

9904

Diag. Cht. Nos. 1243-2 & 1244.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-82 Office No. T-9904

LOCALITY

State Florida

General locality Matanzas River

Locality St. Augustine

1952-57

CHIEF OF PARTY

P. Taylor, Chief of Field Party

E.H. Kirsch, Balto. Photo. Office

W. F. Deane, " " "

LIBRARY & ARCHIVES

DATE October 1962

USCOMM-DC 5087

9904

DATA RECORD

T - 9904

Project No. (II): **Ph-S2(51)** Quadrangle Name (IV):

Field Office (II): **Brunswick, Georgia** Chief of Party: **Paul Taylor**

Photogrammetric Office (III): **Baltimore, Md.** Officer-in-Charge: **E. H. Kirsch**
W. F. Deane

Instructions dated (II) (III): **29 December 1951** Copy filed in Division of
15 February 1952 (Supplement I) Photogrammetry (IV)
28 February 1952 (Supplement I)
14 March 1952 (Supplement II)
28 April 1952 (Supplement III)

Method of Compilation (III): **Graphic**

Manuscript Scale (III): **1:20,000** Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): **1.000**

Date received in Washington Office (IV): Date reported to Nautical Chart Branch (IV):

Applied to Chart No. Date: Date registered (IV): **5/15/57**

Publication Scale (IV): Publication date (IV):

Geographic Datum (III): **N.A. 1927** Vertical Datum (III): **MSL**
Mean sea level except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as (5) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): **VILANO, 1933**

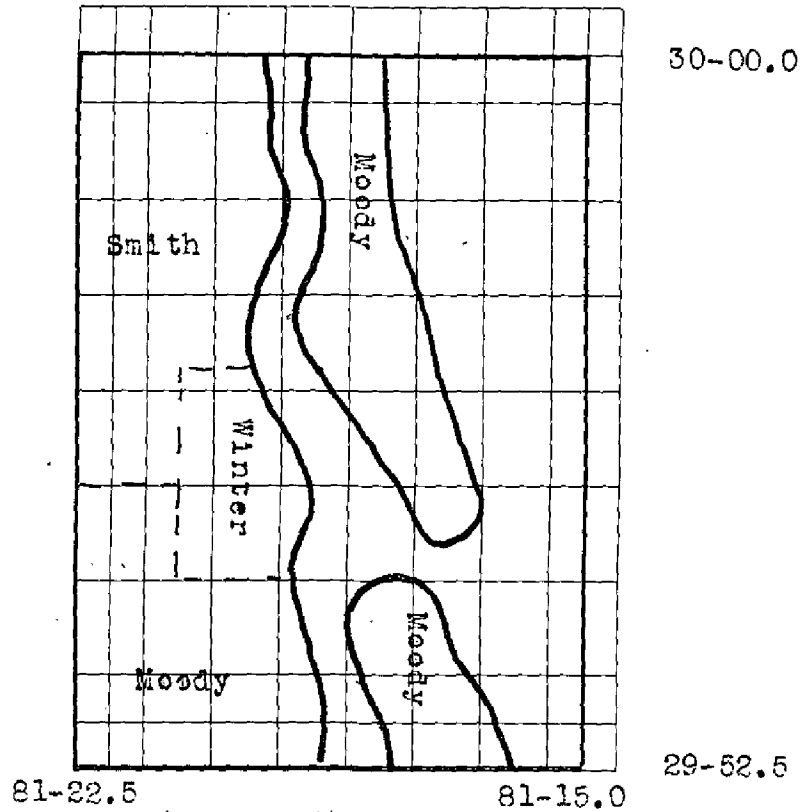
Lat.: **29° 54' 59.136" (1820.9m)** Long.: **81° 17' 32.258" (865.3m)** Adjusted
~~XXXXXXXXXX~~

Plane Coordinates (IV): State: **Florida** Zone: **East**

Y= X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.



Areas contoured by various personnel
(Show name within area)
(H) (III)

DATA RECORD

Field Inspection by (II): **Joseph K. Wilson, Cartographer** Date: **May, 1953**
Martin C. Moody, Cartographic Survey Aid
 Shoeline Inspection by: **H.R. Spies** **Dec., 1952**

Planetable contouring by (II): **John R. Smith, Carto. Surv. Aid** Date: **April-May, 1953**
Martin C. Moody, Carto. Surv. Aid
John S. Winter, Carto. Surv. Aid

Completion Surveys by (II): **J.K. Wilson** Date: **June 1957**

Mean High Water Location (III) (State date and method of location): **1952 field inspection -**
Supplemented by 1956 photography. *Conch Island and the north shore of St. Augustine*
Inlet were inspected during field edit (1957)

Projection and Grids ruled by (IV): **S. Rose** Date: **3/16/53**

Projection and Grids checked by (IV): **H. D. Wolfe** Date: **3/17/53**

Control plotted by (III): **J. C. Richter** Date: **7/6/53**

Control checked by (III): **J. S. ⁺einberg** Date: **7/16/53**

Radial Plot ~~on Stereoscopic~~ Date: **4/11/54**
~~Control checked by (III):~~ **H. R. Rudolph**

Planimetry Date:
 Stereoscopic Instrument compilation (III):
 Contours Date:

Manuscript delineated by (III): **J. B. Phillips** Date: **2/20/57**

Photogrammetric Office Review by (III): **H. R. Rudolph** Date: **4/3/57**

Elevations on Manuscript
 checked by (II) (III): **H. R. Rudolph** Date: **4/3/57**

Camera (kind or source) (III): **USC&GS nine-lens and USC&GS single lens cameras**

		PHOTOGRAPHS (III)				Stage of Tide
Number	Date	Time	Scale			
34964 thru	2/14/52	0941	1:20,000		3.3 above MLW - Inside *	
34967					4.0 " " - Outside	
34973 and						
34974	2/14/52	0954	"		3.4 above MLW - Inside	
					4.1 " " - Outside	
56-W-3704 thru						
56-W-3709	10/19/56	0944	"		0.3 above MHW	
56-W-3839 thru						
56-W-3842	10/19/56	1052	"		3.3 above MLW - Inside	
56-W-3852 thru						
56-W-3860	10/19/56	1058	"		2.4 " " - Outside	

Tide (III)
From Predicted tide tables

Reference Station: **Mayport**
 Subordinate Station: **St. Augustine Inlet**
 Subordinate Station: **St. Augustine**

Ratio of Ranges	Mean Range	Spring Range
	4.5	5.3
1.0	4.5	5.3
0.9	4.2	5.0

Washington Office Review by (IV): *S.G. Blankenbaker*

Date: *May, 1959*

Final Drafting by (IV): *R.A. Carter*

Date: *10-5-59*

Drafting verified for reproduction by (IV): *W. H. Hallin*

Date: *10-8-59*

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): **33**

Shoreline (More than 200 meters to opposite shore) (III): **36 miles**

Shoreline (Less than 200 meters to opposite shore) (III): **26 miles**

Control Leveling - Miles (II): **24**

Number of Triangulation Stations searched for (II): **53** Recovered: **38** Identified: **24**

Number of BMs searched for (II): **41** Recovered: **35** Identified: **29**

Number of Recoverable Photo Stations established (III): **2**

Number of Temporary Photo Hydro Stations established (III): **None**

Remarks: * "Inside" refers to the St. Augustine Inlet. No data is available for the range of tide in the inland waters in this area.

Five (5) Public Lands section corners & three (3) grant corners were recovered and identified during field inspection & field edit.

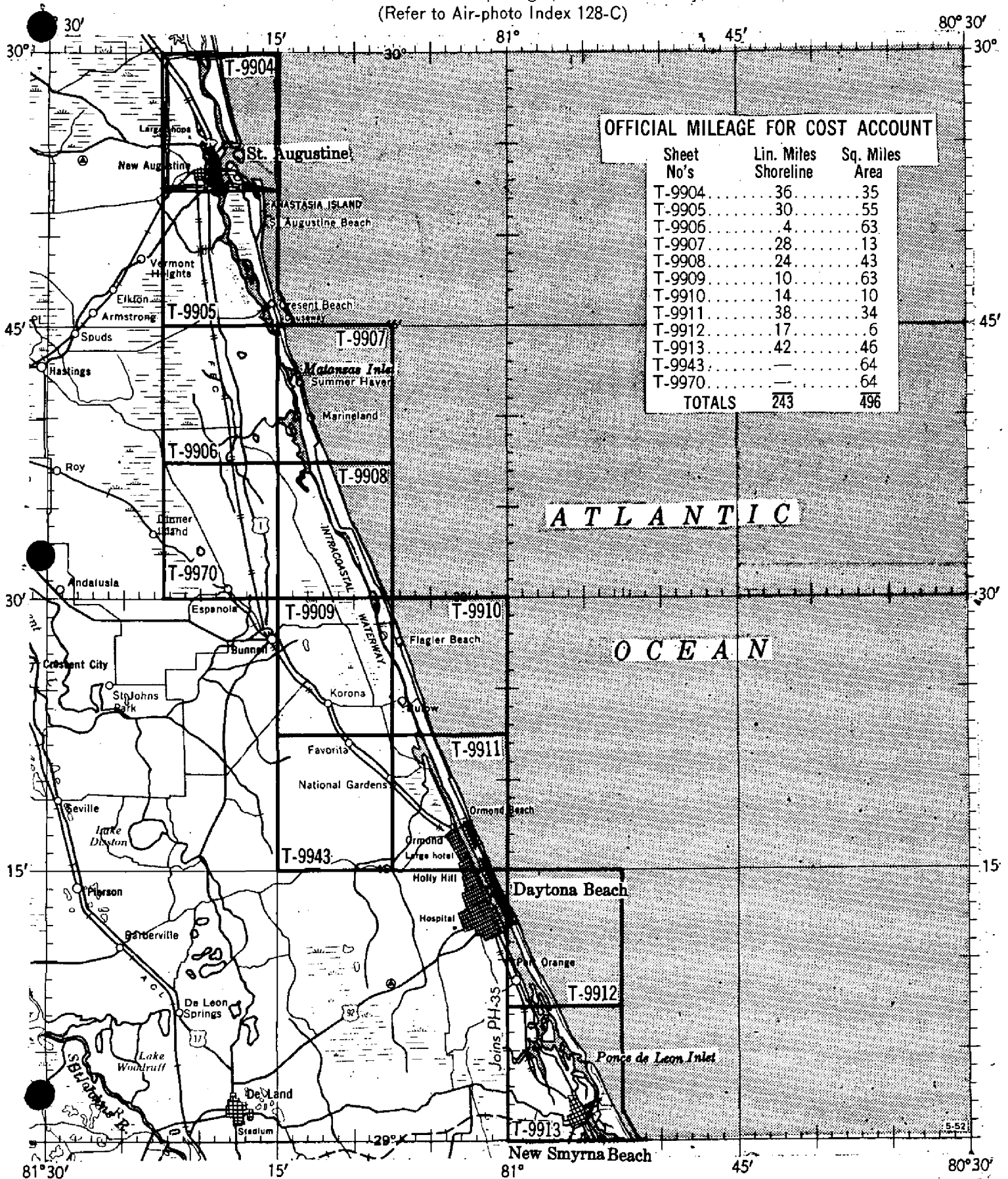
TOPOGRAPHIC MAPPING PROJECT PH-82

FLORIDA - EAST COAST, St. Augustine to New Smyrna Beach

- 5 -

Compiled by the U. S. Coast and Geodetic Survey at scale 1:20,000
from 1:20,000 scale nine-lens photographs taken February, 1952.

(Refer to Air-photo Index 128-C)



OFFICIAL MILEAGE FOR COST ACCOUNT

Sheet No's	Lin. Miles Shoreline	Sq. Miles Area
T-9904	36	35
T-9905	30	55
T-9906	4	63
T-9907	28	13
T-9908	24	43
T-9909	10	63
T-9910	14	10
T-9911	38	34
T-9912	17	6
T-9913	42	46
T-9943	—	64
T-9970	—	64
TOTALS	243	496

ATLANTIC

OCEAN

5-52

Summary to Accompany Descriptive Report T-9904

Topographic map T-9904 is one of twelve similar maps in Project PH-82. It covers the greater part of the city of St. Augustine and portions of the Tolomato, Matanzas, San Sebastian and Guano Rivers.

Project PH-82 is a graphic compilation project. Field work in advance of compilation included complete field inspection and complete planetable contouring directly on the photographs.

The map was compiled at a scale of 1:20,000. 1:20,000 scale nine-lens photographs were used in field inspection, compilation and radial plotting. "W" camera 1:20,000 scale photographs were used in field edit and in the revision of details. The map was corrected to the date of the "W" camera photography (Oct. 1956) in compliance with field edit instructions.

After the addition of hydrography the map will be published by the Geological Survey as a standard topographic quadrangle.

Items registered under T-9904 will include the Descriptive Report, a positive impression on cronar of the scribed copy of the manuscript at 1:20,000 scale and a lithographic print of the published quadrangle at 1:24,000 scale.

FIELD INSPECTION REPORT
 Quadrangle T-9904
 Project Ph-82(51)

The phases listed below are in addition to those phases shown on Pages 2 and 3:

<u>Name and Title</u>	<u>Phase</u>	<u>Date</u>
Henry R. Spies, Cartographic Survey Aid	Shoreline Inspection	August, 1952
Martin C. Moody, Cartographic Survey Aid	Horizontal Control Vertical Control	October, 1952
John S. Winter, Cartographic Survey Aid	Fly Levels	April, 1953

2. AREAL FIELD INSPECTION

This quadrangle lies entirely within St. Johns County and is centered around the town of St. Augustine. St. Augustine, which is reputed to be the oldest city within the United States, has many attractions for the summer and winter tourists. It was in St. Augustine that occurred the Spanish-French struggle for Florida in the sixteenth century. Many of the old memories are kept alive by the different historic societies and private enterprises. Many tourists visit such places as the Old Fort, Fountain of Youth, old churches and the numerous other attractions.

Little industry is carried on within the area. However, the Florida East Coast Railway has its maintenance shops and offices in St. Augustine, and there is some boat building and shrimping done. Outside the city, the area is used for cattle, turpentine and logging.

Castillo De San Marcos National Monument (old fort) is a part of the National Park System and is administered by the National Park Service, United States Department of Interior. The National Park Service Southeastern District Office is located within the St. Augustine Post Office.

See Field Inspection Report for Quadrangle T-9905 for discussion of Anastasia State Park.

The entire sheet is served by many roads. During the field inspection, it was noted that plans are being made by local authorities to re-build and re-surface U.S. Highway 1, State Highway 1A and State Highway 207. The field editor should be alert for any of these changes.

There was little construction in progress throughout the area. The field inspection is believed to be adequate and the photographs were easily interpreted.

3. HORIZONTAL CONTROL

(a) No supplemental control was established.

(b) All stations are on the N.A. 1927 datum.

(c) Stations which are within the quadrangle, but were not established by the U.S.C. & G.S. are:

<u>Station</u>	<u>Agency</u>	<u>Order</u>
BP-118, 1935	Florida Geodetic Survey	Third
BP-119 "	"	"
BP-120 "	"	"
BP-122 "	"	"
BP-123 "	"	"
BP-124 "	"	"
BP-125 "	"	"
BP-126 "	"	"
BP-127 "	"	"
E-1, 1934	"	"
E-4 "	"	"
E-5 "	"	"
E-6 "	"	"
USC&GS BM Q-3, 1917	U.S. Geological Survey	"
DRY RM2	Florida Geodetic Survey	"

(e) A search was made for all known control points. Stations reported as "destroyed", "lost" or "not recovered" are:

BP-121 (Fla. Geod. S.), 1935
 E-2 (Fla. Geod. S.), 1934
 E-3 " " "
 ELLZEY AZ. MK. (Fla. Geod. S.), 1935
 HARRISON, 1859
 CASACOLA, 1859
 SANCHEZ, 1859
 COCKED HAT, 1859
 ALLEN, 1859
 VILANO BEACH AND BRIDGE CO. WATER TANK, 1933
 VILANO CASINO, BASE OF FLAGPOLE, N. PARAPET, 1933
 BAYA, 1859.
 ST. AUGUSTINE AIRPORT BEACON, 1933
 ST. AUGUSTINE NORTH BASE, 1859
 ST. AUGUSTINE PRESBYTERIAN CHURCH, 1859

(f) Several stations, which were used in the radial plot for Project Ph-35, were re-pricked on the nine-lens photographs for this project.

4. VERTICAL CONTROL

(a) A search was made for all known vertical control. Bench marks in the quadrangle are:

<u>Station</u>	<u>Agency</u>	<u>Phase</u>
BP-118	Florida Geodetic Survey	Third
BP-119	"	"
BP-120	"	"
BP-122	"	"
BP-123	"	"
BP-124	"	"
BP-125	"	"
BP-126	"	"
BP-127	"	"
E-1	"	"
E-4	"	"
E-5	"	"
E-6	"	"
DRY	"	"
DRY FM 1	"	"
DRY FM 2	"	"
VILANO	"	"
Q-3	U.S. Coast & Geodetic Survey	First
R-3	"	"
G-15	"	"
H-15	"	"
J-15	"	"
D RESET	"	"
ST. AUGUSTINE	"	"
MARION	"	"
C = TIDAL 6	"	"
TIDAL 8	"	"
TIDAL 9	"	"
ST. AUGUSTINE TBM 10	"	Unknown
ST. AUGUSTINE TBM 11	"	"

(b) Twenty-four miles of fly levels were run with a Wye Level, beginning and closing on bench marks of third order or higher accuracy, or on previously established level points. The adjustment of one level line was necessary as it had a closure of 0.37 foot.

(c) The first and last fly-level points are 04-1 and 04-40. Points 04-1 to 04-4 are recorded in the level book of Quadrangle T-9905.

(d) Inapplicable.

5. CONTOURS AND DRAINAGE

The contouring was accomplished by standard planetable methods on 1:20,000 scale nine-lens photographs at an interval of five feet.

The beach section of the quadrangle is composed of numerous small sand ridges. Most of these areas have a growth of scrub growing on them, therefore there is little shifting of the sand dunes, except immediately adjacent to the beach. The five-foot contour along the beach was not drawn, but appropriate notes have been shown on the photographs. The downtown section of St. Augustine is very low and flat with an average elevation of about seven feet. The terrain in the western part of the city is irregular. Some of the sand ridges attain a height of forty feet.

The quadrangle's drainage is toward the Intracoastal Waterway. Many of the swamps have no definite drainage, except by seepage. The drainage and swamp limits were delineated in accordance with instructions stated in the Director's letter, dated 11 August 1952.

6. WOODLAND COVER

The majority of the area along the beach has been classified as scrub. The palmetto and scrub oak are about five feet high. The remainder of the quadrangle is typical north Florida country with scattered pine and palmetto growing on the high and level ground areas and a mixture of cypress, maple and gum growing in the swamps.

7. SHORELINE AND ALONGSHORE FEATURES

See Special Shoreline Report by Mr. Henry R. Spies, submitted in November, 1952, a copy of which is filed in the Field Inspection Report of Quadrangle T-9911. One (1) copy filed in the Project Completion Report

8. OFFSHORE FEATURES

There were no offshore features noted. For the accuracy of the location of the low-water line, see Special Shoreline Report.

9. LANDMARKS AND AIDS

For the nautical aids and landmarks, see Special Shoreline Report mentioned in heading No. 7. One new landmark (WEST AUGUSTINE MUNICIPAL WATER TANK, 1933) is recommended on Form 567. No interior landmarks or aeronautical aids are recommended.

The positions of all aids to navigation in at the time were redetermined or verified during field edit (1957)

10. BOUNDARIES, MONUMENTS AND LINES

* ^{Four} Five section corners and one grant corner were recovered and identified on the photographs. Form M-2226-12 is submitted for each. Four boundary markers were located along the corporate limit line of St. Augustine and one boundary marker along Anastasia State Park boundary. A Special Report on Boundaries was submitted in April, 1953.

11. OTHER CONTROL

AIRWAY BEACON, 1952 and WFOY RADIO MAST, 1952 are submitted on Form 524. There were no photo-hydro stations established.

12. OTHER INTERIOR FEATURES

Buildings have been circled in red on the control set of photographs. The urban limits of St. Augustine were followed as outlined by the Washington Office. See contour photograph No. 34965-A. All roads have been classified in accordance with the Topographic Manual.

Two bridge clearances, a submarine cable and an overhead transmission line are shown on photographs 34964 and 34965. A copy of the letter to the District Engineer on bridge discrepancies is included with the Special Shoreline Report.

13. GEOGRAPHIC NAMES

This will be the subject of a Special Report, which will be submitted at a later date.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

A Coast Pilot Report, Shoreline Report, Boundary Report and Geographic Names Report will be submitted as special reports for the entire project. At this date, all of the above reports have been submitted with the exception of the Geographic Names Report.

* One (1) section corner was classified as "point on line" during field edit.

15. CONTOUR JUNCTIONS

Special attention is called to the junctioning of contours on photograph 34966-A along the beach, with photographs 49-0-223 and 224 (Project Ph-35, T-9311). The original contouring at this point was changed by the Field Editor on photograph 49-0-224 in purple. Apparently this change was made to generalize the area, however this party could not make a satisfactory junction at this point with photograph 49-0-224, but has junctioned with the original work on photograph 49-0-223. The area involved is composed of a series of small sand ridges and the difficulty has arisen over generalizing or drawing the contours. It is believed the the terrain is expressed better on photograph 49-0-223.

Satisfactory junction obtained.

12 May 1953
Submitted by:

Martin C. Moody
Martin C. Moody,
Cartographic Survey Aid

16 June 1953
Approved by:

Paul Taylor
Paul Taylor
Commander, USC&GS
Chief of Party

PHOTOGRAMMETRIC PLOT REPORT
Project Ph-82
Surveys Nos. T-9904 to T-9907 incl.

21. AREA COVERED

This radial plot covers the areas of surveys Nos. T-9904, T-9905, T-9906 and T-9907. These are topographic surveys located along the east coast of Florida and extend from the Guano River Southward to just south of Marineland.

22. METHOD - RADIAL PLOT

Map Manuscripts:

Vinylite sheets with polyconic projections in black and Florida East grid in red, at a scale of 1:20,000 were furnished by the Washington office. Base sheets were prepared in this office.

The positions of all control stations and substitute stations were plotted using the meter bar and beam compass.

A sketch, showing the layout of the surveys in the plot and the distribution of control and photograph centers, is attached to this report. A list of horizontal control stations is also attached to this report.

Photographs:

All photographs used in the radial plot are unmounted nine-lens photographs taken, at a scale of approximately 1:20,000 in February 1952.

23 photographs were used in the plot numbered as follows:

34961 thru 34967
34972 thru 34979
35006 thru 35008
35015 and 35016
35031 thru 35033

Standard symbols were used on the photographs.

Templets:

Vinylite templets were made for all photographs. The master templet was used to correct for paper and film distortion, and for chamber displacement.

Closure and Adjustment of Control:

Vinylite base sheets were prepared by transferring the positions of all identified control to the base sheets, from the manuscripts for surveys Nos. T-9904 to T-9907 inclusive, by matching common grid lines. The positions of several pass points and photograph centers which were established by a prior plot, that fell either within or just south of the areas of surveys Nos. T-9906 and T-9907, were also transferred to the base sheets.

22. METHOD - RADIAL PLOT (Cont'd)

Closure and Adjustment of Control (Cont'd)

The radial plot was constructed on the base sheets.

The templets for those photographs whose centers had been located by the prior plot were laid first holding to the control and pass-points previously established. The templets for 34978 to 34972 were then laid followed by the flights to the west and finally the flight 34961 to 34967. All of the control was held. A satisfactory plot was made.

Transfer of Points:

The positions of all pass points and photograph centers were pricked directly on the map manuscripts by superimposing the manuscripts on the templets and matching common grid lines.

23. ADEQUACY OF CONTROL

All control was held on most of the photographs with a few radial lines falling tangent to the stations.

The tie in with the control on surveys T-9908 and T-9970, to the south, was very good. The tie in with control to the north of the project was also very good.

The distribution of control was very good. Several identified stations, in St. Augustine, were not used in the plot since they were not needed to construct a plot.

24. SUPPLEMENTAL DATA

No graphic control surveys were used in the plot.

25. PHOTOGRAPHY

The photographic coverage was adequate.

No tilt determinations were made.

The definition was good except in light struck areas in the south-east corners of some of the photographs.

Respectfully submitted
11 May 1954

Harry R. Rudolph
Harry R. Rudolph
Carto. Aid (Photo)

Approved and Forwarded
May 1954

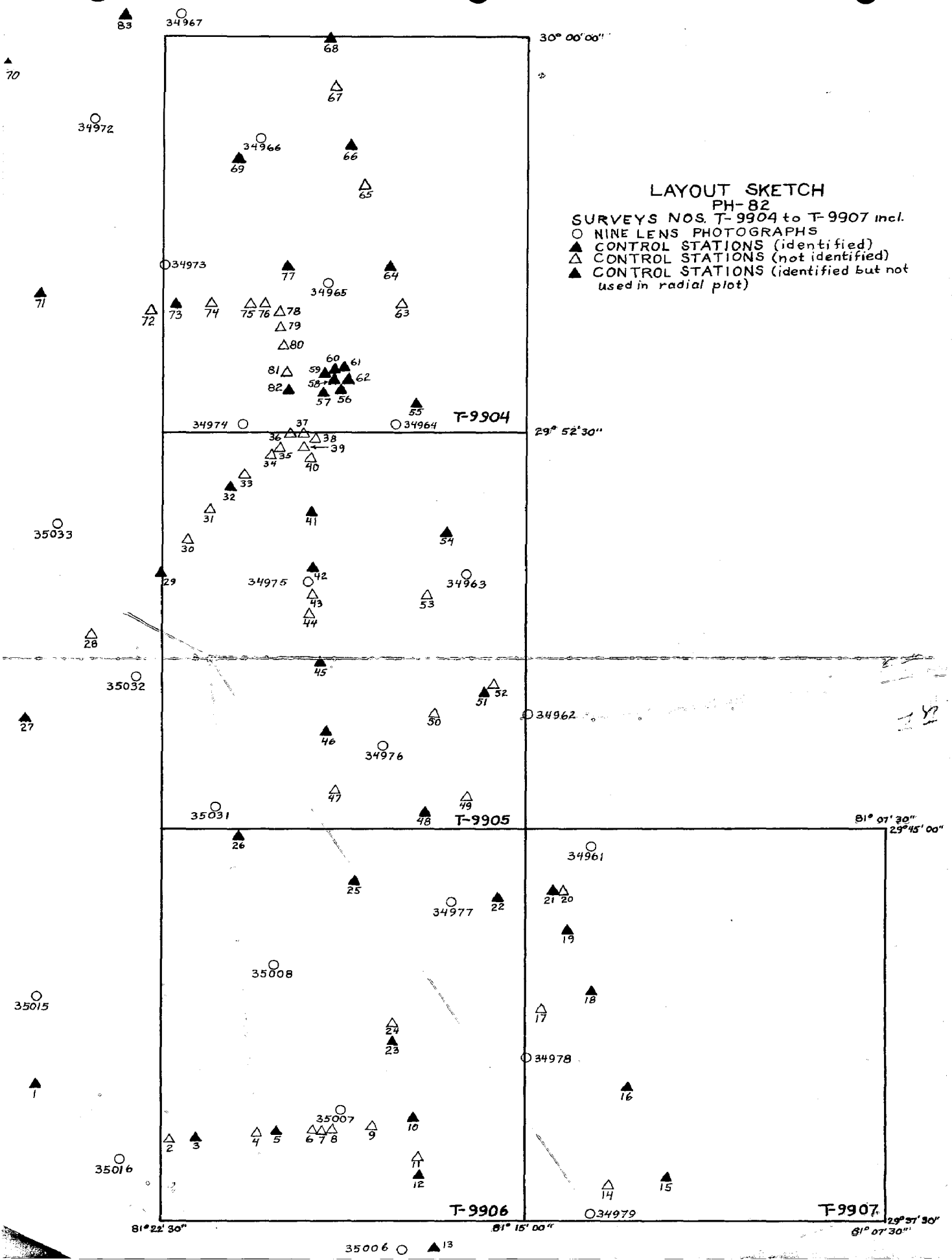
E. H. Kirsch,
Comdr. USO&GS
Officer in Charge

LIST OF CONTROL

No.	Name of Station	Identification
1	BS 44, FGS., 1935	Sub. Point
2	BS 40, FGS., 1935	None
3	BS 39, FGS., 1935	Sub. Point
4	BS 38, FGS., 1935	None
5	BS 37, FGS., 1935	Sub. Point
6	BS 36, FGS., 1935	None
7	PELLICER, 1934	None
8	PELLICER AZ. MK. - RM 2, 1934; FGS, 1935	None
9	BS 35, FGS., 1935	None
10	BS 17, FGS., 1935	Sub. Point
11	BS 18, FGS., 1935	None
12	BS 19, FGS., 1935	Sub. Point
13	BS 20, FGS., 1935	Sub. Point
14	VIRGIL, 1872, 1952	None
15	ROCK, 1934	Sub. Point
16	SHELL, 1934	Sub. Point
17	SWAMP, 1872, 1952	None
18	COVE, 1934	Sub. Point
19	AIRWAY BEACON NO. 28, 1934	Direct
20	LAST, 1872	None
21	NICK, 1933	Sub. Point
22	DUNHAM 1872, 1952	Sub. Point
23	BS 15, FGS., 1935	Sub. Point
24	BS 14, FGS., 1935	None
25	BS 11, FGS., 1935	Sub. Point
26	DUPONT, 1933, 1952	Sub. Point
27	BP 165, FGS., 1935	Sub. Point
28	VERMONT, 1933	None
29	BP 160, FGS., 1934	Sub. Point
30	BP 159, FGS., 1934	None
31	BP 158, FGS., 1934	None
32	BP 157, FGS., 1934	Sub. Point
33	BP 156, FGS., 1934	None
34	BP 155, FGS., 1934	None
35	BP 154, FGS., 1934	None
36	BP 153, FGS., 1934	None
37	BP 152, FGS., 1934	None
38	BP 150, FGS., 1934	None
39	BP 151, FGS., 1934	None
40	BS 1, FGS., 1937	None

LIST OF CONTROL (cont'd)

No.	Name of Station	Identification
41	BS 2A, FGS., 1937	Sub. Point
42	BS 3A, FGS., 1937	Sub. Point
43	BS 4, FGS., 1937	None
44	BS 5, FGS., 1937	None
45	BS 6A, FGS., 1937	Sub. Point
46	BS 7, FGS., 1937	Sub. Point
47	BS 8, FGS., 1937	None
48	KITTLESON, 1934	Sub. Point
49	BRADDOCKS POINT, 1871	None
50	GOVERNMENT, 1859	None
51	MICKLER, 1933	Sub. Point
52	MARCH, 1871	None
53	MANLY, 1859	None
54	AUGUSTINE, 1933	Sub. Point
55	ST. AUGUSTINE LIGHTHOUSE, 1882	Direct
55	NAVAL RESERVE W. T., 1933	Direct
56	ST. AUGUSTINE FLAGLER MEMORIAL HOSPITAL STACK, 1933	Direct
57	ST. AUGUSTINE FLORIDA POWER AND LIGHT CO. STACK, 1933	Direct
58	ST. AUGUSTINE PONCE DE LEON HOTEL EAST CUPOLA, 1933	Direct
58	ST. AUGUSTINE PONCE DE LEON HOTEL WEST CUPOLA, 1933	Direct
59	ST. AUGUSTINE FLAGLER MEMORIAL CHURCH FINIAL, 1933	Direct
60	ST. AUGUSTINE GRACE M. E. CHURCH BELFRY, 1933	Direct
61	ST. AUGUSTINE MUNICIPAL STANDPIPE, 1933	Direct
62	ST. AUGUSTINE FIRST NATIONAL BANK DOME, 1933	Direct
63	VILANO, 1933	None
64	E 1, FGS, 1934	Sub. Point
65	E 4, FGS, 1934	None
66	E 5, FGS, 1934	Sub. Point
67	E 6, FGS, 1934	None
68	DRY, 1917	Sub. Point
69	Q 3 (USGS), 1917	Sub. Point
70	SAMPSON, 1933	Sub. Point
71	ELLZEY, 1933	Sub. Point
72	BP 118, FGS., 1934	None
73	BP 119, FGS., 1935	Sub. Point
74	BP 120, FGS., 1935	None
75	BP 122, FGS., 1935	None
76	BP 123, FGS., 1935	None
77	ST. AUGUSTINE FLORIDA E. COAST R. R. SHOPS W. T., 1933	Direct
78	BP 124, FGS., 1935	None
79	BP 125, FGS, 1935	None
80	BP 126, FGS, 1935	None
81	BP 127, FGS, 1935	None
82	WEST AUGUSTINE MUNICIPAL W. T., 1933	Direct
83	PREM. TRAV. STA. NO. 3K, 1917	Sub. Point



LAYOUT SKETCH

PH-82

SURVEYS NOS. T-9904 to T-9907 incl.

○ NINE LENS PHOTOGRAPHS

△ CONTROL STATIONS (identified)

△ CONTROL STATIONS (not identified)

▲ CONTROL STATIONS (identified but not used in radial plot)

81° 22' 30"

81° 15' 00"

81° 07' 30"

35006 ○ ▲ 13

MAP T. 9904 PROJECT NO. 24170 SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR χ -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR OF DISTANCE FROM GRID OR PROJECTION LINE IN METERS
			•	•	FORWARD	(BACK)		FORWARD	(BACK)	
ST. AUGUSTINE FIRST NATIONAL BANK DOME, 1933	G-1788 p. 21	N.A. 1927	29	53	33.547			1032.9	(814.5)	
ST. AUGUSTINE PONCE DE LEON HOTEL, EAST CUPOLA, 1933	G-1788 p. 22	"	81	18	44.457			1192.8	(417.0)	
ST. AUGUSTINE PONCE DE LEON HOTEL, WEST CUPOLA, 1933	"	"	29	53	32.887			1012.6	(834.8)	
ST. AUGUSTINE PONCE DE LEON HOTEL POWER HO STACK, 1933	"	"	81	18	53.220			1427.9	(181.9)	
ST. AUGUSTINE GRACE M.E. CHURCH BELFRY, 1933	"	"	29	53	32.436			998.7	(848.7)	
ST. AUGUSTINE CATHOLIC CHURCH CROSS, 1933	"	"	81	18	54.962			1474.7	(135.2)	
ST. AUGUSTINE GRACE M.E. CHURCH BELFRY, 1933	"	"	29	53	35.551			1094.7	(752.8)	
ST. AUGUSTINE GRACE M.E. CHURCH BELFRY, 1933	"	"	81	18	55.855			1498.6	(111.2)	
ST. AUGUSTINE FLAGLER MEMORIAL CHURCH, FINIAL, 1933	G-1788 p. 21	"	29	53	33.292			1025.1	(822.4)	
ST. AUGUSTINE FLAGLER MEMORIAL CHURCH, FINIAL, 1933	G-1788 p. 22	"	81	18	45.912			1231.9	(378.0)	
ST. AUGUSTINE F.E.C. R. R. SHOPS W. T. 1933	"	"	29	53	41.019			1263.0	(584.4)	
ST. AUGUSTINE FLAGLER MEMORIAL CHURCH, FINIAL, 1933	"	"	81	18	54.776			1469.7	(140.2)	
ST. AUGUSTINE FLAGLER MEMORIAL CHURCH, FINIAL, 1933	"	"	29	53	36.738			1131.2	(716.3)	
ST. AUGUSTINE FLAGLER MEMORIAL CHURCH, FINIAL, 1933	"	"	81	19	01.331			35.7	(1574.2)	
ST. AUGUSTINE FLAGLER MEMORIAL CHURCH, FINIAL, 1933	"	"	29	55	46.013			1416.8	(430.7)	
ST. AUGUSTINE FLAGLER MEMORIAL CHURCH, FINIAL, 1933	"	"	81	19	56.352			1511.4	(97.8)	
ST. AUGUSTINE FLAGLER MEMORIAL CHURCH, FINIAL, 1933	"	"	29	53	23.83			733.7	(1113.7)	
ST. AUGUSTINE FLAGLER MEMORIAL CHURCH, FINIAL, 1933	"	"	81	18	48.68			1306.2	(303.7)	
ST. AUGUSTINE FLAGLER MEMORIAL CHURCH, FINIAL, 1933	G-1788 p. 23	"	29	53	27.883			858.5	(988.9)	
ST. AUGUSTINE FLAGLER MEMORIAL CHURCH, FINIAL, 1933	G-1788 p. 22	"	81	19	50.606			1357.9	(252.1)	
ST. AUGUSTINE FLAGLER MEMORIAL CHURCH, FINIAL, 1933	G-1788 p. 22	"	29	53	19.744			607.9	(1239.5)	
ST. AUGUSTINE FLAGLER MEMORIAL CHURCH, FINIAL, 1933	G-1788 p. 22	"	81	19	08.088			217.0	(1392.9)	

MAP T. 2904 PROJECT NO. 24170 SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
			FORWARD	(BACK)	FORWARD	(BACK)		FORWARD	(BACK)	
E-6, FGS, 1934	St. Johns County P. 9	N.A. 1927	2,054.435.22	400,528.36	4,435.22 (5,564.78)	528.36 (9,471.64)	-5.5	1351.9 (1696.1)	161.0 (2887.0)	
Q-3 U.S.G.S., 1917	PRIM-T-37A ST. AUGUSTINE QUAD P. 39	N.A.	57 46.0		1,416.4 (431.1)		-6.5	1409.9 (437.6)		
Sub. Pt. Q-3 USGS, 1917		N.A.	20 57.9		1,552.4 (56.3)		-5.0	1547.4 (61.3)		
E-5 FGS, 1934	St. Johns County P. 9	1927	57 20					1457.0 (390.5)	1588.4 (20.3)	
Sub. Pt. E-5 FGS, 1934		"	2,047,291.84		7,291.84 (2,708.16)			2222.6 (825.4)		
E-4 FGS, 1934	"	"	402,212.64		2,212.64 (7,787.36)			674.4 (2373.6)		
E-1 FGS, 1934	"	"	2,040					2572.8 (475.2)		
Sub. Pt. E-1 FGS, 1934		"	400					589.7 (2458.3)		
E-1 FGS, 1934	St. Johns County P. 8	"	2,043,046.13		3,046.13 (6,953.87)			928.5 (2119.5)		
Sub. Pt. E-1 FGS, 1934		"	403,308.13		3,308.13 (6,691.87)			1008.3 (2039.7)		
Sub. Pt. ELLZEY, 1933		"	2,033,366.39		3,366.39 (6,633.61)			1026.1 (2021.9)		
B.P-118 FGS, 1934	St. Johns County P. 2	"	406,268.41		6,268.41 (3,731.59)			1910.6 (1137.4)		
		"	2,030					1077.2 (1970.8)		
		"	400					1885.8 (1162.2)		
		"	29 55					183.9 (1663.5)		
		"	81 25					32.3 (1577.2)		
		"	2,028,852.10		8,852.10 (1,147.90)			2698.1 (349.9)		
		"	380,384.00		384.00 (9,616.00)			117.0 (2931.0)		

MAP T. 9904 PROJECT NO. 24170 SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR x -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
				FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
BP-119 FGS, 1935	St. Johns County p. 2	N.A. 1927	2,029,572.48	9,572.48 (427.52)			2917.7 (130.3)			
Sub. Pt. BP-119 FGS, 1935	"	"	382,555.26	2,555.26 (7,444.74)			778.8 (2269.2)			
			2,020				2897.0 (151.0)			
			380				883.1 (2164.9)			
BP-120 FGS, 1935	St. Johns County p. 2	"	2,029,530.87	9,530.87 (469.13)			2905.0 (143.0)			
			386,869.61	6,869.61 (3,130.39)			2093.9 (954.1)			
BP-122 FGS, 1935	"	"	2,029,355.86	9,355.86 (644.14)			2851.7 (196.3)			
			390,965.96	965.96 (9,034.04)			294.4 (2753.6)			
BP-123 FGS, 1935	St. Johns County p. 3	"	2,029,391.68	9,391.68 (608.32)			2862.6 (185.4)			
			392,218.05	2,218.05 (7,781.95)			676.1 (2371.9)			
BP-124 FGS, 1935	"	"	2,028,880.59	8,880.59 (1,119.41)			2706.8 (341.2)			
			394,054.45	4,054.45 (5,945.55)			1235.8 (1812.2)			
BP-125 FGS, 1935	"	"	2,027,247.23	7,247.23 (2,752.77)			2209.0 (839.0)			
			394,277.60	4,277.60 (5,722.20)			1303.9 (1744.1)			
BP-126 FGS, 1935	"	"	2,025,140.23	5,140.23 (4,859.77)			1566.7 (1461.3)			
			394,620.49	4,620.49 (5,379.51)			1408.3 (1639.7)			
BP-127 FGS, 1935	"	"	2,021,676.80	1,676.80 (8,323.20)			511.1 (2536.9)			
			395,083.63	5,083.63 (4,916.37)			1549.5 (1498.5)			
BANK, 1933	G-1788 p. 20	"	29 53 33.684				1037.2 (810.3)			
			81 16 44.344				1189.8 (420.1)			
VILANO, 1933	G-1788 p. 4	"	29 54 59.136				1820.9 (26.6)			
			81 17 32.258				865.3 (744.2)			
ST. AUGUSTINE MONI STANDPIPE, 1933	G-1788 p. 21	"	29 53 41.837				1288.2 (559.3)			
			81 18 45.434				1219.0 (390.8)			

1 FT. = .3048006 METER

COMPUTED BY: J. C. Oregon DATE 9 June 1953 CHECKED BY: J. Steinberg DATE 15 June 1953

MAP T-9904 PROJECT NO. 24170 SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ν -COORDINATE		DISTANCE FROM GRID IN FEET.		DATUM CORRECTION	N. A. 1927 - DATUM		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
			LONGITUDE OR x -COORDINATE	"	OR PROJECTION LINE IN METERS FORWARD (BACK)	IN METERS		FROM GRID OR PROJECTION LINE FORWARD (BACK)		
ST. AUGUSTINE Lighthouse, 1882	G-1788 p. 20	N. A. 1927	29 53	06.715				206.8	(1640.7)	
			81 17	19.449				521.9	(1088.1)	
NAVAL RESERVE W.T., 1933	G-1788 p. 23	"	29 53	04.68				144.1	(1703.4)	
			81 17	14.52				389.6	(1220.4)	
DRY, 1917	G-1788 p. 4	"	29 59	55.789				1717.8	(129.7)	
			81 19	02.152				57.7	(1550.4)	
Sub. Pt. DRY, 1917		"	30 00					148.6	(1698.9)	
			81 19					144.6	(1463.5)	
DRY, RM, 1933	St. Johns County p. 10	"	2,059,687.82		9,687.82	(312.18)		2952.8	(95.2)	
			399,401.19		9,401.19	(598.81)		2865.5	(182.5)	

COMPILATION REPORT

T-9904

31. DELINEATION

This survey was compiled by graphic methods. The field inspection was adequate except for changes in topography which have occurred since the field inspection was made during 1952. The inspection was accomplished on nine-lens photographs taken in 1952. Single lens photographs were taken in October of 1956. Changes in topography have been office interpreted using the 1956 photographs.

32. CONTROL

The identification, placement, and density of horizontal control was adequate.

33. SUPPLEMENTAL DATA

U.S.G.S. St. Augustine, Florida Quadrangle, scale 1:62,500 edition of 1943, Final Name Sheet, used for Geographic Names.

Nautical Chart No. 842.

Florida East Coast Railway Map, scale 1" = 100', December 1927.

Large scale map of St. Augustine (Exhibit "F").

Castillo De San Marcos National Monument (Exhibit "J").

Special Report on Boundary Investigation, Project Ph-82 (51) Florida March 1953.

Bureau of Land Management Plats as follows:

T6S - R29E (pages 1, 2, 3, 4, 5, and 6)

T6S - R30E (page 18)

T7S - R29E (pages 7, 8, 9, 10, 11, and 12)

T7S - R30E (pages 19, 20, 21, 22, 23, 24, 25, and 26).

34. CONTOURS AND DRAINAGE

Contours - Adequate.

Drainage - Limits of swamp areas were outlined, stereoscopically, on the 1956 photographs and checked against the field inspection on the 1952 photographs. Where the limits as outlined on the 1956 photographs were in fair agreement with the field inspection, the field inspection was accepted; otherwise, the outline on the 1956 photographs was used.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline was delineated from the 1956 photographs supplemented by the field inspection. The entire shoreline of Conch Island has been shown as ~~unsurveyed~~. The Conch Island MLW line was field inspected in 1957 & located on the 1956 photography. The Conch Island approximate MLW line was delineated from office interpretation of the 1956 photography.

36. OFFSHORE DETAILS

No comment.

37. LANDMARKS AND AIDS

Forms 567 are submitted for eleven (11) Landmarks for Charts, two (2) aeronautical aids, and twenty-four (24) non-floating aids for charts.

Several other non-floating aids were identified and recommended. However, they have been discontinued or moved.

The positions of all aids to navigation in at the time were redetermined or verified during field edit (1957)

38. CONTROL FOR FUTURE SURVEYS

Forms 524 are submitted for two (2) Recoverable Topographic Stations.

There are no photo-hydro stations.

39. JUNCTIONS

Junction was made with survey T-9311 (1952) Ph-35 to the north and discrepancies were noted in the ^{*}shoreline of Guano River and in the ^{**}public land lines. Contour junction was made with SOUTH PONTE VEDRA BEACH quadrangle to the north.

* discrepancy resolved
** See the Review Report

To the east is an all water area.

Junction was made with Survey T-9905 to the south and is in agreement.

There is no contemporary survey to the west.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41. LAND LINES

All Section and Grant Lines, shown on the manuscript, have been applied to the manuscript from the Land Management Plats listed in paragraph 33 by the following method: Copies of latest plats of the townships were made on vinylite at a scale of 1:20,000. The manuscript was then oriented over these copies of the plats holding to identified section and grant corners. Features delineated on the manuscript, such as roads, ditches, edges of clearings or breaks in tree areas that appeared to be old survey lines, and grant lines on the north and west margins that had been transferred to the manuscript from USGS quadrangles were also held. Adjustments were necessary because the recorded distances between some section corners were in disagreement with the distances between section corners which had been identified and graphically located on the manuscript. Also, there was a poor junction between T7S - R29E and T7S - R30E. See Field Edit Report & Review Report

42 - 45

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

Comparison was made with USGS St. Augustine Quadrangle scale 1:62,500 edition of 1943, and with USGS St. Augustine Quadrangle scale 1:24,000 - Advance sheet, subject to correction - surveyed in 1937.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Nautical Chart No. 842, Scale 1:40,000, combined edition of 1952, corrected to 8 September 1956.

Items to be applied to nautical charts immediately:

None.

Items to be carried forward:

None.

Respectfully submitted
21 February 1956

Jacqueline B. Phillips
Jacqueline B. Phillips *for F. J. Laraga*
Carto. Photo. Aid

Approved and forwarded

William F. Deane
William F. Deane,
CDR, C&GS
Baltimore District Officer

T-9904.

Geographic Names.

No. 1.

Anastasia Island ✓
Araquay ✓
Atlantic Ocean ✓

Bird Island ✓
Bridge of Lions ✓

Capos Island ✓
Casa Cola ✓
Casa Cola Creek ✓
Castillo de San Marcos National Monument ✓
Comatchie Island ✓
Conch Island ✓

Davis Shores ✓

Florida ✓
Florida East Coast ✓
Florida Normal and Memorial Industrial College ✓
Fountain of Youth Park ✓

Guano River ✓

Hospital Creek ✓

Indian Creek ✓
Intracoastal Waterway ✓
Maria Sanchez Lake ✓
Matanzas River ✓
Mill Creek Road ✓ (Fla. 16)
Mount Pleasant Cemetery ✓

Oyster Creek ✓

Pancho Creek ✓
Ponce de Leon Golf Club ✓

Quarry Creek ✓

Red House ~~Creek~~ Branch ✓
Robinson Creek ✓

Saint Augustine ✓
Saint Augustine Inlet ✓
Saint Augustine Municipal Airport ✓ Fairchild - St. Augustine Airfield ✓
San Sebastian River ✓
Sombrero Creek ✓
Salt Run ✓

T-9904, No. 2.

Tocoi Road
Tolomato River ✓

Usina Beach

Vilano Beach ✓
Vilano Beach Bridge ✓

Woodlawn ✓

Ximanius Creek ✓

U.S. No. 1

Fla. A1A ✓
Fla. 16 ✓
Fla. 207 ✓

Above names, on map manuscript, approved
5-10-57. L. Heck

*Additional Names verified by project names report
or other available sources, shown on manuscript
by numbers, have been underlined on the names
sheet.

- * St. Augustine National Cemetery ✓
- St. Francis Barracks State Arsenal ✓
- Flagler Memorial Hospital ✓
- St. Josephs Academy ✓
- Old Protestant Cemetery or Hoquenet Cemetery ✓
- St. Augustine Municipal Yacht Basin ✓
- State Deaf & Blind Institution ✓
- F. E. C. Miller Shops ✓
- La Leche Mission & Cemetery ✓
- Moultrie Junction ✓
- Bdy. Anastasia State Park ✓

FIELD EDIT REPORT
Project 24170(6082)
Quadrangle T-9904

The field edit of this quadrangle was accomplished during the months of May and June 1957.

51. METHODS

The inspection of the quadrangle was accomplished by traversing all roads by truck, walking to other areas which required special attention, and by skiff along the waterways. Instructions were followed in accordance with letter to Baltimore District Office, dated 9 November 1956, 731-mkl. Standard surveying methods were used for other corrections and additions.

All additions, corrections and deletions have either been indicated on the field edit sheet, referenced to the field photographs, or answered directly on the discrepancy print. A legend, describing the colored inks used, is shown on the field edit sheet. Purple ink was used for additional information on the photographs and on the discrepancy print.

One 1:20,000 scale print is submitted as a field edit sheet. One additional 1:20,000 scale print is submitted with the information on fixed aids to navigation and is labeled Planetable Sheet.

Thirty photographs, on which field edit information has been shown, are listed as follows:

56-W- 3705	56-W-3845	56-W-3859	34964A
3706	3846	3875	34965A
3707	3847	3877	34966A
3708	3851	3879	34974A
3840	3853	3881	
3841	3854	3883	
3842	3856	3887	
3843	3857	3915	
3844	3858		

52. ADEQUACY OF COMPILATION

The compilation was adequate with the exceptions and additions indicated by the field edit data. It is believed that the the compilation will be complete after these are applied.

The quadrangle, as a whole, has changed very little since the original field inspection and there was not much construction in progress during the field edit.

U.S. Highway 1 is now a four-lane highway from the northern limits of the quadrangle to the Florida East Coast Railway Yards in the town of St. Augustine. The old routing of U.S. Highway 1 through downtown St. Augustine is obsolete. The routing of Florida State Highway 207 has changed slightly. The highway Department has recently completed a small section of road connecting U.S. Highway 1 with the Hasting Road, thereby eliminating a dangerous curve. Other road routes in the quadrangle have not changed.

The St. Augustine Municipal Airport has been taken-over by the Fairchild Aircraft Division of the Fairchild Engine and Airplane Corporation. The municipal airport has been leased from the City of St. Augustine and Fairchild has purchased several other adjoining properties. The limits of the municipal property was shown by the field inspector on photograph 34966. No attempt has been made to show the present property controlled by Fairchild, however a map of their holdings is submitted with the field edit data. It is to be noted that the municipal property extended out to the west shore of the Intracoastal Waterway and that Fairchild's property also includes that marshy area. The airway Beacon is intact, but was not in operation during the field edit.

All fixed aids to navigation, within the limits of the quadrangle, were either re-located or verified during the field edit. Several methods were employed in their re-location due to photographic coverage and to their invisibility on the photographs. All aids along the Intracoastal Waterway, with the exception of Matanzas River Daybeacons 4 and 5, were identified or verified directly on the photographs. The Guano River Daybeacons, San Sebastian River Daybeacons and Matanzas River Daybeacons 4 and 5 were located by planetable on a double-weight print copy of the quadrangle. The Guano and San Sebastian River Daybeacons consist of smaller one pile structures, which could not be seen on the photographs. A complete list of all aids to navigation, within the limits of this quadrangle, is submitted on form 567. The field editor realized that this was not entirely necessary but since so many of the numbers of the aids have been changed recently, it was felt that a complete list was justified.

The construction of rock jetties at the St. Augustine Inlet had just been started during the field edit. The approximate position of the proposed construction is shown on photograph 56-W3858. The shoreline of Conch Island is subject to considerable change, especially will it be changed after the erection of the new jetties.

A submerged telephone cable, crossing the Intracoastal Waterway at Vilano Bridge, has been shown on photograph 56-W-3857. The overhead clearances of several power lines were measured and noted on either the photographs or field edit sheet.

The investigation of section and land-grant corners is somewhat of a problem in this area. The field editor has spent considerable time searching for additional information. Two land-grant corners and one section corner were recovered and identified on the photographs. Several points on line, which are believed to be correct, have also been shown. These points on line are not entirely reliable as there are differences of opinion among the local surveyors. The public land-line survey did not include land grants 45 through 48 etc. in the city of St. Augustine. It is believed that no attempt should be made to show these grants. The discrepancy print questioned the poor junction between Ranges 29 and 30 East in Township 7 South and also questioned the correctness of the grants in that area. No new corners were recovered, but according to local information, it is believed that they are approximately correct. Grant 41 is believed to be entirely within quadrangle T-9905. The section corner 7, 8, 18 and 17, Township 6 South- Range 30 East could not be positively verified. There is a concrete monument at the position shown on the manuscript, which is probably a point on line.

Triangulation station DRY, 1917 was recovered in good condition. Form 526 is submitted with the field edit data.

53. MAP ACCURACY

The horizontal positions of the map detail appear to be good. No standard vertical accuracy test was requested and none was made.

The contours were visually checked and were found to adequately depict the terrain. Since the original contouring, many areas have been changed due to new construction etc. These areas have been revised during the field edit.

54. RECOMMENDATIONS

None

55. EXAMINATION OF PROOF COPY

Mr. J.H. Lauper, City Engineer of St. Augustine and a resident of the area for fifty years, has agreed to examine a proof copy of this quadrangle for possible errors. Mr. Lauper's address is: P.O. Box 757, St. Augustine, Florida.

All geographic names were verified as shown on the advance copy of the manuscript, however the following changes are noted: The distance, shown in the western portion of the sheet as 0.5 miles to Glimpse of Glory, is not recommended. The name GLIMPSE OF GLORY is no longer known and is obsolete. The distance, shown in the southern portion of the sheet as 6 miles to Butler Beach is not recommended. It is recommended that the distance be shown to Crescent Beach. Crescent Beach is much more prominent than Butler Beach and there is only a short distance separating the two.

21 June 1957

Submitted by:

Joseph K. Wilson
Joseph K. Wilson
Cartographer

Ira R. Rubottom
CDR, USC&GS
Chief of Party

PHOTOGRAMMETRIC OFFICE REVIEW

T. 9904

- 1. Projection and grids H.R.R. 2. Title H.R.R. 3. Manuscript numbers H.R.R. 4. Manuscript size H.R.R.

4a. Classification label H.R.R.

CONTROL STATIONS

- 5. Horizontal control stations of third-order or higher accuracy H.R.R. 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) H.R.R. 7. Photo hydro stations 8. Bench marks H.R.R.
- 9. Plotting of sextant fixes H.R.R. 10. Photogrammetric plot report H.R.R. 11. Detail points H.R.R.

ALONGSHORE AREAS

(Nautical Chart Data)

- 12. Shoreline H.R.R. 13. Low-water line H.R.R. 14. Rocks, shoals, etc. H.R.R. 15. Bridges H.R.R. 16. Aids to navigation H.R.R. 17. Landmarks H.R.R. 18. Other alongshore physical features H.R.R. 19. Other along-shore cultural features H.R.R.

PHYSICAL FEATURES

- 20. Water features H.R.R. 21. Natural ground cover H.R.R. 22. Planetable contours H.R.R. 23. Stereoscopic instrument contours 24. Contours in general H.R.R. 25. Spot elevations H.R.R. 26. Other physical features H.R.R.

CULTURAL FEATURES

- 27. Roads H.R.R. 28. Buildings H.R.R. 29. Railroads H.R.R. 30. Other cultural features H.R.R.

BOUNDARIES

- 31. Boundary lines H.R.R. 32. Public land lines H.R.R.

MISCELLANEOUS

- 33. Geographic names H.R.R. 34. Junctions H.R.R. 35. Legibility of the manuscript H.R.R. 36. Discrepancy overlay H.R.R. 37. Descriptive Report H.R.R. 38. Field inspection photographs H.R.R. 39. Forms H.R.R.

40. Harry R. Rudolph Reviewer Joseph Steinberg Supervisor, Review Section of Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

J. Honick sup Compiler F. Tarca sup Supervisor

43. Remarks:

Review Report
Topographic Survey T-9904
May 26, 1959

62. Comparison with Registered Topographic Surveys:

No. 783 - 1:10,000 - 1859 No. 4094 - 1:20,000 - 1924

T-9904 supersedes the above surveys for nautical charting purposes in common areas.

63. Comparison with Maps of Other Agencies:

St. Augustine, Fla. (USGS-1937) 1:62,500

The map is outdated.

St. Augustine, Fla. (AMS-1954) 1:50,000

The map was copied in 1954 from the USGS (1937) quadrangle.

64. Comparison with Contemporary Hydrographic Surveys:

Inapplicable

65. Comparison with Nautical Charts:

842	1:40,000	1952	revised 10/20/58
1243	1:80,000	1940	revised 12/15/58

Numerous differences exist in the MHW line and MLW line delineation and in the positions of aids to navigation.

The greater part of the Tolomato River shoreline consists of marsh or scattered grass in water with shell banks along the outer edge. Field inspection notes indicate the banks vary in height, defining the MHW line in some areas- the approximate MLW line in other areas. The shell bank was used for the MHW line on chart 842.

There are differences in the shoreline delineation on Conch Island, in the San Sebastain River and along the ocean north of the St. Augustine Inlet.

The MHW line on Conch Island was field inspected by the field editor in 1957. The approximate MLW line was delineated on the manuscript from office interpretation of the 1956 photographs.

The MHW line and the approximate MLW line along the ocean north of St. Augustine Inlet were located on the photographs by measurements to identifiable points by the 1952 field party.

Position of all aids to navigation shown on the manuscript were redetermined or verified during field edit in 1957. Numerous charted positions of aids to navigation differ from positions furnished by this survey. Two unnumbered (chart 842) Daybeacons and Daybeacons Nos. 20 and 22 in the San Sebastian River apparently were not in at the time of field edit.

The field editor reported Matanzas River Daybeacon No. 12 not in at the time of field edit.

Guano River Daybeacons 5 and 7 shown on chart 842 were reported destroyed in 1957 (form 567).

See heading 67 for bridge and cable data.

66. Adequacy of Results and Future Surveys:

This map complies with the National Standards of Map Accuracy and Bureau requirements.

67. Bridge and Cable Data:

- (1) Vilano Beach Bridge (vertical lift)
 - Horizontal clearance - 89.5 ft
 - Vertical clearance MHW
 - Closed 5.8 ft open 83.8 ft
- (2) Ovhd. cable south of Vilano Beach Bridge -104.6 ft MHW
- (3) Bridge approximately 3500 ft. SW of Valano Beach
 - Fixed Bridge - Horizontal clearance 31 ft
 - Vertical " 6.6 ft
 - Cable adjacent to bridge
 - (ovhd power) Clearance 38. ft MHW
- (4) Bridge of Lions
 - Double bascule
 - Horizontal clearance 76.7 ft.
 - Vertical clearance (closed) 24 ft. MHW
- (5) Cable over San Sebastian River SE of King St.
 - Bridge - 75 ft MHW

68 St. Augustine Light Station Boundary:

The boundary was delineated from the field inspected limits outlined with the aid of the lightkeeper on photograph 34934. The fact that the boundary is not in agreement with the resurvey plot (1923) of the reservation was called to the attention of the field editor. No positive evidence that the boundary was checked is available.

69 Land Lines:

With the exception of T75, R29E not enough recovery was accomplished to accurately position the land lines on T-9904.

Junction was made with grant lines as published on USGS South Point Vedra quad. (USC&GS -T-9311-PH 35A) to the north of this survey. The township line between range 29E and 30E was not joined. Land lines in the junction ^{area} are considered unreliable on both surveys.

The public land and grant lines within the city limits of St. Augustine were omitted to prevent confusion of detail.

Reviewed by:

S. G. Blankenbaker
S. G. Blankenbaker

Approved by:

L. C. Landy
Chief, Review & Drafting Sec.
Photogrammetry Division

Merritt Paulson
Chief, Nautical Charts ~~Sec.~~
~~Charts~~ Division

J. E. Vaughn 10/10/62
Chief, Photogrammetry Div.

Mal. Skellett
Chief, Coastal Surveys Div.
Operations

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC

NONFLUORESCENT AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED } STRIKE OUT ONE
~~NO BE CHARTED~~

Baltimore, Maryland 3 May 19 57

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

The positions given have been checked after listing by H. R. Rudolph

William F. Peane Chief of Party.

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE	LONGITUDE	DATUM							
MARINE LIGHT	St. Augustine Lighthouse, 1882 Ht = 162 (177 MSL)		29 53	81 17	N.A. 1927	19.449 521.9	T-9904 Tri	1882				ORLANDO (0-8)
AERO	St. Augustine Airport Beacon Ht = 91 (101) (Not in operation at time of field inspection) <i>not in operation May, 1957</i>		29 57	81 20	"	37.18 997	Rad. Plot	1952				"

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating* aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

35-

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED } STRIKE OUT ONE
~~TO BE DELETED~~

Baltimore, Maryland 3 May 19 57

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

The positions given have been checked after listing by Harry R. Rudolph

Daybeacons 20 & 21 are outside manuscript + limits

CHARTING NAME	DESCRIPTION	LATITUDE		LONGITUDE		DATUM	METHOD OF LOCATION AND SURVEY	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		°	'	°	'							
		D. M. METERS		D. P. METERS								
FLORIDA												
DAYBEACON 1	Guano River Daybeacon	29	59	81	19	M.A. 1927	T-8904	1952	X	X	X	842
3	"	29	59	81	19	"	"	1957	X	X	X	"
5	Destroyed	29	59	81	19	"	"	"	X	X	X	"
7	Destroyed	29	59	81	19	"	"	"	X	X	X	"
9	see form 567 dated 12/10/57	29	59	81	19	"	"	"	X	X	X	"
11	"	29	59	81	19	"	"	"	X	X	X	"
12	see form 567 dated 12/10/57	29	59	81	19	"	"	"	X	X	X	"
14	"	29	59	81	19	"	"	1957	X	X	X	"
16	"	29	59	81	19	"	"	1957	X	X	X	"
17	"	29	59	81	19	"	"	"	X	X	X	"
18	"	29	59	81	19	"	"	1957	X	X	X	"
20	"	30	00	81	19	"	"	"	X	X	X	"
21	"	30	00	81	19	"	"	"	X	X	X	"
LIGHT	St. Augustine Light (St. Augustine Lighthouse, 1882)	29	53	81	17	"	TRI	1882	X	X	X	842, 1243

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS/ON/LANDMARKS FOR CHARTS

TO BE CHARTED }
~~TA/PA/DA/ET/ER~~ } STRIKE OUT ONE

Baltimore, Maryland 3 May 1957

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

The positions given have been checked after listing by H. R. Rudolph

*Date of Field Edit 6/21/57
(positions verified)*

William F. Deane,

Chief of Party.

CHARTING NAME	DESCRIPTION	NEW NUMBER	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE		LONGITUDE							
			°	'	°	'						
135	TOLOMATO RIVER LT	41	29	59	81	20	N.A. 1927	1957 1956	X			842
136	" "	44	29	59	81	19	16.98 455	"	X			"
--	" "	45	29	59	81	19	58.54 1569	"	X			"
140	" DAYBEACON	46A	29	58	81	19	28.26 870	"	X			"
139	" "	47	29	58	81	19	49.68 1332	"	X			"
142	" LT.	48	29	57	81	19	44.31 1188	"	X			"
143	" "	49	29	57	81	19	44.46 1192	"	X			"
147	" "	51	29	57	81	18	16.45 401	"	X			"
150	" "	54	29	56	81	18	51.20 1373	"	X			"
--	" "	55	29	55	81	18	44.07 1182	"	X			"
--	" "	59	29	54	81	17	40.40 1244	"	X			"
158	MATANZAS RIVER LT	2A	29	54	81	17	22.89 614	"	X			"
162	" "	6	29	53	81	18	49.65 1332	"	X			"
							56.77	"	X			"
							1523	"	X			"
							25.72	"	X			"
							690	"	X			"

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating* aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
TO BE DELETED

STRIKE OUT ONE

Baltimore, Maryland 3 May 1957

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

The positions given have been checked after listing by H. R. Rudolph

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE		LONGITUDE							
				°	'	°	'						
FLORIDA	TANK	(Elevated) St. Augustine, F.E.C. RR Shops Water Tank, 1933 Ht = 121 (130)	29 55	46.013	81 19	56.352	N.A. 1927	T-9904 Tri	1933	X	X	X	842, 1243
	RADIO TOWER	(Radio Station WFOY) Skeleton Steel Ht = 200 (205)	29 54	26.86	81 18	49.24	"	Rad. Plot	1952	X	X	"	"
	STANDPIPE	St. Augustine Municipal Standpipe, 1933 Ht = 125 (132)	29 53	41.837	81 18	45.434	"	Tri	1933	X	X	"	"
	PRESB. CHURCH DOME	St. Augustine, Flagler Memorial Church Final, 1933 Ht = 131 (140)	29 53	36.738	81 19	01.331	"	"	"	"	X	X	"
	TANK	(Elevated) West Augustine, Municipal Water Tank, 1933 Ht = 127 (143)	29 53	27.883	81 19	50.606	"	"	"	"	X	X	"
	HOTEL	St. Augustine, Ponce de Leon Hotel, (West Cupola, 1933 Ht = 137 (145))	29 53	32.436	81 18	47.47	"	"	"	"	X	X	"
	TOWERS	St. Augustine, Ponce de Leon Hotel, East (Cupola, 1933 Ht = 137 (145))	29 53	32.887	81 18	53.220	"	"	"	"	X	X	"
	CUPOLA	St. Augustine, First National Bank, Dome, 1933 Ht = 134 (142)	29 53	33.547	81 18	44.457	"	"	"	"	X	X	"
	STACK	St. Augustine, Fla. Power & Light Co. Stack, 1933 Ht = 143 (150)	29 53	19.744	81 19	08.088	"	"	"	"	X	X	"
	LIGHT	St. Augustine L. H. 1882 Ht = 162 (175)	29 53	06.715	81 17	19.449	"	"	"	1882	X	X	"
	TANK	(Elevated) Naval Reserve Water Tank, 1933 Ht = 131 (140)	29 53	04.68	81 17	14.52	"	"	"	1933	X	X	"

William F. Deane
Chief of Party.

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR/NAVMARKS FOR CHARTS

~~TOP/BY/SMARTER~~
TO BE DELETED

STRIKE OUT ONE

St. Augustine, Florida August 19 52

I recommend that the following objects which have ~~State/hsf~~ been inspected from seaward to determine their value as landmarks be ~~listetd/hsf (deleted from)~~ the charts indicated.

The positions given have been checked after listing by Henry R. Spies

Paul Taylor

Chief of Party.

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
			LATITUDE		LONGITUDE								DATUM
			°	'	°	'							
FLORIDA DAYBEACON 2	Guano River Daybeacon <i>see Form 567 dated 12/10/57</i>		29	59.1	81	19.7							
DAYBEACON 19	" " "		30	00.1	81	19.5							

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DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~NO/BE/DELETED~~

STRIKE OUT ONE

Baltimore, Maryland

10 December, 19 57

I recommend that the following objects which have ~~Deleted from~~ been inspected from seaward to determine their value as landmarks be charted on ~~Deleted from~~ the charts indicated.

The positions given have been checked after listing by H. R. Rudolph

Date of field edit June 21, 1957

William F. Deane

Chief of Party.

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
				LATITUDE *		LONGITUDE *								DATUM
				° ' "	° ' "	D. M. METERS	D. P. METERS							
FLORIDA	DAYBN 33	San Sebastian River Daybeacon		29 53	09.97	81 19	14.53	N.A. 1927	1957	X			812	
	DAYBN 32	San Sebastian River Daybeacon		29 53	08.18	81 19	14.24	"	"	X			"	
	DAYBN 30	San Sebastian River Daybeacon		29 53	03.99	81 19	23.63	"	"	X			"	
	DAYBN 29	San Sebastian River Daybeacon		29 53	03.83	81 19	26.57	"	"	X			"	
	DAYBN 27	San Sebastian River Daybeacon		29 52	59.63	81 19	28.47	"	"	X			"	
	DAYBN 26	San Sebastian River Daybeacon		29 52	58.75	81 19	26.35	"	"	X			"	
	DAYBN 24	San Sebastian River Daybeacon		29 52	56.64	81 19	26.53	"	"	X			"	
	DAYBN 18	San Sebastian River Daybeacon		29 52	47.09	81 19	07.08	"	"	X			"	
	DAYBN 17	San Sebastian River Daybeacon		29 52	45.70	81 19	03.65	"	"	X			"	
	DAYBN 15	San Sebastian River Daybeacon		29 52	44.01	81 18	56.57	"	"	X			"	
	DAYBN 13	San Sebastian River Daybeacon		29 52	39.36	81 18	56.27	"	"	X			"	
	DAYBN 12	San Sebastian River Daybeacon		29 52	36.80	81 18	54.66	"	"	X			"	
	LT 11	Matanzas River Light		29 52	59.40	81 18	00.63	"	"	X			"	
	DAYBN 10	Matanzas River Daybeacon		29 53	01.95	81 18	12.41	"	"	X			"	

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* TABULATE SECONDS AND METERS

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE DELETED~~

STRIKE OUT ONE

Baltimore, Maryland 10 December, 1957

I recommend that the following objects which have ~~(1400/140)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(detail/float)~~ the charts indicated.

The positions given have been checked after listing by H. R. Rudolph

Date of Field edit June 1957

William F. Deane

Chief of Party.

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
				LATITUDE*		LONGITUDE*								DATUM
				°	'	°	'							
FLORIDA	DAYBN 5	Matanzas River Daybeacon		29	53	81	18	N.A. 1927	1957	X			842	
	DAYBN 4	Matanzas River Daybeacon		29	54	81	18	"	"	X			"	
	DAYBN 52	Tolomato River Daybeacon		29	56	81	18	"	"	X			"	
	DAYBN 50	Tolomato River Daybeacon		29	57	81	19	"	"	X			"	
	DAYBN 46	Tolomato River Daybeacon		29	58	81	19	"	"	X			"	
	DAYBN 44A	Tolomato River Daybeacon		29	59	81	19	"	"	X			"	
	DAYBN 42	Tolomato River Daybeacon		29	59	81	20	"	"	X			"	
	DAYBN 39	Tolomato River Daybeacon		30	00	81	20	"	"	X			"	
	LT. 36	Tolomato River Light		30	00	81	20	"	"	X			"	
	DAYBN 1	Guano River Daybeacon		29	59	81	19	"	"	X			"	
	DAYBN 2	Guano River Daybeacon		29	59	81	19	"	"	X			"	
	DAYBN 4	Guano River Daybeacon		29	59	81	19	"	"	X			"	
	DAYBN 6	Guano River Daybeacon		29	59	81	19	"	"	X			"	
DAYBN 9	Guano River Daybeacon		29	59	81	19	"	"	X			"		

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* TABULATE SECONDS AND METERS

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS ~~ON LANDMARKS~~ FOR CHARTS

~~TO BE CHARTED~~
~~NO BE DELETED~~

Baltimore, Maryland

STRIKE OUT ONE

10 December, 19 57

I recommend that the following objects which have ~~(blacked holes)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(blacked holes)~~ the charts indicated.

Date of field edit 6/21/57

The positions given have been checked after listing by H. R. Rudolph

William F. Deane, Chief of Party.

CHARTING NAME	STATE	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
				LATITUDE*		LONGITUDE*								DATUM
				°	'	°	'							
DAYBN 12	FLORIDA	Guano River Daybeacon		29	59	81	19	N.A. 1927	1957	X			842	
DAYBN 17	FLORIDA	Guano River Daybeacon		29	59	81	19	" "	" "	X			"	

+ 4 3 -

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* TABULATE SECONDS AND METERS

NAUTICAL CHARTS BRANCH

SURVEY NO. T-9904

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
5-27-57	842	L.A.M.G.	Before After Verification and Review <i>Examined - not applied at this time.</i>
7-6-60	842	R.E. EIKINS	Before After Verification and Review <i>Fully applied - topo revised.</i>
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.