

6080

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

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: South Carolina

DESCRIPTIVE REPORT

Topographic } Sheet No. A 6080
~~Hydrographic~~

LOCALITY

Charleston, S. C.

Cummings Pt. to Mt. Pleasant

193 4

CHIEF OF PARTY

Lt. Benjamin H. Rigg

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

AUG 14 1984

TOPOGRAPHIC TITLE SHEET

Acc. No.

REG. NO. 6080

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

Field No. A

REGISTER NO. 6080

State South Carolina

General locality Charleston, S. C.

Locality Cummings Pt. to Mt. Pleasant

Scale 1-10,000 Date of survey June, 19 34

Vessel Party No. 19

Chief of party Lt. Benjamin H. Rigg

Surveyed by A. M. Rogers, Jr.

Inked by A. M. Rogers, Jr.

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated October 10, 19 33

Remarks: Report of supplementary survey, under direction
of Lt. Benjamin H. Rigg. Original survey under direction
of Lt. M. O. Witherbee.

DESCRIPTIVE REPORT TO ACCOMPANY

TOPOGRAPHIC SHEET "A".

Instructions dated Nov. 2, 1933.

a The primary purpose of this sheet was to locate hydrographic signals, landmarks, aids to navigation and some shore line.

The section of Atlantic coast line located on this sheet was off sand with low dunes from ten to thirty meters in from high water line.

Located about 2500 meters of shore line of a newly dredged channel, a part of inland waterway route improvement north of Sullivan's Island.

This channel was dredged through a grass covered mud marsh, the topographic location was made necessary by dredging operations subsequent to the completion of the aerial photography.

b Landmarks,

- Fort Moultrie Tank
- Cupola (Coast Guard Station)
- ~~East Flag Tower (adjacent to C.G. Sta.)~~
- ~~West " " " " " "~~
- Flagpole (east of C.G. Sta.)
- Steel Tower
- ~~Port Sumter Flagpole~~
- Quarantine Tank
- Catholic Church Tower, (Sullivan's Island.)

c The control used on this sheet was of second and third order triangulation.

d No traverses were run.

e The hydrographic signals, aids to navigation and landmarks were located by at least three cuts from triangulation stations.

All shore line location was rodded in after positioning table by three point fixes.

Direction of ranges was located by setting up on physical range line, positioning by a three point fix and cutting through range markers.

f No form lines.

g No revision work.

h No incomplete or unreliable work.

i No deviation from standard practice.

j No junction with adjacent work.

k No new names.

l Recoverable positions furnished on form # 524.

m Aerial photographs have been taken of this area.

n No changes in coast line.

o Marshes are of grass covered mud often covered at high tide.

Respectfully submitted,
Oscar Mulford.
Topographer.

Forwarded:

M.O. Witherbee
M.O. Witherbee
Chief of Party

Oscar Mulford

OUTLINE OF SUPPLEMENTARY REPORT FOR
ALUMINUM CONTROL SHEET A

1. INSTRUCTIONS.
2. PURPOSE OF SURVEY.
3. LIMITS OF SHEET.
4. CONTROL.
5. SURVEYING METHODS USED.
6. DESCRIPTION OF TERRITORY.
7. NEW NAMES.
8. LANDMARKS.
9. STATIONS PERMANENTLY MARKED.
10. FIELD INSPECTION.
11. AIDS TO NAVIGATION.

DESCRIPTIVE REPORT TO ACCOMPANY
ALUMINUM MOUNTED CONTROL SHEET

A

INSTRUCTIONS

The survey was carried out under original instructions dated October 10, 1933, also Director's letters MG 1990 (19), 26 AHH 293, and circular letter No. 30.

PURPOSE OF SURVEY

The purpose of this supplementary survey was to rod in additional shoreline as a check for photo compilation, to cut in additional landmarks, to locate and describe additional U.S.E.D. Stations, to locate additional topographic features such as docks, jetties, break-waters, and highways, and also to locate additional aids to navigation. This survey was also to definitely tie in U.S.E.D. points on the traverse for the newly dredged intracoastal route.

LIMITS OF SHEET

The sheet includes topography in and around the entrance to Charleston Harbor, from the mouth of Shem Creek at lat. $32^{\circ} 47.3'$ to a point on the shoreline south of Cummings Point at $32^{\circ} 43.5'$, and from the Quarantine Station at long. $79^{\circ} 54'$ to a point on the Sullivan's Island shoreline at $79^{\circ} 50.5'$.

CONTROL

Control was from triangulation stations listed below with the date of their execution:

MAIN SCHEME

Mt. Pleasant Tank, 1921
Jet, 1933
Kid, 1933
Ft. Moultrie Tank, 1910
Cummings, 1933
Quarantine Tank, 1933
U.S.E.D. Johnson, 1933
Ft. Sumter Battery R.M., 1919
Horse, 1933

INTERSECTION STATIONS

Fort Sumter Front Range, 1933
North Tower, Sumter, 1933
Ft. Sumter Flagpole, 1933
South Tower, Sumter, 1933
Sumter U.S.E.D., 1933
Ft. Sumter Rear Range, 1933.

SURVEY METHODS USED

The usual U.S. Coast and Geodetic Survey methods were used. All hydrographic signals, landmarks and aids to navigation were located as near as possible by cuts from triangulation stations. Where this method was impossible, cuts were taken from position obtained by a strong three point fix.

A traverse was run from station Jet, 1933 to the highway joining Mt. Pleasant and Sullivans Island, then down the highway to a point on the first curve where the traverse could be checked in by a 3 point fix. No adjustment was necessary.

All shoreline was rodded in from set-ups located by strong 3 point fixes except in the cases of the shoreline adjacent to triangulation stations Jet Horse, and Cummings. In those cases, setups were made on the stations.

In locating the azimuths of ranges, a 3 point fix was made near the range. Then rod readings were taken to a point on range. In each case the distance from the point on range to the Front Range was long enough to accurately determine the azimuth of the range.

DESCRIPTION OF TERRITORY

Everywhere on the sheet except in Cove Inlet, the shoreline is of a sandy nature with small dunes on it. Mt. Pleasant is high ground covered with oak trees. Along the new intracoastal route, the shoreline is a grass covered mud flat partially covered at high tide.

NEW NAMES

There are no new names.

LANDMARKS

The following landmarks are of importance:

Fort Moultrie Tank
Cupola (Coast Guard Station)
Steel Tower
Quarantine Tank
Catholic Church Tower.
~~Mt. Pleasant Tank. Mt. Pleasant Tank~~
~~Mt. Pleasant Rear Range~~
~~Mt. Pleasant Front Range~~
~~Ft. Sumter Front Range~~
~~Ft. Sumter Rear Range~~

Descriptions of landmarks located by topography are made on form 567 and 524 which accompany this sheet, except those cut in by triangulation.

STATIONS PERMANENTLY MARKED

Listed below are the permanently marked U.S.E.D. Stations and U.S. Bm.'s which were found and located on this sheet:

U.S.E.D. STATIONS

Cap 2

U.S. Bm.'s.

No. 60

No. 59

No. —

These stations and Bm.'s are described on form 524 which accompany this report.

U.S.E.D. traverse stations along the intracoastal route between Charleston and Georgetown are also located on this sheet. The stations located on the topographic sheet are noted on U.S.E.D. location sheet No. 8, dated January 12, 1934, by red circles. Location sheet No. 8 will accompany this report.

These stations are marked by wooden 4 x 4's driven into the mud. Due to the fact that they have no future value and were located in such

unsuitable ground, they were not permanently marked.

FIELD INSPECTION

The requirements stated on page 30 in "Notes on Compilation of Planimetric Line Maps" have been complied with as noted in the descriptive report accompanying sheet K. Seven and seven tenths miles of shoreline were rodded in and checked with the celluloid sheet.

AIDS TO NAVIGATION

Listed below are the aids to navigation with their D.M.'s and D.P.'s: These are also included on forms 567 and 524.

Located by topography

Name	Lat.	Long.
	° ' m.	° ' m.
Light No. 1-32 46	(121.3) 1727.0	79 53 (337.0) 1224.4
Mt. Pleasant	(963.3)	(1487.5)
Front Range 32 48	885.0	79 53 74.0
Mt. Pleasant	(131.)	(485.2)
Rear Range 32 47	(131.) 1731.✓	79 53 1076.5
Shem Creek	(----)	(1240)
Light 32 47	219	79 53 321.4
Shem Creek	(----)	(1229.3)
Front Range 32 47	596	79 53 332.1
Shem Creek	(---*)	(1233.3)
Rear Range 32 47	677	79 53 328.1
Light No. 4	(1776.2)	(1258.7)
32 46	84.1	79 52 303.3
Light No. 3	(1748.3)	(132.1)
32 46	100	79 51 1429.6
Cove Inlet	(1599.3)	(415.1)
Rear Range 32 46	249	79 51 1146.3
Cove Inlet	(1661.3)	(200)
Front Range 32 46	187	79 51 1361.4
	(184.1)	(538.5)
Beacon A 32 45	1664.2	79 51 1013.5
	(138)	(668)
Light 2-C 32 45	1710.3	79 51 894
	(395)	(970)
Beacon B 32 45	1153.3	79 51 592
	(1598.2)	(1419.5)
Beacon 32 46	250.1	79 51 1143.2
	(981)	(1048)
Light No. 2-32 46	867.3	79 50 513.7
Sullivans Is.	(901.1)	(719.2)
Beacon F. R. 32 45	947.2	79 51 843

Located by triangulation

Name	Lat		Long.	
	°	' m.	°	' m.
Ft. Sumter		(273.1)		(289.5)
Front Range	32 44	1575.1	79 51	1272.5
Ft. Sumter		(1522.4)		(785.5)
Rear Range	32 45	325.9	79 52	776.5
Ft. Moultrie		(904.8)		(191.7)
Tank R. R.	32 45	943.5	79 50	1370.3

Respectfully submitted by,

Augustus M. Rogers Jr.
Augustus M. Rogers, Jr.

Forwarded by,

Benjamin H. Higgs
Lt. Benjamin H. Higgs
Engineer
H. & G. Engineer

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Sheet "A"

6080

Charleston, S. C.

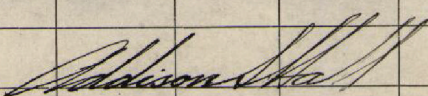
July 31, 1934

DIRECTOR, U.S. COAST AND GEODETIC SURVEY:

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

Lt. Benjamin H. Rigg.

Chief of Party.

DESCRIPTION	POSITION						METHOD OF DETER- MINATION	CHARTS AFFECTED	
	LATITUDE			LONGITUDE					DATUM
	°	'	D.M. METERS	°	'	D.P. METERS			
Sullivan's Island Beacon F. R.	32	45	(901.1) 947.2	79	51	(719.2) 813	N.A. 1927	Plane- table	Same as letter 547-1934 1239 & 470
These positions have been re-plotted on the original topographic sheet and found to be correct.									
									

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

Sheet "A"

LANDMARKS FOR CHARTS

Charleston, S. C.July 31, 1934

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

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

Lt. Benjamin H. Rigg.

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DESCRIPTION	POSITION						METHOD OF DETERMINATION	CHARTS AFFECTED	
	LATITUDE			LONGITUDE					DATUM
	°	'	D. M. METERS	°	'	D. P. METERS			
			(121.3)			(337.0)	N.A.	Plane-	Same as Letter 547-34
Light No. 1	32	46	1727.0	79	53	1224.4	1927	table	
Mt. Pleasant		46	(963.3)			(1487.5)			
Front Range	32	47	885.0	79	53	74.0	"	"	792
Mt. Pleasant			(1131.7)			(485.2)			
Rear Range	32	47	131	79	53	1076.5	"	"	
Shem Creek			(---)			(121.0)			
Light	32	47	219	79	53	321.4	"	"	
Shem Creek			(---)			(1229.3)			
Front Range	32	47	596	79	53	332.1	"	"	
Shem Creek			(---)			(1233.3)			
Rear Range	32	47	677	79	53	328.1	"	"	
			(1776.2)			(1258.7)			
Light No. 4	32	46	84.1	79	52	303.3	"	"	
			(1748.3)			(132.1)			
Light No. 3	32	46	100	79	51	1429.6	"	"	
Cove Inlet			(1599.3)			(415.1)			
Rear Range	32	46	219	79	51	1146.3	"	"	
Cove Inlet			(1661.3)			(200)			
Front Range	32	46	187	79	51	1361.4	"	"	
			(184.1)			(538.5)			
Beacon A	32	45	1664.2	79	51	1013.5	"	"	
			(138)			(668)			
Light 2-C	32	45	1710.3	79	51	834	"	"	
			(395)			(970)			
Beacon B	32	45	1455.3	79	51	593	"	"	
			(1598.2)			(1419.5)			
Beacon	32	46	250.1	79	51	143.2	"	"	
			(981)			(1048)			
Light No. 2	32	46	867.3	79	50	513.7	"	"	

A list of objects carefully selected because of their value as landmarks as determined from seaward, together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) Offshore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaves and like objects are not sufficiently permanent to chart.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

Sheet "A" 6080

LANDMARKS FOR CHARTS

Charleston, S. C.

July 17 1934

DIRECTOR, U.S. COAST AND GEODETIC SURVEY:

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

Lt. Benjamin H. Rigg

Chief of Party.

DESCRIPTION	POSITION						METHOD OF DETERMINATION	CHARTS AFFECTED		
	LATITUDE			LONGITUDE					DATUM	
	°	'	D.M. METERS	°	'	D.P. METERS				
*TANK, conical top, flat bottom (Ft. Moultrie)	1-2-3	32	45	943.5	79	50	1370.3 (191.7)	N.A. 1927	Triang. 1910	1239 & 470
CUPOLA, C. G. Station (cup)	1-2	32	45	953	79	50	(590)	"	Plane-table	" "
TOWER, steel, 75' high (Quarantine Sta)	1-2	32	45	1014	79	51	803	"	"	" "
*TANK, conical top, hemi-spherical bottom, 1-2-3		32	45	283.1 282.9	79	53	1432.9	"	Schoppe 1933	" " 792
TOWER, square, church	3	32	45	1159	79	51	815	"	Plane-table	"
TANK, (Mt. Pleasant Tank)	3	32	47	746.6	79	52	1009.3 1010	"	Triang. 1921	"
These positions have been re-plotted on the original topographic sheet and found to be correct.										
<i>William Hall</i>										

A list of objects carefully selected because of their value as landmarks as determined from seaward, together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

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