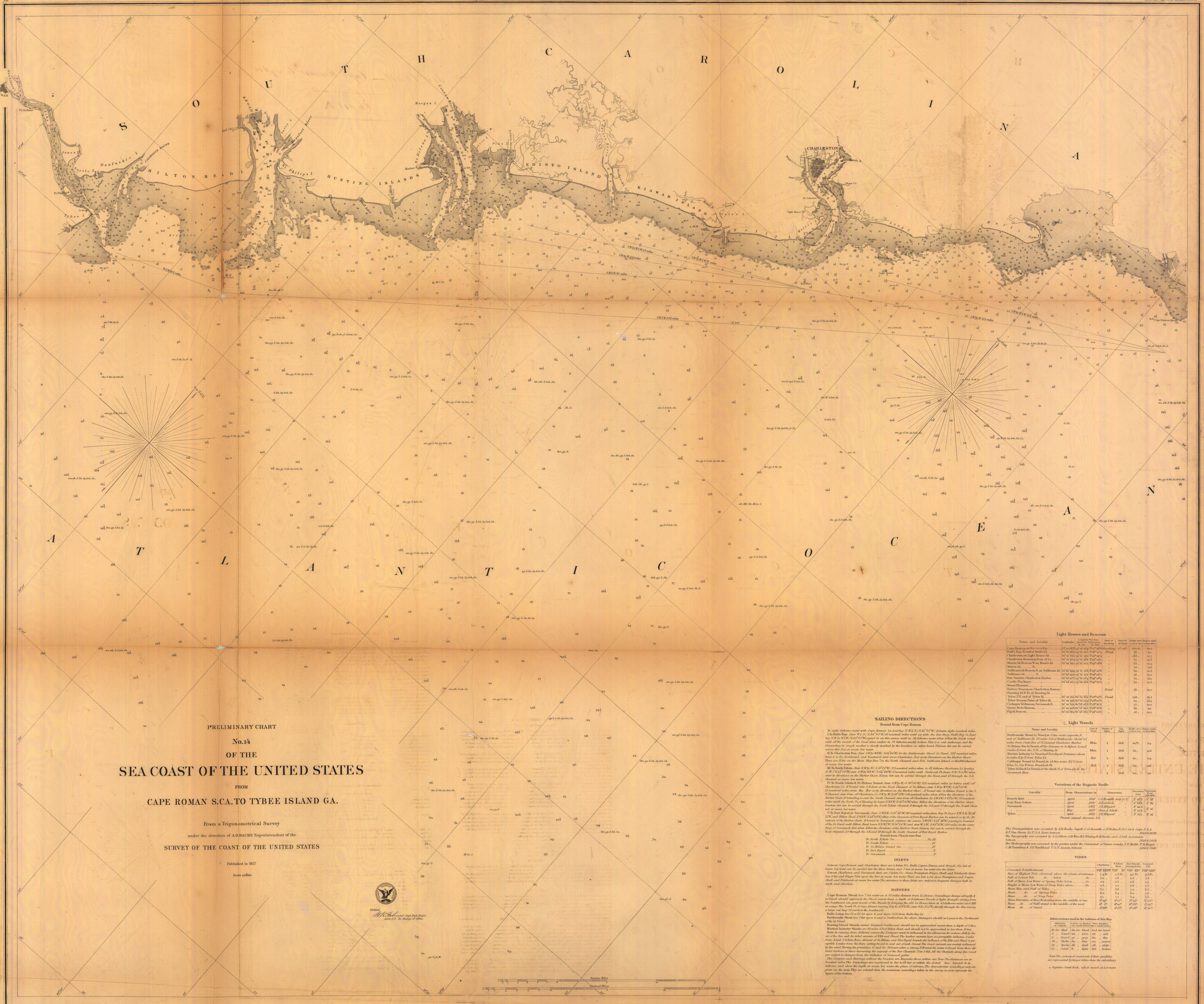
RAREBK
VK
982
.S6
B3
1861
Chart A

No.

Electrotype Copy No.3 by G.Mathiot U.S.C.S.



PRELIMINARY CHART

No.14

OF THE

SEA COAST OF THE UNITED STATES

FROM

CAPE ROMAN S.CA. TO TYBEE ISLAND GA.

From a Trigonometrical Survey

under the direction of A.D.BACHE Superintendent of the

SURVEY OF THE COAST OF THE UNITED STATES

Published in 1857

Scale 200,000

Verified
W. R. Palmer Capt. Topl. Engrs.
Asst. C.S. In charge of Office.

SAILING DIRECTIONS

Bound from Cape Roman

In eight fathoms water with Cape Roman Lt. bearing N.W.¼ N. (N. 41° 30' W.) distant eight nautical miles.

I. To Bulls Bay. *Steer W.½ S. (S. 86° 30' W.) 13 nautical miles until up with the Bar Buoy, Bull's Bay Lt. bearing N.W. by W.½ W. (N. 60° 00' W.); stand in on this course until in 3¼ fathoms water, when follow the beach round until off the mouth of the Creek, when anchor in 3½ fathoms, muddy bottom. This is a safe anchorage and the Channelway in rough weather is clearly marked by the breakers on either hand. Thirteen feet can be carried across this Bar at mean low water.*

II. To Charleston Bar. *Steer S.W. by W.¼ W. (S. 64° 00' W.) for the Rattlesnake Shoal Lt. Vessel 25¾ nautical miles, leave it to the Northward and Eastward and cross Charleston Bar as by Directions on the Harbor Chart. There are 11 feet on the Main Ship Bar, 7 in the North Channel and 11 in Sullivan's Island or Maffitt's Channel at mean low water.*

III. To North Edisto. *Steer S.W. by W. (S. 59° 00' W.) 32½ nautical miles; when in 6¾ fathoms Charleston Lt. bearing N.W. (N. 43° 00' W.) steer S.W. by W.¼ W. (S. 64° 00' W.) 17 nautical miles until Seabrook Pt. bears N.W. (N. 43° W.) when enter by directions on the Harbor Chart. Eleven feet can be carried through the East, and 13 through the S.E. Channel at mean low water.*

IV. To South Edisto & St. Helena Sound. *Steer S.W. by W. (S 59° 00' W.) 32½ nautical miles as before, until off Charleston Lt. If bound into S. Edisto or the East Channel of St. Helena, steer S.W. by W.¼ W. (S. 62° 00' W.) 25 nautical miles, cross the Bar as by directions on the Harbor Chart. If bound into St. Helena Sound by the S.E. Channel, steer from off Charleston Lt. S.W. by W. (S. 58° 55' W.) 28½ nautical miles, when follow the directions of the Harbor Chart. If intending to enter the South Channel, steer from off Charleston Lt. S.W.½ W. (S 53° 40' W.) 30 nautical miles until the North Pt. of Hunting Id. bears N.W.½ W. (N. 50° 00' W.) when follow the directions of the Harbor Chart. Fourteen feet can be carried through the South Edisto Channel, 8 through the S.E. and 17 through the South Channel at mean low water.*

V. To Port Royal or Savannah. *Steer S W.½ W. (S. 53° 30' W.) 80 nautical miles; when Bay Pt. bears N.W.½ N. (N. 36° 25' W.) and Hilton Head N.W.¼ W. (N. 48° 00' W.) either of the Channels of Port Royal Harbor can be entered as by the Directions of the Harbor Chart. If bound to Savannah continue the course S.W.½ W. (S. 53° 30' W.) passing to Seaward of the Lt. Vessel until Hilton Head bears N.N.W.¾ W. (N. 30° 00 W.) and steer W.S.W. (S. 69° 35' W.) 10½ miles for the outer Buoy of Savannah Bar, when follow the directions of the Harbor Chart. Sixteen feet can be carried through the East Channel, 20 through the S.E. and 18 through the South Channel of Port Royal Harbor.*

Bound from Charleston Bar

To North Edisto See .... No. III
To South Edisto " IV
To St. Helena Sound See IV
To Port Royal " V
To Savannah " V

INLETS

Between Cape Roman and Charleston there are 4 Inlets, Viz: Bull's, Capers, Dewees, and Breach. Six feet at mean low water can be carried into the three former, and 2 feet at mean low water into the latter.

Between Charleston and Savannah there are 5 Inlets, Viz: Stono, Frampton's, Fripp's, Skull, and Pritchard's. Stono has 6 feet and Fripp's 7 feet upon the Bar at mean low water. There are but 4 feet upon Frampton's, and 3 upon Skull and Pritchard's at mean low water. The entrances to these Inlets are subject to frequent changes both in depth and direction.

DANGERS

Cape Roman Shoal *has 7 feet water on it 5½ miles distant from Lt. House; Soundings change abruptly & no Vessel should approach the Shoal nearer than a depth of 8 fathoms. Vessels of light draught coming from the Southward can pass inside of the Shoals by bringing the old Lt. House (when in 4½ fathoms water) and Mill in range. The South Pt. of Cape Island bearing N. by E. (N. 9° 15' E.) steer N.E. (N. 43° E.) directly through the Slue, leaving a large red buoy 20 yards to the Southward.*

Bulls Lump *has 12 or 16 feet upon it and bears S.¼ E. from Bulls Bay Lt.*

Rattlesnake Shoal *has 7 feet upon it and is 3 miles from the shore. Strangers should not pass to the Northward of the Lt. Vessel.*

Hunting Island Shoals *extend Seaward 6 miles, and should not be approached nearer than a depth of 5 fms.*

Martin's Industry Shoals *are 8½ miles S.E. of Hilton Head, and should not be approached in less than 8 fms.*

Note. *In running these different courses the Navigator must be influenced in his allowances for inshore drift, by the set of the Sea and the tidal currents of Ebb and Flood. The harbor currents have no perceptible influence 3 miles from N. and S. Edisto Bars. Abreast of St. Helena and Port Royal Sounds, the influence of the Ebb and Flood is perceptible 4 miles from the Bars, setting broad in and out of each Sound. The Coast currents are mainly influenced by the wind. During the prevalence of, and for 36 hours after, a strong N.W. wind, the water is forced from these different harbors, at times decreasing the capacity of the Bar Channels 2½ to 3 feet. All the Channels along this Coast are subject to changes from the influence of Seaward gales.*

The Courses and Bearings without the brackets are Magnetic, those within are True. The distances are in Nautical miles. The Soundings are expressed in feet to 18 feet or within the dotted line beyond it in fathoms, and show the depth at mean low water—the plane of reference. The characteristic soundings only, are given on the map. They are selected from the numerous soundings taken in the survey, so as to represent the figure of the bottom.

Light Houses and Beacons

Name and Locality	Latitude	Longitude West from Greenwich Observatory — In Arc	In Time	Fixed or Revolving	Interval of Flash	Height above Level of Sea	Distance visible in Naut. Miles
Cape Roman, on Raccoon Key	[illegible]	[illegible]	[illegible]	Revolving	1m 00s	150 Ft.	[illegible]
Bull's Bay, N. end of Bull's Id.	32° 55' 18".4	79° 33' 43".5	5h 18m 14s.9	Fixed		35 "	11.1
Charleston, on Light House Id.	32° 41' 54".7	79° 52' 29".0	5h 19m 29s.9	"		133 "	17.7
Charleston Beacon, in front of Lt.	32° 41' 45".9	79° 52' 18".6	5h 19m 29s.2	"		50 "	12.5
Morris Id. Beacon W. on Morris Id.	32° 42' 59".1	79° 52' 12".2	5h 19m 28s.8	"		55 "	12.9
Morris Id. E.				"		40 "	11.6
Sullivan's Id. Beacon N. on Sullivans Id.	32° 45' 39".9	79° 51' 11".8	5h 19m 24s.8	"		50 "	12.5
Sullivan's Id. S.	32° 45' 29".4	79° 51' 11".0	5h 19m 24s.7	"		45 "	12.0
Fort Sumter, Charleston Harbor	32° 45' 07".5	79° 52' 13".9	5h 19m 28s.9	"		57 "	13.0
Castle Pinckney, "	32° 46' 24".1	79° 54' 25".6	5h 19m 37s.7	"		50 "	12.5
Mount Pleasant, "							
Battery Beacon, on Charleston Battery				Fixed		45 "	12.0
Hunting Id. N. Pt. of Hunting Id.							
Tybee, N.E. end of Tybee Id.	32° 01' 21".4	80° 50' 33".1	5h 23m 22s.5	Fixed		108 "	16.3
Tybee Beacon, Point of Tybee Id.	32° 01' 19".6	80° 50' 07".9	5h 23m 20s.5	"		62 "	13.4
Cockspur Id. Beacon, Savannah R.	32° 01' 57".0	80° 53' 05".3	5h 23m 32s.4	"		25 "	10.0
Oyster Beds Beacon, "	32° 02' 10".8	80° 53' 54".5	5h 23m 35s.6	"		35 "	11.1
Fig Id. Beacon, "	32° 04' 58".2	81° 03' 35".2	5h 24m 14s.3	"		26 "	10.2

Light Vessels

Name and Locality	Color of Vessel	Number of Lights	Fog Signal	Height above Level of Sea	Distance visible in Naut. Miles
Rattlesnake Shoal Lt. Vessel, *in 6 fms. water, opposite N. end of Sullivan's Id. 2¼ miles S.E. of Rattlesnake Shoal 4½ miles from Outer Bar of N. Channel Charleston Harbor*	White	2	Bell	44 Ft.	11.9
St Helena Bar Lt. Vessel, *off the Entrance to St. Helena Sound 3 miles E. from the N. Pt. of Hunting Id.*	White	1	Bell	30 "	10.6
Martin's Industry Lt. Vessel, *off Port Royal Entrance about 14 miles E. by N. from Tybee Lt.*	Red	2	Bell	44 "	11.9
Calibogue Sound Lt. Vessel, *in 4½ fms. water, N.¾ E. from Tybee Lt. S. by W. from Braddock Pt.*	Red	1	Bell	30 "	10.6
Tybee Id. Knoll Lt. Vessel, *off the Knoll N. of Tybee Id. in the Savannah River.*		1	Bell	40 "	11.6

Variations of the Magnetic Needle

Locality	From Observations in	Observers	Variation East	Variation East Jan. 1861
Breach Inlet	April 1849	C.O. Boutelle Asst. C.S.	2° 16'.5	1° 53'
East Base Edisto	April 1850	G. Davidson " "	2° 53'.6	2° 32'
Savannah	April 1852	J.E. Hilgard " "	3° 40'.3	3° 21'
" "	May 1857	Chas. A Schott " "	3° 27'.5	
Tybee	April 1852	J.E. Hilgard " "	3° 32'.1	3° 14'

Present annual decrease 2'.0

The Triangulation was executed by A.D. Bache Supdt. C.O. Boutelle, C.P. Bolles, E.O.C. Ord Capt. U.S.A. D.T. Van Buren Lt. U.S.A. Assts. between .... 1849 & 1859

The Topography was executed by S.A. Gilbert, G.D. Wise, H.L. Whiting, R.M. Bache and J. Seib Assistants between .... 1848 & 1858

The Hydrography was executed by the parties under the Command of Lieuts. Comdg. J.N. Maffit, T.B. Huger, C.M. Fauntleroy & J.P. Bankhead U.S.N. Assists. between .... 1850 & 1860

TIDES

	Charleston	N. Edisto River	Fort Pulaski Savannah Ent.	Savannah City
Corrected Establishment	VIIh XXVIm	VIIh Xm	VIIh XXm	VIIIh XIIIm
Rise of Highest Tide observed above the plane of reference	7.9 Ft.	7.3 Ft.	9.1 Ft.	9.8 Ft.
Fall of Lowest Tide do below do	2.4 "	1.6 "	2.3 "	1.3 "
Fall of Mean Low Water of Spring Tides below do	0.4 "	0.5 "	0.6 "	0.4 "
Height of Mean Low Water of Neap Tides above do	0.5 "	0.4 "	0.6 "	0.3 "
Mean Rise and Fall of Tides	5.1 "	5.8 "	7.0 "	6.5 "
Mean do of Spring Tides	6.0 "	6.9 "	8.0 "	7.6 "
Mean do of Neap Tides	4.1 "	4.7 "	5.9 "	5.5 "
Mean Duration of Rise) Reckoning from the middle of one	6h 19m	6h 12m	5h 49m	5h 04m
Mean do of Fall) stand to the middle of the next	6h 7m	6h 10m	6h 35m	7h 22m
Mean do of Stand	0h 33m	0h 15m	0h 26m	0h 14m

Abbreviations used in the bottoms of this Map

Materials in Capitals	Colors or shades two small letters	Other Qualities three small letters
M. for Mud	bk. for black	hrd. for hard
S. " Sand	wh. " white	sft. " soft
G. " Gravel	gy. " grey	fne. " fine
Sh. " Shells	bu. " blue	crs. " coarse
Sp. " Specks	dk. " dark	stk. " sticky
Co. " Coral	lt. " light	brk. " broken

Note. *The principal materials & their qualities are represented by larger letters than the subsidiary.*

+ Signifies Sunk Rock, ✱ Rock awash at Low water.