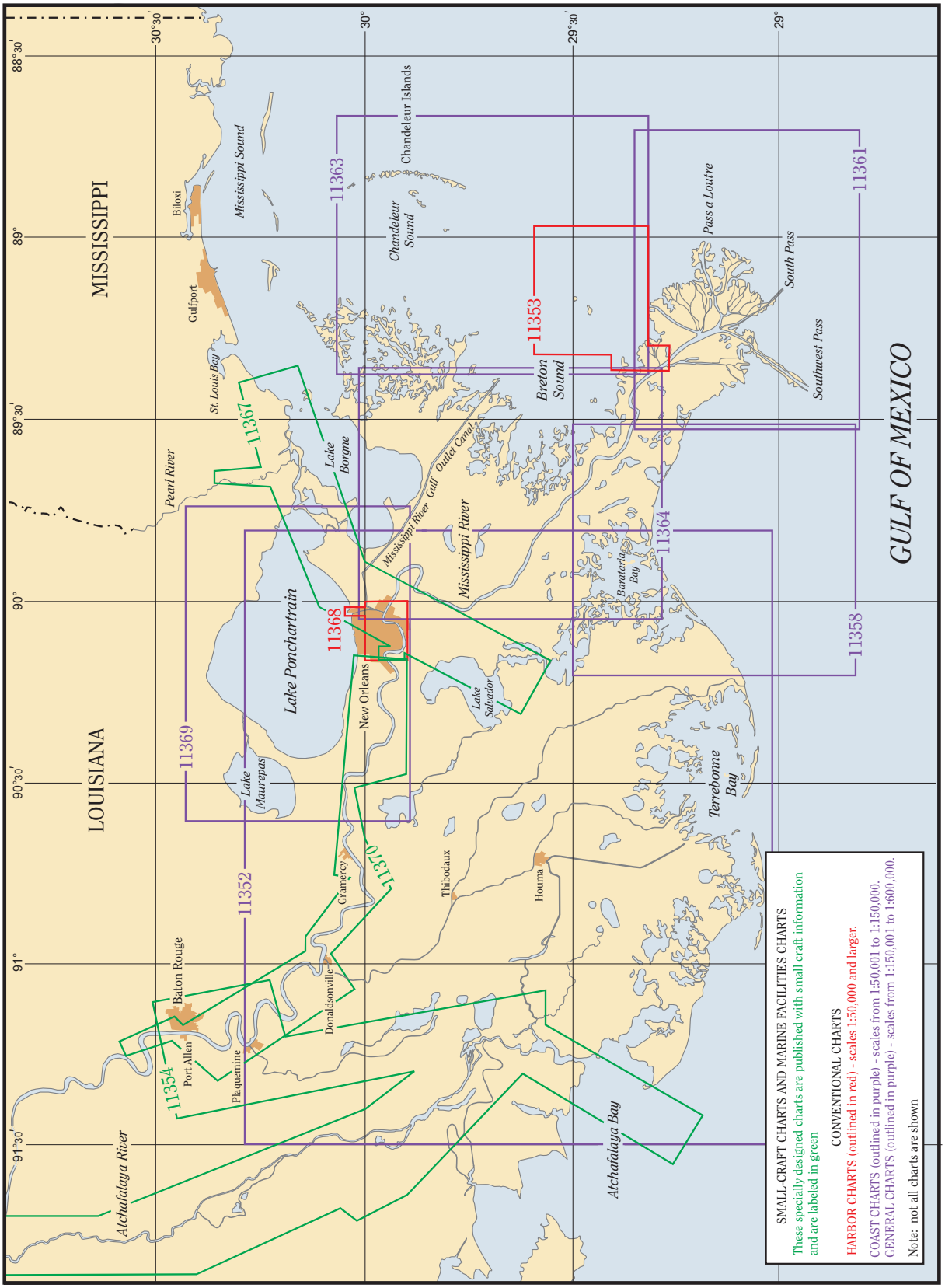
MISSISSIPPI
LOUISIANA
GULF OF MEXICO
Mississippi Sound
Biloxi
Gulfport
St. Louis Bay
Pearl River
Chandeleur Islands
Chandeleur Sound
Breton Sound
Pass a Loutre
South Pass
Southwest Pass
Lake Borgne
Lake Ponchartrain
Lake Maurepas
Mississippi River Gulf Outlet Canal
Mississippi River
New Orleans
Lake Salvador
Barataria Bay
Terrebonne Bay
Atchafalaya Bay
Atchafalaya River
Baton Rouge
Port Allen
Plaquemine
Donaldsonville
Gramercy
Thibodaux
Houma
11354
11352
11369
11367
11370
11368
11363
11353
11364
11358
11361
88°30′
89°
89°30′
90°
90°30′
91°
91°30′
30°30′
30°
29°30′
29°
SMALL-CRAFT CHARTS AND MARINE FACILITIES CHARTS
These specially designed charts are published with small craft information and are labeled in green
CONVENTIONAL CHARTS
HARBOR CHARTS (outlined in red) - scales 1:50,001 to 1:150,000.
COAST CHARTS (outlined in purple) - scales from 1:50,001 to 1:150,000.
GENERAL CHARTS (outlined in purple) - scales from 1:150,001 to 1:600,000.
Note: not all charts are shown

Mississippi River

(1) This chapter describes the Mississippi River from the delta passes at the Gulf of Mexico to Baton Rouge, 217 miles via Southwest Pass, 211 miles via South Pass, above the Gulf. Also described are the deepwater ports of New Orleans and Baton Rouge, as well as the facilities at the many small communities along the river.

(2) **Note**: All mileage distances given in this chapter are in statute miles unless otherwise indicated. Historically, distances on the Mississippi River are in statute miles, referred to an origin at the Head of Passes. Distances in this system are suffixed AHP (i.e., above Head of Passes).

COLREGS Demarcation Lines

(3) The lines established for this part of the coast are described in **80.820 and 80.825**, chapter 2.

Charts 11360, 11340, 11366

(4) **Mississippi River** empties into the N central part of the Gulf of Mexico through a number of mouths or passes which, taken together, form the delta of the river. The river and its tributaries form the largest network of navigable waters in the world. The two principal passes, South Pass and Southwest Pass, are about 1,600 nautical miles from New York, 500 nautical miles from Key West, 300 nautical miles E of Galveston, and 440 nautical miles E of Corpus Christi. The river is the access to the Ports of New Orleans and Baton Rouge, and the numerous cities in the central part of the United States located in the Mississippi River Valley and along its tributaries, the Ohio, Missouri, Red, Tennessee, and other rivers flowing into it. From the mouth, at the entrance to Southwest Pass, it is about 1,840 miles to Minneapolis, 1,960 miles to Pittsburgh, 1,680 miles to Knoxville, and 1,530 miles to Chicago via the Illinois Waterway. (See the publication "Distances Between United States Ports" for more detailed information.)

(5) New Orleans can also be reached by the more direct route through the Mississippi River-Gulf Outlet Canal, about 30 miles N of South Pass. The outlet canal extends from deepwater in the Gulf to the junction with the Inner Harbor Navigation Canal at New Orleans. Impending closure of the Mississippi River-Gulf Outlet Canal to deep-draft vessels in 2008 was reported.

(6) The shape of the delta is somewhat like the foot of a bird, with its four toelike extensions protruding into the Gulf. The passes consist of narrow-banked deposits of sand and clay brought down by the river current which continuously adds them to the seaward margins of the delta. In this manner the delta is being built seaward at an estimated average rate of 300 feet a year. Numerous bays between the passes are changing through wave and tidal action and filling up with the immense amounts of material carried down by the river. The upper half of **Garden Island Bay** has been filled in so that now it is a marsh.

Prominent features

(7) The most conspicuous objects, when approaching the passes, are the lights, which are easily recognized. **Southwest Pass Entrance Light** (28°54'18"N., 89°25'42"W.), 85 feet above the water is shown from a tower on a white dwelling on piles near the end of the E jetty. A racon and a fog signal are at the light. **Southwest Pass East Jetty End Light 4** (chart 11361), 50 feet above the water, is shown from a red skeleton tower on piles with a red triangular daymark. A fog signal is at the light. A lighted buoy (Sea Buoy) is 1.6 miles S of the E jetty.

(8) **South Pass Light** (29°00'54"N., 89°10'00"W.), 108 feet above the water, is shown from a skeleton tower painted white below the gallery and black above. The light is located on the W side of the pass about 2.2 miles from the outer end of the jetties. A fog signal is at South Pass West Jetty Light, near the outer end of the W jetty at the mouth of the pass. This light serves as South Pass Range Front Light. A lighted bell buoy (Sea Buoy) is 1.5 miles SE of the jetty light.

(9) The numerous oil well structures in **East Bay**, some of which extend about 3 miles SE of a line between the jetties at South and Southwest Passes, are also prominent. (See chart 11361.)

Anchorages

(10) **Vessels should anchor in the South Pass Anchorage, NE of South Pass Light.** (See **166.100 through 166.200**, chapter 2.)

(11) **Mississippi River-Gulf Outlet Approach Lighted Horn Buoy NO** (29°26'24"N., 88°56'48"W.), about 2.5 miles ENE of the entrance to the Mississippi River-Gulf Outlet Canal, is equipped with a racon. The buoy is about 29 miles NNE of South Pass and about 40 miles NE of Southwest Pass.

(12) There are numerous oil well structures in the vicinity of the entrance to the canal, and the dredging ranges for the channel are prominent. (See chart 11363.)

(13) Numerous oil well structures off the entrances to the Mississippi River Delta passes and in East Bay can be seen for some distance offshore. Smoke from burning gas from some of these wells is seen from far offshore.

(14) The discolored water discharge from Mississippi River usually provides mariners with their first indication that they are approaching land. However, this is not a sure indication; during high river stages and with N winds the discolored water will be encountered in some directions 60 miles or more from land, and at times the water will appear broken from 15 to 20 miles from the passes. The land near the entrances to the passes is low marsh covered with tall, coarse grass and weeds.

COLREGS Demarcation Lines

(15) The lines established for the Mississippi River and Mississippi Passes are described in **80.820 and 80.825**, chapter 2.

Special Notices

(16) The Corps of Engineers, New Orleans District, have promulgated the following through navigation bulletins to all interested parties:

Mississippi River-Gulf Outlet Canal

(17) (Impending closure of the Mississippi River-Gulf Outlet Canal to deep-draft vessels in 2008 was reported. For further information, visit internet site: mrgo.usace.army.mil or for questions and comments, phone: 504-862-2319.) The hazards existing to a small-boat operator on this waterway cannot be over emphasized.

(18) It is understood, however, that ships must maintain sufficient headway at all times in order that the vessel can be controlled. Consequently, small-craft operators should approach and pass ships with extreme caution and with one thought in mind, the safety of their own vessel and its occupants.

(19) As a large ship moves in the waterway a wave is pushed ahead. As it comes abreast of a given point a suction effect is created that abruptly drops the water level in the channel and the water is drawn off the banks of the waterway. The violence of the reaction depends on the speed and draft of the ship.

(20) As the ship passes, the displaced water rushes back toward the banks and could possibly capsize or throw a small boat onto the bank. Shortly after the ship has passed, waves cause severe agitation along the banks.

Pilotage, Mississippi River-Gulf Outlet Canal

(21) See Pilotage, Mississippi River (indexed as such) this chapter.

Locking Procedures for all locks in the New Orleans Engineer District

(22) When a sufficient backlog of vessels exists, and water differential and other conditions make such procedure advantageous, a maximum of four successive lockages will be made alternately from each direction. However, should the fourth lockage in either direction be a long tow requiring two lockages, a fifth lockage will be made for the second section of the long tow.

(23) For the successive lockage procedure to be successful and in order to conserve lockage time, radios on vessels must be kept tuned to the lock frequency to receive instructions and move up promptly when called by the lock operator. The lockmaster will coordinate movement and arrangement of tows and other vessels and direct such procedures in the movement and lockings as conditions may warrant in order to obtain maximum and efficient usage of the lock.

(24) **Note**: Special Notices affecting locking procedures in the New Orleans Corps of Engineers District are issued by the Corps as conditions warrant. These special regulations, in addition to those mentioned above and elsewhere in this chapter, announce new, and/or changes to existing regulations. Mariners are advised to contact the local office of the Corps of Engineers to obtain the latest information.

Shipping Safety Fairways

(25) **Vessels should approach the Mississippi River-Gulf Outlet Canal, Southwest Pass and South Pass (Mississippi River) through the prescribed Safety Fairways.** (See **166.100 through 166.200**, chapter 2.)

Channels

(26) The improved ship channels into Mississippi River are through Southwest Pass and South Pass. Several minor passes can be used only by small craft. A Federal project provides for a 45-foot channel over the bar and through Southwest Pass, to Head of Passes. The project is under constant maintenance dredging. The project further provides for a 45-foot channel from Head of Passes to New Orleans, thence 45 feet to Mile 181 above New Orleans, thence 40 feet to Baton Rouge. The

channels are well marked. Contact the New Orleans District, Corps of Engineers, for controlling depths. The office is at the foot of Prytania Street, New Orleans; telephone (865-1121). (See Appendix A for mailing address.)

Note

(27) The Associated Branch Pilots, Port of New Orleans, advised that South Pass has a recommended draft limit of 15 feet. The pilots further advised that a recommended deadweight tonnage limit of 21,000 d.w.t. and/or 15 feet is in effect for ships using South Pass. The deadweight tonnage limit is recommended because ships of large tonnage do not steer well. The tonnage limit is subject to a larger limit as the draft limit deepens.

(28) Southwest Pass has a recommended draft limit of 45 feet. There is no limit on deadweight tonnage for ships using Southwest Pass.

(29) **Mississippi River-Gulf Outlet Canal** (see charts 11363 and 11364) is a 66-mile-long deepwater channel that extends NW from deep water in the Gulf of Mexico to the Inner Harbor Navigation Canal at New Orleans. Impending closure of the Mississippi River-Gulf Outlet Canal to deep-draft vessels in 2008 was reported. The Federal project provides for an entrance channel 38 feet deep for 8.3 miles to the entrance to Breton Sound between Grand Gosier Islands and Breton Islands, thence 36 feet deep across Breton Sound NW for 20.3 miles where it enters a landcut, thence 36 feet through the landcut for 32.2 miles where it joins the Gulf Intracoastal Waterway at Mile 13.6E, thence through the waterway for about 5 miles to a turning basin at its junction with the Inner Harbor Navigation Canal at New Orleans. The approach to the landcut is protected by stone retention dikes on both sides of the channel; the NE dike is about 2.6 miles long, and the SW dike is about 5.5 miles long. The channel is well marked with aids. (See Notice to Mariners and latest editions of the charts for controlling depths.)

(30) In 1991, the Associated Branch Pilots, Port of New Orleans, advised that vessels with a fresh water draft greater than 33 feet should not use the Mississippi River-Gulf Outlet Canal due to shoaling in various parts of the channel.

(31) Unpredictable tidal currents may be encountered at places along the Mississippi River-Gulf Outlet Canal. Until such time as surveys are made to determine the actual tidal current conditions, exercise caution when transiting the waterway.

Bridges

(32) There are no bridges across the Mississippi River below New Orleans. An overhead power cable with a clearance of 175 feet crosses the river about 1 mile above the Algiers Lock at about 89 miles AHP. One bridge and two cables cross the Mississippi River-Gulf Outlet Canal below the junction with the Inner Harbor Navigation Canal at New Orleans.

(33) The **Paris Road Bridge (State Route 47)**,about 4.4 miles E of the junction with Inner Harbor Navigation Canal, is a fixed bridge, with a clearance of 138 feet at mean high water (140 feet at mean sea level) for a 500-foot midwidth. Clearance at center of span is 140 feet at mean high water (142 feet at mean sea level). The Louisiana Department of Transportation and Development has installed vertical clearance gauges on the Paris Road Bridge; the clearances posted are for the middle 500-foot channel between the fixed red channel lights on the bridge. Mariners desiring **present** Paris Road Bridge clearances before entering the Mississippi River-Gulf Outlet Canal are advised to seek **competent** local knowledge for water heights and bridge information. The **present** vertical clearance above mean sea level may be determined for the 500-foot midwidth of Paris Road Bridge by using a **present**, **reported**, and **nearby water height**, in feet, **relative** to mean sea level clearance of 140 feet. A positive (higher) water height reading should be subtracted from 140 feet, and a negative (lower) water height reading should be added to 140 feet.

(34) The overhead power cables across the canal, near the Paris Road Bridge, have a minimum clearance of 170 feet. (See **117.1 through 117.59 and 117.459**, chapter 2, for drawbridge regulations for drawbridges over the Mississippi River and its navigable tributaries and outlets.)

Caution

(35) The Coast Guard advises that because of constantly changing river stages mariners should carefully review and validate mast height data and air draft to assure adequate clearance under the bridges and overhead cables on the Lower Mississippi River. It is recommended that maximum vessel height be determined for various drafts and trim of the vessel and be kept readily available on the bridge of the vessel. Bridge clearance data for various river stages can be obtained from the Coast Guard.

Anchorages

(36) Vessels should anchor in Southwest Pass Anchorage SE of the entrance to Southwest Pass, South Pass Anchorage NE of the entrance to South Pass, or in the Mississippi River-Gulf Outlet Canal Fairway Anchorages E and N of Mississippi River-Gulf Outlet Lighted Bell Buoy 2. (See **166.100 through 166.200**, chapter 2.)

(37) In heavy weather craft in the vicinity of South Pass seek refuge in the pass. Vessels may anchor off South Pass and Southwest Pass as appropriate, weather permitting.

(38) There are numerous designated anchorages on both sides of the river below New Orleans, and temporary anchorages may be prescribed by the Commander, Eighth Coast Guard District and published in the Local Notice to Mariners. (See **110.1 and 110.195**, chapter 2, for anchorage limits and regulations.)

Caution

(39) The Coast Guard advises that during high-water conditions mariners should give anchored vessels a particularly wide berth. Fast river currents may cause anchored vessels to swing in wide arcs. Under these conditions, it is important that the mariner be aware of the location of anchor chains.

Dangers

(40) An area bounded by latitude 28°20'N., to latitude 28°30'N., between longitude 88°50'W., and longitude 89°00'W., has been established as a dumping ground for ammunition and explosives.

(41) A shoal with depths of 8 to 15 feet extends along the W side of the approach channel to Southwest Pass for about a mile beyond the end of the W jetty. The position of this shoal and its depths are rather constant except for changes during and after high-river stages in the spring.

(42) A shoal with depths of 2 to 17 feet extends along the W side of the entrance to South Pass. Vessels should not close the passes before the pilot boards.

(43) **Flocculation**, locally known as **Slush**, is a living mass of jellied material, or muck, deposited in the lower part of the Mississippi, during low stages of the river. It consists of the suspended material which, after being carried downstream by the current, comes into contact with the relatively still salt water which backs into the passes. This muck has been observed to be as much as 10 to 15 feet deep. It remains where deposited until flushed out during high-water stages of the river. Although slowed down by this muck, deep-draft vessels are able to pass through it. Accordingly, and because it will be flushed out during high-water stages, the Corps of Engineers does not consider it necessary to remove the material during low stages.

(44) **Sand waves**, the material brought down during high stages, on the contrary, is of a sandy nature such that, if not removed, builds up bars and reduces controlling depths. These sand bars or waves are dredged out during high stages.

(45) **Mud lumps** are the small oval-shaped mounds or islands no more than 8 feet high which are peculiar to the Mississippi River delta. They are caused by upward forces of the static pressure exerted by sedimentary deposits accumulating underneath; most of them never rise above the surface but remain as subsurface mounds. Their cores of plastic clay may arise from depths as much as 300 to 500 feet. Fissures or cracks develop in the islands, through which mud, gas, and salt water discharge and often build up low flat cones. In South and Southwest Passes, which have been jettied, there are arcs of mud lumps outside of and parallel with the peripheries of the bar deposits. In natural passes, the mud lumps are affected by submerged natural levees as well as by the bar deposits. Generally, the lumps appear within only a few weeks' time and, unless affected by succeeding periods of uplift, will wash away within a few years or be overrun by the encroaching marshland.

Tides

(46) In the passes the tide has generally but one high and one low water in 24 hours, the diurnal range varying from 0.9 to 1.4 feet. At New Orleans the range of tide during low-river stages averages about 0.8 foot. There is no periodic tide at high-river stages.

Current off the Passes

(47) Currents in the Gulf of Mexico are discussed in chapter 3. The currents are variable in direction and velocity depending to a great extent upon the velocity and direction of the wind, and near the entrance to the passes upon the stage of the river.

(48) A vessel on the course from Dry Tortugas to the Mississippi River generally will encounter an opposing or SE current for a distance of about 300 miles after leaving Dry Tortugas. For the last 125 miles before reaching the mouth of the river the current will usually set between N and E.

(49) During a light S wind a NE set of 2.2 knots has been observed 13 miles SE of South Pass entrance, and at the same time there was an E set of 0.5 knot at the lighted bell buoy off the entrance.

(50) At Southwest Pass Entrance Lighted Buoy SW the current is due chiefly to the discharge of the river. In general it sets SW and its velocity varies from 0 to 4 knots, the average being about 1.7 knots. At times, however, there is said to be a SE current of nearly a knot at this location.

Currents in the river

(51) The current due to the tide is not strong at any point, and for purposes of navigation it is rarely taken into account. The average date of high-river stage

occurs in April and of low-river stage in October. At Baton Rouge the extreme difference between high and low stages of the river is 40 feet, the mean difference is about 21 feet. At New Orleans, the extreme difference between high and low stages is 17 feet, the mean difference is about 8 feet. Zero on the Baton Rouge and New Orleans gage is the National Geodetic Vertical Datum of 1927 (NGVD).

(52) Currents for Baton Rouge and New Orleans are given below for high water flow of 1,100,000 cubic feet per second (cfs), medium water flows of 520,000 cfs, and low water flow of 180,000 cfs. Baton Rouge: 3.8 mph (3.3 knots), 2.6 mph (2.3 knots), and 1.3 mph (1.1 knots). New Orleans: 4.0 mph (3.5 knots), 2.8 mph (2.4 knots), and 1.4 mph (1.2 knots).

(53) At several places in the lower part of the river countercurrents or eddies often are found near the banks and, if taken advantage of, can greatly assist vessels bound up the river.

(54) At South Pass outside the jetties the current from the river frequently has a W set. At Southwest Pass it sets straight out from between the jetties, thence spreading out fan shaped, with slightly greater velocity to W.

Weather

(55) The Gulf of Mexico moderates the climate of this region throughout the year. It reduces the range between extremes of temperature, increases humidity, and influences the windspeed and direction. E through S winds prevail for all months except January. These tempering Gulf winds carry warm, moist air which is favorable for sporadic, often quite localized, development of thunderstorms, particularly from May through October. From November through March, the area is subjected to fluctuations between tropical air and cool continental air. From December to June, the Mississippi River waters are usually colder than the air temperature, favoring the formation of river fogs, particularly with weak S winds. These fogs may be encountered anywhere from 60 miles off the delta passes to the city of New Orleans.

(56) Polar air masses and their fronts penetrate the Gulf of Mexico from the North American continent each winter. About 15 to 20 of these systems bring strong N winds, cold temperatures, and adverse weather. Winds of 60 knots or more may occur in severe “northers”. Northers are most likely from November to March and usually last about a day and a half; severe storms may endure for 3 or 4 days.

(57) The tropical cyclone season runs from late May into early November. On average, hurricanes move through this region once every 4 years. In August 1969, Camille generated winds estimated at 175 knots. At Boothville, gusts climbed to 107 mph before the anemometer failed, and storm tides reached 15 feet. Surge heights varied at different locations because of the shape of the bays and inlets. Water levels reached 9 feet above mean sea level near the mouth of the Mississippi at Garden Island. In several places from the Empire Canal S to Buras, Boothville, and Venice, the surge poured over the E and W bank Mississippi River levees and was trapped by the back levee, leaving the built-up areas between the levees severely flooded. The highest actual wind measurement in Camille was a gust of 172 mph recorded on a Transworld Drilling Co. rig E of Boothville.

Routes

(58) Approaching the mouth of the river from Florida Straits, deep-draft vessels usually set a course direct for the entrance to the shipping safety fairways off the passes or the Mississippi River-Gulf Outlet Canal from a position 10 or 12 miles SW of Dry Tortugas Light on Loggerhead Key. Low-powered vessels of moderate draft sometimes pass N from Florida Straits through Rebecca Channel, to the W of Rebecca Shoal Light, and for 200 miles set a course 10° to 20° N of the course to the passes of the river, and then change course for the entrance to the safety fairways off the passes or the Gulf Outlet Canal. This keeps them out of the strongest part of the Gulf current.

(59) Going to the Straits of Florida, a course usually is set for a point 10 or 12 miles SW of Dry Tortugas.

(60) Since in either direction soundings are of little value in determining position, observations should be relied upon. The currents vary considerably, so that even with the closest navigation a vessel bound for South Pass may make a landfall at Pass a Loutre or Southwest Pass.

(61) Vessels bound to Southwest Pass sometimes fall W of the Mississippi River delta, a situation which the mariner can quickly ascertain by soundings. The water shoals much more gradually along this part of the coast than off the delta.

(62) Approaching South Pass, a vessel uncertain of her position can set a course so as to pick up the 20-fathom curve from 5 to 20 miles NE of the lighted bell buoy off South Pass and then follow the curve SW to the entrance to the safety fairway. During thick weather, vessels might ground NE of South Pass and N of Southwest Pass, because of infrequent sounding. Due consideration should be given to the possible occurrence of mud lumps.

(63) Vessels approaching South Pass or Southwest Pass should become fairly certain of their positions in any weather by using radar or radio bearings in conjunction with soundings.

(64) In thick or foggy weather, Southwest Pass is more accessible and more easily navigated than South Pass because the former's channel is marked better, has greater width, and is nearly straight. Furthermore, a vessel is not set off course to the same extent by currents at the entrance.

Pilotage, Mississippi River

(65) Pilotage is compulsory at the bar and on the river for all foreign vessels over 100 tons and U.S. vessels over 100 tons under register in foreign trade. Pilotage is optional for coastwise vessels that have on board a pilot licensed by the Federal Government. There are four pilot associations: the Associated Branch Pilots for the bar from sea to Pilottown; the Crescent River Port Pilots for the river between Pilottown and New Orleans; the New Orleans-Baton Rouge Steamship Pilots for the river between New Orleans and Baton Rouge; and the Associated Federal Pilots and Docking Masters of Louisiana, L.L.C., for public vessels and vessels in coastwise trade from Southwest Pass to Baton Rouge. On the Mississippi River-Gulf Outlet Canal, the Associated Branch Pilots take vessels from the entrance to Light 78, about 38 miles above the entrance, where they are relieved by the Crescent River Port Pilots, who take vessels on to New Orleans.

Note

(66) The Associated Branch Pilots, Port of New Orleans, advised that South Pass has a recommended draft limit of 15 feet. The pilots further advised that a recommended deadweight tonnage limit of 21,000 and/or 15 feet is in effect for ships using South Pass. The deadweight tonnage limit is recommended because ships of large tonnage do not steer well. The tonnage limit is subject to a larger limit as the draft limit deepens.

(67) Southwest Pass has a recommended draft limit of 45 feet. There is no limit on deadweight tonnage for ships using Southwest Pass.

(68) Pilots for South Pass and Southwest Pass board vessels in areas up to 3 miles off the sea buoys at the passes, depending on the weather. Pilots for the Mississippi River-Gulf Outlet Canal board vessels in the vicinity of Mississippi River-Gulf Outlet Approach Lighted Bell Buoy 2 (29°26'30"N., 88°59'18"W.). The **Associated Branch Pilots** have 65-foot diesel-powered tenders with red hulls and white housing. They fly the International Code flag "P" and are equipped to handle radio traffic on VHF-FM channels 6, 9, 16 and 67. VHF-FM channel 67 is the working channel. There is a pilot station at Southwest Pass off the West Jetty about 2 miles inside the entrance. There is a pilot station at South Pass at a small settlement on the W side about 0.5 mile above the ends of the jetties. Both pilot stations are equipped to handle radio traffic on the same VHF–FM channels as the pilot boats. They have radiotelephone communication with the pilot office in New Orleans. Pilots may be obtained by making a signal off the bar, as both pilot stations maintain lookouts, or on advance notice by telegraph (cable address: BARPI), radio, radiotelephone through the New Orleans Marine Operator, telephone (504-524-3384), or through the ships' agents. Vessels are boarded and taken in day or night. For boarding, the pilots request that the pilot ladder be rigged 6 feet above the water on the lee side of the vessel. All bar pilots carry portable radiotelephones. The pilots request a 24-hour advance notice of arrival.

(69) The pilots for the river between Pilottown and New Orleans have an office in New Orleans that is manned 24 hours a day year round. Vessels requiring a Crescent River Port Pilot shall provide an estimated time of arrival (ETA), draft, deadweight tonnage, and speed at least 24 hours prior to arrival off the South Pass Lighted Bell Buoy 2, Southwest Pass Entrance Lighted Buoy SW, or MR-GO sea buoys. If the original ETA changes by more than 2 hours, an amended ETA is required 12 hours in advance of arrival, or if the arrival time is later than the original ETA, an amended ETA is required 12 hours prior to the original ETA. Vessels arriving without the required notice may be delayed if a pilot is not available in addition to the penalties specified in the tariff. Vessels may notify the Crescent Pilots, 24 hours a day, by telephone (504-392-8001), by fax (866-569-4138), by email (dispatch@crescentpilots.com), by telex (6737841), or cable (CRES-PILOTS, New Orleans, via radio station WNU). The river pilots board vessels off Pilottown, about 2.3 miles above Head of Passes Light. The pilot station, on the E side of the river at Pilottown, maintains a lookout and is equipped to handle radio traffic on VHF-FM channels 9 and 67. The **Crescent River Port Pilots** have fast motorboats painted white with the names RIVERPILOT, PORTPILOT, or CRESPILOT in black on the sides. The Crescent River Port Pilots take vessels from Pilottown upriver to New Orleans and from Light 78 on the Mississippi River-Gulf Outlet Canal to New Orleans. On the canal, pilots board vessels from a private launch at Light 78. The river pilots boarding vessels at Pilottown rarely have information from the vessel's agent pertaining to the vessel's destination or working schedule while in port. It is advised that vessel masters contact their agent via radio station WNU or preferably through the New Orleans Marine Operator to obtain information on the vessel's exact destination and to advise the agent of the vessel's ETA in order that the agent can arrange for tugs, line handlers, boarding party, or, if necessary, a New Orleans-Baton Rouge Pilot. All Crescent River Port Pilots carry portable radiotelephones for

bridge-to-bridge communications with other vessels on the river and canal.

(70) The **New Orleans-Baton Rouge Steamship Pilots** usually board vessels continuing upriver off **The Point** at about Mile 91.0. The pilots board vessels from commercial launches. Two launch stations are in Arabi, LA on the E side of the river about 1.0 mile and 1.6 miles below the Inner Harbor Navigation (Industrial) Canal. All the upriver pilots carry portable radiotelephones and communicate with other vessels on the river. Their working frequency is VHF-FM channel 67. They can be obtained by notifying the Crescent River Port Pilots at Pilottown, by prior notice by telegraph, radio, radiotelephone through the New Orleans Marine Operator, telephone (504-466-7881 or 466-7882), or through ships' agents. The pilots request a 3-hour advance notice of time of sailing for all downriver bound vessels departing berths above Norco, about 126 miles AHP.

(71) The **Associated Federal Pilots and Docking Masters of Louisiana L.L.C.** provide service for public vessels and vessels in the coastwide trade from Southwest Pass to Baton Rouge. The pilots have a gray 46-foot boat, FEDERAL PILOT 1, and a gray 40-foot boat, FEDERAL PILOT 3, and meet vessels at Southwest Pass Entrance Lighted Buoy SW. Vessels to be boarded should provide a ladder 6 feet above the water and maintain a slow speed. The pilot boats fly International Code flag P by day and monitor VHF-FM channels 9 and 16, with channels 9,16, 6, 67, and 79A used as working frequencies. The pilot station monitors VHF-FM channels 9 and 16. Arrangements for pilots are generally made in advance by telephone (504-456-0787) or through ships' agents. The Associated Federal Pilots e-mail address is FEDPILOT@Bellsouth.net. A 12 hour estimated time of arrival (ETA) is requested.

Towage

(72) Tugs of about 2,400 hp are normally used for assisting in docking, undocking, towing in the harbor and canals, and towing to sea. Tugs of up to 4,600 hp are available. Two tugs must be employed on all towing to and from the drydocks and should be employed on all ships towed around Algiers Point when the traffic lights are operating, and by large vessels going through the Inner Harbor Navigation Canal. The tugs are equipped to handle radio traffic on VHF-FM channel 67. There are two diesel-powered fireboats in the harbor.

Quarantine

(73) **Quarantine** on the river is enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.) A 4,000-foot **quarantine anchorage** is on the W side of the river at New Orleans, about 1.5 miles downriver of the Inner Harbor Navigation (Industrial) Canal. The upper end is marked by a quarantine anchorage sign at about Mile 91.6 (See **110.1 and 110.195**, chapter 2, for limits and regulations.) The quarantine station is at the New Orleans National Airport, and officials maintain regular service for marine inspections from 0600 to 1800. Outside of these hours, vessels may be boarded on request, but a charge is made for services. Quarantine clearance is granted by the New Orleans station for all vessels destined to all ports on the Mississippi River or to ports reached via the Mississippi River. Vessels are usually cleared either at anchor or at the dock.

(74) **Agricultural quarantine** is enforced in accordance with regulations established by the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture. Officials making inspections for the ports on the Mississippi River, from the mouth to Gramercy, have an office at the U.S. Customhouse in New Orleans. (See Appendix A for address.) Vessels are inspected at anchor and alongside the docks. Arrangements are usually made through the ships' agents.

Customs

(75) New Orleans and Baton Rouge are ports of entry. Vessels are generally boarded at berth; however, arrangements can be made for boarding anywhere within the port limits.

Immigration and Naturalization

(76) The Immigration and Naturalization Service maintains a district office and a port of entry at New Orleans and serves the port facilities from the mouth of the Mississippi River to Remy, about 150.7 miles AHP. The Baton Rouge office serves the port facilities above Remy. (See Appendix A for addresses.)

Coast Guard

(77) The **Captain of the Port** maintains an office in New Orleans. **Marine inspection** and **vessel documentation** offices are at New Orleans. (See Appendix A for addresses.)

Harbor regulations

(78) Federal regulations for navigation of the river are given in **162.80, 165.1 through 165.25, 165.803, 165.810, and 207.200**, chapter 2.

Supplies

(79) An unlimited supply of ships' stores, marine supplies, and provisions can be obtained at New Orleans. Water is available at all piers and wharves. Bunker C fuel oil and diesel fuel can be supplied at the oil

terminals or from tank barges while vessels are alongside the wharves.

Repairs

(80) New Orleans has facilities for all types of above- and below-water hull and engine repairs. The largest floating drydock has a capacity of 81,000 tons for a length of 900 feet. Shipbuilding and ship repair plants are well equipped with machine shops and foundries. Floating cranes up to a capacity of 660 tons are available. There are smaller drydocks, marine railways, and boatyards for repair of medium and small craft.

Salvage facilities

(81) Equipment necessary for heavy salvage work at sea or in the port is available at New Orleans, including floating derricks, dredges, barges, pumps, diving equipment, and ground tackle. Oil salvage barges are at the shipyard at Avondale and Baton Rouge.

Chart 11361

(82) **Southwest Pass**, the westernmost of the passes of the Mississippi, is 18 miles WSW of South Pass entrance and 295 miles E of Galveston entrance. The pass has been improved by the construction of jetties on both sides at the entrance.

(83) Near the ends of the jetties the depths are somewhat changeable, although there appears to be deep water in the Gulf from nearly every direction up to within 2 miles of the entrance.

(84) The approach to Southwest Pass is marked by a lighted whistle buoy, 1.6 miles S from the jetty ends. From the buoy to abreast of Southwest Pass Entrance Light, the channel is marked by a lighted buoy on the W side of the channel and by a lighted range ("A" Range). A second set of ranges ("B" Range) continue from the first range. In February 2006, the alignment of the range lights at the seaward end of the channel were reported about 40 feet to the east of the centerline; extreme caution is advised. Lights marking the channel are off some of the wingdam, wooden pile dikes extending channelward from along the inner bulkhead of the jetties.

(85) A racon is at the charted platform SSW of the entrance to Southwest Pass in about 28°50'01"N., 89°27'10"W.

(86) Depths in Southwest Pass Entrance are subject to some change, but the current, so far as is known, can be depended upon to set nearly straight out from between the jetties, but cross currents can be present due to winds and seas. Wingdams, wooden pile dikes have been constructed channelward from the jetties.

(87) Federal project depth is 45 feet. Contact the New Orleans District Office, Corps of Engineers, for controlling depths; the office is located at the foot of Prytania Street, New Orleans; telephone (504-865-1121).

Note

(88) The Associated Branch Pilots, Port of New Orleans, advise that Southwest Pass has a recommended draft limit of 45 feet.

(89) In the pass the sides are a sufficient guide. Lights are on both sides, and a lighted range for entering the pass is at its head. There are several wharves, most of which are for transferring petroleum products from wharf to barge, on both sides of the pass. Most of these wharves are marked by privately maintained lights. Lights from wharves may be difficult to see as they can get lost in the background lighting.

(90) **Burrwood Bayou** is on the E bank 5 miles above the jetties.

(91) **South Pass**, one of the three important commercial entrances to the Mississippi River from the Gulf, lies 425 miles NW of Dry Tortugas and 90 miles SW of Mobile Bay entrance. The pass has been improved by the construction of jetties on both sides of the entrance. In June 2007, the jetties were reported to be visible at high tide, however during rough sea conditions, they could become submerged; extreme caution is advised. Immediately outside the entrance, the depths are subject to considerable change, due to the large amount of sediment brought down by the strong river currents; but at a distance of 2 miles out from the end of the jetties the depths are more dependable, and over 10 fathoms can be found in any E or S direction.

(92) Federal project depth is 17 feet. Contact the New Orleans District Office, Corps of Engineers, for controlling depths; the office is at the foot of Prytania Street, New Orleans; telephone (504-865-1121).

Note

(93) The Associated Branch Pilots, Port of New Orleans, advise that South Pass has a recommended draft limit of 15 feet.

(94) The entrance approach is marked by a lighted bell buoy, 1.5 miles SE of the end of the rock jetties. A buoy marks the shoal ground between 0.2 and 0.5 mile off the end of the jetties on the W side of the channel. This dangerous shoal has depths of 2 to 17 feet over it. The buoy marks the E portion of the shoal. Except for changes during and after high-river stages, the position of this shoal and depths on it are fairly constant. This shoal, coupled with strong river currents, makes navigation of South Pass difficult for strangers. A bend in the channel near Head of Passes also adds to the difficulty. Depths in the channel at the entrance to South

Pass are subject to frequent change; local knowledge is advised. The current has considerable velocity, which tends to carry a vessel upon the shoal on the W side of the channel.

(95) **Head Range Channel** leading from the head of Southwest Pass into the river is part of the 45-foot Federal project for the Southwest Pass and Mississippi River. **Cypress Range Channel** leading from the head of South Pass into the river is part of the 17-foot Federal project for South Pass. Dredging is necessary to maintain both channels to near project depths. Contact the New Orleans District Office, Corps of Engineers, for controlling depths; the office is at the foot of Prytania Street, New Orleans; telephone (504-865-1121). Lighted ranges mark the two channels, and lights mark the jetties at the head of the passes.

(96) At **Head of Passes**, three of the river's important passes come together; South Pass, Southwest Pass, and Pass a Loutre. This point of confluence is at **Head of Passes East Jetty Light** (29°09'06"N., 89°14'59"W.). From this point, measurement is made of all distances on the river S or below the mouth of the passes, referred to as below Head of Passes (BHP), and N of or above Head of Passes (AHP) to Cairo, IL. Head of Passes Junction Light separating Southwest Pass and South Pass has a seasonal fog signal.

(97) **Pass a Loutre** and its branches**, Southeast Pass, North Pass**, **Northeast Pass**, flow E into the Gulf. These passes are deep from the Head of Passes to within a short distance of the Gulf, but the mouths are obstructed by bars. Small local craft occasionally use these passes, but strangers should avoid them. Pass a Loutre and North Pass have depths of about 7 feet over the bars; the others are much shallower. North Pass is marked by a lighted bell buoy. Pass a Loutre is marked by a lighted bell buoy.

(98) An abandoned lighthouse, a 76-foot black and white spirally banded tower, is on the N side of Pass a Loutre, 2.3 miles inside the entrance. Another abandoned lighthouse, a grayish-white tower, is 1.7 miles W of the entrance to Northeast Pass.

(99) The marsh lands from Main Pass southward are used extensively for hunting and oil operations; some oyster camps are located in the **Redfish Bay** area.

(100) From Head of Passes northward to New Orleans, the river has a least width of 600 yards and a clear unobstructed channel with depths of 31 to 194 feet. There are a few shoals along the river banks. The outer limits of a shoal on the E side of river, 8.2 miles AHP, is marked by lighted buoys. On both sides of the river the land is dry, and in the lower reaches it is covered mostly with coarse grass and willows.

(101) Above Bohemia on the E side, at about Mile 45, and The Jump on the W side, at about Mile 10.0, levees prevent overflow at high water. Below Bohemia, the absence of levees permit floodwaters to flow E into the Gulf. On both sides of this break are levees extending from the river to the Gulf, to prevent the flooding of adjacent land. Below this break the levee continues to Baptiste Collette Bayou.

(102) The land back of the levees on the E side, formerly laid out in sugar and rice plantations, now is given over to pasturage and market gardens. Orange groves are back of the levees on the W side. New Orleans is reached by river boats and also by railroads and highways which extend down the W side to Venice (The Jump), at about Mile 10.0, and down the E side to Bohemia, about Miles 10.4 and 45.8, respectively, AHP.

Caution during high stages of the river

(103) Vessels navigating the Mississippi River at flood stages, when passing habitations or other structures, partially or wholly submerged and subject to damage from wave action, shall proceed slowly and keep as far away from such structures as circumstances permit, and shall also proceed slowly when passing close to levees. In low river stages, vessel bow wave and suction may be more pronounced due to calmer, less-flowing waters. Caution is advised when nearing facilities and moored/anchored vessels as their own suction may cause hazard and damage.

(104) Under these conditions, between Baton Rouge, Mile 232.0, and The Jump, Mile 10.0, mariners are directed to steer a course as close as possible to the center of the river and to proceed at a speed sufficiently slow so that levees and revetments will not be endangered by wave wash. Careful observation by mariners of the effects of the vessel's wash is a vital element in this control.

(105) Strong currents and shifting eddies in the vicinity of Algiers Point will be encountered during high stages of the river. These conditions may make hazardous the operation of a tow which could normally be handled with ease. It is accordingly requested that operators and masters exercise every precaution when operating in the area controlled by the New Orleans Harbor traffic lights. Size of tows and tugs should be considered in view of conditions which may be expected.

(106) The river is marked with lights, and for the most part the banks are sufficient guides. The distance from Head of Passes to New Orleans is 95 miles.

(107) **Pilottown**, a small village on the E side of the river 2 miles AHP, is the exchange point for bar pilots and river pilots for both inbound and outbound vessels. A wingdam about 1.6 miles AHP is marked by a light and seasonal fog signal. The pilots' wharf about 2 miles AHP and a wingdam inshore on the E side are marked by

private lights. The Ergon Co. wharf, Mile 2.4 AHP, about 0.6 mile N of the pilot wharf, has berthing for 600-foot vessels and 38 feet alongside. Crude oil is shipped and received mostly by barge.

(108) **Cubits Gap** is an opening on the E side of the river about 3.5 miles AHP, at which **Raphael Pass, Main Pass**, **Octave Pass**, and **Brant Bayou** meet and connect with the river. These passes are navigable for small craft, but Main Pass is the only one having a navigable connection with the Gulf. A sill of willow brush weighed down by rocks has been laid across the entrance to each of these passes. With local knowledge, certain spots along the sills may be crossed by drafts of 5 to 9 feet.

(109) **Cubits Gap Light 4**, on the SE side of the gap, is shown from a skeleton tower with a red triangular daymark; a seasonal fog signal is at the light.

(110) **Main Pass**, in May 1984, had a controlling depth of 4 feet from the Mississippi River for about 2.1 miles, thence there was shoaling to Breton Sound. In August 1984, it was reported that vessels of 3-foot draft could navigate the pass at high water. This pass is used considerably by fishing vessels and oil companies operating in Chandeleur and Breton Sounds.

(111) The buildings of the Department of Interior's Delta National Wildlife Refuge and a lookout tower at the old quarantine station on the E side just above the gap are conspicuous, but abandoned and no longer in use.

(112) **The Jump** is an opening on the W side 10.6 miles AHP, where Grand Pass, Tiger Pass, and several smaller passes connect with the river. There is a sill across the entrance at a depth of about 15 feet and a depth of about 4 feet can be carried through Grand Pass into the Gulf.

(113) **Tiger Pass**, close W of Grand Pass, connects the river via the Jump with the Gulf. In March 2007, the controlling depths were 6 feet to Light 19; thence in August 2006, 8 feet to Buoy 52, thence in February 2008, 12 feet to the junction with the Mississippi River. In January 2006, numerous pipelines were reported possibly exposed; seeking an alternate route is advised. The entrance from the Gulf is protected by jetties. Lights and daybeacons mark the entrance and the lower 5 miles of the pass. A Coast Guard Aids to Navigation Team is on the W side of the head of the pass at Venice.

(114) **Venice** is a fishing and marine repair center on the W side of Grand Pass just inside The Jump. Oil companies have service and repair bases, and drilling mud, pipe, and equipment are loaded here for the offshore drilling rigs in the Gulf. Boatyards have a 150-ton lift and cranes to 100 tons; hull and engine repairs are made. Oil well platforms are built at Venice. Gasoline, diesel fuel, water, ice, provisions, marine supplies, berths, a 3-ton lift, and ramps are available at marinas. An abandoned Corps of Engineers wharf is on the W side just N of The Jump, Mile 10.7 AHP. Wharves and small-craft landings are at Venice on Grand Pass and on the W side of the river between Venice and Boothville.

(115) Plains Marketing Petroleum, Mile 11.9, ships crude oil from a wharf on the W side of the river about 1.6 miles above The Jump. The wharf has 40 feet reported alongside and berthing space for 785-foot vessels.

(116) **Baptiste Collette Bayou** (see charts 11353, 11361, and 11363), on the E side of the river 11.5 miles AHP, connects the Mississippi River with Breton Sound. The entrance from Breton Sound is protected by jetties. In February 2008, the controlling depth was 4 feet (6 feet at midchannel) in the entrance channel to Light 7, thence 10 feet (11 feet at midchannel) through the jetties; thence in 1997-February 2008, 9 feet to the Mississippi River. The channel is marked by lights and daybeacons.

(117) **Boothville** is a small town on the W side of the river about 16.1 miles AHP. A public wharf 100 feet long is 14.7 miles AHP.

Chart 11364

(118) **Fort Jackson** is on the W side of the river on the point of the river about 19.6 miles AHP. Here the river takes a SW trend for about 2.3 miles, then trends WNW..

(119) **Ostrica** is a small village on the E bank of the river about 24.7 miles AHP. The State-owned **Ostrica Canal**, which connects the river with Quarantine Bay, enters the river 25 miles AHP. (See chapter 7 for a description of the canal and lock.)

(120) **Buras** is a small town and fruit shipping center on the W bank of the river about 25.7 miles AHP. A water tank is prominent.

(121) **Empire** is a town on the W bank of the river about 29.5 miles AHP. A tank and a church spire are prominent. **Empire Canal** leads from the river at Empire to the Gulf W of the river. The canal, lock and dam, and the port facilities on the canal at Empire are described in chapter 9. A pile cluster mooring is at **Nairn** on Sixtymile Point about 32.2 miles AHP.

(122) **Port Sulphur** is on the W bank of the river about 39.4 mile AHP. The loading towers, two tanks, and conveyor galleries of the sulfur plant are very conspicuous. Freeport-McMoran Sulphur Co. operates one ship loading dock (29°28'34"N., 89°41'20"W.), for occasional mooring of transient vessels. The dock has 1,258 feet of berthing space, 50 feet alongside, and a deck height of 12 feet. The wharf is marked by privately maintained lights.

(123) An abandoned oil transfer barge wharf is on the E bank of the river at **Nestor** about 40.3 miles AHP.

(124) **Bohemia** is a small village on the E bank of the river about 45.8 miles AHP. State Route 39 leads along the E bank of the river behind the levee from Bohemia to New Orleans.

(125) **Pointe a la Hache**, 49 miles AHP and about 46 miles below New Orleans, is the seat of Plaquemine Parish which embraces most of the lower Mississippi River. Gasoline, water, and some marine supplies can be obtained in the town. The courthouse clock tower, a water tank, and several radio and microwave towers are very prominent. A ferry crosses the river at Pointe a la Hache and can be contacted on VHF-FM channel 67. Bass Enterprises Production Co., Pointe a la Hache Wharf (29°34'46"N., 89°48'03"W.) has 280 feet of berthing space, 30 feet alongside and a deck height of 14 feet. On the W bank of the river, opposite Pointe a la Hache about 48.9 miles AHP, there is an oil transfer barge wharf and fresh water diversion piping.

(126) At **Bellevue**, on the E bank of the river about 55.2 miles AHP, TECO Energy Co. operates four bulk-material handling wharves marked by private lights. TECO Bulk Terminal, Berth No. 2 (29°36'55"N., 89°53'23"W.) has 1,164 feet of berthing space with dolphins, 50 feet alongside; 1,182 feet of berthing space with dolphins in rear of face, 30 to 40 feet alongside and a deck height of 15 feet. TECO Bulk Terminal, Berth No. 1 (29°37'00"N., 89°53'32"W.) has 1,851 feet of berthing space with dolphins, 55 to 70 feet alongside, 30 to 60 feet alongside in rear of face and a deck height of 16.5 feet. TECO Bulk Terminal, Davant Barge Unloading Station No. 1 (29°36'59"N., 89°53'21"W.) has 1,200 feet of berthing space, 12 to 20 feet alongside and a deck height of 15 feet. TECO Bulk Terminal, Davant Barge Unloading Station No. 2 (29°37'05"N., 89°53'30"W.) has 1,250 feet of berthing space, 12 feet alongside and a deck height of 15 feet. Mooring buoys are located just up and down river from TECO docks. Davant anchorage is located about 2 miles down river from TECO docks.

(127) On the W bank of the river about 57 miles AHP, International Marine Terminals (IMT) operates three bulk-material handling wharves marked by private lights. International Marine Terminals, Shiploader Wharf (29°37'18"N., 89°54'54"W.) has 1,044 feet of berthing space, 46 feet alongside, 1,044 feet of berthing space in rear of face, 40 feet alongside, and a deck height of 15 feet. Traveling shiploader is served by electric conveyor system with a rate of 7,000 tons per hour; used for shipment of dry bulk commodities and mooring barges at rear of face. International Marine Terminals, Myrtle Grove Bulk Commodities Wharf (29°37'23"N., 89°55'01"W.) has 1,271 feet of berthing space, 671 feet of berthing space with dolphins in rear of face, 40 feet alongside and a deck height of 15 feet; receipt and shipment of dry bulk commodities. International Marine Terminals, Myrtle Grove Crane Wharf (29°37'26"N., 89°55'07"W.) has 1,271 feet of berthing space, 600 feet of berthing space with dolphins in rear of face, 46 feet alongside, a deck height of 15 feet; revolving crane to 25 tons with 100-ton receiving hopper; transfer of dry bulk commodities.

(128) A grain elevator and wharf operated by Cenex Harvest State Cooperatives (29°40'27"N., 89°57'51"W.) is on the W bank of the river 61.8 miles AHP. The wharf has a 536-foot face, 790 feet of berthing space with dolphins, 40 feet alongside, and a deck height of 23.5 feet. Four revolving ship loaders have a combined loading rate of 50,000 bushels per hour. The wharf is marked by private lights.

(129) An offshore barge wharf and an offshore oil transfer tanker wharf operated by Conoco Phillips 66 Co. are at **Alliance** on the W bank of the river of 62.5 and 63 miles AHP. Conoco Phillips 66 Co., Alliance Refinery, Coke Wharf (29°41'02"N., 89°58'11"W.) has 740 feet of berthing space with dolphins, 40 feet alongside, deck height of 12 feet, and a conveyor and loading tower with a rate of 35 tons per hour. Conoco Phillips 66 Co., Alliance Refinery, Tanker Dock No. 1 (29°41'26"N., 89°58'28"W.) has 1,320 feet of berthing space with dolphins, 60 feet alongside, a deck height of 12 feet and storage capacity of 5.014-million barrels. The dolphins and wharf are marked by privately maintained lights.

(130) At **Oak Point**, on the W bank of the river 72.3 miles AHP, Chevron Oronite ships and receives chemicals. The wharf at (29°48'32"N., 90°00'26"W.) has 675 feet of berthing space with dolphins, 44 feet alongside, and a deck height of 10 feet. The dolphins are marked by private lights.

(131) **Belle Chasse** is on the W bank of the river about 75.5 miles AHP. A T-shaped wharf at (29°51'05"N., 89°58'59"W.) operated by Alphine Mud Products, Inc. has 280 feet of berthing space with dolphins, 25 feet alongside and a deck height of 18 feet. The wharf is used for mooring vessels. The dolphins are marked by private lights. A ferry crosses the river from Belle Chasse on the W bank to **Scarsdale** on the E bank of the river. The ferry landings are marked by privately maintained lights.

(132) **Port Nickel** is on the E bank of the river about 76.5 miles AHP.

(133) **Braithwaite**, on the E bank of the river about 79.7 miles AHP just above **English Turn Bend-Shingle Point**, has two wharves at about (29°52'14"N., 89°56'34"W.) owned and operated by Stolthaven New Orleans, LLC, for the receipt and shipment of liquid bulk goods. The lower berth has 754 feet of berthing space with dolphins, the upper berth has 460 feet of

berthing space with dolphins, and both have 50 feet alongside and a deck height of 20.4 feet.

(134) **Meraux**, on the E bank of the river about 87.5 miles AHP, has an oil refinery (Murphy Oil) with facilities for receipt and shipment of crude oil and petroleum products by tanker and barge. The tall stacks and cracking towers of the refinery are prominent.

(135) **Algiers Alternate Route** and **Algiers Lock,** on the W bank of the river about 88.4 miles AHP, connect the Mississippi River with an extensive network of inland waterways W of New Orleans. The route is an alternate route of the Intracoastal Waterway leading W of New Orleans. (See chapter 12 for description of canal and lock.)

(136) **Chalmette**, on the E bank of the river about 88.9 miles AHP, has several large oil refineries, ExxonMobil Chalmette Refinery, CCI Carbon and an aluminum plant. The stacks and cracking towers of the refineries and the aluminum plant are conspicuous. Several wharves between mile 88.3 and 89.1 AHP are used for the receipt and shipment of petroleum products and for bunkering vessels. (See Wharves under Port of New Orleans for descriptions.)

(137) An overhead power cable with a clearance of 213 feet crosses the river at Chalmette about 89.0 miles AHP.

(138) A ferry crosses the river from Chalmette on the E bank to Algiers on the W bank about 88.6 miles AHP.

(139) **Chalmette Slip** Chalmette Slip indents the E bank of the river at about 90.7 miles AHP. Chalmette National Monument, a tall white obelisk, is conspicuous close E of the slip. Berthing for deep-draft cargo vessels is available on the N and S sides of the slip. (See Wharves under Port of New Orleans for description.)

(140) The New Orleans General Anchorage, about 2 miles long, is off the W bank of the river opposite Chalmette Slip, the Quarantine Anchorage, about 0.7 mile long, is just above it and the Emergency Anchorage is just below the General Anchorage.

(141) **Arabi**, a suburb of New Orleans, is on the side bank of the river just upriver of Chalmette. A deep-draft wharf and a smaller wharf are at a large sugar refinery. Tate and Lyle North American Sugar: one wharf is used by ship service boats and the other by the refinery company. (See Wharves under Port of New Orleans for description.)

(142) Just upriver of the sugar refinery wharf, at the Port Ship Service boat wharf about 91.0 miles AHP, is the landing for the pilot boat. The upriver pilots board vessels off the landing in the section of the river known as **The Point.** Here vessels bound for destinations above New Orleans discharge the river pilot and take on board the New Orleans-Baton Rouge Steamship Pilot, or upriver pilot. Launch service is also available from Belle Chasse Marine Transport at the St. Maurice Street Wharf about 91.7 miles AHP.

(143) On the W bank of the river opposite Chalmette and Arabi at **Algiers** are barge moorings, towing company wharves, the large floating drydocks of a large ship repair firm, the U.S. Naval Station, and other towing company wharves and barge moorings.

(144) The Inner Harbor Navigation Canal entrance is on the N side of the river about 92.7 miles AHP. The Intracoastal Waterway enters the river through the canal. There are numerous industries along both sides of the Inner Harbor Navigation Canal, including shipbuilding and ship repair yards, cement and concrete mixing plants, chemical, fertilizer, steel fabrication, glass making, instant coffee, and drilling mud manufacturing plants, boatyards, shipwrecking and salvage yards, oil well and dredging company supply bases, and shell-handling wharves.

(145) The vessel is now approaching the crescent-shape in the river that encompasses the city of New Orleans on three sides, and ahead are the numerous tall buildings in the main part of the city. Most of the commercial wharves of the Port of New Orleans are on both sides of the river in this section.

Charts 11369, 11368

(146) **Port of New Orleans** is one of the largest ports in the United States. It is located on both sides of the Mississippi River with its lower limit about 80.6 miles AHP, and its upper limit about 115 miles AHP. The limits of the port encompass the parish of Orleans and the river frontage of the parishes of St. Bernard and Jefferson. This includes the city of New Orleans, the towns and communities of Violet, Meraux, Chalmette, Arabi, Southport, Harahan, and Kenner on the E bank, and Algiers, McDonoghville, Gretna, Harvey, Marrero, Westwego, Bridge City, and Avondale on the W bank. The frontage for deep-draft vessels within the port limits includes approximately 58 miles along the river banks, about 11.5 miles on the Inner Harbor Navigation Canal, and the Mississippi River-Gulf Outlet Canal. The Intracoastal Waterway above the Inner Harbor Navigation Canal and below Harvey Lock offers frontage for barges and small vessels.

(147) The city of **New Orleans** is the major commercial area within the port limits. It is one of the largest cities on the Gulf and is a natural gateway to and from the vast central and S portions of the nation, and particularly to the entire Mississippi Valley with which it is connected by numerous inland water routes. From New Orleans, main-route air and rail lines fan out to all parts of the country. Foreign and coastwise trade are

extensive. The chief imports are crude petroleum, coffee, iron and steel products, metalliferrous ores and scrap, nonferrous metals, sugar, crude rubber, meat and meat products, and manufactures of metal. The chief exports are grain, machinery, oilseeds, animal feeds, nonferrous metals, organic chemicals, oils and fats, metal ores and scrap, iron and steel products, and containers, and coal.

(148) New Orleans is a popular resort with many fine hotels, theaters, restaurants, parks, and places of historical interest. Among the latter is the famous French Quarter (Vieux Carre) which is kept in as near its original state as possible. For the convenience of representative citizens of foreign countries who arrive or depart via New Orleans, an international world trade center known as the **International House** is in a 10-story building at the corner of Gravier and Camp Streets.

(149) The city proper is bounded on three sides by the Mississippi River. The city limits extend N to Lake Pontchartrain, which is connected to the river by the Inner Harbor Navigation Canal along the E side of the city. Strong levees protect the city from flood waters of the Mississippi River, which at times rise to a level higher than that of the city streets.

(150) Abreast of New Orleans on the opposite bank of the river are **Algiers,** which is part of the city of New Orleans, **McDonoghville, Gretna, Harvey, Marrero**, and **Westwego**. Algiers and Gretna are connected with New Orleans by ferries operated by the Mississippi River Bridge Authority and the Crescent City Connection Division, Bridges and Marine Administration.

(151) The Port of New Orleans has over 28 miles of public and private wharves and other related facilities. The public docks can handle as many as 85 ships at a time. The port is mainly a general cargo port, and the first objective is to give shippers whatever facilities and services they need to handle any type of cargo. Modern handling devices suitable for the varied commodities entering the port are provided on the wharves and in the transit sheds. Almost all wharves have rail connections.

(152) Most of the wharves along the waterfront of the city of New Orleans are public facilities under the control of the Board of Commissioners (Dock Board) of the Port of New Orleans. Virtually all these wharves parallel the river bank, and for about 10 miles along the bank there is an almost continuous quay. Transit sheds cover much of the wharf area. Depths at the wharves range from 6 to 45 feet, with about 35 feet alongside most wharves. It is the Dock Board's responsibility to keep sufficient depths alongside the wharves for ships to berth. The board controls the area from the faces of the wharves to 100 feet into the stream. The dock areas silt up rapidly and change from day to day. The Dock

Board's dredge is working continually to keep the docks open.

(153) The offices of the Dock Board are in the Port of New Orleans Building at the foot of Thalia Street Wharf, E bank, 95.7 miles AHF, under the Crescent City Connection Upper bridge.

Channels

(154) The main deepwater channels leading to and in the Port of New Orleans are in the river, the Inner Harbor Navigation Canal, and the Mississippi River-Gulf Outlet Canal. (See Channels at the beginning of this chapter.) Impending closure of the Mississippi River-Gulf Outlet Canal to deep-draft vessels in 2008 was reported. Secondary channels for shallow-draft vessels and barges are on Algiers, Harvey, and other canals and waterways that radiate from the river in all directions.

(155) The **Inner Harbor Navigation Canal (Industrial Canal)** offers a deepwater connection between Mississippi River and Lake Pontchartrain, a distance of about 5.8 miles. The lock is about 0.6 mile N of the Mississippi River Levee; inside dimensions are 640 feet long, 75 feet wide, and 31½ feet over the sills at low water in the Mississippi River. Approaching craft are directed by loudspeaker, lights, and radiotelephone. VHF-FM channels 14 and 16 are continuously monitored. N from the lock in October 1995, the controlling depths were 29 feet to the Seabrook Highway and Southern Railway bridges at the N end of the canal, thence 14 feet across the bar into Lake Pontchartrain. A 900-foot-wide turning basin about 0.7 mile N of the lock has depths of 31 feet. A second turning basin at the junction with the Mississippi River-Gulf Outlet Canal has a 1,600-foot diameter with depths of 40 feet. In 2005, the Inner Harbor Navigation Canal was reported under construction; caution is advised.

Caution

(156) A submerged drainage line is reported crossing the Inner Harbor Navigation Canal just S of the Florida Avenue bridge; maximum permissible draft over the line is 30 feet.

(157) A total of eight bridges cross the canal between the Mississippi River and Lake Pontchartrain. The St. Claude Avenue highway bridge at the S end of the navigation lock has a bascule span with a clearance of zero feet. The North Claiborne Avenue (Seeber) highway bridge, about 0.2 mile N of the lock, has a vertical lift span with a clearance of 40 feet down and 156 feet up. About 1 mile N of the lock, the combination Florida Avenue and Southern Railway vertical lift bridge has a clearance of zero feet down and 156 feet up. An overhead power cable crossing close N of the bridge has a clearance of 166 feet. The combination Gentilly Road

highway and Seaboard System Railroad (L&N) bridge, 2.8 miles N of the lock, has a bascule span with a clearance of zero feet. The U.S. Interstate Route 10 highway bridge close N of Gentilly Road bridge has a fixed span with a clearance of 120 feet for the middle 200 feet and 115 feet elsewhere. An overhead power cable crossing close N of this bridge has a clearance of 136 feet. Chef Menteur Highway (U.S. Route 90) bridge, 3 miles N of the lock, has a vertical lift span with clearances of 50 feet down and 120 feet up. The combination Seabrook Highway and Southern Railway Bridge across the N entrance of the canal, about 4.7 miles N of the lock, has a bascule span with a clearance of 1 foot. A highway bascule bridge with a clearance of 44 feet at the center crosses the canal close N of the Seabrook Highway and Southern Railroad Bridge. (See **117.1 through 117.59 and 117.459**, chapter 2, for drawbridge regulations.)

(158) Bridgetenders of the following bridges monitor VHF-FM channel 16 and work on channel 13:

(159) St. Claude Avenue, WG-401;

(160) Florida Avenue, WUG-409;

(161) Gentilly Road, KZV-719;

(162) U.S. Route 90, KRS-864; and

(163) Seabrook Highway, KZV-819.

Bridge Curfews (No Openings for Marine Traffic)

(164) The bridge opening curfews for the St. Claude Avenue and Florida Avenue bridges are as follows: 6:30 a.m. to 8:30 a.m., and 3:30 p.m. to 5:45 p.m., Monday through Friday (except federal holidays and vessels in distress). The Florida Avenue, St. Claude Avenue, Almonaster Avenue bridges and Seabrook Railroad bridge are operated by the Board of Commissioners of the Port of New Orleans. The Senator Ted Hickey Bridge (Seabrook Vehicular Bridge) is operated by the Orleans Levee District and operates under their curfew of 7:30 a.m. to 8:30 a.m., and 5:00 p.m. to 6:30 p.m., Monday through Friday (except for federal holidays and vessels in distress). The Seaboard System Railroad (L&N) bridge has similar curfews. Schedules can be obtained from the Port of New Orleans, telephone 504-522-2551.

(165) **New Orleans Coast Guard Base** is on the W side of the Inner Harbor Navigation Canal, just N of the lock.

(166) **Harvey Canal** is opposite New Orleans about 98.2 miles AHP. The canal and locks connect the Mississippi River with an extensive network of inland waterways SW of New Orleans. The canal is the route of the Intracoastal Waterway. (See chapter 12 for description of canal and locks.)

Anchorages

(167) General, quarantine, and emergency anchorages are on the W side of the river at New Orleans. (See **110.1 and 110.195**, chapter 2, for limits and regulations.) Vessels may also take anchorage as directed by the Coast Guard District Commander.

Dangers

(168) Submerged revetments are located on the river bottom on both sides in the port area; anchorage is prohibited in these areas. (See **207.200**, chapter 2, and chart 11368 for revetment areas and regulations.)

Bridges

(169) Crescent City Connection Bridge (Business Route 90), a high-level fixed highway bridge connecting Algiers and New Orleans, about 0.7 mile above Canal Street, has a clearance of 150 feet over a central 750-foot width. The Huey P. Long Bridge, a combined highway (U.S. 90) and railroad bridge crossing the river 11 miles above Canal Street, has a clearance of 133 feet through the W span for a channel span width of 750 feet. A private fog signal is on the bridge. In March 2007, the bridge was reported under construction with a reduced horizontal clearance in the west channel to approximately 650 feet. These are the only bridges over the Mississippi in the New Orleans vicinity. The other bridges and tunnels in the port are covered in the description of the respective waterways which they cross.

Cables

(170) Overhead power cables with clearances of 155 feet and 176 feet cross the river just below Nine Mile Point, about 103.6 and 104.1 miles AHP, respectively. In 2008, the cables were reported to be buried.

Tides and Currents

(171) A description of tides and currents is given under the general discussion of the Mississippi River at the beginning of this chapter.

Regulated Navigation Areas

(172) The Mississippi River from 88 to 240 miles AHP is a regulated navigation area. (See **165.1 through 165.13 and 165.803**, chapter 2, for limits and regulations.)

Weather

(173) The climate at New Orleans and the surrounding suburbs is influenced, in a large degree, by the many water surfaces provided by lakes and streams, and by the proximity to the Gulf of Mexico. Throughout the year, these water areas modify the relative humidity and temperature conditions, decreasing the range between the extremes; when S winds prevail, these effects are increased, imparting the characteristics of a marine climate. Relative humidities of less than 50 percent occur in each month of the year; however, they are less frequent in the summer months than in other seasons.

During mid-June to mid-September, the prevailing SE to SW winds carry inland warm, moist air favorable for sporadic, often quite localized, development of thundershowers. In the New Orleans area, these showers tend to occur most frequently around 1300-1400, and keep the temperature from rising much above 90°F. At times, a thunderstorm will develop over Lake Pontchartrain in the early evening, and move over the city. Occasionally the pressure distribution changes to bring in a flow of hotter and drier air. However, there is only an average of about 71 days per year when the temperature rises to 90°F (32.2°C) or higher. From about mid-November to mid-March, the area is subjected alternately to tropical air and cold continental air in periods of varying length. About 80 percent of the December-February hourly temperatures range from 41°F to 69°F. The mean date of the first occurrence of 32°F or lower is about December 12, while the mean date of the last occurrence is about February 13. Between those dates, there is, on the average, more than 6 days out of 7 entirely above freezing, with some afternoons having temperatures in the seventies and eighties. The mean length of the freeze-free period is about 302 days and the average number of days with a recorded temperature below freezing is 13. The usual track of winter storms is to the N of New Orleans, but occasionally one moves into the area, bringing large and rather sudden drops in temperature, but the cold spells seldom last over 3 or 4 days. In about two-thirds of the years, one can expect the annual lowest temperature to be 24°F or warmer, with some years entirely above freezing. The lowest recorded temperature was 7°F on February 13, 1899, at Audubon Park while the coolest temperature on record at the airport is 11°F recorded in December 1989. The average annual temperature at New Orleans is 68.7°F with an average high of 77.8°F and an average low of 59.1°F. July is the warmest month with an average temperature of 82.4°F while January is the coolest month with an average temperature of 52.8°F. Each month, June through September, has had temperature at- or greater than 100°F while each month, November through April, has had temperatures at- or below freezing. The warmest temperature on record at the airport is 102°F recorded in August 1980. From December to May, the water of the Mississippi River is usually colder than the air temperature, favoring the formation of river fogs, particularly with weak S winds. The nearby lakes also serve to modify the extremes of temperature and to increase fogginess over narrow strips along the shores. From April through October, the occurrence of fog is not frequent enough to ordinarily consider them operationally significant. In other months, particularly in winter (December through February), the occurrences increase, with the greatest frequency in February. Visibility at times is reduced by smoke from the industrial plants along the river. Smoke, particularly during the fall and winter, also occurs when marshland areas are burned.

(174) A fairly definite rainy period is from mid-December to mid-March and convective activity is apparent during the summer months. Thunderstorms can be expected about 72 times each year with a pronounced peak in June, July, and August. About 30% of the annual rainfall of 61 inches occurs during this three-month period. Measurable precipitation occurs on about one-third of the days during the winter season and usually falls to the north of a warm front or a cold front which has stalled over the northern Gulf of Mexico. It is as apt to fall in one hour as another, generally slow, steady, and relatively continuous, often lasting for several days. The wettest month is July averaging 6.6 inches and October is the driest averaging 2.7 inches. Snowfall amounts are generally small, with the snow usually melting as it falls. The average annual snowfall total is less than one inch and the greatest 24-hour snowfall total is only 2.7 inches which occurred in December 1963. The pattern of spring rains is similar to that of winter, while fall rains are distributed in much the same manner as summer rains. April, May, October, and November are generally dry, but there have been some extremely heavy showers in those months.

(175) While thunder usually accompanies summer showers, thunderstorms with damaging winds are relatively infrequent. The most damaging thunderstorms are those which move over the city from Lake Pontchartrain, usually in connection with cold fronts and line squalls. Hail of a damaging nature seldom occurs, and tornadoes are extremely rare. Since 1900, the centers of three hurricanes have passed over the city and since 1950, 14 tropical cyclones have passed within 50 miles of New Orleans. New Orleans is in the belt where a mean recurrence interval of 50 years gives an extreme wind speed of 95 to 100 mph or more. The most recent significant storm to affect New Orleans was hurricane Katrina in August 2005. Winds gusted to over 100 mph and levees broke which produced massive flooding. It was one of the strongest storms to impact the United States coast during the past 100 years. Hurricane Elena in September 1985, passed about 70 km NE of the city with 60-knot winds. Hurricane Camille provided New Orleans with 75-knot gusts when it rammed Gulfport, MS in August 1969 and hurricane Betsy caused 90-knot winds when it passed about 70 km W of the city in September 1965.

(176) The lower Mississippi River floods result from runoff upstream. Rainfall within the State of Louisiana has little influence on these stages. If the water level in the river becomes dangerously high, the Bonnet Carre

Spillway, some 33 miles above the city, may be opened to divert the floodwaters.

(177) The National Weather Service maintains an office in the Federal Building; **barometers** may be compared there or checked by telephone. (See Appendix A for address.)

(178) (See page for **New Orleans climatological table**.)

(179) **Pilotage** is discussed under the general description of the river at the beginning of this chapter.

Towage

(180) Tugs up to 4,600 hp are available at New Orleans for towing and docking. (See detailed description at the beginning of this chapter.)

Quarantine

(181) **Quarantine** procedures are discussed at the beginning of this chapter. Numerous public and private hospitals are in New Orleans.

(182) **Agricultural quarantine** procedures are discussed at the beginning of this chapter.

Customs

(183) New Orleans is a customs port of entry with a customhouse on Canal Street. Vessels are generally boarded by customs officers at berth; however, arrangements can be made for the officers to board vessels at any point within the port limits. The customhouse serves the area from the Mississippi River entrance to Reserve, a small town about 138.1 miles AHP.

Immigration

(184) The U.S. Immigration and Naturalization Service maintains a district office at New Orleans. (See Appendix A for address.) Inspectors board vessels at anchor or alongside the wharves. Arrangements should be made through ships' agents.

Coast Guard

(185) **New Orleans Coast Guard Air Station** is at the naval air station about 2.8 miles SW of Belle Chasse.

Harbor regulations

(186) The navigation of vessels in the Mississippi River, the Inner Harbor Navigation Canal to its junction with the Mississippi River-Gulf Outlet Canal, and the Mississippi River-Gulf Outlet Canal are under the jurisdiction of the U.S. Coast Guard. The development, operation, and control of the Port of New Orleans is regulated by The Board of Commissioners of the Port of New Orleans.

(187) **Movement of vessels in vicinity of Algiers Point:**

(188) New Orleans Vessel Traffic Center controls traffic flow in the vicinity of Algiers Point, about 94.6 miles AHP, and is subject to regulations stated in **33 CFR 165.1 through 165.13, 165.803, and 165.810**, chapter 2. In addition to the traffic lights at Governor Nicolls Street Wharf, about 94.6 miles AHP, and at Gretna, about 96.6 miles AHP, described in that regulation, there is a traffic light at **Westwego**, about 101.4 miles AHP, 6.5 miles above Canal Street, which indicates to downbound traffic whether the Gretna traffic control light, about 96.6 miles AHP, 1.7 miles above Canal Street, is red or green.

(189) At a conference of representatives of navigation interests in New Orleans, it was agreed that high stages on the Mississippi River require special precautionary measures in the operation of vessels in New Orleans Harbor, particularly in the vicinity of Algiers Point where high river stages produce strong currents and powerful shifting eddies.

(190) The following recommendations were made for the operation of vessels and other craft when the stage of the river is 10 feet or above on the Carrollton Gage. All underpowered vessels should be assisted by a tug around Algiers Point; and further, underpowered vessels should not leave the harbor unless they can clear Algiers Point during daylight. Terminal operators and fleet owners should observe extra precaution in the mooring of barges to prevent the possible breaking loose of such craft to the danger of all installations downstream.

(191) The attention of all navigation interests, masters, pilots, and operators is invited to the urgent necessity for observance of these policies and meticulous adherence to good seamanship and sound operating practice in order to minimize navigational hazards during the period of high stages of the river.

(192) **Note:** When emergency conditions exist due to the velocity of the flow of the Mississippi River in the vicinity of New Orleans, the Commander, Eighth Coast Guard District, will issue special orders and notices restricting the size and make up of tows, movement of vessels, and the use of anchorages.

(193) **Control of the Port of New Orleans:**

(194) The **Board of Commissioners of the Port of New Orleans**, generally known as the **Dock Board**, has full control of the port except for matters pertaining to the levees and the yacht harbor on Lake Pontchartrain, which are under control of the **Levee Board,** and the **New Orleans Public Belt Railroad**, which is a terminal railroad owned and operated by the city of New Orleans through the **Public Belt Railroad Commission**.

(195) The Dock Board consists of members selected by the Governor of the State of Louisiana from a list of nominees compiled by eighteen business and civic

associations. The board is charged with the development, operation, and control of the Port of New Orleans and establishes rules and regulations for the various terminals and the part of the Inner Harbor Navigation Canal under its control. The office of the Port of New Orleans is located at 1350 Port of New Orleans Place, on the Thalia Street Wharf, under the Crescent City Connection.

Fire prevention

(196) Smokestacks of vessels moored to the wharves and landings must be equipped with spark arrestors, and every precaution must be taken to avoid an issue of sparks. Smoking in the holds or on the decks of vessels, while loading or discharging cargo while alongside the wharves, is prohibited.

(197) **Extracts from the rules and regulations for the Inner Harbor Navigation Canal are as follows:**

General

(198) No vessels shall berth at any wharf, landing or mooring, or move from one point to another in the canal, or load or unload cargo elsewhere than at a regularly established wharf, except by authority of the Superintendent.

Obstructing Navigation–Anchoring and Mooring

(199) No vessel shall anchor in the channel of the canal or in the approaches thereto, except in case of distress or emergency or while waiting the opening of a drawbridge, and such stoppages shall be only for such periods as may be absolutely necessary by reason of such causes. Vessels moored at wharves, landings, clusters, etc., shall be so placed and tied up as not to interfere with safe passage of other vessels navigating the canal. No warp line shall be passed across the channel, wharf, or landing, so as to obstruct passage or to cause interference with the discharging of cargoes.

(200) Vessels shall not be berthed two abreast alongside any wharves, bulkheads, or clusters, except that small barges or other small craft may be moored two or more abreast when necessary clearances for proper operation of the canal can be maintained, and permission of the Superintendent shall have been obtained.

(201) Vessels, lighters, barges, launches, other watercraft, timbers, rafts, or similar floating objects moored or tied to and alongside vessels, wharves, bulkheads, or clusters, shall be placed so as not to obstruct the channel, and shall be made fast securely at both ends to prevent swinging out or breaking loose, and shall display conspicuously suitable lights at night.

(202) Under no circumstances shall vessels or other watercraft be anchored or moored within 100 feet of the centerline of the Inner Harbor Navigation Canal channel as determined by the Engineering Department of the Board.

(203) In the event any vessel or other floating equipment, including any logs or lumber assembled in rafts or separated therefrom, or any large sinkable object on any such vessel shall sink, or in any manner obstruct navigation in the canal, the owner or agent of said vessel shall promptly remove same. In case the owner or agent fails for any cause to remove any such obstruction promptly upon demand, the Board may remove it or cause it to be removed at the cost, risk, and expense of said vessel, its owner, or agent.

(204) **Responsibility for Vessel**

(205) Masters of vessels in Canal waters shall be responsible for safe handling and proper navigation of vessels under their charge. Masters of vessels shall abide by the rules and regulations of the canal, as interpreted by the Superintendent.

(206) No vessel, even if moored and tied up, shall be left without sufficient crew to care for it properly. Lights shall be displayed at all times, both when tied up and navigating the canal, in accordance with the provisions of the Inland Rules.

(207) The dropping of anchors, weights, or other ground tackle, within the areas occupied by submarine cables or pipe crossings, is prohibited. Such crossings will be marked ordinarily by signboards on each bank.

(208) The master or other party in charge of the movement of an oceangoing vessel or craft of unusual height, including piledrivers, derricks, etc., shall before passing through the canal bridge openings, make certain that such craft and every part of the superstructure or any equipment or cargo beyond the gunwales will clear all parts of the bridge structure.

(209) As it may see fit, the Board reserves the right to place its own pilot on any vessel passing through the canal. The canal pilot will serve only in an advisory capacity.

(210) Vessels shall exercise due care in navigating the canal, as to **speed** and otherwise, in order to avoid damage to the canal structures or equipment, or to other vessels.

(211) The making of trial runs in the canal by speed boats and other such motorcraft is prohibited. Under no circumstances shall any watercraft navigate in the canal at a **speed exceeding 10 m.p.h.**

(212) Vessels shall be liable for any damage to canal structures, equipment, and/or appurtenances while passing through the canal.

(213) The Board has noted that some masters ground their vessels bow-on while waiting lockage in the forebay of the lock. As such contact endangers the levees, mariners are directed to discontinue the practice.

(214) Steel-pile dolphins and other facilities are on the E and W banks downstream from the lock forebay to provide "ready" mooring areas for barges and tows awaiting lockage. These craft are under the direction and control of the lockmaster.

(215) A port-wide radiotelephone system using VHF-FM channel 16 and 67 connects all terminals, bridges, tugs, pilots, and the yacht harbor with the Harbor Police.

Wharves

(216) The Port of New Orleans has more than 100 berths and wharves located on both sides of the Mississippi River, the Inner Harbor Navigation Canal, and the Mississippi River-Gulf Outlet Canal. More than 100 additional facilities for small vessels and barges are on Harvey Canal, Algiers Canal, Michoud Canal, and Bayou Barataria. Only the deep-draft facilities are described. For a complete description of the port facilities refer to Port Series No. 20, published and sold by the U.S. Army Corps of Engineers. (See Appendix A for address.) The alongside depths are reported; for information on the latest depths contact port authorities or the private operators. All the facilities described have direct highway connections, and most have plant trackage with direct railroad connections. Water is available at most of the wharves, but electrical shore power connections are available at only about 25 percent of the wharves. General cargo at the port is usually handled to and from vessels by ships' tackle. Cargo on the wharves, particularly the public facilities, is handled by a wide range of equipment furnished by various stevedoring companies. Special handling equipment, if available, is mentioned in the description of the particular facility. Shore-based hoisting equipment with capacity up to 300 tons is available to the public at New Orleans; floating cranes and derricks up to 700-ton capacity are available.

(217) Of the facilities described, about one-half are for public use operated by the Board of Commissioners of the Port of New Orleans. They operate general and containerized cargo wharves, heavy lift and bulk material handling wharves, and a grain elevator. Nearly half of the private facilities are for handling petroleum and chemical products. Most of the rest are for handling general, bulk, and liquid cargo.

(218) **Facilities on E bank of river from Meraux to Inner Harbor Navigation Canal:**

(219) **Murphy Oil USA, Meraux Refinery Wharf,** about 87.0 miles AHP (29°55'30"N., 89°56'15"W.): 757 feet of berthing space at the face of six offshore breasting platforms; 40 feet alongside; 205 feet of barge berthing space at the rear of the lower platforms; 35 feet alongside; deck height, 24 feet; receipt of crude oil by tanker and barge; shipment of petroleum products by tanker and barge; owned and operated by Murphy Oil USA, Inc.

(220) **Chalmette Refining, Crude Wharf,** about 88.3 miles AHP, (29°55'36"N., 89°57'56"W.): 580 feet of berthing space with dolphins; 35 feet alongside; deck height, 21 feet; receipt of crude oil; owned by Chalmette Refining, LLC, a subsidiary of ExxonMobil Corp.; and operated by ExxonMobil Corp.

(221) **Chalmette Refining, No. 5 Dock**, (29°55'34"N., 89°57'54"W.): 380 feet of berthing space with dolphins; 12 feet alongside; deck height, 20 feet; receipt of crude oil; owned by Chalmette Refining, LLC, a subsidiary of ExxonMobil Corp., and operated by ExxonMobil Corp.

(222) **Chalmette Refining, No. 6 Dock** (29°55'38"N., 89°58'10"W.): 310 feet of berthing space with dolphins; 25 feet alongside; deck height, 20 feet; receipt and shipment of petroleum by barge; owned by Chalmette Refining, LLC, a subsidiary of ExxonMobil Corp.; and operated by ExxonMobil Corp.

(223) **Chalmette Refining, No. 4 Dock** (29°55'45"N., 89°58'39"W.): 390 feet of berthing space with dolphins; 42 to 50 feet alongside; deck height, 27 feet; receipt of crude oil; shipment of petroleum products and petrochemicals by tanker and barge; owned by Chalmette Refining, LLC, a subsidiary of ExxonMobil Corp.; and operated by ExxonMobil Corp.

(224) **CCI Carbon, Chalmette Coke Dock**, (29°55'53"N., 89°58'52"W.): 300 feet of berthing space; 55 feet alongside; receipt and shipment of coke by barge; owned and operated by CCI Carbon, LLC, a division of Calciner Industries, Inc.

(225) **Chalmette Slip, Dock No. 2** (29°56'33"N., 89°59'47"W.): 1,680 feet of berthing space; 32 to 36 feet alongside; deck height, 20 feet; 55,000 square feet of covered storage; 168,500 square feet open storage; receipt and shipment of conventional and containerized general cargo in foreign and domestic trade; owned by St. Bernard Port, Harbor and Terminal District; and operated by International Ship Services, Inc., a subsidiary of Kaiser Aluminum Corp.

(226) **Chalmette Slip, Dock No. 1** (29°56'42"N., 89°59'50"W.): 1,280 feet of berthing space; 30 to 36 feet alongside; deck height, 20 feet; 84,400 square feet of covered storage; receipt and shipment of general bulk cargo in foreign and domestic trade; owned by St. Bernard Port, Harbor and Terminal District; and operated by International Ship Services, Inc., a subsidiary of Kaiser Aluminum Corp.; and Bulk Material Transfer, Inc., a subsidiary of Bergeron Group.

(227) **Tate and Lyle North American Sugars, Chalmette Refinery Wharf** (29°56'36"N., 90°00'05"W.): 1,115 feet of berthing space; 45 feet alongside; deck height, 21.8 feet; two 10-ton electric gantry cranes, 36-inch electric belt-conveyor system with unloading rate of 500 tons

per hour; 5-ton electric gantry hoist for loading vessels; 18,090 square feet covered storage; receipt of raw sugar; and shipment of refined sugar; owned and operated by Tate and Lyle North American Sugars, Inc.

(228) **Pacorini USA Wharf** (29°57'10"N., 90°01'06"W.): 1,314-foot face; 27 to 33 feet alongside; deck height, 20 feet; 126,000 square feet covered storage, 15 acres open storage; receipt and shipment of conventional general cargo in foreign and domestic trade; landing for water taxis serving anchored vessels; owned by Board of Commissioners of the Port of New Orleans; and operated by Pacorini USA, Inc., and Belle Chasse Marine Transportation, Inc.

(229) **Facilities on E side of Inner Harbor Navigation Canal and Industrial Canal:**

(230) **Southern Scrap Material Co., Industrial Canal, Main Wharf** (29°59'00"N., 90°01'13"W.): 451-foot face; 32 feet alongside; deck height, 7 feet; cranes to 40-tons; 10 acres of open storage; receipt of scrap metal by barge, shipment of scrap metal by ship and barge; owned by Board of Commissioners of the Port of New Orleans; and operated by Southern Scrap Material Co., LLC., a division of Southern Holdings, Inc.

(231) **Dwyer Road Wharf** (30°01'14"N., 90°01'50"W.): 340 feet of berthing space with dolphins; 22 feet alongside; deck height, 7 feet; mooring of transient vessels; owned and operated by Board of Commissioners of the Port of New Orleans.

(232) **United States Gypsum Co., Industrial Canal Wharf** (30°01'17"N., 90°01'49"W.): 362-foot face, 25 feet alongside; 240 feet of barge berthing space at rear of face, 12 feet alongside; deck height, 7.5 feet; 54-inch, electric, belt-conveyor system leads from wharf to gypsum storage bins having a capacity of 60,000 tons; 24-inch, radial, belt-conveyor system leads from barge berths to open storage area for 16,000 tons of limestone; receipt of synthetic gypsum and limestone by barge; owned by Board of Commissioners of the Port of New Orleans; and operated by United States Gypsum Co.

(233) **Morrison Yard Wharf** (30°01'29"N., 90°01'53"W.): 970 feet of berthing space with dolphins; 28 to 30 feet alongside; deck height, 7 feet; 6 acres open storage; mooring of transient vessels; owned and operated by Board of Commissioners of the Port of New Orleans.

(234) **Halliburton/Baroid Drilling Fluids, Industrial Canal, Ore Wharf** (30°01'48"N., 90°02'00"W.): 490 feet of berthing space; 23 feet alongside; deck height, 6 feet; open storage area for 60,000 tons of barite ore; receipt of baroid ore by barge; owned by Board of Commissioners of the Port of New Orleans; and operated by Halliburton/Baroid Drilling Fluids, Inc.

(235) **Facilities on W side of Inner Harbor Navigation Canal and Industrial Canal**:

(236) **Holcim (US), New Orleans Cement Wharf** (30°01'08"N., 90°01'51"W.): 560 feet of berthing space with dolphins; 17 feet alongside; deck height, 5 feet; pneumatic pump delivers cement at 200 tons per hour to storage silos with 55,000-ton capacity; receipt of bulk cement by barge; owned by Board of Commissioners of the Port of New Orleans; and operated by Hocim (US), Inc.

(237) **France Road Terminal, Berth No. 5** (29°59'31"N., 90°01'22"W.): 900 feet of berthing space; 30 to 33 feet alongside; deck height, 10 feet; up to 100,000 square feet of covered storage; open storage for 3,949 containers; receipt and shipment of containerized and roll-on/roll-off cargo in foreign trade; owned by Board of Commissioners of the Port of New Orleans; and operated by P&O Ports Louisiana, Inc.

(238) **France Road Terminal, Berth No. 4:**(29°59'18"N., 90°01'18"W.); 700-foot face; 30 to 33 feet alongside; deck height, 10 feet; up to 100,000 square feet of covered storage; open storage for 3,949 containers; receipt and shipment of containerized and roll-on/roll-off cargo in foreign trade; owned by Board of Commissioners of the Port of New Orleans; and operated by Ceres Gulf, Inc.

(239) **France Road Terminal, Berth No. 1** (29°59'00"N., 90°01'19"W.): 830 feet of berthing space; 32 feet alongside; deck height, 10.8 feet; two 30-ton container cranes; open storages for 1,100 containers; receipt and shipment of containerized cargo in foreign and domestic trade; owned by Board of Commissioners of the Port of New Orleans; and operated by Universal Maritime Service Corp., a subsidiary of Maersk Sealand, Inc.

(240) **Florida Avenue Wharf** (29°58'46"N., 90°01'30"W.): 482-foot face; 30 feet alongside; deck height, 9 feet; 57,600 square feet of covered storage; occasional mooring of barges; owned by Board of Commissioners of the Port of New Orleans; and operated by The Kearney Co.

(241) **Lafarge Corp., New Orleans Cement Wharf** (29°58'40"N., 90°01'33"W.): 600-foot face; 11 feet alongside; deck height, 10 feet; pipelines extend to cement storage silos with 60,000-ton capacity; receipt of cement by barge; owned by Board of Commissioners of the Port of New Orleans; and operated by Lafarge Corp.

(242) **Namasco Corp., New Orleans Wharf** (29°58'36"N., 90°01'30"W.): 180 feet of berthing space with dolphins; 12 feet alongside; deck height, 12 feet; one crane with two 5-ton electric hoists; forklifts to 10-tons; receipt of structural steel shapes, flat-rolled steel, and wire products by barge; owned by Board of Commissioners of the Port of New Orleans; and operated by Namasco Corp.

(243) **Facilities on the Mississippi River-Gulf Outlet Canal:**

(244) **Entergy Corp., Michoud Electric Station, Oil Dock** (30°00'18"N., 89°56'10"W.): 590 feet of berthing

space with dolphins; 12 feet alongside; deck height, 7 feet; pipeline extends to storage tanks with 350,000-barrel capacity; owned and operated by Entergy Corp.

(245) **Facilities on Michoud Canal:**

(246) **Vulcan/ICA Distribution Co., Michoud Canal Wharf** (30°01'20"N., 89°54'21"W.): 585-foot face; 38 feet alongside; deck height, 3 feet; receipt of crushed limestone by self-unloading vessel; owned and operated by Vulcan/ICA Distribution Co.

(247) **Lone Star Industries, Michoud Plant, Ship Wharf** (30°01'30"N., 89°54'21"W.): 840 feet of berthing space with dolphins; 34 feet alongside; deck height, 10 feet; gantry crane with unloading rate of 3,000 tons per hour; receipt of bulk cement, urea, ammonium nitrate, fertilizer, and granulated slag by ship; owned and operated by Lone Star Industries, Inc.

(248) **Lone Star Industries, Michoud Barge Slip** (30°01'39"N., 89°54'21"W.): 324 feet of berthing space; 15 feet alongside; deck height, 4.4 feet; conveyor system with 380-ton per hour rate; shipment of fertilizer by barge; owned and operated by Lone Star Industries, Inc.

(249) **Facilities on the E bank of river from Inner Harbor Navigation Canal W to Southport:**

(250) **Poland Avenue Wharf, Berths Nos. 4 and 5** (29°57'32"N., 90°02'08"W.): 932-foot face; 35 feet alongside; deck height, 22 feet; 84,328 square feet of covered storage; receipt and shipment of conventional general cargo in foreign and domestic trade; owned by U.S. Government; and operated by Board of Commissioners of the Port of New Orleans.

(251) **Pauline Street Wharf** (29°57'36"N., 90°02'16"W.): 581-foot face; 35 feet alongside; deck height, 22 feet; 19,612 square feet of covered storage; receipt and shipment of conventional general cargo in foreign and domestic trade; owned and operated by Board of Commissioners of the Port of New Orleans.

(252) **Esplande Avenue Wharf** (29°57'38"N., 90°03'20"W.): 584-foot face; 35 feet alongside; deck height, 22 feet; 99,031 square feet of covered storage; shed used for warehousing; owned and operated by Board of Commissioners of the Port of New Orleans.

(253) **Governor Nicholls Street Wharf** (29°57'33"N., 90°03'28"W.): 1,210-foot face; 35 feet alongside; deck height, 22 feet; 156,617 square feet of covered storage, 37,700 square feet of paved open storage; receipt and shipment of conventional general cargo in foreign and domestic trade; owned and operated by Board of Commissioners of the Port of New Orleans.

(254) **Bienville Street (Aquarium Landing) Wharf** (29°57'03"N., 90°03'46"W.): 580 feet of berthing space; 30 to 35 feet alongside; deck height, 22 feet; boarding and discharge of passengers for excursion vessels; owned by Board of Commissioners of the Port of New Orleans; and operated by New Orleans Steamboat Co.

(255) **International Rivercenter, Excursion Vessel Landing** (29°56'49"N., 90°03'42"W.): 840 feet of berthing space; 35 feet alongside; deck height, 22 feet; boarding and discharge of passengers for excursion paddlewheeler; owned by Board of Commissioners of the Port of New Orleans; and operated by New Orleans Paddlewheels, Inc.

(256) **Julia Street Wharf** (29°56'32"N., 90°03'40"W.): 1,189-foot face; 35 feet alongside; deck height, 22 feet; boarding and discharge of cruise ship passengers; mooring transient cruise ships; owned and operated by Board of Commissioners of the Port of New Orleans.

(257) **Erato Street Wharf** (29°56'19"N., 90°03'39"W.): 1,067-foot face; 35 feet alongside; deck height, 22 feet; occasional mooring of cruise ships and other vessels; owned and operated by Board of Commissioners of the Port of New Orleans.

(258) **Thalia Street Wharf** (29°56'13"N., 90°03'39"W.): 860-foot face; 35 feet alongside; deck height, 22 feet; occasional mooring of transient vessels; owned and operated by Board of Commissioners of the Port of New Orleans.

(259) **Robin Street Wharf** (29°56'04"N., 90°03'40"W.): 1,216-foot face; 35 feet alongside; deck height, 22 feet; 157,000 square feet of covered storage; passenger landing for excursion vessels; owned by Board of Commissioners of the Port of New Orleans and operated by Delta Queen Steamboat Co.

(260) **First Street Wharf** (29°55'19"N., 90°04'20"W.): 1,275 feet of berthing space; 35 feet alongside; deck height, 22 feet; 140,655 square feet of covered storage, 2.3 acres paved open storage; receipt and shipment of conventional and containerized general cargo in foreign and domestic trade; owned by Board of Commissioners of the Port of New Orleans; and operated by Empire Stevedoring (LA), Inc.

(261) **Seventh Street Wharf** (29°55'07"N., 90°04'50"W.): 1,196 feet of berthing space; 35 feet alongside; deck height, 20.5 feet; 119,280 square feet of covered storage; 3.5 acres open storage; receipt and shipment of conventional general cargo in foreign and domestic trade; owned by Board of Commissioners of the Port of New Orleans; and operated by Coastal Cargo Co., Inc., a division of The Jackson Kearney Group.

(262) **Harmony Street Wharf** (29°55'04"N., 90°05'00"W.): 1,231 feet of berthing space; 35 feet alongside; deck height, 20.5 feet; 120,600 square feet of covered storage, 3.9 acres of open storage; receipt and shipment of conventional general cargo in foreign and domestic trade; owned by Board of Commissioners of the Port of New Orleans; and operated by Coastal Cargo Co., Inc., a division of The Jackson Kearney Group.

(263) **Louisiana Avenue, Wharves E, F, and G** (29°54'58"N., 90°05'18"W.): 1,590 feet of berthing space; 35 feet alongside; deck height, 24 feet; 138,624 square feet covered storage, 36 acres open storage; receipt and shipment of conventional general cargo in foreign and domestic trade; owned by Board of Commissioners of the Port of New Orleans; and operated by Coastal Cargo Co., Inc., a division of The Jackson Kearney Group.

(264) **Milan Street Wharf** (29°54'49"N., 90°05'53"W.): 1,271 feet of berthing space; 35 feet alongside; deck height, 24 feet; 107,081 square feet covered storage; receipt and shipment of conventional general cargo in foreign and domestic trade; owned by Board of Commissioners of the Port of New Orleans; and operated by Stevedoring Services of America.

(265) **Napoleon Avenue Open Wharf** (29°54'45"N., 90°06'03"W.): 375 feet of berthing space with dolphins; 35 feet alongside; deck height, 24 feet; 3.5 acres open storage; receipt and shipment of conventional general cargo and heavy lift items in foreign and domestic trade; owned by Board of Commissioners of the Port of New Orleans; and operated by Stevedoring Services of America.

(266) **Napoleon Avenue, Wharf C** (29°54'44"N., 90°06'11"W.): 1,000-foot face; 35 feet alongside; deck height, 24 feet; 199,859 square feet of covered storage; warehouse building, vacuum fumigation plant, lumber drying kiln; open storage area and other facilities of Foreign Trade Zone No. 2 located in rear of transit shed; receipt and shipment of conventional general cargo in foreign and domestic trade; owned by Board of Commissioners of the Port of New Orleans; and operated by Stevedoring Services of America.

(267) **Napoleon Avenue, Container Terminal Wharf**, (29°54'42"N., 90°06'30"W.): two 1,000-foot faces; 35 feet alongside; deck height, 24 feet; automated portals; owned by Board of Commissioners of the Port of New Orleans; operated by Ceres Gulf and P&O Ports of Louisiana.

(268) **Nashville Avenue, Wharf C**, about 99.8 miles AHP, (29°54'42"N., 90°06'45"W.): 1,658 feet of berthing space; 35 feet alongside; deck height, 22 feet; 179, 500 square feet of covered storage, 51 acres open storage; receipt and shipment of conventional general cargo in foreign and domestic trade; receipt of steel products; owned by Board of Commissioners of the Port of New Orleans; and operated by P&O Ports Louisiana, Inc.

(269) **Nashville Avenue, Wharf B** (29°54'42"N., 90°07'08"W.): 1,785 feet of berthing space; 35 feet alongside; deck height, 22 feet; 141,000 square feet of covered storage, 61 acres open storage; receipt and shipment of conventional general cargo in foreign and domestic trade; owned by Board of Commissioners of the Port of New Orleans; and operated by P&O Ports Louisiana, Inc.

(270) **Nashville Avenue, Wharf A** (29°54'46"N., 90°07'27"W.): 2,759 feet of berthing space; 35 feet alongside; deck height, 22 feet; 756,000 square feet of covered storage, 61 acres open storage; receipt and shipment of conventional general cargo in foreign and domestic trade; owned by Board of Commissioners of the Port of New Orleans; and operated by P&O Ports Louisiana, Inc.

(271) **Henry Clay Avenue Wharf** (29°54'53"N., 90°07'49"W.): 842 feet of berthing space; 38 feet alongside; deck height, 22 feet; 170,850 square feet of covered storage; receipt and shipment of conventional general cargo in foreign and domestic trade; owned by Board of Commissioners of the Port of New Orleans; and operated by P&O Ports Louisiana, Inc.

(272) **Facilities on W bank of river from Algiers Alternate Route W to Avondale:**

(273) **Perry Street Wharf** (29°56'02"N., 90°03'19"W.): 1,100 feet of berthing space with dolphins; 50 feet alongside; deck height, 24.5 feet; 120,000 square feet of covered storage; mooring vessels for repairs and maintenance; owned by Board of Commissioners of the Port of New Orleans; and operated by Boland Marine Services and Delta Queen Steamboat Co.

(274) **John W. Stone Oil Distributor, Gretna Dock No. 5** (SP Dock) (29°55'23"N., 90°03'43"W.): 590 feet of berthing space with dolphins; 28 to 29 feet alongside; deck height, 20 feet; pipelines lead from wharf to molasses storage tanks in rear with 1.6 million-gallon capacity; receipt of molasses by self-unloading vessels; shipment of molasses by barge; receipt of petroleum products by ship and barge; owned by John W. Stone Oil Distributor, LLC.; and operated by John W. Stone Oil Distributor, LLC and CHR Hansen Ingredient Technology Co.

(275) **John W. Stone Oil Distributor, Gretna Dock No. 8 Mooring Wharf** (29°55'15"N., 90°03'49"W.): 180 feet of berthing space with dolphins; 30 feet alongside; deck height, 20 feet; mooring vessels in transit to and from nearby John W. Stone docks; owned and operated by John W. Stone Oil Distributor, LLC.

(276) **International Matex Tank Terminals, Gretna Lower Dock** (29°55'00"N., 90°04'16"W.): 900 feet of berthing space with buoys; 45 to 55 feet alongside; deck height, 3 feet; receipt and shipment of petroleum products; bunkering vessels; loading midstream fueling barges; owned and operated by International-Matex Tank Terminals, Ltd.

(277) **Delta Terminal Services, Harvey Wharf No. 3** (29°54'40"N., 90°05'15"W.): 240 feet of berthing space; 38 feet alongside; deck height, 24 feet; receipt and shipment of petroleum products, chemicals, and

miscellaneous bulk liquids by vessel and barge; owned and operated by Delta Terminal Services, Inc.

(278) **Delta Terminal Services, Harvey Wharf No. 2** (29°54'39"N., 90°05'20"W.): 700 feet of berthing space; 38 feet alongside; deck height, 24 feet; receipt and shipment of petroleum products, chemicals, and miscellaneous bulk liquids by vessel and barge; owned and operated by Delta Terminal Services, Inc.

(279) **Delta Terminal Services, Harvey Wharf No. 1** (29°54'36"N., 90°05'27"W.): 700 feet of berthing space with dolphins; 32 feet alongside; deck height, 20 feet; receipt and shipment of petroleum products, chemicals, and miscellaneous bulk liquids by vessel and barge; owned and operated by Delta Terminal Services, Inc.

(280) **Delta Terminal Services, Harvey Wharf No. 4** (29°54'31"N., 90°05'38"W.): 326 feet of berthing space with dolphins; 60 feet alongside; deck height, 19 feet; receipt and shipment of petroleum products, chemicals, and miscellaneous bulk liquids by vessel and barge; owned and operated by Delta Terminal Services, Inc.

(281) **Marlex Terminal, Harvey Mooring Pier**, (29°54'31"N., 90°05'44"W.): 460 feet of berthing space with dolphins; 35 feet alongside; deck height, 24 feet; mooring large commercial vessels, owned and operated by Diversified Group, Inc

(282) **Fuel and Marine Marketing, Marrero Terminal Wharf** (29°54'23"N., 90°06'09"W.): 746 feet of berthing space with platform; 34 feet alongside; deck height, 18 feet; receipt and shipment of petroleum products by barge; loading midstream fueling barges; bunkering barges; owned and operated by Fuel and Marine Marketing, LLC, a joint venture between Texaco, U.S.A. and Chevron Oil Co.

(283) **Williams Energy Partners, Marrero Terminal, Dock No. 1** (29°54'21"N., 90°06'18"W.): 850 feet of berthing space with dolphins; 48 feet alongside; deck height, 8 feet; receipt of crude oil; receipt and shipment of petroleum products by vessel and barge; bunkering vessels; supplying bunkering barges; owned and operated by Williams Energy Partners, LLC.

(284) **ST Services, Westwego Terminal Wharf**, (29°54'49"N., 90°08'16"W.): 250 feet of berthing space with dolphins; 30 feet alongside; deck height, 24 feet; receipt and shipment of molasses, miscellaneous chemicals, bulk liquids, fats and oils by vessel and barge; owned and operated by ST Services, LLC.

(285) **National Gypsum Co., and Vopak Terminal, Westwego Plant Wharf** (29°55'19"N., 90°08'34"W.): 720 feet of berthing space with dolphins and bank; 29 feet alongside; deck height, 23 feet; open storage area for 75,000 tons of gypsum rock and synthetic gypsum; self-unloading vessels discharge into a hopper serving a covered 36-inch, electric, belt-conveyor system with unloading rate of 800 tons per hour; receipt of gypsum rock by self-unloading vessel; receipt of synthetic gypsum by barge; receipt of miscellaneous bulk liquids by vessel and barge; owned by National Gypsum Co.; and operated by National Gypsum Co. And Vopak Terminal Westwego, Inc.

(286) **Cargill, Westwego Elevator Wharf** (29°56'18"N., 90°08'30"W.): 1,837 feet of berthing space with platform; 45 feet alongside; deck height, 22 feet; 3.38 million-bushel grain elevator; six vessel-loading spouts can load two vessels at about 100,000 bushels per hour each; receipt and shipment of grain; owned by Board of Commissioners of the Port of New Orleans; and operated by Cargill, Inc.

(287) **International–Matex Tank Terminals, Dock No. 1** (29°55'18"N., 90°11'41"W.): 700 feet of berthing space with dolphins; 40 feet alongside; deck height, 7 feet; pipelines extend to storage tanks with 675,000-barrel capacity; receipt and shipment of petroleum products, liquid chemicals and petrochemicals, lard, and vegetable, fish, and tung oils by barge and vessel; owned and operated by International–Matex Tank Terminals, Ltd.

(288) **International–Matex Tank Terminals, Dock No. 2** (29°55'20"N., 90°11'35"W.): 400 feet of berthing space with dolphins; 40 feet alongside; deck height, 6 feet; pipelines extend to storage tanks with 675,000-barrel capacity; receipt and shipment of petroleum products, liquid chemicals and petrochemicals, lard, and vegetable, fish, and tung oils by barge; owned and operated by International–Matex Tank Terminals, Ltd.

Supplies

(289) An unlimited supply of purified river water is available at nearly all piers and wharves. This water, while excellent for drinking purposes, contains a small percentage of sulfate which causes some scale when used in stationary boilers. Several concerns furnish bunker oil from tank barges to vessels alongside the wharves. The bunkering capacity ranges from 1,000 to 3,500 barrels per hour. Bunker C and diesel oil can be obtained at a number of oil terminals on both sides of the river. Marine supplies of all kinds are obtainable, and ice and provisions are plentiful.

Repairs

(290) New Orleans has numerous commercial plants which can handle vessels for underwater repairs. Most plants have equipment at wharves for making repairs above the waterline, or portable equipment for working on vessels anywhere in the harbor. The largest floating drydock, on the W bank of the river about 1.5 miles above Huey P. Long Bridge, has a capacity of 81,000 tons, a length of 900 feet over the keel blocks, and a

maximum clear width of 220 feet. It can lift vessels up to 906 feet long. Also available are numerous other floating drydocks, small graving docks, and marine railways. The largest marine railway, at Braithwaite, about 80.7 miles AHP, has a capacity of 2,000 tons and can handle vessels up to 300 feet long. Marine repair plants are operated in connection with drydocks, the larger plants having well-equipped shops and other facilities necessary for complete repairs to wooden or steel vessels. A large shipbuilding plant at Avondale builds all types of vessels up to 900 feet long.

Salvage facilities

(291) Practically any equipment necessary for heavy salvage work at sea or in port is procurable at New Orleans. This includes floating derricks, dredges, barges, pumps, deep-sea divers and diving equipment, and ground tackle.

Communications

(292) New Orleans is the terminus for six trunkline railroads including the Illinois Central Gulf Railroad, the Seaboard System Railroad, the Missouri Pacific Railroad, the Southern Railway System, Southern Pacific Lines, and Kansas City Southern Lines. The New Orleans Public Belt Railroad is a city-owned switching railroad that expedites the handling of rail freight in the port. About 100 shipping lines operate on regular schedules out of the port. Coastwise service and intracoastal service reaches all important Gulf, Atlantic, and Pacific coast ports, and foreign service includes all world ports, particularly West Indian, Caribbean, the Panama Canal, Central and South American, European, West, South, and East African, and Far Eastern ports.

(293) Inland barge lines operate on the Mississippi River and its tributaries as far as Minneapolis and St. Paul on the Mississippi, and Chicago on the Illinois River, Kansas City on the Missouri River, and Pittsburgh on the Ohio River. There is also barge-line service to Mobile and to Port Birmingham, the port for Birmingham, Ala., on Black Warrior River. The barge-line terminals are on the Inner Harbor Navigation Canal, just above the locks and on both banks of the river above and below the city. There are inside freight routes on the Intracoastal Waterway out of New Orleans E to Mobile, Pensacola, Panama City, and Apalachicola, and W to New Iberia, Port Arthur, Galveston, Houston, Texas City, Port Lavaca, Corpus Christi, Port Mansfield, and Brownsville.

(294) New Orleans International Airport (Moisant Field) about 12.7 miles NW of the center of the city is served by several airlines, which offer scheduled service to all parts of the country and overseas destinations. New Orleans Lakefront Airport is on Lake Pontchartrain on the E side of the N end of the Inner Harbor Navigation Canal. Alvin Callender Field is a naval reserve training facility on the S side of the river E of Algiers.

(295) Radiotelephone service is available through the New Orleans Marine Operator.

Small-craft facilities

(296) Most small-craft facilities are on the canals inside the locks from the river, at Chef Menteur, or at the Municipal Yacht Basin and Orleans Marina at the yacht harbor, about 4.6 miles W of the Inner Harbor Navigation Canal, on Lake Pontchartrain. Covered and open berths with electricity for over 800 craft up to 100 feet long are available at the yacht harbor. Two yacht clubs, several boatyards, and service wharves in the yacht harbor have gasoline, diesel fuel, water, ice, provisions, marine supplies, and ramps. Marine lifts and cranes can lift out craft to 35 tons for hull and engine repairs, or dry open or covered storage. Electronic repairs can be made. Fuel, water, and supplies are also available on the Inner Harbor Navigation Canal, Harvey Canal, and on the Algiers Alternate Route of the Intracoastal Waterway.

Charts 11369, 11352, 11370, 11354

(297) Above New Orleans, the Mississippi River is used by oceangoing vessels to Baton Rouge, about 135 miles above Canal Street.

Channels

(298) The river channel between New Orleans and Baton Rouge is for the most part deep and clear. However, at low river stages, there are sections of the river that have been improved by dredging to accommodate deep-draft vessels. These sections are called crossings. **Mississippi River crossings** number 13 in all and are at:

(299) Fairview-Davis Crevesse, 114.8 miles AHP;
(300) Belmont, Lower, 152.3 miles AHP;
(301) Rich Bend, 156.4 miles AHP;
(302) Smoke Bend-Pumpkin Bezette, 174.4 miles AHP;
(303) Philadelphia, 182.1 miles AHP;
(304) Alhambra-White Castle, 189.3 miles AHP;
(305) Bayou Goula-Virginia, 197.0 miles AHP;
(306) Granada-St. Louis Plantation, 203 miles AHP;
(307) Medora-Old Hermitage, 211.3 miles AHP;
(308) Sardine Point, 218.9 miles AHP;
(309) Red Eye-Arlington, 223.2 miles AHP;
(310) Baton Rouge, 230.7 miles AHP.

(311) Federal project depth for the crossings is 45 feet to mile 181 AHP, thence 40 feet to Baton Rouge. In 1980, the U.S. Army Corps of Engineers reported that the

Lower Belmont crossing is maintained yearly. Lighted ranges mark the centerline of the channel at the crossings. In some cases the channel edges are marked by lighted and unlighted buoys which are maintained only at low river stages.

(312) Buoys are also maintained at low river stages at Bonnet Carre Point Bend, Caliborne Island Bend, Point Clair, Point Pleasant, Plaquemine Bend, Manhac Bend, and Missouri Bend. Both E and W river banks are referred to as left and right descending bank respectively and are marked by lights at critical places on the river and at the bends.

(313) **River gages** are maintained at New Orleans, 102.8 miles AHP; Bonnet Carre, 127.1 miles AHP; Reserve, 138.7 miles AHP; Donaldsonville, 175.4 miles AHP; and Baton Rouge 228.4 miles AHP.

Anchorages

(314) There are numerous designated anchorages on both sides of the river between New Orleans and Baton Rouge. Temporary anchorages may be prescribed by the Commander, Eighth Coast Guard District and published in the Local Notice to Mariners. (See **110.1 and 110.195**, chapter 2, for anchorage limits and regulations.)

Dangers

(315) Logs and other floating debris are likely to be encountered in the river at all times. Operators of small craft are advised to maintain a sharp lookout. Night travel by small craft is not recommended because of the hazard of floating obstructions.

Ferries

(316) Vehicular ferries cross the river at Reserve, 138.0 miles AHP; White Castle, 191.2 miles AHP; and Plaquemine, 207.7 miles AHP.

Bridges

(317) High-level highway bridges with a minimum clearance of 125 feet cross the river above New Orleans at Luling, 121.8 miles AHP; Wallace, 146.1 miles AHP; Union, 167.4 miles AHP; and Baton Rouge, 229 mile AHP.

Cables

(318) Overhead power cables with a minimum clearance of 149 feet cross the river at Nine Mile Point, 103.6 miles AHP; 1 mile above the Huey P. Long Bridge at Bridge City, 107.2 miles AHP; Montz, 129.1 and 129.6 miles AHP; Point Pleasant, 201.5 miles AHP; Lukeville, 224 miles AHP; and Baton Rouge, 232.8 miles AHP.

Pilotage, Above New Orleans

(319) Pilots to destinations above New Orleans are obtainable at New Orleans. See Pilotage, Mississippi River, indexed as such, early this chapter.

Towage

(320) Tugs are available at Gramercy, Burnsides, and Baton Rouge to assist vessels in docking and undocking.

Facilities on the Mississippi River above New Orleans to Baton Rouge

(321) Private and public terminals for handling oil and other products are on both sides of the river; most places have only bankside landings.

(322) At **Avondale**, on the W bank of the river 107.7 miles AHP, the ways and fitting out wharves of a large shipyard are equipped to build, convert, or repair vessels up to 900 feet long. The yard has machine and fabricating shops, thermite welding facilities, and can turn out shafts and steel forgings up to 20,000 pounds. The yard has a floating drydock that can accommodate vessels up to 81,000-ton displacement, 220-foot beam, and 35-foot draft. The yard has a marine railway that can handle vessels up to 300 feet. The yard has barges and facilities for gas freeing and tank cleaning.

(323) On the W bank of the river 108.5 miles AHP, a wharf is operated by an oil-handling facility, and 108 miles AHP two wharves and storage facilities are operated by a tank terminal company. (See Wharves under Port of New Orleans for descriptions.)

(324) **Harahan** is on the E bank of the river at 108.9 miles AHP, above the Huey P. Long bridge.

(325) At **Ama**, on the W bank of the river 117.6 miles AHP, ADM/Growmark operates a 5-million-bushel grain elevator with a wharf (29°56'27"N., 90°18'39"W.) that has 1,000 feet of berthing space with dolphins, 50 feet alongside, and a deck height of 28 feet. A marine leg serves a conveyor with an unloading rate of 85,000 bushels per hour.

(326) **St. Rose**, on the E bank of the river 118.5 miles AHP, has a bulk liquids terminal and is operated by International-Matex Tank Terminals, Ltd. (29°56'19"N., 90°19'28"W.). The terminal has seven berths with a total of 2,135 feet of berthing space with dolphins, 15 to 30 feet alongside, and deck heights of 4, 6, and 28 feet.

(327) E of **Luling**, on the W bank of the river 120.0 miles AHP, a large chemical plant (29°55'56"N., 90°20'54"W.) is owned by the Monsanto Co. Railway connection in rear of plant.

(328) **Destrehan**, on the E bank of the river opposite Luling, is the site of two large grain elevators. The Bunge North America, Destrehan Elevator Wharf (29°56'17"N., 90°20'53"W.), 120 miles AHP, has 1,000 feet of berthing space with dolphins, 45 feet alongside,

and a deck height of 26 feet. The facility, with a storage capacity of about 7.5 million bushels, can load vessels at a rate of 60,000 bushels per hour. The ADM/Growmark grain elevator (29°56'22"N., 90°21'24"W.), 120.5 miles AHP, has 1,000 feet of berthing space with buoys, 40 feet alongside, and a deck height of 28 feet. The facility has storage for 5 million bushels of grain and can load vessels at a rate of 60,000 bushels per hour.

(329) About 121.8 miles AHP, Interstate Route 310 fixed highway bridge crosses the river between Destrehan and Luling. The clearances are 133 feet under the 1,200-foot main span and 117 feet under the 460-foot auxiliary span.

(330) On the W bank about a mile below the tank at **Hahnville**, there is a prominent brick courthouse with clock tower. A shipyard at Hahnville has marine railways that can handle barges up to 300 feet for general repairs.

(331) **Good Hope**, on the E bank of the river 125.3 miles AHP, is the site of a large oil storage area. Valero Refining Corp. operates five wharves for the receipt and shipment of crude oil and petroleum products. Dock No. 5 (29°58'52"N., 90°23'39"W.) has 1,135 feet of berthing space with dolphins, 25 feet alongside and a deck height of 4 feet. Dock No. 4 (29°58'59"N., 90°23'43"W.) has 800 feet of berthing space with dolphins, 55 feet alongside and a deck height of 25 feet. Dock No. 3 (29°59'12"N., 90°23'55"W.) and Dock No. 2 (29°59'20"N., 90°24'03"W.) both have 900 feet of berthing space; 45 to 50 feet alongside and a deck height of 24 feet. Dock No. 1 (29°59'24"N., 90°24'09"W.) has 800 feet of berthing space with platforms, 45 to 50 feet alongside and a deck height of 24 feet.

(332) At **Norco**, on the N side of the river 126.1 miles AHP, an oil-transfer wharf is operated by Motiva Enterprises. The wharf (29°59'39"N., 90°24'38"W.) has 750 feet of berthing space with fender and 45 feet alongside at Berth 1; 465 feet of berthing space with fender and 25 feet alongside at Berth 1A, and a deck height of 35 feet. About 1 mile above the oil wharf, the large Shell Oil chemical plant has a barge wharf.

(333) The **Bonnet Carre Spillway** is on the E bank of the river 127.9 miles AHP. When the spillway is in operation due to high stages of the river, all vessels and particularly heavily loaded tows passing the site are directed to steer a course sufficiently close to the S bank to avoid possible crosscurrents or draw resulting from water being diverted through the spillway and flowing toward and into Lake Pontchartrain.

(334) **Taft**, on the W bank of the river about 128.1 miles AHP, is the site of the Union Carbide Corp., Taft Plant, Dock No. 1 (29°59'30"N., 90°26'45"W.). The wharf has 500 feet of berthing space with dolphins, 30 feet alongside, and a deck height of 4 feet.

(335) On the W bank of the river 128.9 miles AHP, Occidental Chemical Corp. and IMC Phosphates, receives ammonia and ships caustic soda from a wharf (29°59'39"N., 90°27'33"W.) and has 810 feet of berthing space with platforms, 50 feet alongside and a deck height of 30 feet.

(336) Two overhead power cables about 0.5 mile apart cross the river near Montz, about 129.5 miles AHP. The minimum clearance of the cables is 160 feet.

(337) On the E bank of the river 132.4 miles AHP, Bayou Steel Corp. receives scrap metal and ships steel products from a wharf (30°02'20"N., 90°28'13"W.) and has 600 feet of berthing space with dolphins, 40 feet alongside and a deck height of 30.5 feet.

(338) **Laplace**, on the E bank of the river 134 miles AHP, is a truck-farming center and prosperous sugar section. About 2 miles above Laplace on the N side at 135.5 miles AHP is the large DuPont refinery and chemical plant. A 321-foot barge wharf at the plant has pipelines for handling caustic soda and fuel oil. The cracking towers and tanks at the refinery and chemical plant are prominent.

(339) **Edgard**, on the W bank of the river about 137.9 miles AHP, has a large brick church with twin towers and a tank, and about 0.7 mile W is a large sugarmill with a tall white stack.

(340) **Reserve**, 138.5 miles AHP, has a large sugar refinery with two tall stacks, and a grain elevator. The town is the trading center and shipping point for a very productive sugarcane region. A wharf operated by various companies (30°03'13"N., 90°33'57"W.) has 692 feet of berthing space with dolphins, 60 feet alongside and a deck height of 34 feet. Two gantry unloaders are available. A ferry crosses the river from Reserve to Edgard. Globalplex Terminal (30°03'15"N., 90°34'10"W.) a 205-acre intermodal terminal 138.7 miles AHP, has 711 feet of berthing space with dolphins, 45 feet alongside and a deck height of 34 feet; two gantry cranes with hoppers and a conveyor system capable of loading rate of 1,800 tons per hour. The complex has facilities for about 250,000 square feet of covered storage.

(341) A river gauge is at Reserve, mile 138.7 AHP.

(342) A fireboat is moored adjacent to the ferry landing at The Port of South Louisiana, Reserve. The fireboat is on call 24 hours and can be contacted on VHF-FM channels 16 or 67.

(343) Several wharves are on the E bank of the river from 139.2 to 140.2 miles AHP. At the lower end, about 139.2 miles AHP, ADM/Growmark operates a 4-million-bushel grain elevator wharf (30°03'16"N., 90°34'38"W.) providing 1,000 feet of berthing space with platforms, 50 feet alongside and a deck height of 15 feet. Three vessel-loading spouts operate at a rate of 85,000 bushels per hour, and a marine leg can discharge barges at the

rear of the wharf face at 50,000 bushels per hour. Close up river, about 139.6 miles AHP, Cargill, Inc., receives and ships grain from a wharf (30°03'13"N., 90°35'00"W.) and provides 1,450 feet of berthing space with dolphins, 45 feet alongside and a deck height of 35 feet. The grain elevator has a capacity of 6.8 million bushels. Four vessel-loading spouts have a maximum rate of 100,000 bushels per hour, and a bucket elevator can discharge vessels at 180,000 bushels per hour. Cargill, Inc., about 139.8 miles AHP, also receives and ships vegetable oils from a wharf (30°03'09"N., 90°35'18"W.) and has 650 feet of berthing space with dolphins, 50 feet alongside and a deck height of 35 feet. At the upper end of this stretch, Marathon Ashland Petroleum, LLC about 140.6 miles AHP, operates two wharves (30°03'06"N., 90°35'28"W.) and (30°03'01"N., 90°35'39"W.) for the receipt and shipment of crude oil, asphalt, and petroleum products. Each wharf has 1,000 feet of berthing space, 65 feet alongside and a deck height of 5 to 35 feet.

(344) A tank is prominent in **Garyville**, 141.7 miles AHP.

(345) Gramercy-Wallace fixed highway (SR 3213) bridge has a clearance of 139 feet. The bridge crosses the navigable river, 146.1 miles AHP.

(346) **Gramercy**, 146.6 miles AHP, has a large aluminum reduction and chemical plant and a sugar refinery on the E bank. A molasses dock (30°02'45"N., 90°40'40"W) operated by Imperial Sugar Co., has 800 feet of berthing space, 45 feet alongside and a deck height of 33 feet. Pipelines extend to three storage tanks with a capacity of 2.5 million gallons. Cll-Carbon, Coke Dock (30°03'03"N., 90°40'04"W), has 1,165 feet of berthing space with platforms, 42 feet alongside, and a deck height of 35 feet. Kaiser Aluminum Corp., Bauxite Dock (30°03'07"N., 90°39'50"W) has 760 feet of berthing space with platform, 40 feet alongside, and a deck height of 35 feet.

(347) Gramercy is a **customs port of entry**.

(348) **Lutcher**, 147.8 miles AHP, has a lumber mill and a factory for processing perique tobacco.

(349) At **Remy**, on the E bank of the river about 150.5 miles AHP, Peavey Co. receives and ships grain from a wharf (30°01'01"N., 90°44'07"W.) and has 900 feet of berthing space with dolphins, 45 feet alongside and a deck height of 35 feet. A vessel-loading spout has a rate of 45,000 bushels per hour, and a marine leg can discharge vessels at 40,000 bushels per hour.

(350) **College Point**, 156.1 miles AHP, is the site of Jefferson College. A large sugar mill with a tall stack is across the river.

(351) Several crude oil wharves are on the W bank of the river from 158.0 to 160.7 miles AHP. At the lower end, Equilon Pipeline Co. LLC receives crude oil at four wharves. The first two wharves, Equilon Sugarland Dock No. 2, about 158.0 miles AHP and Dock No.1, about 158.4 miles AHP, (30°00'12"N., 90°50'08"W.) and (30°00'30"N., 90°50'10"W.) have 940 feet of berthing space with dolphins, 50 feet alongside and a deck height of 42 feet. The next two wharves, Capline Terminal Dock No. 1, about 158.8 miles AHP and Dock No. 2, about 159.0 miles AHP, (30°00'51"N., 90°50'15"W.) and (30°01'02"N., 90°50'17"W.) have 1,000 feet of berthing space with dolphins, 42 feet alongside and a deck heights of 25 and 35 feet. About 159.7 miles AHP, Koch Supply and Trading, LP, receives and ships crude oil at three wharves. The lower wharf No. 1 Dock, about 159.7 miles AHP, (30°01'38"N., 90°50'23"W.) has 500 feet of berthing space, 32 feet alongside and a deck height of 35 feet. The middle wharf Dock No. 2. about 159.8 miles AHP, (30°01'44"N., 90°50'25"W.) has 850 feet of berthing space, 35 feet alongside and a deck height of 35 feet. The upper wharf Dock No. 5, about 160.0 miles AHP, (30°01'53"N., 90°50'28"W.) has 950 feet of berthing space, 42 feet alongside and a deck height of 36 feet.

(352) At **Uncle Sam**, on the E bank 160.4 miles AHP, a wharf (30°02'19"N., 90°50'06"W.) is used for the receipt of phosphate rock, shipment of phosphoric acid, receipt and shipment of sulfur and sulfuric acid, and is operated by IMC Phosphates MP, Inc. The wharf has 625 feet of berthing space, 40 feet alongside and a deck height of 35 feet.

(353) IC Railmarine Terminal Wharf, about 160.9 miles AHP, (30°02'43"N., 90°50'15"W.) 745 feet of berthing space; 50 feet alongside; deck height, 33 feet; receipt and shipment of miscellaneous dry bulk commodities by vessel and barge; owned by Canadian Nationa/Illinois Central Railroad and operated by IC Railmarine, a subsidiary of Canadian Nationa/Illinois Central Railroad.

(354) At **Romeville**, on the W bank of the river 161.5 miles AHP, Occidental Chemical Corp. receives and ships ethylene dichloride and caustic soda from a wharf (30°03'47"N., 90°50'22"W.). The wharf has 740 feet of berthing space, 55 feet alongside, and a deck height of 37 feet.

(355) At **Central**, on the N side of the river 163.8 miles AHP, Zen-Noh Grain Corp. receives and ships grain from a wharf (30°03'53"N., 90°52'28"W.) that has 1,200 feet of berthing space with dolphins, 50 feet alongside, and a deck height of 38 feet. Four vessel-loading spouts have a rate of 80,000 to 120,000 bushels per hour, and a marine leg can discharge barges at 100,000 bushels per hour.

(356) At **Salsburg**, on the W bank of the river 166.9 miles AHP, IMC Phosphates MP receives phosphate rock, liquid sulfur, and ammonia; and ships phosphates and ammonia from a wharf (30°05'23"N., 90°54'48"W.). The wharf has 800 feet of berthing space with dolphins, 40

feet reported alongside and a deck height of 37 feet. A gantry shiploader can load vessels at 1,000 tons per hour.

(357) **Sunshine Bridge**, the State Route 70 fixed cantilever bridge with a clearance of 133 feet crosses the river just below Union about 167.4 miles AHP. The lower limit of the Port of Baton Rouge is about 0.8 mile above the bridge. Shell Oil Co. and SRI has two wharves on the E side of the river 168.2 miles AHP. The lower wharf (30°06'32"N., 90°54'40"W.) has 820 feet of berthing space with platforms, 40 to 50 feet alongside and a deck height of 35 feet. The upper wharf (30°06'41"N., 90°54'44"W.) has 900 feet of berthing space with dolphins, 40 feet alongside and a deck height of 32 feet.

(358) **Burnside**, on the E bank of the river 169.6 AHP, has a bulk-handling terminal owned by the Greater Baton Rouge Port Commission and operated by Ornet bulk-handling Terminal main deepwater wharf, about 169.7 miles AHP, has 858 feet of ship berthing space with 40 feet reported alongside. A 190-foot barge wharf, just N of the ship wharf, has 2,575 feet of berthing space with dolphins with 12 feet reported alongside. The ship wharf has two unloader gantries, each with a capacity of 1,000 tons per hour, and a vessel-barge loader with a capacity of 1,500 tons per hour. Loading spouts at the barge wharf have a capacity of 1,500 tons per hour. Bulk material handled at the terminal include bauxite, alumina, raw sugar, coal, phosphate, iron ore, manganese and chrome ores, zinc, salt, and coke. Liquid caustic soda is transferred by pipeline from barges to storage tanks at rear of ship wharf. A tug is available for docking and undocking vessels.

(359) A cement dock, owned and operated by River Cement Co., is on the E bank just N of the barge wharf at Burnside. The cement dock has 370 feet of berthing space with dolphins, a reported depth of 25 feet alongside, and a deck height of 29 feet. Bulk cement is transferred by two 10-inch pneumatic pipelines from the dock to three silos having a total capacity of 10,000 tons. The unloading rate is 250 tons per hour.

(360) **Donaldsonville**, on the W bank of the river 175.4 miles AHP, is a town at the former junction of the river and Bayou Lafourche. A river gage is at Donaldsonville. Three chemical wharves are at Donaldsonville. The first, operated by Triad Chemical 173.5 miles AHP, has 650 feet of berthing space with dolphins and reported depths of 40 to 50 feet alongside. The wharf is used for receipt and shipment of liquid ammonia, and shipment of dry bulk urea. Conveyor and pipelines extend from wharf to storage facilities. CF Industries Ship Dock, 173.7 miles AHP, has 720 feet of berthing space with dolphins and a reported depth of 40 feet alongside. The dock is used for shipment of liquid ammonia and dry bulk urea. Conveyor and pipelines extend from wharf to storage facilities. CF Industries Barge Dock, 173.8 miles AHP, has 843 feet of berthing space with dolphins and a depth of 20 feet alongside. The dock is used for receipt and shipment of ammonia and urea ammonia hydrate, and receipt of fuel oil for plant consumption. Pipelines extend from wharf to storage facilities. A rice mill is in the town. A church with twin spires and a tank are prominent.

(361) **Geismar**, on the E bank of the river 184.6 miles AHP, has several chemical plants with wharves for handling liquid chemicals, two petroleum wharves used to receive petroleum products and ship petrochemicals, and one floating offshore wharf used to receive shell and limestone and to ship fertilizer. The floating wharf, operated by Hall-Buck Marine Services Co. 183.2 miles AHP, has 250 feet of berthing space with a reported depth of 25 feet alongside. The floating wharf has a revolving crane with clamshell bucket and conveyor belt equipment. The petroleum wharf, operated by the Shell Chemical Co. 183.3 miles AHP, has 940 feet of berthing space at the face with dolphins with 38 feet reported alongside and 450 feet of berthing space at rear of face with 34 feet reported alongside. Pipelines at the wharf lead to storage tanks. The BASF Wyandotte Chemical Corp. Wharf, 183.9 miles AHP, has 615 feet of berthing space with dolphins with 50 feet reported alongside. The Borden Chemical Wharf, 185.0 miles AHP, has 350 feet of berthing space with dolphins and 20 feet reported alongside. Pipelines lead from the wharf to storage tanks in the rear. Liquid anhydrous ammonia and methanol are shipped. The petroleum barge wharf, operated by the El Pasco Field Services, Inc. 186.0 miles AHP, has a 225-foot face with 80 feet reported alongside. The wharf has facilities for loading barges with gasoline and liquid propane gas. The General Electric Co., PCS Nitrogen Dock Wharf, 187.0 miles AHP, has 1,175 feet of ship berthing space with dolphins at the face with 50 feet reported alongside and 700 feet of barge berthing space at rear of face with 10 to 15 feet reported alongside. Pipelines and bulk material handling equipment at the wharf are used for handling receipts of phosphate, ammonia, sulfuric acid, and liquid sulfur, and for loading shipments of liquid fertilizer, ammonia, sulfuric acid, and petrochemicals. The ATOFINA, Cos-Mar Plant Wharf, operated by ATOFINA Petrochemical Co. 188 miles AHP, has 802 feet of berthing space with dolphins with 45 feet reported alongside for receipt and shipment of petrochemicals. Pipelines lead from the wharf to storage tanks at plant in rear.

(362) The **White Castle** ferry crosses the river to **Carville** about 191.2 miles AHP.

(363) **St. Gabriel**, on the E bank 200.7 miles AHP, has a chemical plant with a large wharf used for receipt of bulk salt and shipment of chlorine and caustic soda and

a small floating petroleum wharf used for receipt of crude oil by barge. The chemical wharf, operated by Pioneer Americas, Inc., 199.9 miles AHP, has 595 feet of berthing space with dolphins and 55 to 90 feet reported alongside.

(364) The Gulf States Utilities Co. is at **Sunshine**, on the E bank of the river 201.3 miles AHP. The plant has a wharf with 1,035 feet of berthing space with platforms and a reported alongside depth of 39 feet. The wharf is used for receipt of fuel oil for plant consumption. Pipelines lead from wharf to storage tanks of about 2½-million-barrel total capacity. A chemical company wharf on the E bank of the river 203.4 miles AHP, owned and operated by LCB PetroUnited Terminals, Inc., has 400 feet of berthing space with dolphins at the face and a reported depth of 42 feet alongside. The wharf is used for receipt and shipment of chemicals, petroleum products, and petrochemicals; occasional receipt of crude oil. Pipelines lead from wharf to storage tanks in the rear.

(365) **Plaquemine**, on the W bank of the river about 208.8 miles AHP, is at the junction of the Mississippi and Bayou Plaquemine. A vehicular ferry crosses the river just below Plaquemine. The town has a foundry, and several sugar mills are in the vicinity. A petrochemical wharf is operated by Ashland Chemical Co. on the W bank 204.9 miles AHP. The wharf has 450 feet of berthing space with dolphins with 60 feet reported alongside. Georgia Pacific Corporation has two wharves on the W side 205.7 and 205.8 miles AHP. The downstream wharf has 320 feet of berthing space with dolphins and a depth of 42 feet alongside. The wharf is used for receipt and shipment of petrochemicals and shipment of caustic soda. Pipelines extend from the wharf to storage tanks. The upstream wharf has 410 feet of berthing space at the face. A reported depth of 25 feet is alongside. The wharf is used for receipt of vinyl chloride. A pipeline extends from the wharf to storage tanks. Dow Chemical Co. has a large chemical plant and wharf on the W bank about 209.9 miles AHP. The wharf has 575 feet of berthing space with platforms and 35 to 40 feet reported alongside. Pipelines at the wharf lead to bulk liquid storage tanks at the plant. A second wharf, owned and operated by Dow Chemical Co., is on the W side about 221.8 miles AHP. The wharf has 998 feet of berthing space with dolphins and a reported depth of 35 feet alongside. It is used for receipt and shipment of petroleum products and receipt of naphtha and fuel oil for plant consumption.

(366) An overhead power cable crossing the river at Lukeville, 224 miles AHP, has a clearance of 150 feet.

Chart 11370

(367) The **Port of Greater Baton Rouge** is located adjacent to the capital city of Louisiana with its deepwater general cargo docks located on the W bank of the river at 229.5 miles AHP in Port Allen, Louisiana. The port is a deepwater river port of considerable importance, which serves the petrochemical corridor along the Mississippi River system. The port is situated at the convergence of the Mississippi River (part of the Inland Waterways System) and the Gulf Intracoastal Waterway (GIWW). Port limits extend from Union 168.3 miles AHP, to Point Menoir 255 miles AHP. All port facilities have intermodal access to general cargo docks, rail, and U.S. Interstates 10, 12, 55, and 49, and state highways. The port's short sea shipping terminal features container handling equipment and cross-dock bagging facilities. Foreign trade zone services and delivery areas are available.

(368) Public port facilities, including deep-draft and shallow-draft terminals, are owned and operated by the Greater Baton Rouge Port Commission. General cargo docks are located on the W bank of the river at Port Allen and have a grain elevator, molasses terminal and petroleum terminal. The bulk terminal is located at the head of the Baton Rouge Harbor Canal and the E bank of the river at 235.3 miles AHP, about 6.5 miles above Baton Rouge. The port's Inland Rivers Marine Terminal is located on a slack water canal just off the GIWW near the Port Allen Lock. The terminal features short sea shipping services, project cargo, heavy lifts, container handling equipment and cross-dock bagging facilities. Foreign trade zone services and delivery areas are available. The port can handle a variety of bulk and breakbulk products such as forest and paper products to general cargo and steel.

(369) The principal industries in the Baton Rouge port region are petrochemicals, petroleum, synthetic rubber, chemicals, pipe, steel coils, rail, steel products, building and construction materials, lumber and wood products, stone gravel, clay, cement, steel fabricating, aluminum, agriculture and food products, machinery, and transportation equipment. The principal shipments from the port includes wheat, corn, sorghum, soybeans, animal feeds, petroleum products, scrap iron, aluminum, lumber, steel products, pipe and rail, rubber, liquid bulk chemicals, and sulfuric acid. The principal receipts are sugar, molasses, coffee, vegetable oil, manganese, chrome and zinc ores, bauxite, phosphate rock, caustic soda, sulfur, sodium hydroxide, alcohol, sulfuric acid, newsprint, and containerized cargo.

(370) At **Port Allen**, the N end of the Intracoastal Waterway (Port Allen to Morgan City Alternate Route)

connects with the Mississippi River at Port Allen Lock about 228.1 miles AHP. (See chapter 12.) Baton Rouge is the site of Louisiana State University and is the cultural center of the State.

Prominent features

(371) The most conspicuous object in the city is the State Capitol Building, a 520-foot white structure that dominates the area. Several tall buildings and the Louisiana State University and stadium are prominent. The Interstate Route 10 fixed highway bridge, with a clearance of 135 feet at the center and 125 feet elsewhere, crosses the river between Baton Rouge and Port Allen about 229 miles AHP.

Channels

(372) Federal project depth for the river is 45 feet to 232.4 miles AHP, about 1.5 miles below the Baton Rouge Railroad and U.S. 190 Highway Bridge. This bridge is the 232.4 miles AHP, about 1.5 miles below the Baton Rouge Railroad and Highway Bridge. This bridge is the limit of deepwater navigation on the river. Federal project depth for the Baton Rouge Harbor Canal is 12 feet for 2.9 miles. The channels are maintained and well marked.

Anchorages

(373) Anchorages are at Baton Rouge on the W bank of the river below the Port Allen Locks and in midriver immediately below and above the U.S. Interstate 10 bridge. Temporary anchorages may be prescribed by the Commander, Eighth Coast Guard District and published in the Local Notice to Mariners. (See **110.1 and 110.195**, chapter 2, for anchorage limits and regulations.)

Dangers

(374) Mariners departing Greater Baton Rouge Port Commission Dock No. 2, are advised to use extreme caution when turning vessels downstream. Strong currents associated with high water have caused vessels departing this facility to be set down upon the fender system of the Interstate Route 10 fixed highway bridge causing extensive damages. The New Orleans-Baton Rouge Steamship Pilots report that currents in excess of 7 knots have been observed. Mariners should consider moving vessels well above or below the bridge before turning downstream.

Bridges

(375) Besides the U.S. Interstate 10 fixed highway bridge crossing the river between Baton Rouge and Port Allen, the combination Airline Highway (U.S. Highway Route 190) and Kansas City Southern Railroad bridge crosses the river 233.8 miles AHP, about 4.6 miles above Baton Rouge. The bridge, known as the Baton Rouge Railroad and Highway Bridge, has a 748-foot fixed span over the channel with a clearance of 65 feet. Strong river currents and a bend upstream render the bridge susceptible to collision by overburdened downbound tows. Vessel owners and operators should ensure that sufficient horsepower is available for the size of the tow and the river conditions. Special precaution should be taken during high water stages. Mariners are urged to use extreme care when passing the bridge, particularly downbound tows.

Cables

(376) An overhead power cable with a clearance of 150 feet crosses the river about 232.8 miles AHP.

Tides and currents

(377) Tidal effects are felt in the river to some extent to 265 miles AHP, about 35.7 miles above Baton Rouge. The highest stage of the river ever recorded was 47 feet in 1927.

Weather

(378) Located on the E bank of the Mississippi River, the area is near the first evident relief N of the deltaic coastal plain. Marsh and swamp terrain stretch S to the Gulf of Mexico. The general climate is humid subtropical, but the city is subject to significant polar influences during winter, as masses of cold air periodically move S across the plains and the Mississippi Valley. The prevailing winds are from a S direction during much of the year. These breezes help to temper the extremes of summer heat and shorten winter cold spells. They also provide a source of abundant moisture and rainfall. Winds are usually light; 80 percent of the hourly observations during the year are less than 10 knots. Rainfall is plentiful year round, with a slight minimum in September and October. Most is of the showery type, except occasionally during winter when steady rain is produced by a stalled cold front. The average annual rainfall at Baton Rouge is 58.5 inches. July is the wettest month averaging 6.6 inches while October is the driest month averaging 3.1 inches. Twenty-eight percent of the annual rainfall occurs during the summer months of June, July, and August and the most of this amount falls during convective activity. Baton Rouge averages 73 thunderstorm-days, 52% of these occur during this same three-month period.

(379) The winter months are normally mild, with cold spells of short duration. The typical pattern is weather turning cold with rain one day, reaching the lowest temperatures after the sky clears on the second day, and warming on the third day. Temperatures fall below

freezing on about 21 days annually. This ranges from fewer than 10 days to more than 30 days in individual years. The average annual temperature at Baton Rouge is 68°F with an average maximum of 78°F and an average minimum of 57°F. The warmest temperature on record is 103°F recorded in June 1954 and the coolest temperature on record is 8°F recorded in December 1989. Each month, October through April, has recorded extreme minimum temperatures at or below freezing while June, July, and August each have had temperatures in excess of 100°F.

(380) Summers are warm but maximums rarely exceed 100°F because of the high humidity, cloudiness, and scattered showers and thunderstorms, which are primary features of the weather during these months. Showers and thunderstorms are present in the area on about one-half of the days during June, July, and August. Severe local storms, including hailstorms, tornadoes, and local windstorms have occurred in all seasons, but are most frequent in spring. Large hail of a damaging nature very rarely occurs, and tornadoes in this section of Louisiana are unusual. Since 1900, the centers of four tropical cyclones have passed within 10 miles of Baton Rouge and ten have passed within 25 miles of the city. The area can expect 75-knot winds about once every 50 years, on average.

Pilotage, Baton Rouge

(381) Pilotage is compulsory on the river between Baton Rouge and the Gulf of Mexico. (See Pilotage, Mississippi River (indexed as such) at the beginning of this chapter.)

Towage

(382) Tugs up to 4,000 hp are available at the Port of Baton Rouge to assist during docking.

Quarantine, customs, immigration, and agricultural quarantine

(383) (See chapter 3, Vessel Arrival Inspections, and Appendix A for addresses.)

(384) Baton Rouge is a **customs port of entry**.

(385) **Quarantine** is enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

(386) A general hospital and several private hospitals are in the city.

Harbor regulations

(387) Federal regulations for the navigation of the Mississippi River are given in **161.402, 162.80, and 207.200**, chapter 2. The Greater Baton Rouge Port Commission, consisting of members appointed by the governor of the State, establishes rules and regulations for the Port of Baton Rouge. The Executive Director of the commission is the Port Director who is in charge of the management and operation of the port facilities under control of the commission, and the facility manager assigns berths at the various pubic terminals.

Wharves

(388) The Port of Baton Rouge has over 70 piers and wharves located on both sides of the Mississippi River and in Baton Rouge Harbor Canal. More than half of these facilities are for barges with depths less than 15 feet alongside. Only the deep-draft facilities and the larger barge facilities are described. For a complete description of the port facilities refer to Port Series No. 21, published and sold by the U.S. Army Corps of Engineers. (See Appendix A for address.) The alongside depths are reported; for information of the latest depths contact port authorities or the private operators. All the facilities described have direct highway and railroad connections. Water and electrical shore power connections are available at most piers and wharves.

(389) General cargo at the port is usually handled by ship's tackle; special handling equipment, if available, is mentioned in the description of the particular facility. Cranes up to 150 tons, warehouses, and open storage facilities are adjacent to the waterfront.

(390) **Facilities on the E bank of the river:**

(391) ExxonMobil Refining & Supply Co., Baton Rouge Marine Terminal Wharf (30°28'54"N., 91°11'39"W.): 3,000-foot face, 60 to 70 feet alongside; 1,250 feet of barge berthing space at rear of face, 15 feet alongside; deck height, 50 feet; a ballast line, a steam line, compressed air lines, high-pressure river water lines, and drain lines are at the wharf; receipt and shipment of petroleum products and petrochemicals; loading barges for fueling tugboats in midstream; owned and operated by ExxonMobil Refining & Supply Co.

(392) Formosa Plastics Corp., Baton Rouge Plant Wharf (30°30'04"N., 91°11'40"W.): 39-foot face; 763 feet of berthing space; 40 to 60 feet alongside; deck height, 50 feet; pipelines extend to storage tanks with 40,000-ton capacity; receipt and shipment of liquid caustic soda; shipment of ethylene dichloride; owned and operated by Formosa Plastics Corp., USA.

(393) **Facilities in Baton Rouge Harbor:**

(394) Carmeuse Lime and Stone, Inc. (30°33'06"N., 091°12'48"W.): 195-foot face; 250 feet of berthing space; 17 feet alongside; deck height, 6 feet; receipt of limestone by barge; owned and operated by Dravo Lime Co.

(395) Greater Baton Rouge Port Commission, Baton Rouge Harbor, Kinder Morgan Bulk Terminals Coke Dock (30°33'23"N., 91°13'05"W.): 90-foot face, 399-foot E side, 490-foot W side; 12 feet alongside; deck height,

47 feet at face and on E side, 50 feet on the W side; crane to 14 tons; rail service; coal handling facility; Public Bulk Terminal leased and operated by Kanorado Corporation.

(396) **Facilities on W bank of river at Port Allen:**

(397) Intercontinental Terminals Co., Anchorage Chemical Terminal Wharf, about 232.2 miles AHP (30°28'55"N., 91°12'00"W.): 340-foot face with dolphins; 520 feet of berthing space; 40 feet alongside; receipt and shipment of butadiene; owned by ExxonMobil Corp., and operated by Intercontinental Terminals Co.

(398) Placid Refining, Tanker Wharf (30°28'35"N., 91°12'00"W): 140-foot face; 820 feet of berthing space; 50 feet alongside; deck height, 4 feet; pipelines extend to storage tanks with capacity of about 2 million barrels; receipt and shipment of petroleum products and petrochemicals, receipt of crude oil; owned and operated by Placid Refining, LLC.

(399) Greater Baton Rouge Port Commission Petroleum Terminal Wharf (30°26'40"N., 91°12'00"W.): floating offshore wharf; 225-foot face; 864 feet of berthing space; 45 feet alongside; rail service; receipt and shipment of petroleum products, including asphalt; occasional bunkering of vessels; pipelines lead from wharf to storage facilities with capacity of about 1.21 million barrels; owned by Greater Baton Rouge Port Commission, and operated by Petroleum Fuel and Terminals Co., Division of Apex Oil Co.

(400) Greater Baton Rouge Port Commission, Dock No. 2 Wharf (30°26'33"N., 91°12'00"W.): 831-foot face; 45 feet alongside; deck height, 50 feet; 525,000 square foot transit shed; rail access to dock area; receipt and shipment of conventional general cargo in foreign and domestic trades; occasional receipt and shipment of dry bulk materials; owned and operated by Greater Baton Rouge Port Commission.

(401) Greater Baton Rouge Port Commission, Dock No. 1 Wharf (30°26'13"N., 91°12'01"W.): 1,408-foot face; 45 feet alongside; 400 feet of berthing space at rear of face; deck height, 50 feet; 525,000 square foot transit shed; rail access to dock area; pipelines extend to storage tanks with a capacity of 14 million gallons; receipt and shipment of conventional general cargo in foreign and domestic trades; occasional receipt and shipment of dry bulk cargo; receipt and shipment of molasses and of chemicals by barge; owned by Greater Baton Rouge Port Commission and operated by Greater Baton Rouge Port Commission and Westway Trading Corp.

(402) Cargill, Greater Baton Rouge Port Commission, Grain Wharf (30°26'00"N., 91°12'02"W.): 300-foot face; 600 feet of berthing space; 40 feet alongside; deck height, 47 feet; five vessel-loading spouts have a loading rate of 60,000 bushels per hour; two marine legs at rear of face have an unloading rate of 30,000 bushels per hour; grain elevators have storage for 7.5 million bushels; receipt and shipment of grain; owned by Greater Baton Rouge Port Commission, and operated by Cargill, Inc.

Supplies

(403) Gasoline, diesel fuel, provisions, and marine supplies are available. Vessels can receive bunker fuel from tank barges while alongside the wharves or at the ExxonMobil Refining & Supply Co. Wharf, about 1.7 miles below the Baton Rouge Railroad and State Route 190 highway bridge. Water is piped to many of the wharves.

Repairs

(404) Baton Rouge has no facilities for making major repairs or for drydocking large, deep-draft vessels; the nearest facilities are at New Orleans. Several above-the-waterline repair wharves are equipped to make repairs to tugs, fishing boats, barges, and other small vessels. Above-the-waterline hull and engine repairs can be made. Cargo hold cleaning, gas freeing, and tank cleaning facilities are available in the port.

(405) A shipyard on the Port Allen Canal, about 7.2 miles above its junction with the Mississippi River, has two floating drydocks; the largest drydock can handle vessels up to 2,500 tons.

Small-craft facilities

(406) Small-craft facilities are limited to temporary berthage at some of the barge docks and floating docks along the river bank.

Communications

(407) The port is served by the numerous steamship lines to all domestic and overseas ports of the Caribbean, West Indies, Central and South America, Europe, Africa, and the Far East. Three main line railroads offer direct service to the port and a fourth by reciprocal switching. The Canadian National, the Kansas City Southern, and the Union Pacific Railroads serve the area. Numerous truck lines serve the port. Local and interstate bus service is available. Several airlines offer service at the Baton Rouge Metropolitan Airport about 5 miles N of the city.

Mississippi River to Illinois River at Grafton

(408) In 1978, depths of 9 feet were being maintained between Baton Rouge and the junction with the Illinois River at Grafton, Ill., about 1,200 miles AHP. Greater depths are available during high river stages. Limiting clearances between Baton Rouge and Grafton are: fixed bridges, 50 feet above extreme (record) high water; swing bridge at Alton, Ill., 36 feet above normal pool

level closed, 96 feet above normal pool level open; overhead cables, 62 feet above extreme (record) high water; locks, 600 feet long, 110 feet wide.

(409) The Illinois Waterway from Grafton to Chicago is described in United States Coast Pilot 6, Great Lakes.

(410) Navigation maps of the Mississippi River and its tributaries are published by the Corps of Engineers. (See Appendix A.)

Chart 11354

(411) **Old River**, about 73.7 miles above Baton Rouge and 303.1 miles AHP, is a 6-mile-long stream that formerly connected the Mississippi River with the Red and Atchafalaya Rivers. In 1963, a dam was constructed about a mile from its E entrance to prevent the Mississippi from flowing uncontrolled into the Atchafalaya Basin. Outflow channels with control structures are on the W side of the Mississippi River about 5 and 10 miles upstream of the entrance to Old River. These structures regulate and divert the flow of water from the Mississippi River into the Red River.

Caution

(412) The outflow channels are not navigation channels. A flashing amber light on the S point of each of the outflow channels indicates when the control structures are in operation. Very dangerous currents exist at the sites, especially during the high water season. Vessels transiting this reach of the Mississippi are cautioned to navigate within the buoyed navigation channel to avoid possible crosscurrents and being drawn down into the control structures.

(413) The upper Old River control structure, at mile 314.5 AHP, is within a **safety zone.** (See **165.1 through 165.7, 165.20 through 165.25, and 165.802**, chapter 2, for limits and regulations.)

(414) **Old River Navigation Canal and Lock** was built to bypass the dam and permit navigation between the three rivers. The Federal project provides for a dredged channel 12 feet deep and about 2.3 miles long from the Mississippi to Old River about 1.6 miles W of the dam, thence 12 feet to the junction at Barbre Landing with the Red and Atchafalaya Rivers at A.R. Mile 0.0. The lock is 1,200 feet long (1,190 feet usable), 75 feet wide, and 11 feet over the sill. Red and green combination traffic lights and daybeacons are at each end of the lock. The lockmaster monitors VHF-FM channels 12 and 14. State Route 15 highway vertical lift bridge over the lock has a clearance of zero feet down and 53 feet up.

(415) **Atchafalaya River Route** flows S into the Gulf of Mexico from its confluence with the Red and Old Rivers. The 116.8-mile section, the confluence to Morgan City, has a Federal project depth of 12 feet. (The Atchafalaya Bay Ship Channel from the Gulf of Mexico and the Lower Atchafalaya River to Morgan City are described in Chapter 9 with a Federal project depth of 20 feet and width of 400 feet.) There is considerable commerce on the river in shell, logs, sand and gravel, petroleum products, liquid sulfur, alcohol, industrial chemicals, fertilizer, sugar, and molasses.

(416) The minimum clearance of the overhead power cables and pipelines is 51 feet. The minimum clearance of the drawbridges crossing the river is 3 feet. The minimum clearance of the fixed highway bridges is 40 feet.

(417) During periods of high water, strong currents exist at the river junction with the Intracoastal Waterway.