TIDAL INFORMATION				
Place	Height referred to datum of soundings (MLW)			
	Mean High Water feet	Mean Tide Level feet	Mean Low Water feet	Extreme Low Water feet
Cape Charles, 37°16'.0 - 75°51'.8*	3.0	1.5	0.0	−0.5
Kiptopeke, Black River, 37°08' - 76°01'	2.5	1.2	0.0	−0.5
Old Point Comfort, 37°00' - 76°19'	2.5	1.2	0.0	−1.5
Hampton Roads, 36°58' - 76°20'	2.5	1.2	0.0	−1.5
Craney Island Light, 36°54' - 76°20'	2.6	1.3	0.0	−1.5
Lynnhaven Inlet, 36°54' - 76°10'	2.0	1.0	0.0	−1.0
Cape Henry, 36°56' - 76°00'	3.8	1.4	0.0	−2.5

1981

LOGARITHMIC SPEED SCALE

To find SPEED, place one point of dividers on nautical miles run and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in knots. Example: with 4.0 miles run in 15 minutes, the speed is 16.0 knots.

Nautical Miles

Yards

For Symbols and Abbreviations see C. & G. S. Chart No. 1

STORM WARNINGS

The U.S. Weather Bureau displays storm warnings at the following approximate locations:
Cape Charles (37°16'.0 - 75°51'.8)
Little Creek (36°55'.7 - 76°18'.5)
Fort Monroe (37°00'.7 - 76°18'.5)
Norfolk Navy Base (36°57'.7 - 76°18'.9)
Norfolk, Lafayette Yacht Club (36°53'.7 - 76°16'.9)

HEIGHTS

Heights in feet above Mean High Water (Contour interval 10 feet. Relief is shown only where of importance to radar interpretation).

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

UNITED STATES — EAST COAST

VIRGINIA

CHESAPEAKE BAY

CAPE CHARLES TO NORFOLK HARBOR

1st Ed., Mar. 1964

Mercator Projection
Scale 1:40,000 at Lat. 37°00'

SOUNDINGS IN FEET
AT MEAN LOW WATER

AUTHORITIES

Hydrography and topography by the Coast and Geodetic Survey with additions and revisions from the Corps of Engineers, Geological Survey and Department of the Navy.

FISH TRAP AREAS

Boundary lines of fish trap areas are shown in magenta.
Caution: Submerged piling may exist in these areas.

PLANE COORDINATE GRID

The Virginia State plane coordinate grid (Lambert conformal conic) is shown on this chart at 10,000 foot intervals.
The last three digits are omitted.

CAUTION

Temporary defects in aids to navigation are not indicated on this chart except where a buoy replaces a fixed aid. See Notice to Mariners.

RACING BUOYS

Racing buoys within the limits of this chart are not shown hereon. For racing buoy information see the latest issue of Local Notices to Mariners and Light List.

NOTE F
YORK SPIT CHANNEL *

Depths entering from seaward
Surveys of NOV - DEC 1960

Left outside quarter	42.0 ft.
Left inside quarter	42.0 ft.
Right inside quarter	42.0 ft.
Right outside quarter	41.9 ft.

*The use of this channel shall be restricted to vessels and tows drawing less than 20 feet, up or down Chesapeake Bay, and no vessel or other watercraft shall cross the channel or enter it at any point other than at its ends and in the direction of its axis. Any vessel or other watercraft in transit shall follow the course thereof for its entire length.

NORFOLK HARBOR AND APPROACHES

Tabulated from surveys by the Corps of Engineers; reports to Apr. 7, 1966 and surveys to Feb. 1966

Name of Channel	Controlling depths in channels entering from seaward at Mean Low Water: Left outside quarter	Left inside quarter	Right inside quarter	Right outside quarter	Date of Survey	Project Dimensions: Width (feet)	Length (nautical miles)	Depth M.L.W. (feet)
Thimble Shoal Channel *	45.0	40.3	41.0	38.0	9-61	1000	9.9	42
North Auxiliary Channel	32.0	30.2	28.8	29.7	5-66;9-65	650	9.9	32
South Auxiliary Channel	29.0	29.0	29.7	34.1	5-66;9-65	450	9.9	32
Norfolk Harbor Entrance Reach	49.0	40.0	40.0	40.0	2.6-66	1000 700	1.4	40
Norfolk Harbor Reach	b35.5	40.0	38.7	38.0	4.5;10-65	1000	3.8	40
Craney Island Reach	b35.1	40.0	40.0	40.0	6.10-65	750	2.1	40
Lambert Point Reach	b28.8	40.0	40.0	40.0	1-66	750	2.0	40
Old Point Comfort Reach	b34.6	40.0	40.0	40.0	1-66	700	3.0	40
Town Point Reach	c31.4	34.0	35.1	b35.5	12-66	750	1.0	40
Newport News Channel	d37.0	40.0	40.0	d24.6	5.6-66	600	2.8	40
Hampton Roads Entrance Channel	e 3.2	e 7.6	10.6	9.0	9-63	200	1.1	12
Hampton Reach	8.9	9.5	7.4	9.0	9-63	150	1.2	12
Sunset Creek Reach	9.9	10.5	9.6	10.0	10-63	100	0.7	12
Mist Creek Reach	8.7	9.8	8.5	10.0	10-63	80	0.5	12
West Reach Phoebus Channel	11.0	11.8	11.4	8.5	6-57	150	0.7	12

a. This channel is restricted to exclude vessels and tows drawing less than 20 feet. There is no restrictions to passenger ships.
b. The channel has shoaled along the edge; project depth was available in the inside half of the quarter.
c. The channel has shoaled along the edge; a depth of 34.5 feet was available in the inside half of the quarter.
d. The channel has shoaled along the edge near the junction with Lower Reach; a depth of 35.5 feet was available in the inside half of the quarter.
e. The channel has shoaled along the edge near the junction with Lower Reach; a depth of 35.5 feet was available in the inside half of the quarter.
Note.- The Corps of Engineers should be notified for changing conditions subsequent to the above.

NOTE D
CHESAPEAKE BAY BRIDGE & TUNNEL

Trestles A and B - In each trestle section the fixed bridge opening for small craft consists of a group of 3 spans. A fixed green light marks the centerline of each span and fixed red lights mark outer most bridge support piling on each side of the openings.
North Channel & Fisherman Inlet Bridges - A fixed green light marks each mid-channel with fixed red lights marking channel limits.
Fixed red obstruction lights mark each pier.
Trestles C and D

NOTE E
DANGER AREA

Area is open to unrestricted surface navigation but vessels are cautioned neither to anchor, drag, trawl, lay cables, bottom, nor conduct any other similar type of activity because of danger arising from mines on the bottom.

NOTE A
ANCHORAGE AREAS
202.168 (see note A)

Limits and designation of anchorage areas are shown in color. See charts 400, 452 for additional areas not shown on this chart.

NOTE A

Navigation regulations are published in Chapter 2, Coast Pilot 3, or subsequent yearly supplements and weekly Notices to Mariners. Copies of the regulations may be obtained at the office of the District Engineer, Corps of Engineers in Norfolk, Va.
Refer to section numbers shown on area designations.

CABLE AND PIPELINE AREAS

See the larger scale charts for the cable and pipeline crossings in the Elizabeth River south of Lambert Pt.

CRANEY ISLAND DISPOSAL AREA
(closed to navigation)

(CONTINUED ON CHART 452)

(CONTINUED ON CHART 452)

(CONTINUED ON CHART 1227)

(CONTINUED ON CHART 560)

LOANS CHART 494

LOANS CHART 563

LOANS CHART 452

LOANS CHART 519-SC

562-SC

562-SC
CAPE CHARLES TO NORFOLK HARBOR

SOUNDINGS IN FEET - SCALE 1:40,000

Chart 562-SC provides additional information for the small craft operator.

CAUTION

Small craft should stay clear of large commercial and government vessels even if small-craft have the right-of-way.

CAUTION

All craft should avoid areas where the alpha divers flag, a red square with a diagonal white stripe, is displayed.

RULES OF THE ROAD

Motorless craft have right-of-way in almost all cases.
A motorboat being overtaken has right-of-way.
Motorboats approaching head to head or nearly so should pass port to port.
When motorboats approach each other at right angles or obliquely the boat on the right has right-of-way.
Motorboats must keep to the right in narrow channels, when safe and practicable.

WHISTLE SIGNALS

Signal given by one boat is repeated by other boat if safe, and understood.
Use whistle signals when boats are in sight of each other in the daytime by sight of the boat itself, or by night by seeing its signal lights.
When approaching a bend, sound one long blast. If answered, immediately upon sighting other boat give usual passing signals.
A long blast is used as a warning signal when leaving a slip.

1 SHORT BLAST
Meeting head-on
Overtaking

2 SHORT BLASTS
Maintaining Course
Overtaking

3 SHORT BLASTS
Engine is going astern

4 OR MORE SHORT BLASTS
Danger, or first boats signal not understood, or considered dangerous.

CHESAPEAKE BAY SEA CONDITION REPORTS
WWAL 439Hz, Washington, D.C.
Sectional, on-the-scene reports are broad cast during the day on weekends and holidays.

DISTRESS SIGNALS

DAY: Slowly and repeatedly raise and lower arms outstretched to each side.
NIGHT: Flames on the boat as from a burning tar barrel, oil barrel, and so forth.
DAY OR NIGHT: Continuous sounding of fog signal apparatus, or firing a gun.

FOG SIGNALS

WHILE UNDERWAY
Motorboats: Prolonged blast every minute.
Sailboats: When on starboard tack one blast, port tack 2 blasts and wind abaft of beam 3 blasts.
Boats towing or towed: One prolonged and 2 short blasts every minute.
AT ANCHOR
All boats: 5 seconds of bell every minute.

FORECASTING HINTS

With present communications, forecast facilities and store advisories, the skilled mariner does not wind helpless before the elements. In addition to these aids marine weather lore has been passed on down for many years. Masters of ships as well as mates who assume bridge watches should have a good understanding of the significance of wind and barometer changes. In addition small boat operators, not equipped with adequate communications, must resort to local weather indications. They should have an understanding of the significance of local wind shifts and barometric tendencies as signs of changing weather.

Low pressure areas are generally associated with bad weather and high pressure areas with fair weather. As a common rule, winds from easterly quadrants and falling barometer foretell the coming of foul weather, and shifting winds to westerly quadrants foretell clearing and fair weather.

TIDAL CURRENT DATA

PLACE	POSITION Lat.	POSITION Long.	MAXIMUM CURRENTS Flood Direction true (degrees)	Flood Velocity (knots)	Ebb Direction true (degrees)	Ebb Velocity (knots)
BELL, MD. and VA. COAST	N.	W.				
Cape Henry Light, 0.7 mile east of	36 56	76 00	280	1.3	100	1.4
Virginia Beach, north end	36 50	75 58	355	1.1	185	1.1
Chain Henry Light, 2.5 miles SE.	36 54	76 00	280	1.1	100	1.1
CHESAPEAKE BAY						
Cape Henry Light, 1 mile north of	36 58	76 00	090	1.1	30	0.9
Cape Henry Light, 2.4 miles east of	36 55	76 00	280	1.2	100	1.1
CHESAPEAKE BAY BRIDGE-TUNNEL						
Cape Henry Light, 4.6 miles north of	37 00	76 00	090	1.0	180	1.1
Cape Charles Light, 3.4 miles NW. of	37 16	75 52	330	1.0	150	1.3
Cape Henry Light, 8.5 mi. SW. of	36 54	76 10	060	1.1	240	1.1
Lynnhaven Inlet, 1.2 miles east of	36 54	76 04	090	0.7	270	0.5
Lynnhaven Inlet, 1.2 miles south of	36 54	76 04	180	0.7	360	0.5
Chesapeake Bay Bridge Tunnel						
Thimble Shoal Channel, 1.2 miles N. of	36 59	76 10	305	0.9	130	0.9
Thimble Shoal Channel, 1.2 miles S. of	36 57	76 10	125	0.9	305	0.9
Tail of the Horseshoe	37 00	76 04	300	0.7	150	1.2
Middle Ground, 1.2 miles east of	37 00	76 04	090	0.7	270	0.7
Chesapeake Channel, 1.2 miles east of	37 00	76 04	090	1.2	270	1.2
Fisherman I., 0.8 miles NW. of	37 04	76 07	330	1.4	150	1.4
Fisherman I., 1.4 miles NW. of	37 06	76 07	330	1.4	150	1.4
Fisherman I., 2.8 miles south of	37 04	76 07	180	1.4	360	1.4
Fisherman I., 1.4 miles south of	37 06	76 07	180	1.4	360	1.4
Fisherman I., 1.3 miles NE. of	37 06	76 05	045	1.4	225	1.4
Cape Charles, off Mine Point	37 07	75 59	300	0.7	120	0.8
LITTLE CREEK						
Little Creek Inlet, 0.4 mile east of	36 56	76 01	090	0.7	270	0.7
0.4 mile north of west jetty	36 56	76 01	015	0.4	192	0.9
HAMPTON ROADS						
Thimble Shoal Lt., 1.4 miles ESE. of	36 57	76 16	300	0.6	118	1.0
Port Wool						
0.4 mile northeast of	37 00	76 17	060	1.0	80	1.6
0.4 mile southeast of	37 00	76 17	150	1.0	330	1.6
0.4 mile southwest of	37 00	76 17	240	1.0	060	1.6
0.4 mile northwest of	37 00	76 17	330	1.0	150	1.6
Old Point Comfort						
Wickham[illegible]	36 59	76 19	060	1.5	80	1.5
0.4 mile east of	36 59	76 19	090	1.5	270	1.5
0.4 mile south of	36 59	76 19	180	1.5	360	1.5
0.4 mile southwest of	36 59	76 19	240	1.5	060	1.5
Willoughby Spit, 0.3 mile NW. of	36 59	76 18	300	0.7	120	0.7
Willoughby Spit, 0.1 mile north of	36 59	76 18	340	0.7	160	0.8
Willoughby Bay entrance, 0.3 mile east of	36 59	76 17	090	0.7	270	0.7
Sewells Point, channel west of	36 57	76 20	345	1.2	165	1.2
Sewells Point, channel east of	36 57	76 19	165	1.2	345	1.2
Hampton Roads						
Channel, east end	36 58	76 20	050	1.1	40	1.4
Channel, middle	36 58	76 20	230	1.1	050	1.4
Channel, west end	36 58	76 20	230	1.1	050	1.4
Middle channel, 0.4 mile south of	36 57	76 20	270	1.1	090	1.1
ELIZABETH RIVER						
Craney Island	36 53	76 20	345	0.7	10	1.0
Lambert Point	36 55	76 20	175	0.5	345	0.5
Norfolk, Navy Base, western	36 56	76 18	175	0.5	345	0.5
Southern RR. channel, Pinner Point	36 54	76 21	345	0.7	165	0.7
Belltrace Steam Packet Co. wharves	36 51	76 19	340	0.4	160	0.4

Current tends to rotate clockwise. At times for "slack, flood begins" there may be a weak current flowing northwest while at times for "slack, ebb begins" there may be a weak current flowing southeast.

At Old Point Comfort dock, current turns about 1 hour earlier than in midchannel.

Last Print May 2-66
3rd Ed., corr. thru. NM 18, Apr. 30, 1966

562-SC PRICE $1.00

Chart 562-SC provides additional information for the small craft operator.

Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE *John T. Connor, Secretary*
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION *Robert M. White, Administrator*
COAST AND GEODETIC SURVEY *James C. Tison, Jr., Director*

LOGARITHMIC SPEED SCALE

To find SPEED, place one point of dividers on nautical miles run and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in knots. Example: with 4.0 miles run in 15 minutes, the speed is 16.0 knots.

(Cape Charles to Norfolk Harbor)

SOUNDINGS IN FEET - SCALE 1:40,000

C.&G.S. 562-SC

PRICE $1.00