

4291

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Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

....., Director

U. S. COAST AND GEODETIC SURVEY
L. & A.
DEC 19 1927
Acc. No.

State: New Jersey

DESCRIPTIVE REPORT

Topographic
Hydrographic

Sheet No. 4291

LOCALITY

Cape May

Cape May Harbor

1927

CHIEF OF PARTY

G.C. Mattison, R.F.A. Studds

C. & G. SURVEY
L. & A.
DEC 19 1927
Acc. No.

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
E. LESTER JONES, DIRECTOR.

NEW JERSEY

A DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET # 1 4291

S.S. RANGER

G.C. MATTISON,
Chief of Party.

1927

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET #1

CAPE MAY HARBOR, N.J.

LIMITS OF SHEET:

This survey comprises Cape May Harbor and vicinity, including Cold Springs Inlet and the area north of the harbor as far as Jarvis Sound.

The sheet lies between the meridians $74^{\circ} 51'$ and $74^{\circ} 56'$ west and between the parallels $38^{\circ} 56'$ and $38^{\circ} 58'$ north.

General Description of sheet:

Cape May Harbor was dredged out of a salt marsh about 25 years ago. The dredged materials were used to fill in the area south of the harbor so as to make it suitable for building purposes. Cape May Harbor is a good harbor of refuge for small craft.

The area north of the harbor between the Mill Lane Road and the New Jersey Inland Waterway and the Pennsylvania Fish Pier is a salt marsh. At extreme high tide practically this whole area is covered with water. The marsh extends to the west of Mill Lane Road as far as the Reading and Pennsylvania Railroads. The marsh is drained by numerous creeks, some of which are navigable by small boats at high tide. The important creeks are Mill Creek, Skunk Sound and the Inland Waterway to the north and Cape Island Creek to the west of the harbor.

At Cold Springs Inlet two massive rock and concrete jetties extend out into the ocean about 800 meters. They are about 265 meters apart and form the entrance to Cape May Harbor. There are lighted beacons near the outer ends of these jetties. On the south side of the inlet from the extreme inner end of the jetties to a point near the Coast Guard Hangars is a woodsheet piling bulkhead. This bulkhead forms an arc of a circle having a radius of approximately 585 meters. This bulkhead is in poor condition and a lot of silt has passed through shoaling the harbor close by.

The area south of the harbor filled in for development in building properties, is covered with a growth of Bay berry bushes and long grass.

West of the entrance on the south side of the harbor is a Naval Air Station. The navy does not occupy this at present, but some of the buildings are used by the U.S. Coast Guard Base Nine. This unit has about 21 boats and two seaplanes for coast patrol purposes.

There are two docks at the Coast Guard Base. The Survey Ship RANGER tied up at one of these.

North of The Coast Guard Base on the North side of the harbor is the entrance to the New Jersey Inland Waterway, running north thru Jarvis Sound to Wildwood. This channel is dredged and buoyed as also a passage to the right leading to the Pennsylvania Fish Pier. This pier is 280 meters long; has warehouses, a restaurant, gasoline supply and rail connections.

Cape May Harbor has numerous small fishing and pleasure craft, Most of these tie up at docks and boat-houses at Schellengers Landing and Cape Island Creek. There are railroad connections at Schellengers Landing.

A concrete road known as Mill Lane Road passes over Cape Island Creek near Schellengers Landing and connects with interior cities

SURVEY METHODS:

Plane table and stadia were used.

Control for this sheet was established by triangulation. The stations Cape May Lighthouse, Brandywine Shoal Lighthouse and Refuge Lighthouse were occupied and station Hangar was cut in. Hangar was also occupied. A new station MARSH was established. The intersection stations POD, WOOD TANK, POLE and TOWER were established.

Signals were built around the bay for hydrography and cut in with the plane table.

A traverse was run around the harbor and setups were checked by resection on triangulation stations. All the docks and buildings near Schellengers Landing were located by plane table. Traverses were run inland on the marsh for short distance to locate the creeks. A traverse was run from triangulation station WOOD TANK at the Pennsylvania Fish Dock to signal POLE and out on the north jetty. A three point fix was taken out at the end of the jetty to check the traverse. The line was run north along Two Mile Beach for three quarters of a mile and traverses checked by resection on three triangulation stations. A traverse was run from the Coast Guard Base triangulation station along the south side of the inlet to the end of the southern jetty and back along the beach to triangulation station TOWER.

The limits of vegetation were obtained by plane table location and supplemented by sketching.

CHANGES IN SHORELINE:

The sand beach north of the jetties (on Two Mile Beach) has built up and out so that there is a difference of 250 meters between the north and south side of the jetties. The sand beach between the jetties and Cape May Point has been eroding for a number of years.

The two jetties were apparently located by two independent traverses. A location of beach on south jetty by triangulation indicates an error of more than 10 feet. In view of the method of locating the jetties there is no way to adjust this error. Approx.

Recently pile jetties have been built at intervals normal to the shore in an effort to save the beach. The effect of these jetties has not as yet been fully determined though it is believed that they are helping hold the sand.

MAGNETIC DECLINATION:

Magnetic Declination was taken at the magnetic station near Cape May Lighthouse and found to be $8^{\circ} 15.2'$ west.

Respectfully submitted

A.C. Thorson

A.C. Thorson,
Jr. H. & G. Engineer,
Topographer.

*Forwarded
By Mattie
Ch. S. Ray.*

LIST OF PLANE TABLE POSITIONS

Object and Description	Lat.	D.M.	Long.	D.P.	Remarks
Bul Banner on pole	38 37	8	74 52	1106	On bulkhead east of C.G. Base.
Boat Cloth on pile	38 56	1823.8	74 53	145	Outside C.G. boat house.
Go Pile of rock	38 56	1812	74 53	519	On W. C.G. dock
Ran Banner on pile	38 56	1561.5	74 53	901	W. of Go 15 m. out from Shore.
Ma Banner on pile	38 56	1446.5	74 53	1357.5	South side of Bay 25 m. out from shore
Gab Flagpole on tower	38 56	1703	74 54	660	Flagpole on hexagonal tower.
Dog Pile near GAB	38 56	1720	74 54	675	Corner pile boat entrance.
Cat Gable of boathouse	38 56	1613	74 54	829	South side of creek Gable on creek side
East East end pier	38 56	1602	74 54	920	East end ice breaker
West West end pier	38 56	1608	74 54	961.5	West end ice breaker.
Gas Gas pipe on dock	38 56	1632	74 54	1043.5	South side of creek Gas supply pipe Rosemans Dock.
Flag Flagpole on boathouse	38 56	1655	74 54	1007	Boathouse n.side of creek.
Res Restaurant Chy.	38 56	1775	74 54	676	At Schellengers Landing
Shack Small fish shack	38 57	254	74 54	112.5	Northwest shore of Hbr.
Red Red beacon	38 57	743	74 52	680	On w. side Entrance to Inland Waterway
Dee Red Range beacon	38 57	1257	74 52	525	Beacon nearest Jarvis Sound.

LIST OF PLANE TABLE POSITIONS

<u>Object and Description</u>	<u>Lat.</u>	<u>D.M.</u>	<u>Long.</u>	<u>D.P.</u>	<u>Remarks</u>
Tel Telephone pole	38 56	1630	74 52	350	East side of inlet.
White White Jetty Light	38 56	371.5	74 51	1361	Beacon on south Jetty.
Top Banner on pole	38 57	444	74 52	1006	West side entrance to Mill Creek.

STATISTICS

TOPOGRAPHIC SHEET # 1

CAPE MAY HARBOR, N. J.

Area surveyed in square statute miles	4.3
Length of detailed shoreline in sq. stat.mâ.	9.0
Length of rivers and creeks surveyed in square statute miles	7.2
Length of roads in square statute miles	3.4
Length of railroads surveyed in square statute miles	1.6

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Cape May, N.J.

August, 19 27

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.

G.C. MATISON

Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED
	Latitude		Longitude		Datum		
	° ' "	D. M. meters	° ' "	D. P. Meters			
Cupalo on inshore end of Hangar C.G. Base,							
Cape May, N.J.	38-56	1576.4	74-53	51.8	NA	Trian.	1219

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, 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 of primary importance. The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaves and like objects are not sufficiently permanent to chart.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY
E. & A.
DEC 17 1927
Acc. No.

REG. NO.
4291

TOPOGRAPHIC TITLE SHEET

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

Field No. 1

REGISTER NO. 4291

State NEW JERSEY

General locality Cape May

Locality Cape May Harbor

Scale 1:5,000 Date of survey Aug. Sept, 1927

Vessel RANGER

Chief of Party G.C. MATTISON, R.F.A. Studds

Surveyed by A.C. THORSON

Inked by A.C. THORSON

Heights in feet above.....to ground to tops of trees

Contour, Approximate contour, Form line interval.....feet

Instructions dated July 13, 1927

Remarks:.....

Dec 12 18 42