

9912

Diag. Cht. No. 1244.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-82 Office No. T-9912

LOCALITY

State Florida

General locality Halifax River

Locality Port Orange

1949-56

CHIEF OF PARTY

P. Taylor, Chief of Field Party
E. H. Kirsch, Baltimore Photo. Office

LIBRARY & ARCHIVES

DATE December 17, 1959

B-1870-1 (1)

9912

DESCRIPTIVE REPORT - DATA RECORD

T -9912

Project No. (II): ~~24170-6082~~ ^{PH-82} Quadrangle Name (IV):

Field Office (II): Brunswick, Georgia

Chief of Party: Paul Taylor

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: E.M. Kirsch

Instructions dated (II) (III):
29 December, 1951
15 February, 1952 (Supplement 1)
28 February, 1952 (Supplement 1)
14 March, 1952 (Supplement 11)
28 April, 1952 (Supplement 111)
^{2 April, 1952}
^{9 Nov., 1956 (Field edit)}

Copy filed in Division of
Photogrammetry (IV)

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): Aug 27, 1956 Date reported to Nautical Chart Branch (IV): Sept 5, 1956

Applied to Chart No.

Date:

Date registered (IV): 10 Mar 1959

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): WILBER, 1934

Lat.: 29° 07' 35.520" (1093.6m)

Long.: 80° 57' 18.209" (492.3M)

Adjusted
~~Unadjusted~~

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.

DESCRIPTIVE REPORT - DATA RECORD

All contouring done
by
John R. Smith
Cartographic Survey Aid

29° 15.0'

29° 07.5'

81° 00.0' Areas contoured by various personnel 80° 52.5'

(Show name within area)

(II) (III)

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): **John R. Smith**

Date: **May, 1952**

Shoreline Inspection by: H.R. Spies *

Dec, 1952

Planetable contouring by (II): **John R. Smith**

Date: **15 Jan. to
March, 1952**

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

Date: **7 Dec. 1956**

Mean High Water Location (III) (State date and method of location): **1952, date of photography
and field inspection**

Photographs used in field edit taken 19 Oct. 1956

Projection and Grids ruled by (IV): **J. Allen**

Date: **10-20-52**

Projection and Grids checked by (IV): **H.R. Cravat**

Date: **10-22-52**

Control plotted by (III): **S.L. Hollis**

Date: **12-52**

Control checked by (III): **H.R. Rudolph**

Date: **12-52**

Radial Plot ~~on Stereoscopic~~

Date:

~~Control extension~~ by (III): **H.R. Rudolph**

1-9-53

Planimetry

Date:

Stereoscopic Instrument compilation (III):

Contours

Date:

Manuscript delineated by (III): **J.B. Phillips**

Date: **5-9-55**

Photogrammetric Office Review by (III): **H.R. Rudolph**

Date: **6-3-55**

Elevations on Manuscript
checked by (II) (III):

Date:

*** See Item 14 page 13 of this Report**

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): **U.S.C.&G.S. single lens and nine lens**

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
49-0-85 thru 90	4-6-49	1437	1:20,000	2.8' above MLW
49-0-125 " 128	4-14-49	0937	"	4.1' " "
49-0-134 " 136	"	0946	"	3.9' " "
51-0-4251 thru 4253	4-9-51	1307	"	1.2' " "
34931 and 34932	2-13-52	1152	"	2.2' " "
56-W-3755	10-19-56	1004	"	All land area
56-W-3778	10-19-56	1015	"	{ 2.2 above MLW (interior) 2.8 " " (outer coast)
56-W-3792 Thru 3796	10-19-56	1031	"	{ 2.1 above MLW (interior) 2.5 " " (outer coast)

Tide (III)

Reference Station: **Mayport, Florida**
Subordinate Station: **Daytona Beach**
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	4.5	5.3
0.9	4.1	4.9

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

Date: **June 1958**

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): **6**
Shoreline (More than 200 meters to opposite shore) (III): **22.7**
Shoreline (Less than 200 meters to opposite shore) (III): **3.7**
Control Leveling - Miles (II): **10.0**
Number of Triangulation Stations searched for (II): **25**
Number of BMs searched for (II): **None**
Number of Recoverable Photo Stations established (III): **3 Topo cards (524) Landmark Tanks**
Number of Temporary Photo Hydro Stations established (III):

Recovered: **11** Identified: **11 ***
Recovered: **0** Identified: **0**

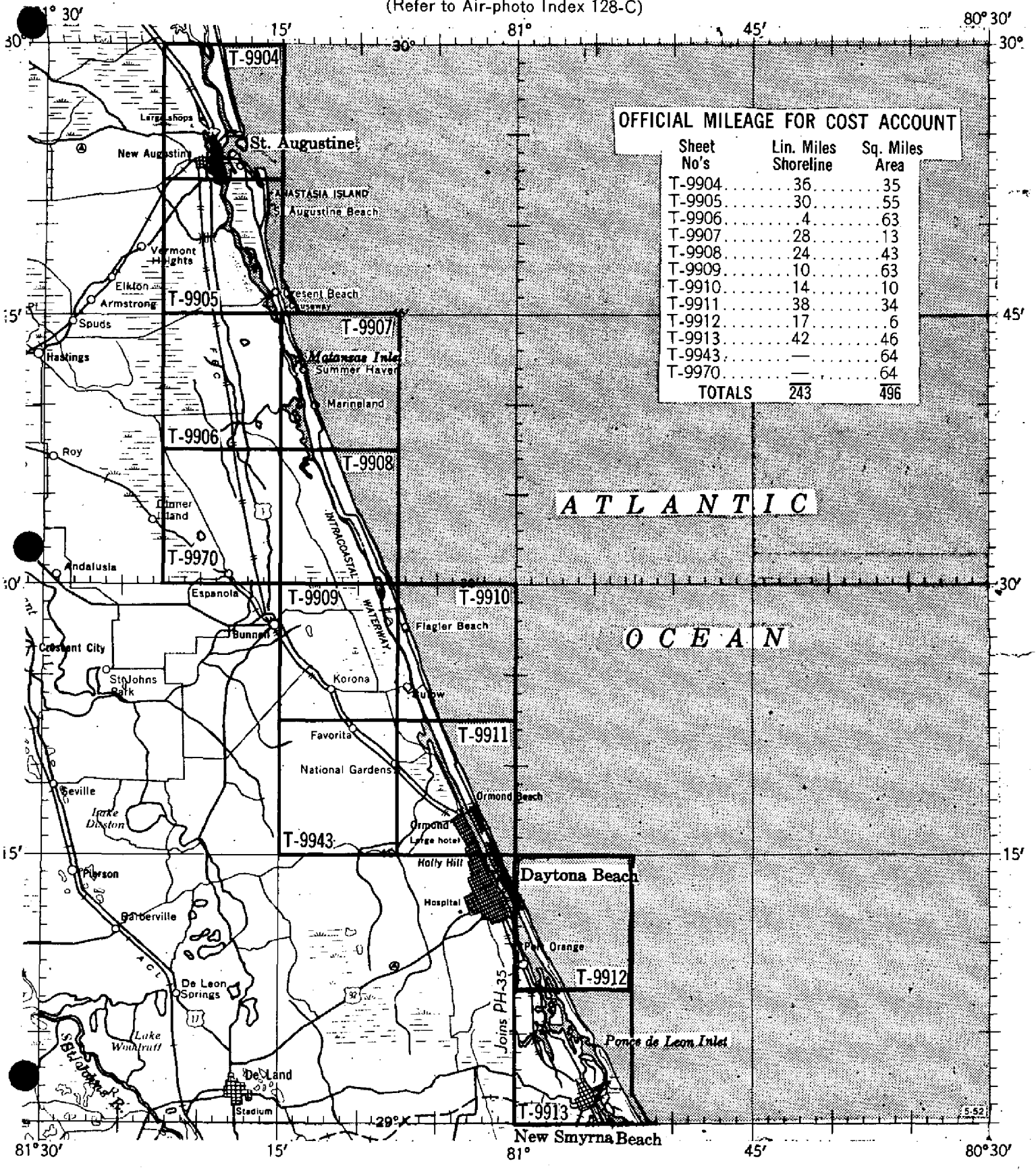
Number of Section and/or Grant Corners recovered and identified: **1**
Remarks:

*** One station within the limits of T-9912**

TOPOGRAPHIC MAPPING PROJECT PH - 82

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

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

SUMMARY TO ACCOMPANY TOPOGRAPHIC MAP T-9912

Topographic map T-9912 is one of twelve similar maps in project PH-82. The project covers the Florida coast from New Smyrna Beach Latitude $29^{\circ} 00'$ to St. Augustine Latitude $30^{\circ} 00'$. Map T-9912 is in the southern end of the project covering the city of Port Orange and a part of the city of South Daytona.

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

Map T-9912 was compiled at 1:20,000 scale. Single-lens photographs taken in 1949 and 1951 and nine-lens photographs taken in 1952 were used in field work. Unmounted nine-lens photographs were used in the radial plot. The map was field edited in December 1956. The map was corrected to the date of the new photography (1956 "W" camera 1:20,000 and 1:10,000 scale) taken in October 1956. With the addition hydrographic data the map will be published by the Geological Survey at 1:24,000 scale.

Items registered under T-9912 will include a Descriptive Report, a positive impression on "cronar" of the scribed copy of the manuscript and a lithographic print in colors of the Geological Survey quadrangle.

FIELD INSPECTION REPORT
 Quadrangles T-9912 and T-9913
 Project Ph-82(51)

Paul Taylor, Chief of Party

Quadrangles T-9912 and T-9913 are the southern two of twelve similar maps comprising Project Ph-82(51).

The accomplished 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>
John R. Smith, Cartographic Survey Aid	Vertical Control Horizontal Control	April, 1952 May, 1952
Henry R. Spies, Cartographic Survey Aid	Shoreline Inspection Horizontal Control	June-July, 1952 August, 1952

2. AREAL FIELD INSPECTION

The quadrangles are located along the Atlantic Beach in the eastern part of Volusia County, Florida. The southern limits of the quadrangles is south of New Smyrna Beach and the northern limits is south of Daytona Beach. The coastline runs in a northwest-southeast direction, being very regular, except where it is broken by the Ponce De Leon Inlet.

The area is adequately served by U. S. Highway No. 1, various state highways and secondary roads, as well as the Intracoastal Waterway and the Florida East Coast Railway.

The New Smyrna Beach Municipal Airport lies within Quadrangle T-9913. This airport was used by the Armed Forces during World War "2", but has since been turned over to the town of New Smyrna Beach. It is used only by small aircraft.

There are several small towns within the area, of which New Smyrna Beach is the largest and most important. The beach section is thickly populated, being used along this portion as both a winter and summer resort. There are many tourist attractions along the highways and beaches.

There is very little industry carried on within the area. In the western part there are a few small sawmills, citrus groves and some cattle raising.

The quality of the nine-lens photographs was good in the interior, but was poor in places along the beach. The quality of the single-lens photographs (used for contouring) was poor. See heading No. 5 (Contours and Drainage) of this report.

The field inspection is believed to be adequate.

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 limits of Quadrangle T-9913 but were not established by the USC&GS are:

<u>Station</u>	<u>Agency</u>	<u>Order</u>
DA-216, 1937	Florida Geodetic Survey	Third
F-26, 1931	U. S. Engineers	"
F-33a	"	"
F-169	"	"
K-84, 1934	Florida Geodetic Survey	"
K-85, "	"	"
K-86, "	"	"
K-87, "	"	"
K-88, "	"	"
K-89, "	"	"
K-91, "	"	"
K-93, "	"	"
K-94, "	"	"
K-95, "	"	"
K-96, "	"	"
K-99, "	"	"
K-100, "	"	"

There were no stations recovered within the limits of Quadrangle T-9912 which were established by other agencies.

(d) The project instructions were complied with. Several additional stations, which fall outside of the project limits, were recovered and identified to control the radial plot. These stations are not listed in this report.

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

T-9912:

CABANA, 1934
 CHRISTIANCY'S HOUSE FLAG, 1906
 DOBBIN, 1874
 DUNE, 1934
 MCDANIEL, 1874
 MOLLISON, 1874
 PORT ORANGE, HOTEL CHIMNEY AT S. END, 1906
 PORT ORANGE, HOTEL WHARF EAST END OF HOUSE, 1906
 SNOW, 1874
 SWATOW, 1874
 WEISER, 1874
 WEISER 2, 1906
 F-19 (USE), 1934

T-9913:

ALDER'S HOUSE CHIMNEY, 1874
 BOAT HOUSE, NORTH GABLE, 1906
 CORONADO, 1934
 DETWEILER'S HOUSE CUPOLA, 1906
 DUSS, 1874
 DUSS HOUSE (ON BEACH), 1906
 DUSS HOUSE (ON RIVER) CHIMNEY, 1906
 HILL, 1934
 HILL 2, 1940
 HOUSE CHIMNEY (HALIFAX RIVER), 1906
 HOUSE ON BEACH (A) CHIMNEY, 1906
 ILIAD, 1874
 NORTH BASE (PROPOSED), 1874
 OCEOLA, 1874
 ODYSSEY, 1874
 PALO ALTO, 1874
 PALO BLANCO, 1874
 PATROCLUS, 1874
 PONCE PARK HOTEL FLAG, 1906
 SAM'S HOTEL CUPOLA, 1906
 SOUTH BASE (PROPOSED), 1874
 SUTTON, 1874

DA-213 (Fla. Geod. Sur.), 1937
 DA-214 " "
 DA-215 " "
 DA-217 " "
 F-35(USE), 1931
 K-90 (Fla. Geod. Surv.) 1934
 K-92 " "
 K-97 " "
 K-98 " "

The following stations were reported lost. However, in each case a reference mark was recovered and identified for use in control of the radial plot.

CORONADO, 1934
DUNE, 1934
HILL, 1934

No attempt was made to locate station F-34 (USE) as there was no geographic position or description available.

4. VERTICAL CONTROL

(a) A search was made for all known vertical control. Bench marks in Quadrangle T-9913 are:

<u>Station</u>	<u>Agency</u>	<u>Order</u>
DA-216	Florida Geodetic Survey	Third
K-84	"	"
K-85	"	"
K-86	"	"
K-87	"	"
K-88	"	"
K-89	"	"
K-91	"	"
K-93	"	"
K-94	"	"
K-95	"	"
K-96	"	"
K-99	"	"
K-100	"	"
A-32	U.S. Coast & Geodetic Survey	First
B-32	"	"
C-32	"	"
E-32	"	"
K-15	"	"
Z-31	"	"
New Smyrna	"	"

There are no bench marks within the limits of Quadrangle T-9912.

(b) Forty-six miles of supplemental levels were run with a Wye Level, beginning and closing on bench marks of third order accuracy or higher. The greatest error of closure was 0.41 foot. This line was adjusted.

(c) The first and last fly-level points are 13-01 and 13-50. All Wye level points within Quadrangle T-9912 are erroneously shown with a prefix "13". The prefix "13" is carried in both the level book and on the photographs.

(d) Inapplicable.

5. CONTOURS AND DRAINAGE

The nine-lens photographs were not available when the contouring was started in these two quadrangles. Single-lens coverage was available and the contouring was accomplished by standard plane table methods on 1:20,000 scale single-lens photographs at an interval of five (5) feet.

The compiler's attention is invited to the delineation of swamp limits adjacent to the contours. Nine-lens photographic coverage of the area was received after the contouring had been completed. As this new photography is much clearer than the single-lens photography, some difficulty was encountered in the correlation of contour and swamp lines. The topographer has delineated in red on the single-lens photographs all swamp limits affecting the contours. This correlation was accomplished by stereoscope and acetate sketches. It is believed that the topographer has obtained the best compromise possible between the two sets of photographs and the actual ground conditions.

The natural drainage in the quadrangles is by Turnbull Creek in the southern portion, Spruce Creek in the western part, and the Halifax Canal in the northern section.

Elevations in this area range from sea-level to 57 feet. The highest of which is found in the western portion of Quadrangle T-9913.

6. WOODLAND COVER

The coverage was classified in accordance with the Topographic Manual. The tones in some areas between swamp and pine is very similar. These areas have been completely delineated by the field inspector. The areas where the tones were very clear and well defined have been sufficiently labeled.

7. SHORELINE AND ALONGSHORE FEATURES

The shoreline for this entire project was done by Mr. H. R. Spies and a special report will be submitted on this subject by him at a later date.

8. OFFSHORE FEATURES

There were no offshore features visited. For the discussion of the accuracy of the location of the mean low-water line, see heading No. 7 above.

9. LANDMARKS AND AIDS

There are no interior landmarks or aeronautical aids recommended. For the nautical landmarks and aids, see special report which will be submitted by Mr. H. R. Spies at a later date. *See item 37 of the Compilation Report.*

10. BOUNDARIES, MONUMENTS AND LINES

This will be the subject of a special report, which will be submitted at a later date.

* *One point on line identified for use on T-9912*

* Eleven section corners or grant corners were identified on the photographs. These corners were located by plane table and photo points. Forms M-2226-12 (Identification Card) are submitted for those corners, which were identified from photo points.

11. OTHER CONTROL

There were no recoverable topographic stations or photo-hydro control established.

12. OTHER INTERIOR FEATURES

All roads and buildings have been classified in accordance with the Topographic Manual. A blueprint copy of the Florida East Coast Railway Yards at New Smyrna Beach is submitted with the quadrangle data.

A slight change was made in the urban limits of New Smyrna Beach from those furnished by the Washington Office. This was done on authority of the Chief of Party and was due to the increase in density of the buildings.

There were no cables over navigable waters within these quadrangles. A copy of the letter to the District Engineer on bridge discrepancies is included within both the Shoreline and Coast Pilot Reports.

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.

Copies of the SHORELINE INSPECTION REPORT are included with the PROJECT COMPLETION REPORT & The DESCRIPTIVE REPORT FOR T-9911

18 August 1952

Submitted by:

John R. Smith

John R. Smith,
Cartographic Survey Aid

5 September 1952

Approved by:

Paul Taylor

Paul Taylor
Lt. Comdr., USC&GS
Chief of Party

PHOTOGRAMMETRIC PLOT REPORT
Ph-82(51)
Surveys Nos. T-9912 and T-9913

21. AREA COVERED

This radial plot covers the area of Surveys T-9912 and T-9913. They are topographic surveys along the east coast of Florida, from New Smyrna Beach to Daytona Beach.

22. METHOD - RADIAL PLOT

Map Manuscripts

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

All control stations and substitute stations were plotted using the beam compass and meter bar method.

A sketch showing the layout of surveys, distribution of control and photograph centers and a list of control stations are attached to this report.

Photographs

Unmounted photographs taken with the nine-lens camera at a scale of approximately 1:20,000 were used in this radial plot. Twelve photographs were used numbered as follows:

34930 thru 34936
34939 thru 34943

Templets

Vinylite templets were made from all photographs using a master templet to correct errors due to paper distortion and chamber displacements.

Closure and Adjustment to Control

Vinylite sheets with 10,000 foot grids were used as base sheets. All identified control was transferred to the base sheets by matching common grid lines.

The radial plot was started with the flight to the east followed by the flight to the west. Only one area was weak due to inability to use all the control. The plot was bridged over the area by disregarding substitute station McELROY-BELLEVIEW WATER TANK, 1934 which was either identified incorrectly or the WATER TANK has been moved. The position of the substitute station for DUNE, 1934, which falls in the same area could not be computed.

RM 1111

23. ADEQUACY OF CONTROL

There is adequate control for a satisfactory radial plot.

The following stations could not be used in the radial plot.

* Sub pt McELROY-BELLEVIEW WATER TANK 1934. The radially plotted position falls 45.3 mm northwest of the computed position. Since the distance between the computed position and the radially plotted position was so great no investigation was made except to examine the photographs to see if there might be a water tank visible in the vicinity of the plotted position of the station. No image was visible. There is a water tank near the identified image point. This tank is probably in a new position. ** Sub Pt. DUNE, R.M. No. 1, 1934. The Sun Observation data necessary to compute the position of this sub-station was not available. However, after completion of the radial plot the position of DUNE RM No. 1, 1934^{was} plotted on the map manuscript. The distance between DUNE RM. No. 1 1934, and the radially plotted position of the sub-point was measured and found to be 0.78 mm. (15.7 meter ground measurement) which agrees with the distance as shown on Form M-2226-12. The radially plotted position of the sub-station is S.S.E. of DUNE R.M. No. 1 on both the map manuscript and the sketch as shown on Form M-2226-12.

24. SUPPLEMENTAL DATA

A few detail points were transferred to the base sheets from the map manuscript for survey No. T-9161, Project Ph-30(48) to the south and from ozalid copies of Surveys Nos. T-9100 and T-9101, Project Ph-35(48) to the west.

25. PHOTOGRAPHY

The photographic coverage and definition of the photographs is good.

Respectfully submitted
9 January 1953

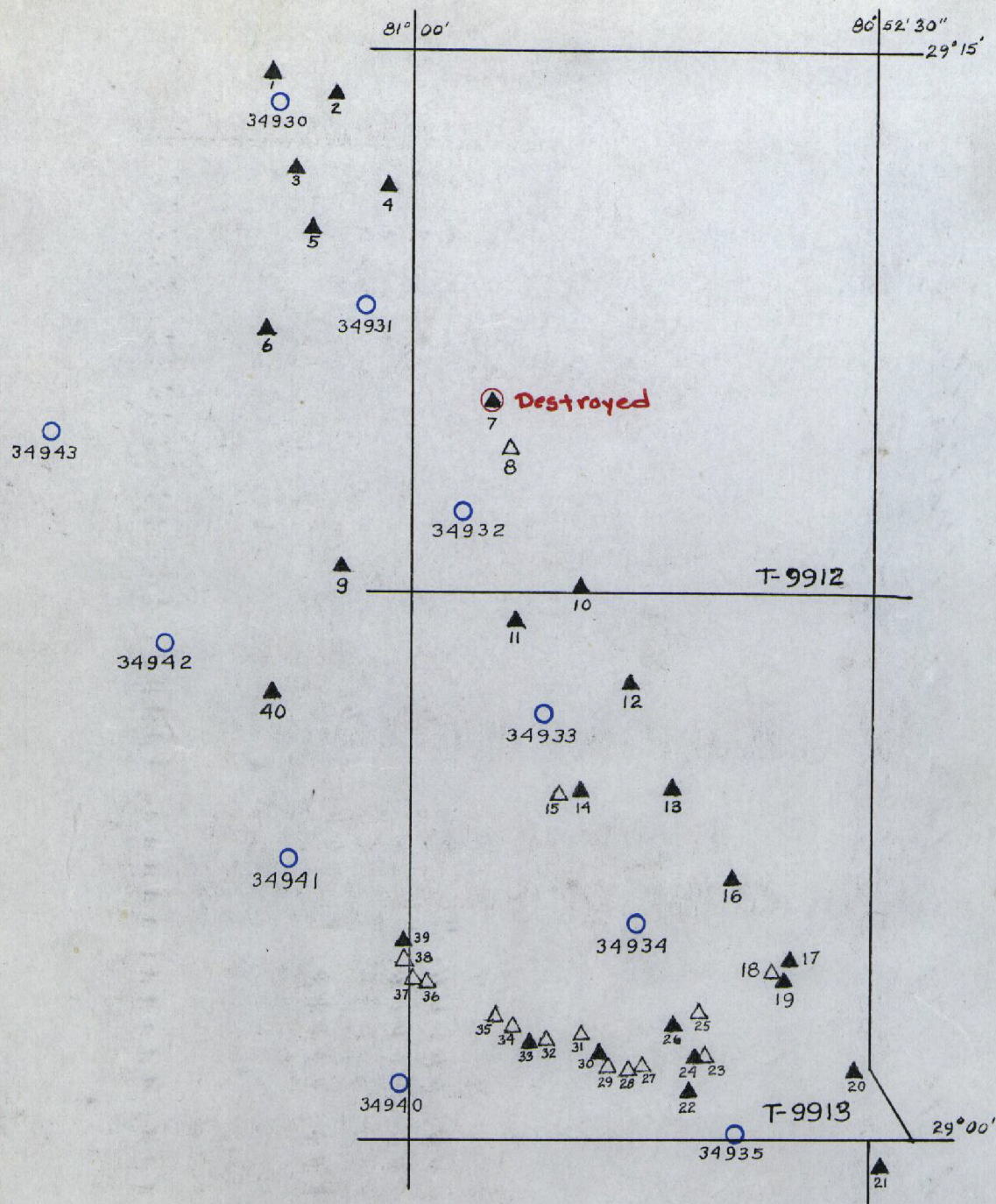
Harry R. Rudolph
Harry R. Rudolph
Carto. Photo. Aid

* McELROY BELLVIEW WATERTANK - Destroyed - Refer to item .52 of the Field Edit Report.

** DUNE, RM 1, 1934 removed from manuscript.

LIST OF HORIZONTAL CONTROL STATIONS
Ph-82(51)

No.	Name of Station	Identification
1.	HOLLYHILL TANK, 1934	Direct
2.	SEABREEZE WATERWORKS TANK, CENTER 1934	Direct
3.	T-4 (Fla. Geod. S.), 1934	Sub Pt.
4.	REVILO, 1934	Sub. Pt.
5.	DAYTONA TANK, 1934	Sub Pt.
6.	K 9 (Fla. Geod. S.) 1934	Sub Pt.
7.	MCELROY-BELLEVIEW WATER TANK, 1934 <i>destroyed</i>	Sub Pt.(not held in plot
8.	DUNE, 1934	Sub Pt.(Pos. not avail.)
9.	OZONE, 1934	Sub Pt.
10.	WILBER, 1934	Sub Pt.
11.	SUTTON, 2, 1934	Sub Pt.
12.	ROSE, 1934	Sub Pt.
13.	PONCE DE LEON INLET LIGHT HOUSE, CENTER 1934	Direct
14.	ODYSSEY 2, 1906	Sub Pt.
15.	F 26-(USED), 1934	None
16.	F 33-A (USED), 1934	Sub Pt.
17.	CORONADO, 1934	Sub Pt.
18.	DA 216 (Fla. Geod. S.) 1937	None
19.	CORONADO BEACH SILVER WATER TANK FINIAL, 1934	Direct
20.	HILL, 1934	Sub Pt.
21.	PALO NEGRO, 1874	Sub Pt.
22.	NEW SMYRNA, BLACK WATER TANK, FINIAL 1934	Direct
23.	NEW SMYRNA, 1934	None
24.	NEW SMYRNA MUNICIPAL WATER TANK, CENTER, 1934	Direct
25.	K 100 (Fla. Geod. S.) 1934	None
26.	K 99 (Fla. Geod. S.) 1934	Sub Pt.
27.	K 96 (Fla. Geod. S.) 1934	None
28.	K 95 (Fla. Geod. S.) 1934	None
29.	K 94 (Fla. Geod. S.) 1934	None
30.	K 93 (Fla. Geod. S.) 1934	Sub Pt.
31.	K 91 (Fla. Geod. S.) 1934	None
32.	K 89 (Fla. Geod. S.) 1934	None
33.	K 88 (Fla. Geod. S.) 1934	Sub Pt.
34.	K 87 (Fla. Geod. S.) 1934	None
35.	K 86 (Fla. Geod. S.) 1934	None
36.	K 85 (Fla. Geod. S.) 1934	None
37.	K 84 (Fla. Geod. S.) 1934	None
38.	K 83 (Fla. Geod. S.) 1934	None
39.	SMYRNA, 1934	Sub Pt.
40.	SPRUCE, 1934	Sub Pt.



34939
LAYOUT SKETCH
 Ph 82 (51) 34936

Surveys Nos. T-9912 and T-9913

- OFFICE PHOTOGRAPHS
- ▲ CONTROL STATION Identified
- △ CONTROL STATION Not identified
- ⊗ CONTROL STATION Not held in plot

MAP T.....9912..... PROJECT NO. 24170 (6082) SCALE OF MAP 1:20,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET. OR PROJECTION LINE IN METERS	DATUM CORRECTION	N.A. 1927 - DATUM		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
			FORWARD	(BACK)			FROM GRID OR PROJECTION LINE IN METERS	(BACK)	
WILBER, 1934	G-3038 pg 123	N.A. 1927	29 07 80 57	35.520 18.209			1093.6 492.3	(753.7) (1129.8)	
MC ELROY - BELLEVUE WATER TANK, 1934	G-3040 pg 175	"	29 10 80 58	05.183 47.839	Destroyed		159.6 1292.8	(1687.6) (328.6)	
SUB PT WILBER, 1934			29 07 80 57				1058.0 507.3	(789.3) (1114.8)	
SUB PT MC ELROY - BELLEVUE WATER TANK, 1934			29 10 80 58				171.8 1323.0	(1675.4) (298.4)	
DUNE RM 1, 1934		"	29 09 80 58				944.9 675.7	(902.3) (945.8)	
REVILLO, 1934	G-3038 pg 123	"	29 13 81 00	01.774 18.305	w. of T-9912		54.6 494.4	(1792.7) (1126.2)	
DAYPORT, 1934	"	"	29 10 81 04	22.835 09.162	"		703.0 247.6	(1144.2) (1373.7)	
SEABREEZE, 1934	G-3040 pg 144	"	29 14 81 01	21.319 20.197	"		656.4 545.4	(1190.9) (1074.8)	
SEABREEZE WATERWORKS TANK, CENTER, 1934	"	"	29 14 81 01	21.445 20.170	"		660.2 544.7	(1187.0) (1075.6)	
OZONE, 1934	"	"	29 07 81 01	51.714 24.630	"		1592.1 665.8	(255.1) (956.2)	
HOLLY HILL TANK, 1934	G-3040 pg 175	"	29 14 81 02	43.540 20.035	"		1340.5 541.0	(506.8) (1079.1)	10 10 10
DAYTONA TANK, 1934	"	"	29 12 81 01	26.726 28.234	"		822.8 762.7	(1024.4) (858.1)	10 10

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T.....9912..... PROJECT NO...2170...(6082)..... SCALE OF MAP 1:20,000..... SCALE FACTOR.....

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR μ -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)
K-9 (FLA. GEODLS) 1934	Dese. Volusia City Fla. PG 5		1,763,845.0			3845.0 7219.7	(6155.0) (2780.3)		1172.0 2200.6	(1876.0) (847.4)	
T-4 (FLA. GEOD. S) 1934	PG 11		1,777,065.0			7065.0 9728.9	(2935.0) (0271.1)	11	2153.4 2965.4	(894.6) (82.6)	
SUB PT REVILLO, 1934			29 13 81 00						60.5 524.2	(1786.8) (1096.4)	
SUB PT DAYPORT, 1934			29 10 81 04						687.0 255.4	(1160.2) (1365.9)	
SUB PT OZONE, 1934			29 07 81 01						1594.0 634.2	(253.2) (987.8)	
SUB PT DATONA TANK, 1934			29 12 81 01						881.3 778.5	(965.9) (842.3)	
SUB PT K-9, 1934 (FGS)			1,763,750.7 487,080.1			3750.7 7080.1	(6249.3) (2919.9)		1143.2 2158.0	(1904.8) (890.0)	
SUB PT T-4, 1934 (FGS)			1,777,031.6 489,728.3			7031.6 9728.3	(2968.4) (0271.7)		2143.2 2965.2	(904.8) (82.8)	

COMPILATION REPORT
T-9912

Refer also to the Shoreline Inspection Report for the entire project.
(A copy has been made part of the descriptive report for survey T-9911).

31. DELINEATION-

This manuscript was delineated by graphic methods, then transferred to a vinylite sheet by the scribing process. Field edit data was applied to the original drafted (ink) copy of the manuscript - this will be utilized in scribing (USGS and USC&GS)

32. CONTROL-

The identification, density and placement of control is adequate.

33. SUPPLEMENTAL DATA-

Final name sheet, Port Orange, Fla. Quadrangle was used for geographic names.

Plat T-15 S, R 33 E pages 24, 25, 26 & 27 also

Plat T-16 S, R 33 E pages 28, 29, & 31 were used for township lines and limits of private grants. Land line "net" & Grants (refer to the Review Report & Field Edit Report Item 52.) were positioned using plats, recovered corners on adjoining manuscripts, Port Orange Corp Limits, and additional data furnished by the field editor.
Plat of Daytona Beach, South Daytona and Port Orange, Florida (Exhibit E) was used for corporate limits.

34. CONTOURS AND DRAINAGE-

Contours along the junction with T-9100 (Ph-35) were revised in the photogrammetric office to make a proper junction between the two sheets.

35. SHORELINE AND ALONGSHORE DETAILS-

Shoreline inspection was adequate.

Channel lines are based on office interpretation of the photographs.

" " deleted. All MLW line shown on the manuscript - from field edit inspection.

36. OFFSHORE DETAILS-

No comment.

37. LANDMARKS AND AIDS-

Form 567 is being submitted for three landmarks. A form 567 is submitted for six (6) non-floating aids located by theodolite cuts and from directions and distances from photo pts. which were located on the photographs by the field party. Fourteen (14) 567 forms submitted. All aids positioned from field edit data.

Form 567 for the deletion of MC ELROY - BELLEVIEW WATER TANK, 1934 is being submitted because no tank is visible on the photographs at that position. Tank was destroyed - See item 52. of the field edit report

38. CONTROL FOR FUTURE SURVEYS-

Forms 524 were submitted by the field party for two landmark tanks.
 Form 524 was submitted by the Wash. office Review Section for one (1) Landmark Tank.

39. JUNCTIONS-

Junction has been made with survey T-9913 to the south. This survey T-9912 does not join at the HWL on the east shore of Halifax River with T-9100 (1952)(Ph 35) to the west.

To the north and east is an all water area.

40. HORIZONTAL AND VERTICAL ACCURACY-

No comment.

41. Public land lines- The Patrick Dean Grant was shifted NW of the position shown on the plats furnished by the Washington Office to agree with the point on line furnished by the field edit party for Survey T-9100- project Ph 35. Referred to in the final review report. Land lines & grants are also referred to in item 33. of this report and in item 52. of the Field Edit Report

46. COMPARISON WITH EXISTING MAPS-

This manuscript has been compared with Bureau survey T-4553 (1930) scale 1:20,000. Comparison was also made with AMS Port Orange Quad., scale 1:50,000, edition of 1947.

47. COMPARISON WITH NAUTICAL CHARTS-

This manuscript has been compared with nautical chart no. 843, scale 1:40,000 published 1952 corrected to 1-16-53.

Items to be applied to Nautical Charts immediately: None

Items to be carried forward: None.

Respectfully submitted
 9 May 1955

Jacqueline B. Phillips
 Jacqueline B. Phillips
 Carto. Photo. Aid

Approved and Forwarded

E. H. Kirsch
 E. H. Kirsch, Capt. U.S.C. & G.S.
 Baltimore District Office
 Officer In Charge

T-9912.

Geographic Names.

Allandale
Atlantic Ocean

Daytona Beach

Florida
Florida ALA
Florida East Coast

Halifax Canal
Halifax Estates
Halifax River

Intracoastal Waterway

Pelican Island
Port Orange

Reed Canal

South Daytona
U.S. I
Wilbur Bay
Wilbur-by-the-Sea
Woodland Cemetery

Names approved 9-10-56.
L. Heck

PHOTOGRAMMETRIC OFFICE REVIEW

T-9912

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

CONTROL STATIONS

6a. Classification label

- 5. Horizontal control stations of third-order or higher accuracy
- 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) None
- 7. Photo hydro stations None
- 8. Bench marks None
- 9. Plotting of ^{Theod. LS} ~~existent~~ fixes
- 10. Photogrammetric plot report
- 11. Detail points

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

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

CULTURAL FEATURES

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

BOUNDARIES

- 31. Boundary lines
- 32. Public land lines

MISCELLANEOUS

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

40. H. R. Rudolph (spec'd) Joseph Steinberg
 Reviewer Supervisor, Review Section or 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.

Horrick Tarza
 Compiler Supervisor

43. Remarks:

FIELD EDIT REPORT
 Project 24170(6082)
 Quadrangle T-9912

The field edit of this quadrangle was accomplished during the months of November and December 1956.

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-mk1. 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.

One 1:20,000 scale print is submitted as a field edit sheet. One additional print, which covers a portion of the sheet, is submitted with the information on fixed aids to navigation.

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

56-W-3755	56*W-4025	49-0-126	34932
3792	4026	136(1)	
3793	4028	136(2)	
3794	4031		
3795			
3796			

52. ADEQUACY OF COMPILATION

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

This area has changed considerably since the original field inspection. Many houses and streets have been constructed along the beach section and within the city of Port Orange. A number of shoreline changes were noted along the east shore of the Halifax River in the section north of the Port Orange bridge.

All fixed aids to navigation were checked during this field edit. Halifax River Lights 45, 47, 52 and 59 were identified on the 1:10,000 scale contact prints. The daybeacons were not visible on these prints, therefore, they were located by graphic methods on a section of a print of the quadrangle. Halifax River Light 45 is believed to be correct as shown. The position of Halifax River Daybeacon 57 was verified. Daybeacons 46, 48, 50, 51, 53, 55, 56, 58 and 60 were located by the field editor. Form 567 is submitted for all aids within the limits of this sheet, with the exception of daybeacon 57.

One triangulation station (McELRAY BELLEVIEW WATER TANK, 1934) was found to be destroyed. Form 526 is submitted. A water tank, which was located by photogrammetric methods and erroneously shown as the 1934 triangulation station, is recommended as a landmark. Form 567 is submitted. *524 form submitted by the Washington Office Review section.*

The low area, running through the city of Port Orange, is neither swamp or marsh. It is well drained by a small ditch. It is not a depression contour.

The ditch, junctioning between T-9100 and this quadrangle in the extreme southwest portion of the sheet, runs along the south edge of the new road and drains into the Halifax Canal. It does not drain the ponds near the sheet junctions.

Many high and low-water features were questioned on the discrepancy print in the vicinity of the bridge at Port Orange. For the most part, these areas consist of oyster shells which only bare at low-water. There are, however, a few small areas which photographed very white on the nine-lens photographs which bare 1 foot at mean high-water. The groin-like features questioned are all shell which bare at low-water. There are few mud areas in this section.

There were no section or land grant corners recovered. A map, compiled from recorded maps in the public records of Volusia County, dated November 1945 by C.E. Money Penny registered Engineer and Surveyor, shows the approximate position of the section lines along the beach section. A copy of the map could not be obtained, but the information has been shown on the field edit sheet. This information should only be considered as approximate and is submitted as a guide in determining the positions of the section lines.

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.

The five-foot contour, along the beach section, should be revised slightly to fit the new bulkhead changes. The roads, for the most part, follow the natural terrain. Therefore, there are few cuts and fills.

54. RECOMMENDATIONS

None

55. EXAMINATION OF PROOF COPY

Mr. L. Michaels, businessman and property owner of Port Orange, has agreed to examine a proof copy of this quadrangle for possible errors. Mr. Michaels address is: Port Orange, Florida.

All geographic names were verified as shown on the advance manuscript.

7 December 1956

Submitted by:

Joseph K. Wilson
Joseph K. Wilson
Cartographer

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

REVIEW REPORT
TOPOGRAPHIC SURVEY T-9912
June 1958

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

4132	1:20,000	1925	4553	1:20,000	1928
4133	1:20,000	1925			

T-9912 supersedes these surveys for nautical charting in common areas.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Port Orange, Florida, 1:50,000 1947, map is outdated.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

None

65. COMPARISON WITH NAUTICAL CHARTS

843	1:40,000	1952 revised	11/25/57
1244	1:80,000	1930 revised	4/14/58

Many cultural changes occurred during the period between field inspection and field edit. Many streets and buildings were constructed. Shoreline changes occurred on the west side of the barrier beach. The new positions of aids to navigation furnished by this survey have not been carried forward to chart 843.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

67. LAND GRANT

The Patrick Dean Grant as positioned on T-9912 is not in the same relative position with section and grant lines that are indicated on Land Management plats. The grant was shifted to affect a good junction with survey T-9100 (USGS Daytona Beach Quad.). Sufficient data to resolve the discrepancy is not available.

- 2 -

68. SECTION LINES

The barrier beach section lines shown on the manuscript were positioned (primarily) from approximate data furnished by the field editor. The source is noted under item 52 of the Field Edit Report.

Reviewed by

S. H. Blankinbake

Approved by

L. C. Land
Chief, Review and Drafting Section
Photogrammetry Division

L. W. Swanson
Chief, Photogrammetry Division

12 NOV 59 *[initials]*

Max B. Little
Chief, Nautical Charts
Branch

[Signature]
Chief, Coastal Surveys
Division

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

~~NONNAVIGATIONAL~~ LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE DELETED~~

STRIKE OUT ONE

Baltimore, Maryland

August

19 56

I recommend that the following objects which have ~~(has been)~~ 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 E.R. Rudolph

E.H. Kirsch 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
				° / ' "	D. M. METERS	° / ' "	D. P. METERS							
TANK	FLORIDA	(Elevated) (Port Orange, East Water Tank) Steel ht = 133(155)ft.	29 09	45.3 1396	80 58	37.7 1018	1927 M.A.	Photo. P T-9912	1952	x x	x x	843 12/4		
TANK		(Elevated) (Port Orange Water Tank) Steel ht = 120(128)ft.	29 08	16.6 512	80 59	44.7 1128	"	"	"	x x	x x	843 12/4		
TANK *		(Elevated) Steel ht = 80(95)ft.	29 10	31.1 958	80 59	3.7 100	"	Rad. plbt T-9912	1952	x x	x x	843 12/4		
		* See form 567 dated 7 Dec. 1956												

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

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NON-NAVIGABLE LANDMARKS FOR CHARTS

**TO BE CHARTED
TO BE DELETED**

STRIKE OUT ONE

Bunnell, Florida 7 December, 1956

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

The positions given have been checked after listing by _____

STATE		DESCRIPTION		SIGNAL NAME	POSITION			METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	CHARTS AFFECTED		
CHARTING NAME	Florida	D.M. METERS	LONGITUDE*		LATITUDE*	D.P. METERS	D.A. DATUM			HARBOR CHART	INSHORE CHART	OFFSHORE CHART
				TANK				(ELEVATED) (South Daytona Beach Water Tank) Steel, ht 85 (106) ft.	28 10			

ITA E. Rubottom 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

TO BE CHARTED
~~TO BE REJECTED~~

STRIKE OUT ONE

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

Baltimore, Maryland

2 October 1957

I recommend that the following objects which have ~~(4444/444)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(4444/444)~~ the charts indicated.

The positions given have been checked after listing by H. B. Randolph

CHARTING NAME	STATE	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE*		LONGITUDE*						
				D. M.	SECONDS	D. P.	METERS					
HALLIFAX RIVER LIGHT (45)	FLORIDA			29 11	03.02	76 59	55.52	N.A. 7106	1956	X		813
HALLIFAX RIVER DAYBEACON (46)				29 11	03.02	76 59	148.60	"	"	X		"
HALLIFAX RIVER LIGHT (47)				29 10	10.57	76 59	37.75	"	"	X		"
HALLIFAX RIVER DAYBEACON (48)				29 10	12.49	76 59	1020	"	"	X		"
HALLIFAX RIVER DAYBEACON (49)				29 10	19.69	76 59	39.49	"	"	X		"
HALLIFAX RIVER DAYBEACON (50)				29 10	18.97	76 59	1067	"	"	X		"
HALLIFAX RIVER DAYBEACON (51)				29 10	02.66	76 59	25.80	"	"	X		"
HALLIFAX RIVER DAYBEACON (52)				29 10	02.66	76 59	7.0	"	"	X		"
HALLIFAX RIVER DAYBEACON (53)				29 09	15.41	76 59	03.00	"	"	X		"
HALLIFAX RIVER DAYBEACON (54)				29 09	13.55	76 59	81	"	"	X		"
HALLIFAX RIVER DAYBEACON (55)				29 09	27.61	76 59	01.55	"	"	X		"
HALLIFAX RIVER DAYBEACON (56)				29 09	10.30	76 58	42	"	"	X		"
HALLIFAX RIVER DAYBEACON (57)				29 08	31.57	76 58	50.77	"	"	X		"
HALLIFAX RIVER DAYBEACON (58)				29 08	12.08	76 58	1372	"	"	X		"
HALLIFAX RIVER LIGHT (59)				29 08	08.45	76 58	13.10	"	"	X		"
HALLIFAX RIVER DAYBEACON (60)				29 07	260	76 58	1173	"	"	X		"
					144.86		18.05	"	"	X		"
					1381		468	"	"	X		"
					52		09.62	"	"	X		"
					52		260	"	"	X		"
					04.51		04.51	"	"	X		"
					122		122	"	"	X		"
					03.92		03.92	"	"	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.

* TABULATE SECONDS AND METERS

Some 02 L. 742 (57)

