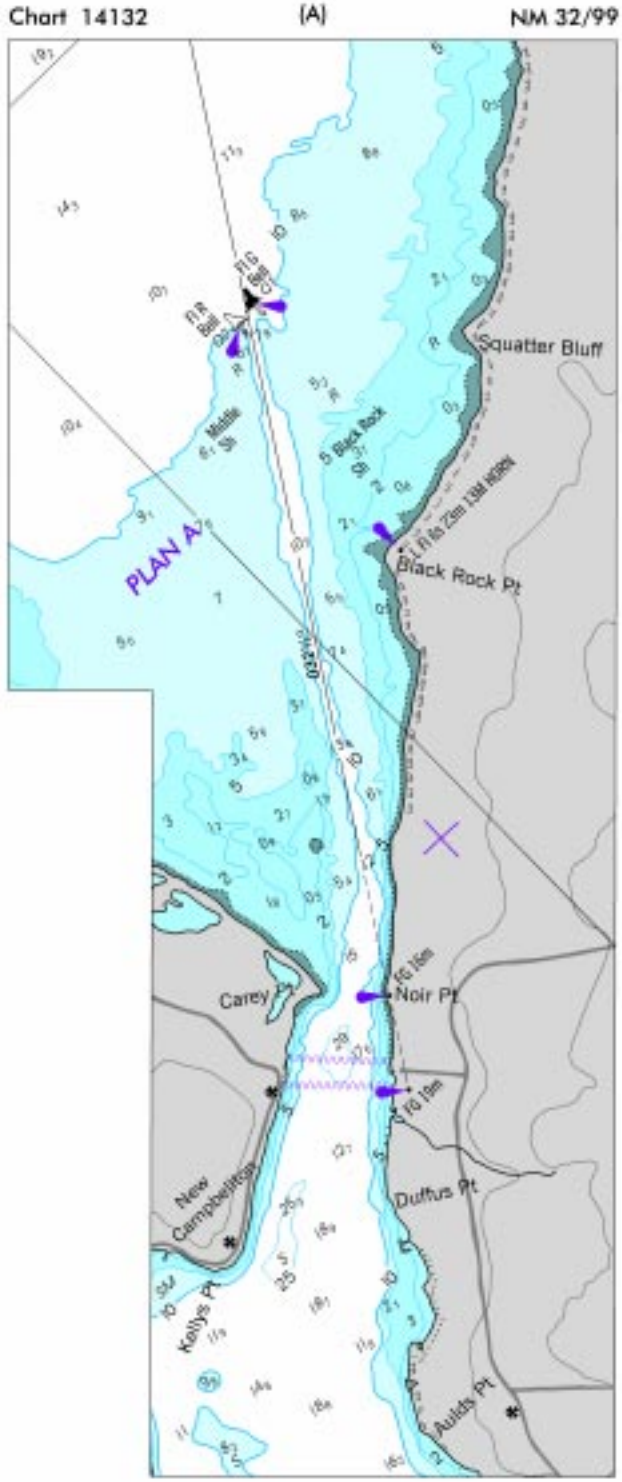
Chart 14132
(A)
NM 32/99
Squatter Bluff
Black Rock Pt
PLAN A
Carey Pt
Noir Pt
Duffus Pt
New Campbelltown
Kellys Pt
Aulds Pt

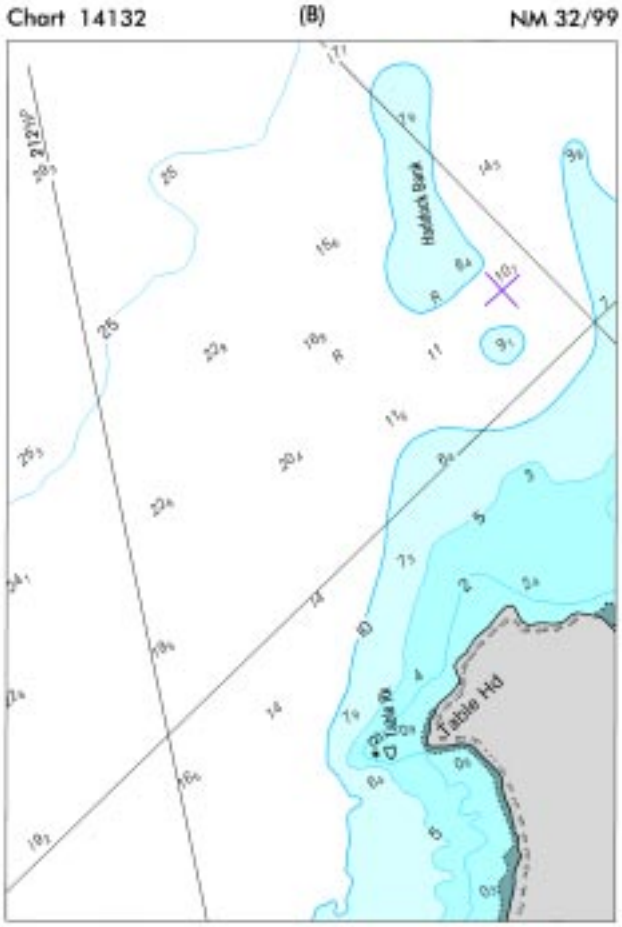
Chart 14132
(B)
NM 32/99
Table Hd

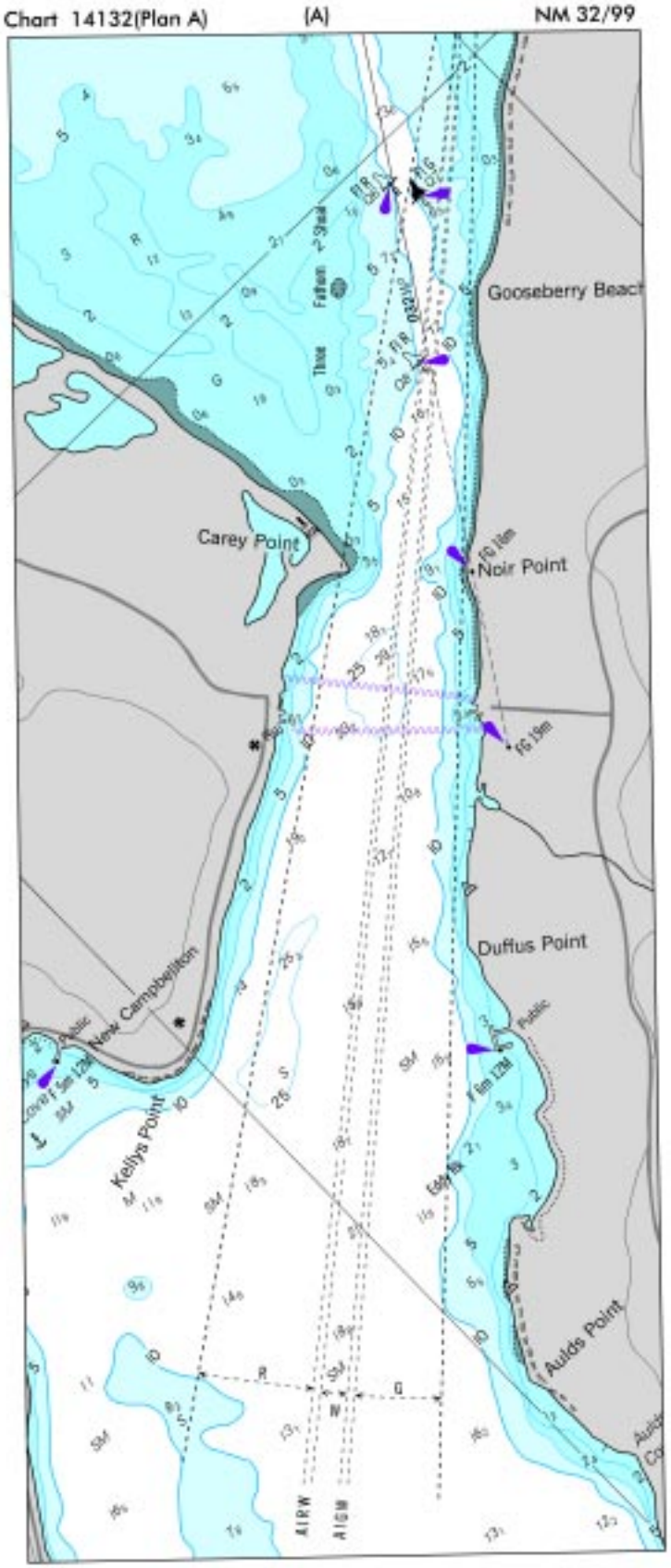
Chart 14132(Plan A)
(A)
NM 32/99
Gooseberry Beach
Carey Point
Noir Point
Duffus Point
New Campbellton
Kellys Point
Aulds Point

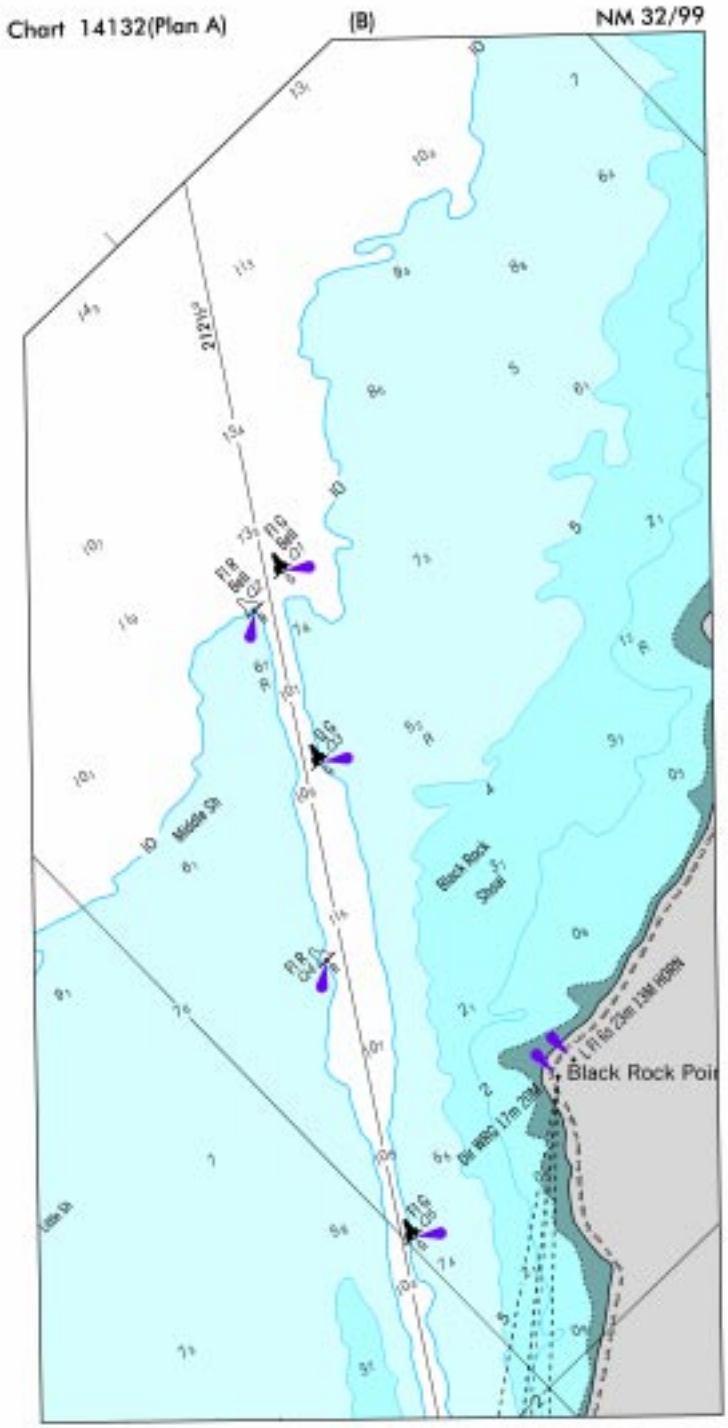
Chart 14132(Plan A)
(B)
NM 32/99
Black Rock Shoal
Black Rock Poi

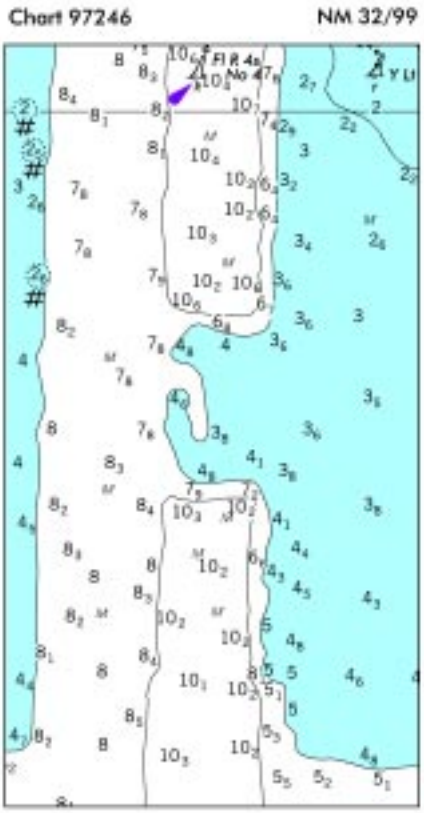
Chart 97246
NM 32/99

Chart 97251 (A) NM 32/99

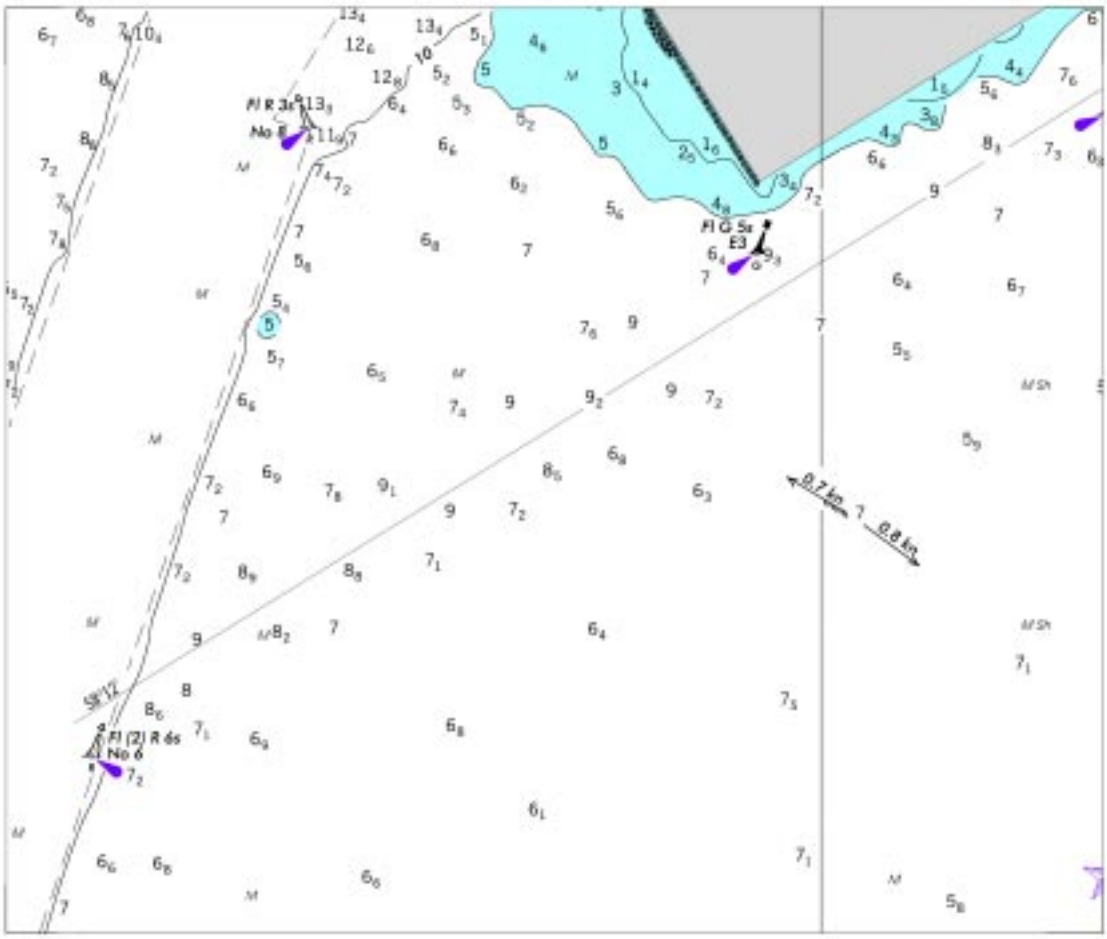

Chart 97251 (B) NM 32/99

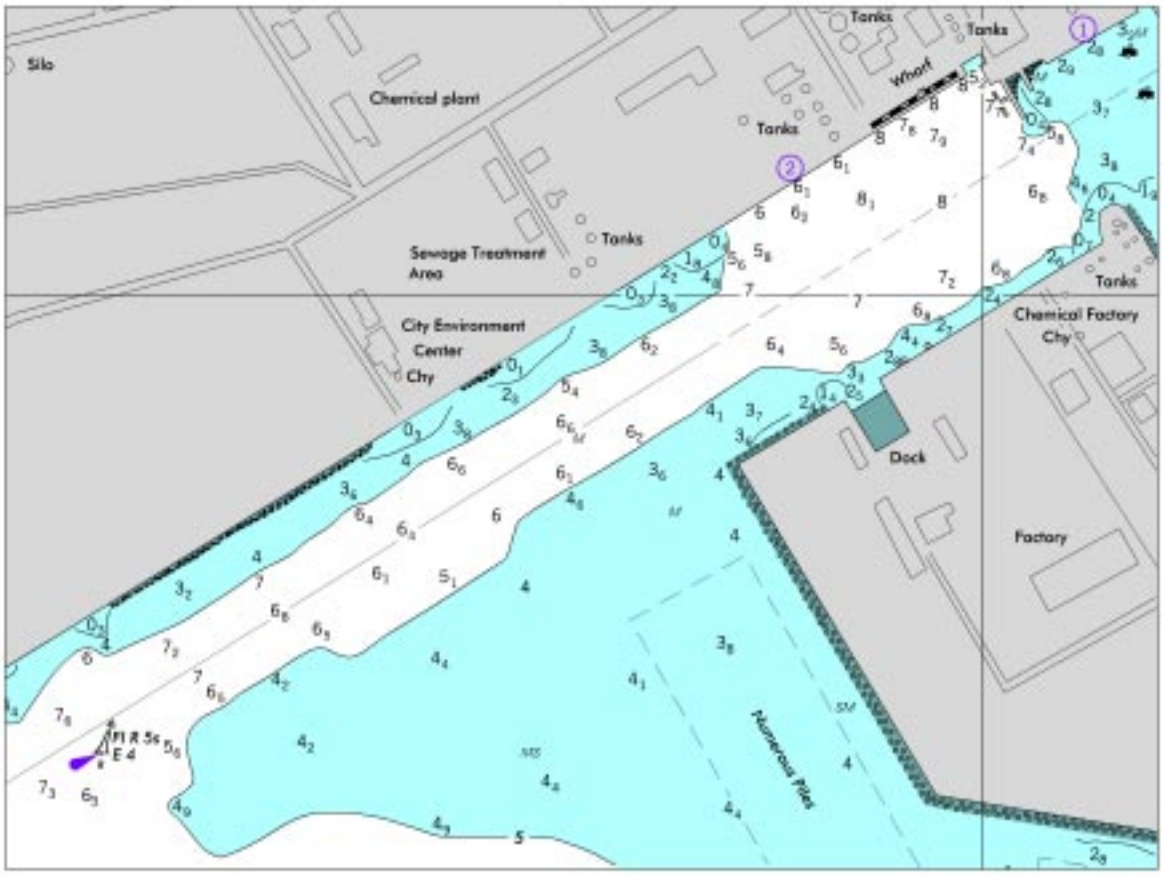

Chart 97251 (C) NM 32/99

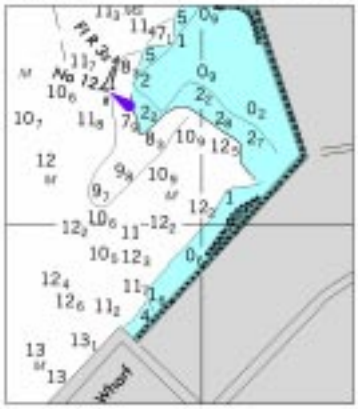

CHART 11372 (SIDE B) NM 32/99

SHIP ISLAND PASS AND GULFPORT HARBOR CHANNELS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF OCT - DEC 1998

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
SHIP ISLAND BAR CHANNEL	35.5	36.0	35.0	12-98	300	11.2	38
GULFPORT CHANNEL	36.0	36.0	36.0	12-98	220	7.0	36
ANCHORAGE BASIN	32.0	32.0	32.0	10-98	1110-1220	0.4	32-36

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 11373 NM 32/99

SHIP ISLAND PASS AND GULFPORT HARBOR CHANNELS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF OCT - DEC 1998

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
SHIP ISLAND BAR CHANNEL	35.5	36.0	35.0	12-98	300	11.2	38
GULFPORT CHANNEL	36.0	36.0	36.0	12-98	220	7.0	36
ANCHORAGE BASIN	32.0	32.0	32.0	10-98	1110-1220	0.4	32-36

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 11503 NM 32/99

FERNANDINA HARBOR

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JAN 1999 AND SURVEYS TO NOV 1998

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)

NAME OF CHANNEL	DEPTH MLLW (FEET)	WIDTH (FEET)	DATE OF SURVEY
QUARANTINE REACH	A 35.3	400-1100	11-98
OLD TOWN REACH	B 33.4	400-560	11-98
SEABOARD REACH	C 35.1	400	11-98
CITY FRONT REACH	22.7	300	11-98
RAYONIER REACH	9.0	300	11-98

A. EXCEPT SHOALING TO 31.5 FT AT 30° 41' 19.6"N, 81° 27' 37.6"W.
B. EXCEPT SHOALING TO 31.7 FT IN RIGHT OUTSIDE QUARTER.
C. EXCEPT SHOALING TO 32.4 FT AT 30° 40' 33.7"N, 81° 27' 59.2"W.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGING CONDITIONS SUBSEQUENT TO THE ABOVE

CHART 11512 NM 32/99

SAVANNAH RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUNE 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
TYBEE RANGE	44.5	44.0	44.0	44.5	6-99	600	3.3	44
BLOODY POINT RANGE	44.0	44.0	44.0	44.0	6-99	600	3.0	44
JONES ISLAND RANGE	46.0	45.0	44.0	46.0	6-99	600	1.2	44
TYBEE KNOLL CUT RANGE	44.0	44.0	45.0	43.0	6-99	500	2.5	42
NEW CHANNEL RANGE (A)	38.5	43.0	43.0	43.0	6-99	500	1.6	42
L. I. CROSSING RANGE	43.0	44.0	44.0	42.5	6-99	500	2.6	42
LOWER FLATS RANGE	46.5	46.0	46.0	41.0	6-99	500	1.3	42
UPPER FLATS RANGE	47.0	47.0	46.0	46.5	6-99	500	1.2	42
THE BIGHT CHANNEL	45.0	46.5	47.0	47.0	6-99	500	1.5	42
FT. JACKSON RANGE	47.0	47.0	47.0	45.0	6-99	500	0.7	42
OGLETHORPE RANGE	42.5	46.0	46.0	45.0	6-99	500	1.2	42
WRECKS CHANNEL (B)	48.0	42.0	44.0	45.0	6-99	500	1.5	42
CITY FRONT CHANNEL	43.0	43.0	41.0	38.0	6-99	500	1.5	42
MARSH ISLAND CHANNEL (C)	43.0	44.5	45.0	43.0	6-99	500	1.7	42
KINGS ISLAND CHANNEL (D)	38.0	38.0	41.0	41.0	6-99	500	2.1	42
WHITEHALL CHANNEL (E)	32.0	35.5	37.0	41.0	6-99	400	0.6	42-36
PORT WENTWORTH CHANNEL (F)	30.0	30.0	30.0	32.0	12-94;11-96;6-99	200	1.2	30

A. OYSTER BED (TURNING BASIN-CONTROLLING DEPTH 42.5 FT, 36.0 FT 100 FT FROM BACKSIDE.
B. FIG ISLAND TURNING BASIN-CONTROLLING DEPTH 39.0 FT, 33.5 FT 100 FT FROM BACKSIDE.
C. MARSH ISLAND TURNING BASIN-CONTROLLING DEPTH 35.0 FT, 30.0 FT 100 FT FROM BACKSIDE.
D. KINGS ISLAND TURNING BASIN-CONTROLLING DEPTH 45.0 FT, 37.0 FT 100 FT FROM BACKSIDE.
E. ARGYLE ISLAND TURNING BASIN-CONTROLLING DEPTH 39.5 FT 100 FT FROM BACKSIDE.
F. PORT WENTWORTH TURNING BASIN-CONTROLLING DEPTH 28.0 FT, 28.0 FT 100 FT FROM BACKSIDE.

NOTE: AT MEAN HIGH WATER, DEPTHS ARE ABOUT 7 FEET GREATER AT LOWER END OF THE HARBOR AND 7.7 FEET GREATER AT UPPER END OF HARBOR.

NOTE: FOR THE LEFT OUTSIDE AND RIGHT OUTSIDE QUARTERS, DEPTHS GIVEN REPRESENT CONDITIONS 75 FEET INSIDE THE CHANNEL LIMITS.

NOTE: CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 11521 NM 32/99

CHARLESTON HARBOR ENTRANCE

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF SEP 1998 AND SURVEYS TO FEB 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
FORT SUMTER RANGE	42.6	41.6	42.6	41.9	2-99	1000	9.0	42
MOUNT PLEASANT RANGE	42.2	44.1	45.5	50.1	2-97	1000-600	1.6	40

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 11523 NM 32/99

CHARLESTON HARBOR ENTRANCE

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF SEP 1998 AND SURVEYS TO FEB 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
FORT SUMTER RANGE	42.6	41.6	42.6	41.9	2-99	1000	9.0	42
MOUNT PLEASANT RANGE	42.2	44.1	45.5	50.1	2-97	1000-600	1.6	40

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 11524 NM 32/99

CHARLESTON HARBOR, COOPER RIVER AND SHIPYARD RIVER

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT TO MAR 1999 AND SURVEYS TO FEB 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
FORT SUMTER RANGE	42.6	41.6	42.8	41.9	2-99	1900	9.0	42
MOUNT PLEASANT RANGE	42.2	44.1	45.5	58.1	2-97	1000-600	1.6	40
REBELLION REACH	41.2	42.7	43.6	35.8	2-97	600	1.9	40
FOLLY REACH	38.7	41.3	41.0	35.2	1-97	600	0.5	40
SHUTES REACH	44.0	45.2	42.2	41.1	1-97	600	0.3	40
HORSE REACH	43.7	43.6	43.0	40.8	1-97	600	0.9	40
CUSTOMHOUSE REACH	37.0	43.6	44.3	45.0	1-97	1385	0.2	40
SOUTH CHANNEL	24.4	24.8	24.5	A24.3	10-96	600-1000	3.1	35
HOG ISLAND REACH	41.1	46.0	40.8	38.3	1-97	600-1300	1.3	40
DRUM ISLAND REACH	38.5	43.0	43.1	40.4	1-97	600-1300	1.0	40
TOWN CREEK LOWER REACH	35.1	46.4	39.0	36.7	1-97	400-450	1.1	40
TURNING BASIN	36.9	36.3	36.0	33.0	1-97	1500	0.25	40
TOWN CREEK UPPER REACH	35.6	39.4	40.4	31.0	12-94	500-600	1.0	40
MYERS BEND	41.9	43.4	44.4	45.3	1-97	600-800	0.8	40
DANIEL ISLAND REACH	40.8	42.1	41.7	37.4	1-97	600-800	1.0	40
DANIEL ISLAND BEND	41.9	42.2	42.2	43.0	2-97	700	0.6	40
CLOUTER CREEK REACH	41.5	42.4	42.3	38.3	2-97	600	0.9	40
NAVY YARD REACH	35.1	41.9	41.9	32.1	2-97	600-700	1.1	40
NORTH CHARLESTON REACH	36.8	40.3	39.8	40.1	2-97	500-600	1.0	40
FILBIN CREEK REACH	39.4	41.2	41.9	40.5	2-97	500	0.6	40
PORT TERMINAL REACH	34.7	41.9	41.7	41.6	2-97	600	0.7	40
ORDNANCE REACH	42.7	44.4	44.5	44.4	2-97	300	0.3	40
ORDNANCE REACH TURNING BASIN	42.8	43.7	43.7	42.5	2-97	1100	0.26	40
WANDO RIVER								
LOWER REACH	38.1	42.7	42.1	40.0	5-98	1500-400	1.3	40
UPPER REACH	38.9	38.9	38.4	37.3	5-98	400-850	.74	40
TURNING BASIN	35.6	39.7	43.1	45.2	8-98	550	.3	40
SHIPYARD CREEK								
MAIN CHANNEL	27.7	28.8	25.6	26.8	2-97	1200-300	1.0	30
LOWER TURNING BASIN	38.3	38.6	41.2	41.3	2-97	750	0.2	38
UPPER TURNING BASIN	25.2	25.9	27.6	26.8	2-97	600	0.15	30
COOPER RIVER								
RANGE A	36.3	37.4	38.3	36.9	7,8-98	400-1350	1.02	35
RANGE B	19.4	26.7	33.5	35.8	7,8-98	VARIES	.74	35
RANGE C	20.4	27.3	39.8	37.1	7,8-98	VARIES	.76	35
RANGE D	32.2	34.2	31.1	25.9	7,8-98	VARIES	.58	35
RANGE E	32.1	34.9	38.2	36.3	1-95	VARIES	.38	35
RANGE F	25.0	36.6	35.2	33.9	1-95	VARIES	.29	35

A. ALONG CHANNEL EDGE.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 11527 NM 32/99

COOPER RIVER

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF MAR 1999 AND SURVEYS TO JULY 1998

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
COOPER RIVER								
RANGE A	36.3	37.4	38.3	36.9	7,8-98	400-1350	1.02	35
RANGE B	19.4	26.7	33.5	35.8	7,8-98	VARIES	.74	35
RANGE C	20.4	27.3	39.8	37.1	7,8-98	VARIES	.76	35
RANGE D	32.2	34.2	31.1	25.9	7,8-98	VARIES	.58	35
RANGE E	32.1	34.9	38.2	36.3	1-95	VARIES	.38	35
RANGE F	25.0	36.6	35.2	33.9	1-95	VARIES	.29	35

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 12337 NM 32/99

NEWARK BAY,PASSAIC AND HACKENSACK RIVERS CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF APR 1999 AND SURVEYS TO MAR 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
NEWARK BAY MIDDLE REACH	37.2	40.2	37.2	34.2	7,8-98	600-400	1.4	35
NEWARK BAY NORTH REACH	32.3	34.6	23.7	A19.0	7,8-98	500	1.1	35
TURNING BASIN	24.7	26.4	24.7	A19.3	7,8-98	900	0.26	35
PASSAIC RIVER:								
KEARNY PT REACH	17.5	18.9	17.3	13.6	3-99	300	1.1	30
POINT NO POINT REACH	5.4	9.7	13.5	10.2	6-89; 3-99	300	1.1	30
HARRISON REACH	1.7	6.5	8.4	2.6	6-89	300	1.9	20
NEWARK REACH	1.2	8.2	9.5	4.3	6-89	300	1.3	B20
KEARNY REACH	C0.8	8.8	8.2	1.2	6-89	300	0.9	B20
ARLINGTON REACH	2.0	6.8	9.1	2.5	6,11-89	200	0.9	16
BELLEVILLE REACH	0.1	0.4	8.0	9.9	6-92	150	1.4	10
NUTLEY REACH	2.6	9.2	7.4	3.5	11-89	150	1.7	10
RUTHERFORD REACH	1.7	5.1	3.8	3.7	11-89	150	2.2	10
WALLINGTON REACH	D2.2	1.5	1.9	E1.1	11-89	150	0.9	10
HACKENSACK RIVER:								
DROYERS POINT REACH	25.5	28.8	25.8	19.3	10,11-98	300-400	1.5	30
MARION REACH	27.1	26.7	28.9	22.6	10,11-98	300	1.8	30
TURNING BASIN	19.2	24.4	29.3	22.6	10,11-98	300-800	0.2	25
PORT NEWARK CHANNEL:								
BRANCH CHANNEL	35.0	35.0	35.0	29.8	12-89;1-90	800-400	0.4	35
INSHORE CHANNEL	35.0	35.0	31.4	33.0	11-89	400	1.1	35
PIERHEAD CHANNEL	35.0	35.0	35.0	35.0	12-89	300	0.7	35

A. EXCEPT FOR A SHOAL TO 9 FT AT 40° 42' 11.4" N 74° 06' 56.1" W ALONG THE RIGHT OUTSIDE QUARTER OF THE REACH.
B. PROJECT CHANNEL, 20 FEET DEEP, HAS NEVER BEEN DREDGED. DEPTHS SHOWN ARE FOR EXISTING CHANNEL.
C. EXCEPT FOR A SHOAL, BARE AT M.L.L.W., ALONG THE LEFT OUTSIDE QUARTER OF THE LAST 380 YARDS OF THE REACH.
D. A SHOAL BARE AT M.L.L.W. EXTENDS ACROSS THE LEFT OUTSIDE QUARTER ABOUT 370 YARDS DOWNSTREAM OF THE EIGHTH STREET BRIDGE.
E. A SHOAL BARE AT M.L.L.W. EXTENDS ACROSS THE RIGHT OUTSIDE QUARTER ABOUT 300 YARDS NORTH OF THE MAIN ST. BRIDGE AND SHOALING TO 0.3 FEET 175 FEET WEST OF THE SECOND ST. BRIDGE.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 12377 (SIDE B) NM 32/99

CONNECTICUT RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEB 1999 AND SURVEYS TO JUL 1998

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
MOUSE ISLAND BAR CHANNEL	15.0	13.3	11.8	7-83	150	0.7	15
PORTLAND BAR CHANNEL	11.6	11.9	12.9	7-83	150	0.3	15
CROMWELL BAR CHANNEL	14.5	14.1	13.3	7-83	150	0.6	15
GILDERSLEEVE ISLAND SHOAL CHANNEL	11.2	14.4	11.1	9-89	150	0.9	15
PISTOL POINT BAR CHANNEL	8.9	9.2	10.1	7-98	150	0.9	15
BROWNSTONE BAR CHANNEL	15.0	13.7	13.1	9-89	150	0.9	15
DIVIDEND BAR CHANNEL	7.7	7.8	8.1	7-98	150	0.6	15
GLASTONBURY-TWO PIERS BAR CHANNEL	11.6	12.1	12.6	4-86	150	1.2	15
GLASTONBURY UPPER BAR CHANNEL	12.3	12.2	12.0	4-86	150	0.9	15
PRESS BARN BAR CHANNEL	14.1	13.2	12.6	9-89	150	0.1	15
NAUBUC BAR CHANNEL	15.0	15.0	13.6	11-82	150	0.5	15
CYS HOLLOW BAR CHANNEL	15.0	15.0	13.9	9-89	150	0.5	15
WETHERSFIELD SHOAL CHANNEL	11.8	12.2	12.8	9-89	150	0.4	15
CLAY BANKS BAR CHANNEL	12.3	12.9	12.9	1,2,3-91	150	1.6	15
HARTFORD BAR CHANNEL	9.7	10.2	13.5	10-89	150	0.4	15

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 12377 (SIDE A) NM 32/99

CONNECTICUT RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF FEB 1999 AND SURVEYS TO JUNE 1998

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
BROCKWAY BAR CHANNEL	12.0	13.7	14.2	6-88	150	0.4	15
POTASH BAR CHANNEL	12.6	12.8	12.7	8-83	150	0.4	15
EDDY ROCK SHOAL CHANNEL	14.1	13.3	12.5	7-83	200-150	0.4	15
WARNERS QUARRY BAR CHANNEL	14.5	14.0	12.9	5-86	200-150	0.5	15
HADDAM ISLAND BAR CHANNEL	13.9	14.0	10.1	8-83	150	0.3	15
ROCK LANDING BAR CHANNEL	10.9	10.6	10.2	6-98	150	0.6	15
HIGGANUM CREEK SHOAL CHANNEL	13.7	14.0	13.8	8-94	150	0.3	15
SCOVILL ROCK BAR CHANNEL	15.0	14.9	14.3	10-89	150	0.4	15
SEARS SHOAL CHANNEL	9.5	9.8	9.9	6-98	150	0.5	15
SEARS UPPER BAR CHANNEL	12.7	13.2	13.7	12-97	150	0.5	15
COBALT SHOAL CHANNEL	13.5	14.1	15.0	5-70	150	0.9	15
PAPER ROCK SHOAL CHANNEL	13.9	13.7	13.4	5-86	150	0.5	15

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 18523 NM 32/99

COLUMBIA RIVER CHANNEL DEPTHS
MILLER SANDS RANGE TO GULL ISLAND TURN AND CHANNEL

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAY 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT COLUMBIA RIVER DATUM (CRD)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
MILLER SANDS RANGE	40	44	39	28	5-99	600	2.2	40
PILLAR ROCK LOWER RANGE	39	40	41	38	5-99	600	3.0	40
PILLAR ROCK UPPER RANGE	37	43	43	40	5-99	600	1.9	40
WELCH ISLAND REACH	42	42	41	25	5-99	600	3.2	40
SKAMOKAWA CHANNEL	37	42	40	29	4,5-99	600	3.3	40
STEAMBOAT REACH	52	47	44	45	4-99	600	1.4	40
PUGET ISLAND RANGE AND TURN	39	41	39	39	4-99	600	3.5	40
WAUNA RANGE	39	42	40	37	4-99	600	2.2	40
DRISCOLL RANGE	42	41	42	42	4-99	600	1.7	40
WESTPORT TURN AND RANGE	39	40	40	41	4-99	600	2.0	40
WESTPORT CHANNEL	37	40	40	39	4-99	600	2.4	40
EUREKA LOWER CHANNEL	44	47	45	44	4-99	600	2.1	40
EUREKA UPPER CHANNEL	40	43	42	41	4-99	600	0.8	40
OAK POINT CHANNEL	44	46	45	44	4-98	600	2.4	40
GULL I TURN AND CHANNEL	47	42	41	37	4,5-99	600	2.2	40

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 18524 (SIDE A) NM 32/99

COLUMBIA RIVER CHANNEL DEPTHS
GULL ISLAND TURN AND CHANNEL TO SAINT HELENS TURN
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAY 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT COLUMBIA RIVER DATUM (CRD)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
GULL I TURN AND CHANNEL	47	42	41	37	5-99	600	2.2	40
STELLA RANGE	34	38	38	36	5-99	600	2.8	40
FISHER I CHANNEL	41	43	45	42	5-99	600	0.9	40
WALKER I CHANNEL	39	43	43	37	5-99	600	1.5	40
BARLOW PT. CHANNEL	41	44	43	41	5-99	600	1.3	40
SLAUGHTERS CHANNEL	38	38	38	39	5-99	600	2.5	40
SLAUGHTERS TURN AND CHANNEL OPPOSITE THE TURNING BASIN	38	39	37	36	5-99	600	1.7	40
COTTONWOOD ISLAND LOWER RANGE	36	36	37	35	5-99	600	1.7	40
COTTONWOOD ISLAND TURN	41	39	39	36	5-99	600	2.7	40
COTTONWOOD ISLAND UPPER RANGE AND TURN	38	40	41	40	5-99	600	1.6	40
KALAMA LOWER RANGE	41	46	41	31	5-99	600	1.8	40
KALAMA UPPER RANGE	37	38	40	40	5-99	600	2.2	40
BYBEE LEDGE CHANNEL	42	42	43	40	5-99	600	2.1	40
MARTIN ISLAND CHANNEL	41	38	36	38	5-99	600	2.1	40
MARTIN ISLAND RANGE	38	39	40	38	5-99	600	1.4	40
COLUMBIA CITY CHANNEL	40	41	41	39	5-99	600	1.2	40
ST. HELENS RANGE	40	41	39	35	5-99	600	2.0	40
ST. HELENS TURN	43	42	41	37	5-99	600	1.7	40

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 18524 (SIDE B) NM 32/99

COLUMBIA RIVER CHANNEL DEPTHS
SAINT HELENS TURN TO TOMAHAWK BAR
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAY 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT COLUMBIA RIVER DATUM (CRD)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
ST. HELENS TURN	43	42	41	37	5-99	600	1.7	40
WARRIOR ROCK RANGE	40	42	41	40	5-99	600	1.3	40
DUCK CLUB TURN	40	42	42	42	5-99	600	1.4	40
HENRICI RANGE	38	38	38	38	5-99	600	2.6	40
FALES CHANNEL	41	40	40	37	5-99	600	1.1	40
KNAPP POINT CHANNEL	42	42	40	38	5-99	600	1.8	40
WILLOW LOWER RANGE	40	40	39	39	5-99	600	2.1	40
WILLOW UPPER RANGE	38	43	44	44	5-99	600	1.1	40
MORGAN TURN	41	45	45	49	5-99	600	1.0	40
MORGAN CHANNEL	45	45	45	43	5-99	600	1.5	40
VANCOUVER LOWER CHANNEL	47	49	50	40	5-99	500	1.0	40
VANCOUVER RANGE	41	41	41	40	5-99	500	1.3	40
VANCOUVER UPPER CHANNEL	41	41	42	40	5-99	500	0.9	40
VANCOUVER LOWER TURNING BASIN	32	33	37	39	5-99	800	1.0	40
VANCOUVER UPPER TURNING BASIN	31	26	28	23	5-99	800	0.9	35
TOMAHAWK BAR	14	15	15	16	4-98, 2-99	300	3.7	27

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 18526 NM 32/99

COLUMBIA RIVER CHANNEL DEPTHS
MORGAN CHANNEL TO TOMAHAWK BAR
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAY 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT COLUMBIA RIVER DATUM (CRD)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
MORGAN CHANNEL	45	45	45	43	5-99	600	1.5	40
VANCOUVER LOWER CHANNEL	47	49	50	40	5-99	500	1.0	40
VANCOUVER RANGE	41	41	41	40	5-99	500	1.3	40
VANCOUVER UPPER CHANNEL	41	41	42	40	5-99	500	0.9	40
VANCOUVER LOWER TURNING BASIN	32	33	37	39	5-99	800	1.0	40
VANCOUVER UPPER TURNING BASIN	31	26	28	23	5-99	800	0.9	35
TOMAHAWK BAR	14	15	15	16	4-98, 2-99	300	3.7	27

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 18584 NM 32/99

UMPQUA RIVER CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUNE 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
ENTRANCE CHANNEL TO LT. 21	18	21	20	5, 6-99	200	7.0	26-22
LT 21 TO REEDSPORT	18	19	17	5-99	200	2.7	22
REEDSPORT TURNING BASIN	26	22	24	10-98,5-99	600	0.2	22
LT. 21 TO GARDINER	13	14	12	5-99	200	1.15	22
TURNING BASIN	3	2	2	9-98, 5-99	500	0.2	22

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 18587 NM 32/99

COOS BAY AND ISTHMUS SLOUGH CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUNE 1999

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
ENTRANCE RANGE	39	37	35	9-98, 6-99	---	1.9	47-37
ENTRANCE RANGE AND TURN	37	46	35	5-99	300-1050	0.6	37
INSIDE RANGE	36	39	36	5-99	300	0.6	37
COOS BAY RANGE	34	37	36	5-99	300	1.6	37
EMPIRE RANGE	36	36	36	5-99	300	1.3	37
LOWER JARVIS RANGE	35	35	33	5-99	300	0.8	37
JARVIS TURN	36	37	34	5-99	300	0.5	37
UPPER JARVIS RANGE	33	35	34	5-99	300	1.9	
NORTH BEND LOWER RANGE	37	38	36	5-99	400	0.7	37
NORTH BEND RANGE	38	38	37	5-99	400	0.9	37
NORTH BEND UPPER RANGE	36	37	36	5-99	400	0.6	37
LOWER TURNING BASIN	35	38	34	5-99	400-800	0.3	37
FERNDALE LOWER RANGE	30	38	38	5-99	400	0.4	37
FERNDALE TURN	26	35	38	5-99	400	0.2	37
FERNDALE UPPER RANGE	A27	35	36	5-99	400	0.7	37
MARSHFIELD RANGE	32	34	31	5-99	400	0.4	37
MARSHFIELD RANGE TO ISTHMUS SLOUGH	29	34	35	5-99	150-750	0.9	37
ISTHMUS SLOUGH	19	20	19	4-85	150	2.0	22

A. SHOALING TO 9 FT IN OUTSIDE 75 FT OF QUARTER.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHART 24211 NM 32/99

CAUTIONS

1. Due to frequent changes in bathymetry, only mariners with local knowledge should navigate the Porto De Aracaju entrance channel.
2. Numerous platforms, submarine cables, and mooring buoys exist in this area. Mariners should avoid navigating in the marked area.
3. Anchoring and fishing are prohibited within 500 meters of submarine cables.

CHART 94082 NM 32/99

KAO-HSIUNG ANCHORAGES

These anchorage areas do not supersede existing Anchoring Prohibited areas. Also, anchoring is prohibited in depths of less than 10 meters.

CHART 94083 NM 32/99

KAO-HSIUNG ANCHORAGES

These anchorage areas do not supersede existing Anchoring Prohibited areas. Also, anchoring is prohibited in depths of less than 10 meters.

CHART 800323 NM N32/99

SHOALWATER BAY MILITARY EXERCISE AREA

1. The waters within the area are closed to public access during the conduct of military exercises; closure will be advised by Notice to Mariners. However, all creeks within the area are permanently closed to public access. Shelter from storm or tempest may still be sought at Freshwater Bay, Port Clinton and Pearl Bay.
2. Shoalwater Bay and its approaches are within the limits of a firing danger area.

CHART 803333 NM N32/99

SHOALWATER BAY MILITARY EXERCISE AREA

1. The waters within the area are closed to public access during the conduct of military exercises; closure will be advised by Notice to Mariners. However, all creeks within the area are permanently closed to public access. Shelter from storm or tempest may still be sought at Freshwater Bay, Port Clinton and Pearl Bay.
2. Shoalwater Bay and its approaches are within the limits of a firing danger area.