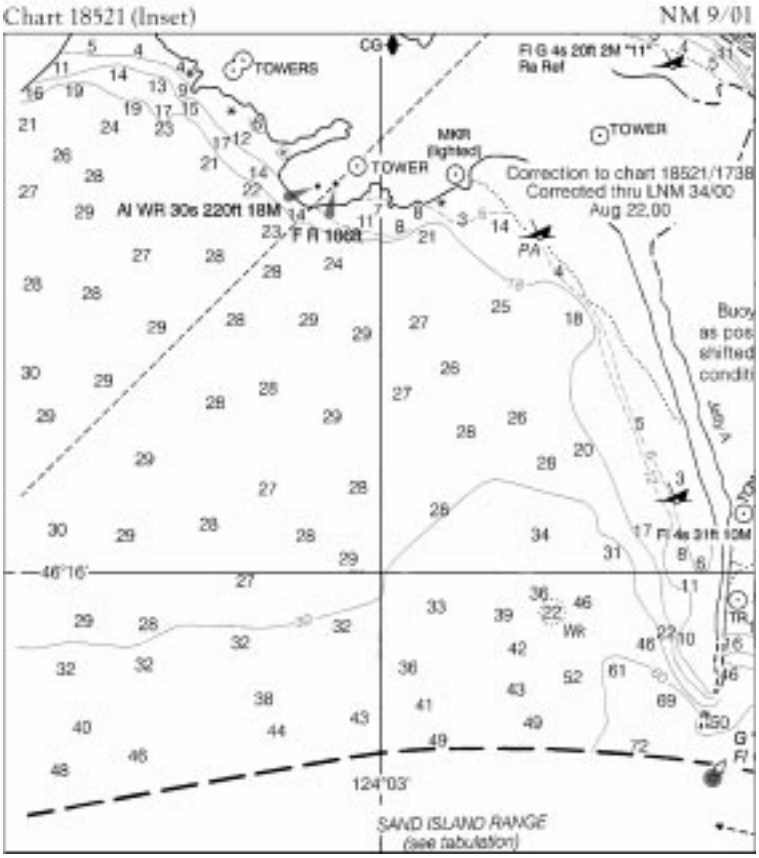
Chart 18521 (Inset)
NM 9/01
TOWERS
CG
Fl G 4s 20ft 2M "11"
Ra Ref
TOWER
MKR
(lighted)
TOWER
Correction to chart 18521/1738
Corrected thru LNM 34/00
Aug 22,00
Al WR 30s 220ft 18M
F Fl 10ft
PA
Buoy
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shifted
conditi
Fl 4s 31ft 10M
46°16'
124°03'
SAND ISLAND RANGE
(see tabulation)

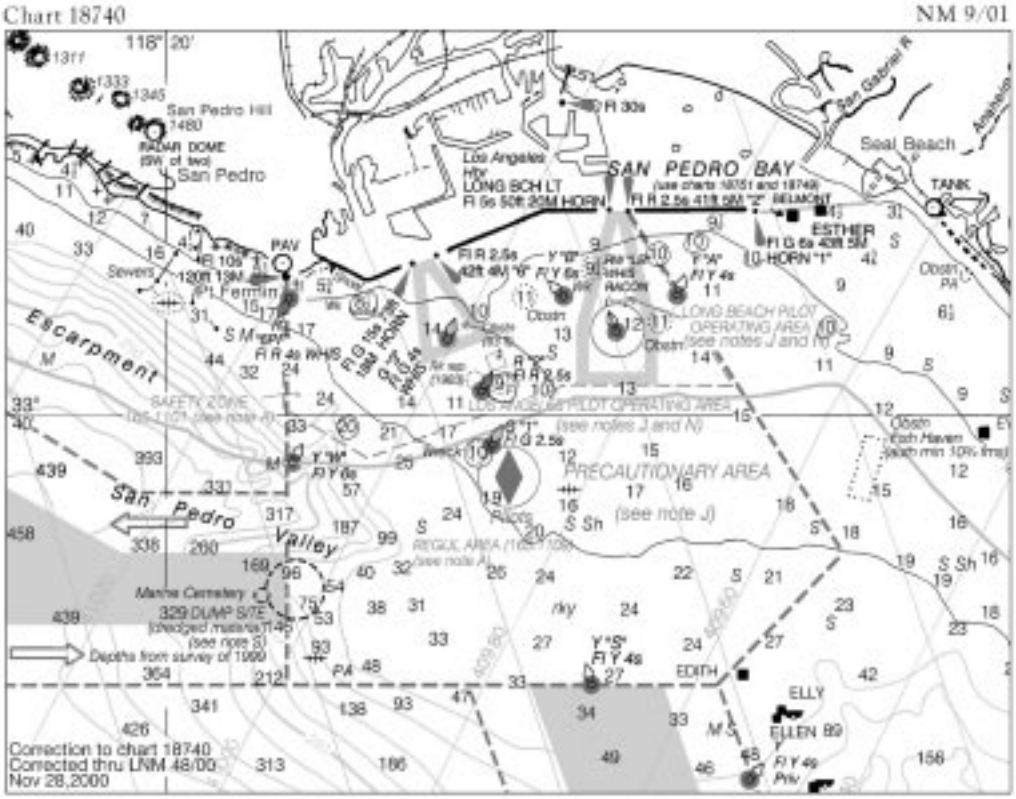
Chart 18740
NM 9/01
San Pedro Hill
RADAR DOME
San Pedro
Los Angeles Hbr
LONG SCH LT
SAN PEDRO BAY
Seal Beach
TANK
ESTHER
BELMONT
Pt Fermin
Escarpment
San Pedro Valley
LONG BEACH PILOT OPERATING AREA
(see notes J and N)
PRECAUTIONARY AREA
(see note J)
SAFETY ZONE
Marine Cemetery
329 DUMP S/TE
Depths from survey of 1999
EDITH
ELLY
ELLEN
Correction to chart 18740
Corrected thru LNM 48/00
Nov 28,2000

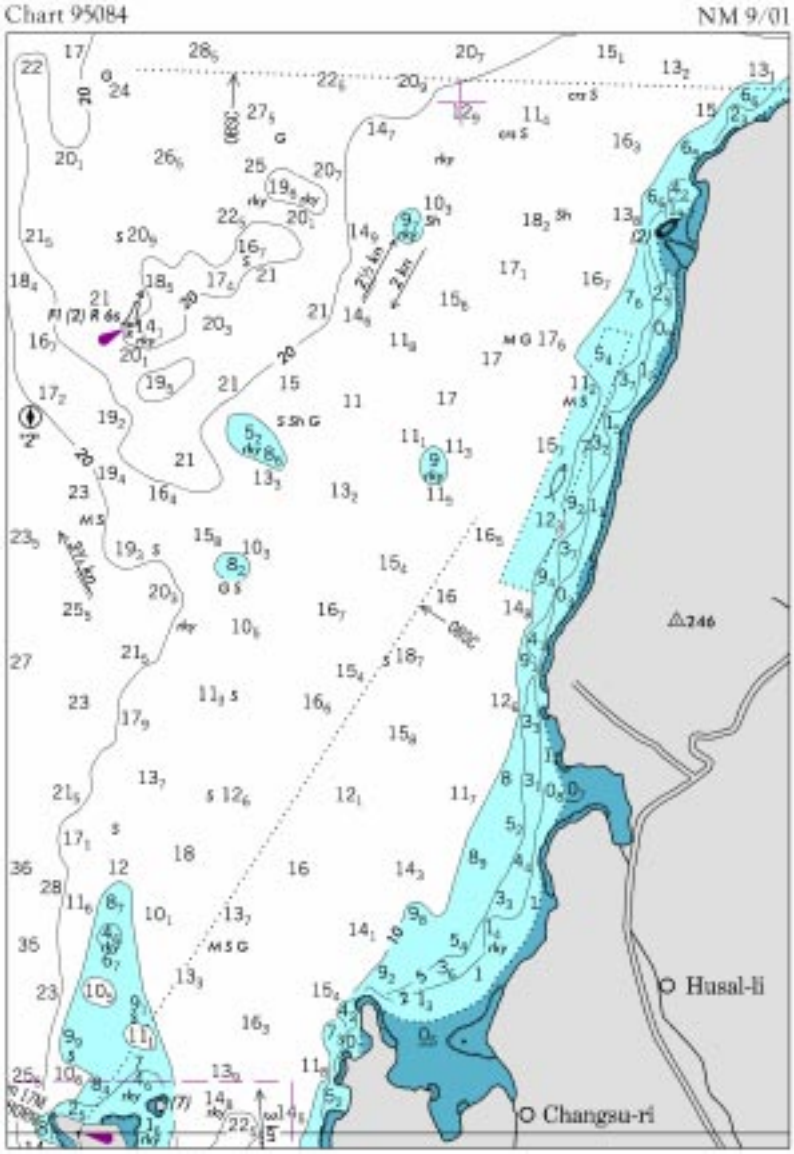
Chart 95084
NM 9/01
Husal-li
Changsu-ri

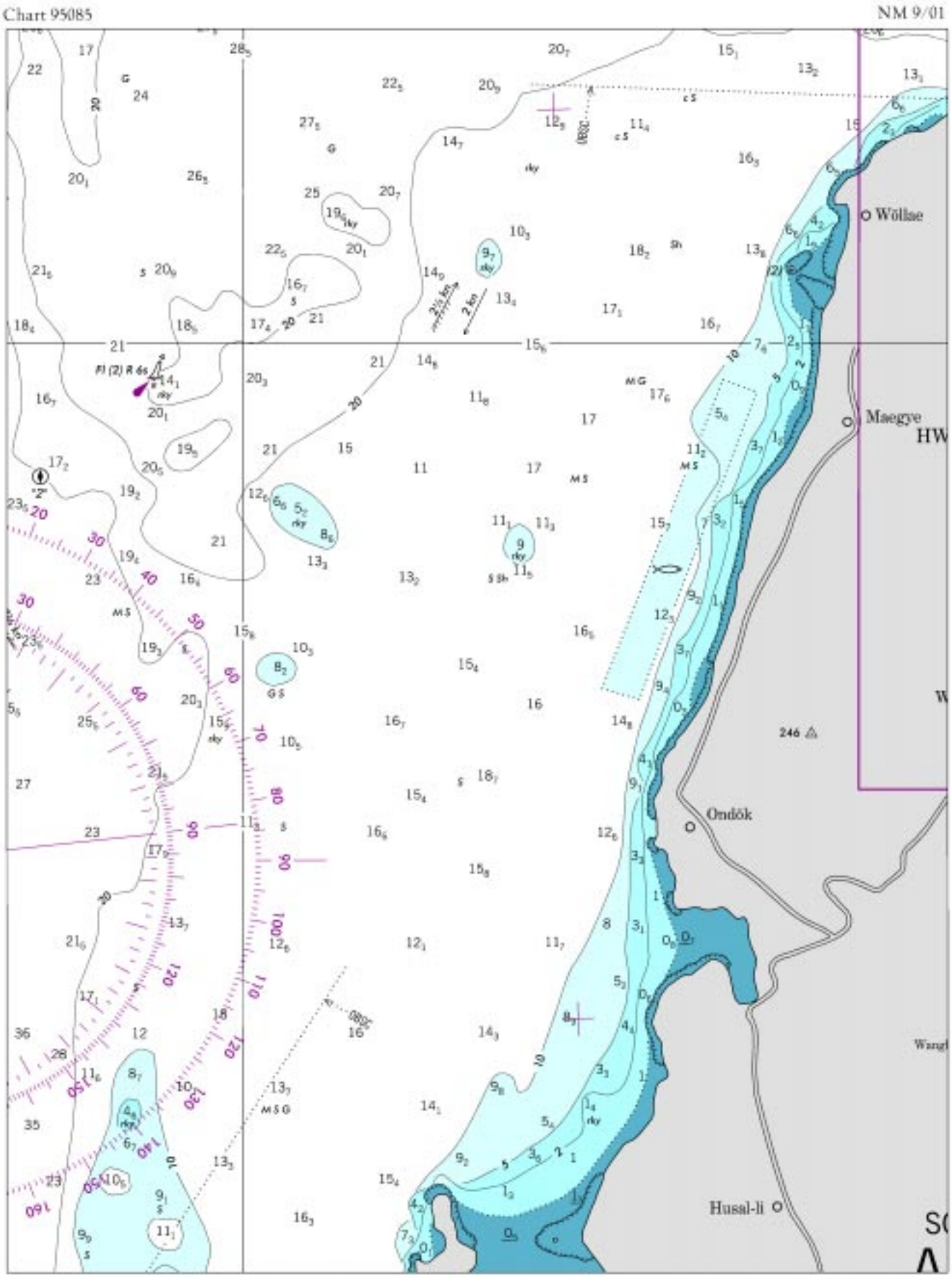
Chart 95085
NM 9/01
Wŏllae
Maegye
Ondŏk
Husal-li
Fl (2) R 6s

Chart 11324 NM 9/01

GALVESTON BAY AND HOUSTON SHIP CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2000

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOW TIDE (MLT)						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)
GALVESTON HARBOR:								
ENTRANCE CHANNEL	41.0	44.0	43.0	36.0	6-99	800	4.2	42
OUTER BAR CHANNEL	39.0	42.0	41.0	41.0	6-99	800	1.5	42
INNER BAR CHANNEL	38.0	42.0	40.0	36.0	2-99	800	2.9	40
BOLIVAR ROADS CHANNEL	43.0	43.0	41.0	36.0	10-99	800	0.78	40
HOUSTON SHIP CHANNEL								
BOLIVAR ROADS TO LOWER END OF MORGAN PT.	35.0	40.0	40.0	36.0	2-00; 3-00	400	22.0	40
GALVESTON CHANNEL	37.0	42.0	42.0	36.0	5-00;6-00;7-00	1125-1075	3.6	40
TEXAS CITY CHANNEL	37.0	41.0	40.0	37.0	6-00	400	5.3	40
TEXAS CITY TURNING BASIN	39.0	41.0	42.0	41.0	6-00	1200	0.6	40

INFORMATION IN THIS TABULATION HAS BEEN PROVIDED TO NOAA BY THE U.S. ARMY CORPS OF ENGINEERS. DEPTHS ARE REFERENCED TO A LOCAL DREDGING REFERENCE CALLED MEAN LOW TIDE. FOR AN APPROXIMATE CONVERSION TO MEAN LOWER LOW WATER, ADD 1 FOOT TO EACH DEPTH IN THE TABULATION.

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

Chart 11327 NM 9/01

GALVESTON BAY AND HOUSTON SHIP CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUN 2000

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOW TIDE (MLT)						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)
HOUSTON SHIP CHANNEL:								
BOLIVAR ROADS TO LOWER END OF MORGAN POINT	35.0	40.0	40.0	36.0	2-00; 3-00	400	22.0	40

INFORMATION IN THIS TABULATION HAS BEEN PROVIDED TO NOAA BY THE U.S. ARMY CORPS OF ENGINEERS. DEPTHS ARE REFERENCED TO A LOCAL DREDGING REFERENCE CALLED MEAN LOW TIDE. FOR AN APPROXIMATE CONVERSION TO MEAN LOWER LOW WATER, ADD 1 FOOT TO EACH DEPTH IN THE TABULATION.

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

Chart 11328 NM 9/01

GALVESTON BAY AND HOUSTON SHIP CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUN 2000

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOW TIDE (MLT)						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)
HOUSTON SHIP CHANNEL:								
BOLIVAR ROADS TO LOWER END OF MORGAN POINT	38.0	42.0	41.0	37.0	1-99; 12-99	400	22.0	40
LOWER END OF MORGAN PT. TO EXXON OIL CO. SUP	30.0	37.0	37.0	30.0	3-00	400-525	4.2	40

INFORMATION IN THIS TABULATION HAS BEEN PROVIDED TO NOAA BY THE U.S. ARMY CORPS OF ENGINEERS. DEPTHS ARE REFERENCED TO A LOCAL DREDGING REFERENCE CALLED MEAN LOW TIDE. FOR AN APPROXIMATE CONVERSION TO MEAN LOWER LOW WATER, ADD 1 FOOT TO EACH DEPTH IN THE TABULATION.

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

Chart 18521 NM 9/01

COLUMBIA RIVER CHANNEL DEPTHS
ENTRANCE TO MILLER SANDS RANGE

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO NOV 2000

* SEE FOOTNOTE						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH * (MILES)	DEPTH * (FEET)
ENTRANCE RANGE	54	50	54	40	11-00	2640	3.3	48
SAND ISLAND RANGE (CLATSOP SPIT)	51	53	54	46	11-00	2640	2.2	48
LOWER DESDEMONA SHOAL	45	46	44	40	5-99;11-00	600	3.4	40
UPPER DESDEMONA SHOAL	41	45	45	46	11-00	600	3.7	40
TANSY POINT TURN AND RANGE	41	41	41	38	10,11-00	600	4.7	40
ASTORIA RANGE	41	42	41	38	11-00	600	2.7	40
TONGUE POINT CHANNEL	40	42	40	40	10-00	600	2.2	40
HARRINGTON POINT RANGE	39	41	40	39	10,11-00	600	2.6	40
MILLER SANDS RANGE	42	42	42	42	11-00	600	2.2	40

* CONTROLLING DEPTHS IN CHANNELS ENTERING FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER FROM THE ENTRANCE TO HARRINGTON POINT AND COLUMBIA RIVER DATUM ABOVE THAT POINT. PROJECT LENGTHS ARE IN STATUTE MILES.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18523 NM 9/01

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

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO OCT 2000

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	37	41	41	42	9-00	600	2.2	40
PILLAR ROCK LOWER RANGE	38	41	41	41	9, 10-00	600	3.0	40
PILLAR ROCK UPPER RANGE	27	42	40	37	10-00	600	1.9	40
WELCH ISLAND REACH	44	42	42	37	10-00	600	3.2	40
SKAMOKAWA CHANNEL	38	41	41	38	9, 10-00	600	3.3	40
STEAMBOAT REACH	51	46	44	41	9-00	600	1.4	40
PUGET ISLAND RANGE AND TURN	37	40	41	37	10-00	600	3.5	40
WAUNA RANGE	39	41	41	44	10-00	600	2.2	40
DRISCOLL RANGE	41	41	42	43	10-00	600	1.7	40
WESTPORT TURN AND RANGE	38	40	42	42	10-00	600	2.0	40
WESTPORT CHANNEL	40	41	41	38	10-00	600	2.4	40
EUREKA LOWER CHANNEL	46	46	43	43	10-00	600	2.1	40
EUREKA UPPER CHANNEL	45	46	43	43	10-00	600	0.6	40
OAK POINT CHANNEL	46	46	46	46	10-00	600	2.4	40
GULL I TURN AND CHANNEL	43	44	38	34	9, 10-00	600	2.2	40

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

Chart 18581 NM 9/01

YAQUINA BAY AND RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO NOV 2000

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)
CHANNEL ENTRANCE 44°36'23"N, 124°06'24"W TO FIRST TURN	24	30	27	10-00	400-300	1.3	46-30
THENCE TO TURNING BASIN	21	29	18	6-99; 4-00	300-400	1.3	30
TURNING BASIN	15	24	24	4-00	300-1200	0.3	30
THENCE TO YAQUINA	13	12	12	6-00	200	1.0	18
THENCE TO END OF PROJECT	2A	7	5B	7-98;7-00;11-00	150	9.7	10

A. SHOAL TO BARE AT 44°36'57.89"N, 123°56'34.87"W.
B. SHOAL TO BARE FROM 44°36'49.6"N, 123°56'56.4"W TO 44°36'57.3"N, 123°56'42.7"W.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18622 NM 9/01

HUMBOLDT BAY AND HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO SEP 2000

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)
BAR CHANNEL	39.5	45.1	44.5	40.9	9-00	1600-750	0.6	45
ENTRANCE CHANNEL	33.9	45.6	46.1	45.5	9-00	750	0.8	45
NORTH BAY CHANNEL	35.1	37.2	35.4	29.9	9-00	400-500	3.0	39
EUREKA CHANNEL								
OUTER REACH	33.8	30.9	29.2	26.6	9-00	400	0.4	36
INNER REACH	5.3	6.4	12.4	12.1A	9-00	400	1.1	26
SAMOA CHANNEL	37.1	37.9	37.5	32.5	9-00	400	1.3	35
TURNING BASIN	34.5	37.6	37.9	33.8	9-00	400-1000	0.3	35
FIELDS LANDING CHANNEL	19.1	27.5	25.9	17.9	9-00	300	1.9	26
TURNING BASIN	13.3	18.6	27.6	25.0	9-00	300-600	0.1	25

A. SHOALING TO 2.4 FEET IN OUTSIDE HALF OF QUARTER

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

Chart 18652 (Page E) NM 9/01

SUISUN BAY AND SAN JOAQUIN RIVER

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO DEC 2000

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)
SUISUN PT. REACH	43.6	44.9	46.6	5-00	350	0.8	35
BULLS HEAD CHANNEL	37.0	36.5	35.4	5,12-00	300-350	1.2	35
EAST BULLS HEAD CHANNEL	33.4	33.2	33.9	5-00	350	1.1	35
PT. EDITH CROSSING RANGE	36.3	34.9	29.3	5-00	350	1.1	35
PRESTON PT. REACH	36.0	34.6	27.9	5-00	350	0.9	35
ROE ISLAND CHANNEL	33.1	34.0	33.6	5-00	350	1.1	35
PORT CHICAGO REACH	39.6	36.5	37.9	5-00	350	0.92	35
MIDDLE GROUND CHANNEL							
WEST REACH	35.6	35.8	35.8	5-00	350	1.29	35
EAST REACH	34.8	36.6	35.7	5-00	350	1.09	35
NEW YORK SLOUGH							
WEST REACH	31.9	33.5	35.4	5-00	400	1.3	35
EAST REACH	34.1	34.4	34.4	5-00	400	1.7	35
SAN JOAQUIN RIVER							
ANTIOCH REACH	32.2	33.4	30.4	4-00	400	3.3	35

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

Chart 18654 NM 9/01

PINOLE SHOAL CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO AUG 2000

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)
CHANNEL ENTRANCE (38°01'33"N, 122°22'47"W) TO LT. 11	32.6	34.7	32.6	8-00	600	2.6	35
THENCE TO 38°02'31"N, 122°17'08"W	33.0	35.6	34.9	8-00	600	2.2	35

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

Chart 18656 NM 9/01

SUISUN BAY

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO DEC 2000

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)
SUISUN PT. REACH	43.6	44.9	46.5	5-00	300	0.8	35
BULLS HEAD CHANNEL	37.0	36.5	35.4	5,12-00	300-350	1.2	35
EAST BULLS HEAD CHANNEL	33.4	33.2	33.0	5-00	350	1.1	35
PT. EDITH CROSSING RANGE	36.3	34.9	28.3	5-00	350	1.1	35
PRESTON PT. REACH	36.0	34.6	27.9	5-00	350	0.9	35
ROE ISLAND CHANNEL	33.1	34.0	33.6	5-00	350	1.1	35
PORT CHICAGO REACH	36.6	36.5	37.0	5-00	350	0.52	35
MIDDLE GROUND CHANNEL							
WEST REACH	35.6	35.8	35.8	5-00	350	1.29	35
EAST REACH	34.8	36.6	35.7	5-00	350	1.09	35
NEW YORK SLOUGH							
WEST REACH	31.9	33.5	35.4	5-00	400	1.3	35
EAST REACH	34.1	34.4	34.4	5-00	400	1.7	35

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

Chart 18657 NM 9/01

SUISUN BAY

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO DEC 2000

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)
SUISUN PT. REACH	43.6	44.9	46.5	5-00	300	0.8	35
BULLS HEAD CHANNEL	37.0	36.5	35.4	5,12-00	300-350	1.2	35
EAST BULLS HEAD CHANNEL	33.4	33.2	33.0	5-00	350	1.1	35
PT. EDITH CROSSING RANGE	36.3	34.9	28.3	5-00	350	1.1	35

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