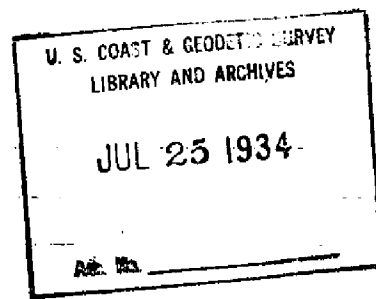


6070



Form 504
Ed. June, 1928

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

State: S. Carolina

DESRIPTIVE REPORT
Topographic 6 Sheet No. C 6070
~~Hydrographic~~

LOCALITY
Cooper and Wando Rivers
Charleston

1934

CHIEF OF PARTY
B. H. Rigg

U. S. GOVERNMENT PRINTING OFFICE: 1930

6070

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

LIBRARY & ARCHIVES

JUL 25 1934

Acc. No.

REG. NO.

6070

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

6070

Field No. C

REGISTER NO. 6070

State South Carolina

General locality Charleston, S. C.

Locality Cooper & Wando Rivers

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

Vessel Party No. 19

Chief of party Lt. Benjamin H. Rigg

Surveyed by Augustus M. Rogers, Jr.

Inked by Augustus 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: Original survey by Lt. M. O. Witherbee. Supplementary
survey by Lt. Benjamin H. Rigg.

OUTLINE OF REPORT TO ACCOMPANY ALUMINUM CONTROL
SHEET NO. C

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 "C"

INSTRUCTIONS

The survey was carried out under original instructions dated October 10, 1933, also Directors letters 22 MG 1990 (19), 26 AHH 293, and circular letter No. 30.

PURPOSE OF SURVLY

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 and pipelines, and to check all ranges. Additional Aids to Navigation were also located.

LIMITS OF SHEET

This sheet covers the area from N. lat. $32^{\circ} 49'$ to $32^{\circ} 52.1'$ and W. long. $79^{\circ} 53.1'$ to $79^{\circ} 58'$ and includes sections of shoreline on the Cooper and Wando Rivers.

The Shipyard River which falls on this sheet was surveyed on a 1-5,000 scale on topo sheet, field letter "X".

CONTROL

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

South Radio Tower 1932	Pile 1933
North Radio Tower 1932	Minel 1928
Navy Yard Oil Tank 1933	Chandler 1928
Oak 1889	Rath 1928
A. A. Tank 1933	U.S.E.D. House 1933
Tuxbury Tank 1933	" R.P. 2-C 1933
Shell 1928	" R.P. 3-C 1933
Bluff 1928	" Planters 1933

SURVEYING METHODS USED

The usual U. S. Coast and Geodetic Survey methods were used.

All hydrographic signals, landmarks, and aids to navigation were cut in as completely as possible from triangulation stations. In some cases it was impossible due to obstructions. In these cases, cuts were taken from positions located by a three point fix, checking with resections.

Drum Island Range -- A point was obtained on this range by setting up on the Southern R.R. loading dock and taking a rod reading on the range. Reading was carefully checked.*

Drum Island channel range as listed on the present Local Light List is $119^{\circ} 30'$. As determined by topography it is $118^{\circ} \frac{30'}{43}'$. The distance between ranges as listed in the Light List is 483 yards; as scaled from the topo sheet, 468 yds. The Director was notified of these facts by letter on July 16, 1932.

Cooper River Lower Range -- In the same manner a point on the Cooper River Lower Range was determined. Value as recorded in the Light List was $00^{\circ} 00'$; as determined by topography was $00^{\circ} 06'$. The distance as listed in the Light List is 325 yds, and as scaled from the topo sheet is 322.4 yds.

Navy Yard Channel Range -- A point was obtained on this range by taking a rod reading to point on land that was on range. Reading was carefully checked. The comparison of the value of this range published in the Light List with the value obtained from aluminum topographic sheet is as follows:

Light List	Topography
138° from preceding.	$137^{\circ} \frac{30'}{44}'$ from preceding.

The distance as listed in the Light List is one mile (1760 yds.) and that scaled from topo sheet is 2266 yds.

The Cooper River Upper Range -- The point on this range was obtained by finding the point on channel range that was also on range with North Radio Tower and Navy Yard Oil Tank. This point was marked and the distance taped from the point to the Navy Yard Oil Tank.

The comparison of the value of this range as published in the Light List with the value obtained from the topographic sheet is as follows:

<u>Light List</u>	<u>Topography</u>
98° 30' from preceeding	98° 41' from preceeding.

The distance as listed in the Light List is 240 yds. and as scaled from topo sheet is 222 yds.

The point on this range shown on the sheet is not in the range line that is drawn, but is on the true range line. The line shown was not erased and redrawn for fear of destroying the range points.

DESCRIPTION OF TERRITORY

The territory adjacent to the rivers covered by this sheet is mostly mud covered with low marsh grass. This grass is partially covered by storm or spring tides. The Center and upper end of Daniel Island is good farming land. The east bank of the Wando River is also bordered by farming lands. The west bank of the Cooper River has numerous oil yards, lumber yards and ship yards.

NEW NAMES

There are none.

LANDMARKS

The landmarks listed below are also listed and described on form No. 567 and 524 which will accompany the report:

Located by Topography

Stack -- Tallest of 4
 Flat Top Tank
 Concrete Stack
 Gulf Tank
 Gray Tank
 Tall Black Tank
 Tall Red Brick Stack
 Tall Slim Black Stack

Located by Triangulation

North Radio Tower
 Tuxbury Tank

U.S.E.D. PERMANENTLY MARKED

- A. U.S.E.D. Stations located by triangulation,
 Witherbee 1933:

U.S.E.D. OAK
 " HOUSE
 " R.P. 2-C
 " R.P. 3-C

- B. U.S.E.D. Stations located by topography &
 found to be permanently marked:

U.S.E.D. SEXTANT
 " TOWER
 " DACO
 " R.P. 4-C
 " POINT
 " PIPE
 " DANIELS CREEK

One Bench Mark, no number, was also located. The U. S. Engineers' Office was unable to give us this number. Descriptions of all these stations accompany this report on form No. 524.

No hydrographic signals were 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". Five and one tenth statute miles of shore line 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:

Name	Lat.	D.M.	Long.	D.P.
Light No. 11 <i>- Key Buoy Front</i>	32° 51'	(1706.0) 142.3 (190.0)	79° 56'	(266.5) 1293.7 (1305.0)
Light No. 9	32° 50'	1658.3	79° 56'	255.5
Front Range		(1782.0)		(347.2)
Cooper River Ranges	32° 51'	66.3	79° 55'	1213.0
Rear Range		(1489.3)	79° 55'	(343.0)
Cooper River Lower	32° 51'	359.0		1217.2
Rear Range		(1815.)		(548.0)
Cooper River Upper	32° 51'	33.3	79° 55'	1012.2
		(1387.0)		(109.0)
Light No. 7	32° 50'	461.3	79° 55'	1451.5
		(272.3)		(515.0)
Light No. 10	32° 49'	1576.0	79° 55'	1045.8
		(383.0)		(1308.0)
Light No. 5-A	32° 49'	1465.3	79° 56'	252.8
		(1789.3)		(541.6)
Light No. 8	32° 49'	59.0	79° 56'	1019.2

Respectfully submitted by,

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

Forwarded by,

Benjamin F. Rice
Benjamin F. Rice
H. & G. Engineer

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEYTopo Sheet "C"
T-6070

LANDMARKS FOR CHARTS

Charleston, S. C.

July 18, 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.

Benjamin H. Rigg,

Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED
	LATITUDE		LONGITUDE		DATUM		
	° ' "	D. M. METERS	° ' "	D. P. METERS			
Stack tallest of four 2,3	32 50	414.0	79 56	1423.0	N.A. 1927	Plane-Table	1239 & 470
Tuxbury Tank 1,2,3.	32 50	313.7	79 57	29.5	"	Schoppe 1933	" "
Flat Top Tank 1,2,3	32 50	161.0	79 57	1308.0	"	Witherbee 1933	" "
Concrete Stack 2,3	32 50	15.0	79 56	1030.0	"	Plane-Table	" "
Gulf Tank 2,3.	32 49	1395.0	79 56	1012.0	"	"	" "
Gray Tank 2,3	32 49	1178.0	79 56	837.0	"	"	" "
Tall Black Tank 1,2,3	32 49	1148.0	79 56	563.0	"	"	" "
Low Flat Tank	32 49	843.5	79 56	581.0	"	"	" "
Tall Red Brick Stack 1,2,3	32 49	591.0	79 56	1486.0	"	"	" "
Tall Slim Black Stack 1 2,3	32 49	789.5	79 57	53.5	"	"	" "
North Radio Tower 2,3	32 51	1370.7	79 57	1240.0	"	Witherbee 1933	" "

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) off-shore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaffs and like objects are not sufficiently permanent to chart.