drawing was prepared before inking, by first rubbing that section about to be inked with bicarbonate of magnesia. It was found that this cut the grease, dirt, and other foreign matter that had accumulated on the sheet, and caused the ink to adhere better.

There was very little retouching to be done on this drawing. This was due principally to having covered each inked in area, as soon as it was finished, with clear celluloid.

Bridges.

The vertical and horizontal clearances have been listed on the overlay, in accordance with "List of Bridges over the Navigable Waters of the United States, 1935." *These are not shown on the map as the information is available in the Bridge Book.*

Marion<sub>2</sub> ( U. S. E. ) was spelled thusly on the overlay. All other sources spell Marian Island with an "a" instead of an "o". As the original copy on form No. 524 in this office shows it could either be an "a" or "o", it is respectfully requested that the Washington Office check back on the smooth copy which has been previously mailed.

*24.5 down  
as in orig 2 on  
Newbury Coast*

Miscellaneous.

*Junction with T 5131 has been completed in this office.*

On the north side of this map drawing the junction with T-5131, the main highway and railroad fall to the west of the position as shown on this drawing. The old trail in the extreme northwest corner falls to the east, and in the northeast corner the main highway falls to the east of this map drawing. However, since the original map drawing (T-5131) was on a scale of 1:20,000, and photostated to the scale of 1:10,000, the present map drawing was accepted as correct. The above statement also holds true concerning the differences in shoreline between the two map drawings.

All objects such as houses and piers that have been placed in blue ink on the back of this map drawing have been taken from the G. C. Sheet. If not inked in black, the objects are gone or destroyed.

The southeast corner of the drawing was made to agree with T-5671, although not in agreement with the latest instructions concerning roads leading to private houses.

Forwarded-

*Perry J. Lipe*

Respectfully submitted.

*J. H. S. Billinger  
J. H. S. Billinger*

## Remarks.

## Decisions

1		304815 ✓
2		303815 ✓
3		304815 ✓
4		303815 ✓
5	Broward R. USGB decision, based on action by County authorities Duval Co.	304816 ✓ USGB
6		303816 ✓
7		303815 ✓
8		" ✓ USGB
9		304816 ✓
10		" ✓
11		304815 ✓ USGB
12		304816 ✓
13		303815 ✓
14		" ✓
15		" ✓
16		303816 ✓
17		303815 ✓
18	Not charted	✓
19		303815 ✓
20	Not charted	✓
21		303815 ✓
22		" ✓
23		" ✓
24		" ✓
25		" ✓
26		" ✓
27		304815 ✓

# GEOGRAPHIC NAMES

Survey No.

T-5670

GEOGRAPHIC NAMES											
Survey No. T-5670											
Name on Survey											

*Strawberry Creek*  
(U.S.G.R. 578/42: 867)  
also T5667)

## Remarks

## Decisions

1		303815 ✓
2		304815 ✓
3		303815 ✓
4		" ✓
5		303816 ✓ USGB
6	Randolph I per recent information from USE to Philadelphia office.	303815 ✓
7		" ✓
8	1939 USGB decision	304815 ✓ USGB
9		304815 ✓
10		303815 ✓
11		USGB
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# GEOGRAPHIC NAMES

Survey No.

577  
1243

7-5671

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	Coast Pilot
A.	B.	C.	D.	E.	F.	G.	H.	K.	
PAULINE ISLAND ✓	X		X		X				1
POLLY TOWN ✓				X					2
QUARANTINE ISLAND ✓	X		X		X		X	X	3
RADCLIFFE ISLAND ✓	X	X	X		X				4
REDDIE POINT ✓	X		X		X				5
<u>Randolph</u> RADOLPH ISLAND ✓			X						6
RUSH ISLAND ✓	X		X		X				7
SAN CARLOS CREEK ✓	X		X		X				8
TERRAPIN CREEK ✓			X						9
<sup>W</sup> WILLIAM ISLAND ✓			X						10
St. Johns R. ✓									11
									12
Names underlined in red approved									13
by L. A. Heck on 8/13/40									14
									15
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									27

## GEOGRAPHIC NAMES

**ALLIGATOR ISLAND.** A portion of a long sandy island directly across the ship channel from New Berlin.

**ARLINGTON HEIGHTS.** A small subdivision in the north part of the village of Arlington.

**BROWARD POINT.** A point between the mouths of Cedar Creek and Dunn Creek.

**CALDER CREEK.** A small stream just north-east of Dame Point.

**CEDAR CREEK.** This name is generally applied by natives of the region to the stream named Broward River on Coast Survey Charts. It is recommended that the name "Cedar Creek" be adopted as the other name is not known locally. The name "Cedar Creek" is used on the Geological Survey maps and is also recommended by our Topographic and Hydrographic Surveys 1934-35. (Sheet "2" & "19")

**CHASEVILLE.** A group of small farms and properties on Reddie Point. There are no public buildings.

**CRAB ISLAND.** A small marshy island in the shallow part of the river about one mile north-east of Chaseville.

**DAME POINT.** A large sandy point of land on the north side of the river. It is shown as Dames Point on U. S. Quadrangle and local maps. "Dame Point" is recommended as this is the name shown on Coast Survey Charts, and used in the Coast Pilot and Light List.

**DRUMMOND CREEK.** A creek on the west side of the map drawing emptying on the north shore of the river. There is marshy ground on each side of the mouth.

**DRUMMOND POINT.** A point on the west side of the mouth of Cedar Creek.

**DUNN CREEK.** This stream is shown on Coast Survey Charts as "Dunn Creek". On local maps it is shown both as Dunn Creek and Dunns Creek. "Dunn Creek" is recommended.

**EASTPORT.** A small settlement north-west of Broward Point and about one third mile from the river.

**EGGLESTON HEIGHTS.** A very small community north of Arlington Heights on the east side of the road to Chaseville.

**EULALIA.** A small settlement on the north bank of the St. Johns River north-west of Dame Point.

**FIP ISLAND.** A small marshy island near the south shore of the river, just south of Newcastle Island.



Floral Bluff. A small community on the east bank of the St. Johns River, and about one half a mile north of Arlington. Chart No. 577 ( March 17, 1939) shows it as Flora Bluff. This should be changed back to its former name as shown above.

Gilmore. A scattered community of farms and private property on the south side of St. Johns River, near the eastern edge of the map drawing, and southwest of Mill Cove.

Heckscher Drive. A private toll road connecting Jacksonville and Fort George, near the mouth of St. Johns River.

Marian Island. A marshy island about one half mile northeast of Gilmore.

Merrill Road. A county road now under construction, connecting the Chaseville-Jacksonville road and Gilmore. Authority J. A. Long, County Road Engineer, Jacksonville, Florida.

Mill Cove. A large cove just east of Marian Island. A small part of this cove falls on the eastern part of this map drawing.

Mitchell Bluff. One local map gives this name as Mitchells Bluff. Charts No. 577 and 1243 and Geological Survey Quad Map give it as Mitchell Bluff. The former term is the one in common usage locally and is recommended for charting purposes.

New Berlin. A small settlement on the west bank of the St. Johns River, just north of Dame Point.

Newcastle. A small community just south of Newcastle Island. There appeared to be some doubt amongst the inhabitants of this district concerning the exact location of this district, so it is not recommended for charting purposes.

Newcastle Island. A marshy island near the center of the map drawing, (just north of New Berlin.)

Nichols Creek. A creek in the marshy area about one mile north of Dame Point.

Pauline Island. A marshy island, just northwest of Mitchell Bluff.

Polly Town. This is also known as Robert's Subdivision, and Pollyville, and is located about a mile north of Eastport. The name Polly Town has been used by the residents for about twenty years, and this name is recommended for charting purposes.

Quarantine Island. A marshy southern part of the sandy island known as Alligator Island.

Reddie Point. The large point where the St. Johns River turns south to Jacksonville, north of Chaseville.

Rudolph Island. A marshy island near the center of the map drawing,

just north of Newcastle Island. Recommended for charting purposes.

Rush Island. An islet in Mill Cove.

San Carlos Creek. A creek in the marshy areas north of Heckscher Drive near the eastern edge of the map drawing. There appears to be some confusion about the location of this creek. Chart No. 1243, U. S. Geological Quad Map, and local maps show it as the northeast branch of the slough. However, the name was used as shown on chart No. 577.

Terrapin Creek. A small creek emptying into Dunn Creek, about one mile north of Heckscher Drive. This is shown as Terrapin Branch on a local map, but is shown as Terrapin Creek on the U. S. Geological Quad Map. The later name is recommended for charting purposes.

William Island. A small marshy island in the group near the center of the map drawing, just north of Newcastle Island.

REVIEW OF AIR PHOTO COMPILATION NO. T-5670

Chief of Party: Riley J. Sipe

Compiled by: J.H.B.

Project: H. T. 168

Instructions dated:

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

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."

8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41) Low water lines left off this map drawing.
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) Yes.
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) Yes.
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) Yes.
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)  
Yes.
13. The geographic datum of the compilation is N. American 1927 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 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. Yes.
  2. The degrees and minutes of Latitude and Longitude are correctly marked. Yes.

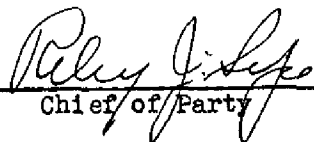
3. All station points are exactly marked by fine black dots. Yes.
4. Closely spaced lines are drawn sharp and clear for printing. Yes.
5. Topographic symbols for similar features are of uniform weight. Yes.
6. All drawing has been retouched where partially rubbed off. Yes.
7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground. Yes.

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

16. No additional surveying is recommended at this time. No.

17. Remarks:

18. Examined and approved; Riley J. Sipe, Chief of Party.

  
Chief of Party

19. Remarks after review in office:

Reviewed in office by:

Examained and approved:

\_\_\_\_\_  
Chief, Section of Field Records

\_\_\_\_\_  
Chief, Section of Field Work

\_\_\_\_\_  
Chief, Division of Charts

\_\_\_\_\_  
Chief, Division of Hydrography  
and Topography.

## PLANE COORDINATE GRID SYSTEM

Positions of grid intersections used for fitting the grid to this compilation were computed by Division of Geodesy and the computation forms are included in this report.

Positions plotted by S. Kass

Positions checked by S.K. (on ruling mach.)

Grid inked on machine by S.K.

Intersections inked by S.K.

Points used for plotting grid:  
Minute Inters.

$\phi$  30-26  
 $\lambda$  81-37

$\phi$  30-21  
 $\lambda$  81-33

$x$  30-26  
 $y$  81-33

$x$  \_\_\_\_\_  
 $y$  \_\_\_\_\_

$x$  30-23  
 $y$  81-35

$x$  \_\_\_\_\_  
 $y$  \_\_\_\_\_

$x$  30-21  
 $y$  81-37

$x$  \_\_\_\_\_  
 $y$  \_\_\_\_\_

Triangulation stations used for checking grid:

- |                         |          |
|-------------------------|----------|
| 1. <u>Mitchell 1926</u> | 5. _____ |
| 2. <u>Beacon #59</u>    | 6. _____ |
| 3. <u>Carlos 1926</u>   | 7. _____ |
| 4. <u>Beacon #50.</u>   | 8. _____ |

80 1000

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

Palatka, Florida.

23 February 1940

1940 FEB 26 AM 10:24

To: The Director,  
U. S. Coast and Geodetic Survey,  
Washington,  
D. C.

From: Lieut. H. O. Fortin,  
Palatka,  
Florida.

Subject: Letters and form regarding the position of Arlington  
Cut Range Front Light.

After map drawing T-5670 was sent in to the Washington  
Office, the attached letters and form regarding Arlington  
Cut Range Front Light were found in our files.

Please attach same to the descriptive report for T-5670.

*H. O. Fortin*

H. O. Fortin.

Attachments.

2

IN REPLY ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY  
AND NOT THE SIGNER OF THIS LETTER

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

AND REFER TO No. 80-DRM

April 9, 1938.

To: Lieutenant Hubert A. Paton,  
U. S. Coast and Geodetic Survey,  
P. O. Box 452,  
Palatka, Florida.

From: The Acting Director,  
U. S. Coast and Geodetic Survey.

Subject: Position of Arlington Cut Range Front Light.

The enclosed letter from the Superintendent of Lighthouses,  
Charleston, South Carolina, is forwarded for your use in plotting  
the correct position of Arlington Cut Range Front Light on air  
photographic survey T-5670. You will please include this letter  
in the descriptive report of T-5670.

Enclosure.

  
Acting Director.

T-5670



883  
ADDRESS ALL COMMUNICATIONS TO  
SUPERINTENDENT OF LIGHTHOUSES  
CHARLESTON, S. C.

DEPARTMENT OF COMMERCE  
LIGHTHOUSE SERVICE

HLB:MSH

OFFICE OF SUPERINTENDENT, 6TH DISTRICT  
CHARLESTON, S. C.

March 5, 1938

1938 MAR 7 AM 9 25

*File from 77.*

The Director,  
U. S. Coast and Geodetic Survey,  
Washington, D. C.

5671  
5672

*L.B.B.*

Subject: Position of Arlington Cut Range Front Light in the St.  
Johns River, Fla.

1. It was necessary to rebuild the structure of the above mentioned light on March 2, 1938. It is not exactly in the old position of the light but is so close to it that no change in position is necessary on Chart 577. However, in the event of its being used on a large scale projection for topographic or hydrographic work in that general locality, you should be furnished with a more exact position of it.

2. There is being forwarded to you herewith a copy of Form 77 dated March 2, 1938 submitted by O. N. Vick, Master, Tender PALMETTO.

*H. L. Beck*  
H. L. Beck,  
Superintendent of Lighthouses

Washington, D. C.,  
March 14, 1938.

5.  
CKG  
KTA

Receipt of the above, with enclosed copy of Form 77,  
is acknowledged, with thanks.

*Reported to Geodetic  
for recovery note 4/6/38  
1398.*

(Signed) J. H. HAWLEY

Acting Director,  
U. S. Coast & Geodetic Survey.

*Beck*

Tender PALMETTODEPARTMENT OF COMMERCE  
LIGHTHOUSE SERVICEMarch 2, 1938

## REPORT ON POSITION OF AID TO NAVIGATION

S.B.B.

Name of aid Arlington Cut Range Front LightAction taken Rebuilt and moved Date March 2, 1938

Buoy: Class or type \_\_\_\_\_ Color \_\_\_\_\_

Sinker, kind and class \_\_\_\_\_ Chain, kind and size \_\_\_\_\_

Moored in 16 feet.Light: Character Fixed Color Green Focal height 20 ft

Diameter of lens in mm \_\_\_\_\_ Illuminant \_\_\_\_\_

Size burner or voltage and amperage of lamp \_\_\_\_\_

Structure: Form 6 45 ft. creosoted piles, White square daymark, black  
skeleton structure 10 ft pipe tower Color vertical stripe

The position of this aid was determined by data taken as entered below, sextant or sextants used being in proper adjustment. Its position was (was not) plotted on Chart No. 577 published \_\_\_\_\_ and bearing rubber stamp "Corrected to \_\_\_\_\_"

## SEXTANT ANGLES

From—	To—	Angle 0-1
Arlington Cut Range Rear Light	Municipal Water Tank	83° 10'
Municipal Water tank	Wilson water tank	56° 46'
Wilson Water tank	City Limits Range Rear Light	52° 08'

## BEARINGS FROM AID

Ship's head	Deviation	Object	Observed bearing
		bears	
		bears	
		bears	

Other method used: \_\_\_\_\_

Position by latitude and longitude if observed: Lat. \_\_\_\_\_ N.; Long. \_\_\_\_\_ W.

Remarks: The structure was moved out on the range line about 3 1/2 yards 195° 08'  
in 16 feet water 20 feet high

Certified correct: (Signed) O. N. Vick Commanding.

## INSTRUCTIONS

1. This report must be made in duplicate whenever action is taken affecting the position of any aid to navigation, or whenever the position of an aid is verified. One copy to be immediately forwarded to the superintendent and one copy to be retained on the tender.

2. Bearings and angles shall be observed from the aid, at the time the work is being done, on objects readily identified on the charts, three or more when practicable. If only two objects are visible, give angle between them and the bearing and distance to the nearest object. When only one object is visible, give bearing.

3. When compass bearings are given they must be corrected for compass errors.

4. Special care must be taken to determine as closely as possible the positions of important off-shore lightships and buoys. Where no shore objects are visible obtain position by radio bearings if practicable; also by dead reckoning, using corrected course and distances run from a well-determined position. Check by an astronomical position if feasible. When such observations are made, submit all computations attached to form 77.

5. Bottom contours shall be obtained by sounding in the vicinity.

6. Depths must be referred to the plane of reference of the chart used.

7. Report all the reliable data readily obtainable. While two sextant angles to well defined objects will ordinarily fix the position of an aid, additional angles are desirable as a check. The observer or other officer of a tender shall plot the position by means of a three-arm protractor on the largest scale chart available before leaving the locality of the aid. If the position appears at all doubtful the angles shall be verified by observing them again.

8. Under the heading "Other Method Used" explain fully. If there is not sufficient room for a full explanation under this heading use an attached sheet.

9. It is not necessary to have two observers take the data, but where more than one employee has assisted in the work the names of both should be entered on the form. All observations should be checked by the person certifying to the correctness thereof.

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5670 (1:10,000)

May 15, 1940

Refer to page one of the descriptive report for the date of information shown on T-5670.

Red notes in the descriptive report have been made in this office as a part of this review.

Graphic Control Surveys.

C.S. 176 (1:10,000) Dec. 1934, filed in air photo unit  
T-6488a (1:10,000) Dec. 1934, additional work March 1937  
T-6487b (1:10,000) Dec. 1934

The graphic control surveys furnished the location of signals for hydrography, part of the water front details, and most of the aids to navigation.

All information on the graphic control surveys within the area of T-5670 is shown on T-5670 except the following:

1. Magnetic Declination. Declinations determined by the graphic control surveys agree within less than two degrees with those on the charts.
2. Temporary stations located for hydrographic control.
3. Water front details changed since the graphic control surveys were made. T-5670 is a 1939 survey except for location of some of the aids.
4. A few recoverable (not described) topographic stations such as house gables have not been transferred from the graphic control surveys to T-5670 because of the close spacing of recoverable stations on T-5670.
5. Azimuths of ranges which are listed from the graphic control surveys as follows:
  - (1) Six Mile Creek Range  $128^{\circ} 47'$ . Range lights located by triangulation. No statement as to whether this azimuth was computed.

- (2) Arlington Cut Range  $15^{\circ} 08'$ . Same statement as for (1) above.
- (3) Quarantine Island Upper Range  $146^{\circ} 12'$ . Same statement as for (1) above.
- (4) City Limit Range  $176^{\circ} 55'$ . One range light located by triangulation and one by planetable. Azimuth determined by planetable point on the range (extended).
- (5) Drummond Creek Range  $58^{\circ} 23'$ . Located by planetable with point on the extension of the range.
- (6) Brills Cut Range:  $316^{\circ} 29'$ . Determined same as (5) above.

The descriptive report and form 524 descriptions for graphic control surveys CS 176 M are not on hand at this date, 5-15-40. The recoverable topographic stations are shown on T-5670 without the (d) to indicate descriptions.

A number of bench marks at Lat.  $30^{\circ}$  <sup>24?</sup>  $(23')$ , Long.  $81^{\circ} 33'$  are shown by crosses instead of circles on the graphic control surveys. These have been transferred to T-5670 and are shown by circles. The method of location is not known, but presumably these bench marks were either located by rod readings or cuts.

#### Hydrographic Surveys.

H-6126 (1935) 1:10,000  
H-6127 (1935) 1:10,000

The hydrographic surveys were reviewed in 1935 and in 1937. Shoreline in the area covered by T-5670 was taken from T-5670 prior to its completion. When T-5670 was completed and brought up to the date of the later photographs (February 1939) some of the shoreline was revised. These changes have not been made on the hydrographic surveys which stand as of the earlier date, 1935.

#### Previous Topographic Surveys.

T-551 (1:10,000) 1855

T-5670 supersedes, for charting, the part of T-551 which it covers.

Chart 577 printing of 8-8-39.

Quarantine Island upper range rear light reported destroyed. New position furnished as of October 1939. Quarantine Island lower range rear light destroyed. No new position furnished. Reported to chart standards 5-20-40.

The dates of location of all aids to navigation located on T-5670 are shown on the map drawing.

T-5670 has not been applied to chart 577 or chart 1243 at the date of this review.

Arlington Cut front range light ( $\Delta$ Bn. 59 1926) has been removed from T-5670. This light was rebuilt. See the attached letter.

Descriptions of Recoverable Topographic Stations.

Descriptions are filed under T-6487b, T-6488a, and T-5670.

General.

The descriptive report and the compilation of map details on T-5670 are complete and the quality of the drafting is very good.

Reviewed in office by - L. C. Lande.

Inspected by - B. G. Jones

Examined and approved:

*Thos O'Rand*

Chief, Section of Field Records.

*J. S. Brown*

Chief, Division of Charts.

*K. T. Adams*

Chief, Section of Topography.

*Grude*

Chief, Division of Coastal Surveys.