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Mississippi River

This chapter describes the Mississippi River from the delta passes at the Gulf of America 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.

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

The lines established for this part of the coast are described in **33** CFR **80.820** and **80.825**, chapter 2.

Mississippi River empties into the north central part of the Gulf of America 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 east of Galveston and 440 nautical miles east 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

https://nauticalcharts.noaa.gov/publications/docs/distances. pdf)

The shape of the delta is somewhat like the foot of a bird, with its four toe-like extensions protruding into the Gulf. The passes consist of narrow-banked deposits of sand and clay brought down by the river current that 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

The most conspicuous objects, when approaching the passes, are the lights, which are easily recognized. **Southwest Pass Entrance Light** (28°54'21"N., 89°25'43"W.), 122 feet above the water, is shown from an 85-foot tower on a white dwelling on piles; a racon is at the light. **Southwest Pass East Jetty End Light 4**, 38 feet above the water, is shown from a red skeleton tower on piles with a red triangular daymark. A lighted buoy (Sea Buoy) is 1.6 miles south of the east jetty.

The numerous oil well structures in **East Bay**, some of which extend about 3 miles southeast of a line between the jetties at South and Southwest Passes, are also prominent.

Anchorages

Vessels should anchor in the Fairway Anchorage, northeast of South Pass. (See **33 CFR 166.100** through **166.200**, chapter 2.)

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.

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 north 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

The lines established for Mississippi Passes are described in **33** CFR **80.825**, chapter 2.

Special Notices

Special Notices affecting locking procedures in the New Orleans Corps of Engineers District are issued through navigation bulletins by the Corps as conditions warrant. These bulletins announce maintenance projects, hazards to navigation and other pertinent information of importance to mariners. these bulletins are posted at www. mvn.usace.army.mil/Missions/Navigation/Navigation-Bulletins/.

Shipping safety fairways

Vessels should approach the Southwest Pass and South Pass (Mississippi River) through the prescribed safety fairways. (See 33 CFR 166.100 through 166.200, chapter 2.)

Channels

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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 50-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 50-foot channel from Head of Passes to Mile 175, thence 45 feet to Mile 232.4, thence 40 feet to Mile 233.8. The channels are well marked. Contact the New Orleans District, Corps of Engineers, for controlling depths. See Appendix A for mailing address and contact information.

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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 DWT. 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.

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

The **Mississippi River-Gulf Outlet Canal** project was officially de-authorized in June 2008 and closed to navigation in 2009. Rocks have been placed across the channel at Mile 36.0 and navigational aids below Mile 36.0 have been removed, with exception of MRGO Lighted Buoy 11. Mariners should not attempt to navigate through this area.

Bridges

There are no bridges across the Mississippi River below New Orleans. One bridge and two cables cross the Mississippi River-Gulf Outlet Canal below the junction with the Inner Harbor Navigation Canal at New Orleans.

The **Paris Road Bridge** (State Route 47), about 4.4 miles east 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 mid-width. 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.

The overhead power cables across the canal, near the Paris Road Bridge and near the junction with the Inner Harbor Navigation Canal, have a minimum clearance of 170 feet.

Caution

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The Coast Guard advises that because of constantly changing river stages mariners should carefully review and validate mast height data and air draft to ensure 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

Vessels should anchor in Southwest Pass Anchorage southeast of the entrance to Southwest Pass, South Pass Anchorage northeast of the entrance to South Pass or in the Mississippi River-Gulf Outlet Canal Fairway Anchorages east and north of the Mississippi River-Gulf Outlet. (See 33 CFR 166.100 through 166.200, chapter 2.)

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.

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 33 CFR 110.1 and 110.195, chapter 2, for anchorage limits and regulations.)

Caution

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(37) 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

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.

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

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

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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 that 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.

(43) **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.

Mud lumps are the small oval-shaped mounds or islands no more than 8 feet high that 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.

Current off the passes

Currents in the Gulf of America 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.

A vessel on the course from Dry Tortugas to the Mississippi River generally will encounter an opposing or southeast 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 north and east.

During a light south wind a northeast set of 2.2 knots has been observed 13 miles southeast of South Pass entrance, and at the same time there was an east set of 0.5 knot at the lighted bell buoy off the entrance.

At **Southwest Pass Entrance Lighted Buoy SW**, the current is due chiefly to the discharge of the river. In general it sets southwest 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 southeast current of nearly a knot at this location.

Currents in the river

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).

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).

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.

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

Weather

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The Gulf of America moderates the climate of this region throughout the year. It reduces the range between extremes of temperature, increases humidity and influences the wind speed and direction. East through south winds prevail for all months except January. These tempering Gulf winds carry warm, moist air that 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 south winds. These fogs may be encountered anywhere from 60 miles off the delta passes to the city of New Orleans.

Polar air masses and their fronts penetrate the Gulf of America from the North American continent each winter. About 15 to 20 of these systems bring strong north 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.

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 south to Buras, Boothville and Venice, the surge poured over the east and west 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 east of Boothville.

Routes

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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 from a position 10 or 12 miles southwest of Dry Tortugas Light on Loggerhead Key. Low-powered vessels of moderate draft sometimes pass north from Florida Straits through Rebecca Channel, to the west of Rebecca Shoal Light, and for 200 miles set a course 10° to 20° north of the course to the passes of the river, and then change course for the entrance to the safety fairways off the passes. This keeps them out of the strongest part of the Gulf current.

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

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.

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

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 northeast of the lighted bell buoy off South Pass and then follow the curve southwest to the entrance to the safety fairway. During thick weather, vessels might ground northeast of South Pass and north of Southwest Pass because of infrequent sounding. Due

consideration should be given to the possible occurrence of mud lumps.

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.

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

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.

Note

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(70) 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.

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

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. 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 west 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 radio, radiotelephone

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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.

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 Buoy 2 or the Southwest Pass Entrance Lighted Buoy SW. 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 east 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. 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.

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 east side of the river about 1 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 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.

The Associated Federal Pilots and Docking Masters of Louisiana L.L.C. provide service for public vessels and U.S. Flag vessels not sailing under registry from Southwest Pass (21.8 BHP) to Baton Rouge (233.7 AHP). The pilot station monitors VHF-FM stations 9 and 16. Pilots are embarked in the vicinity of Southwest Pass Entrance Lighted Buoy SW. The pilot station should be contacted on VHF-FM channel 9 prior to arriving at the pilot boarding area for boarding arrangements and boarding speed. Pilot ladder height is typically 6 feet above the water. The pilots have three pilot boats all with gray hulls and white superstructures: FEDERAL PILOT 1, 48 feet; FEDERAL PILOT 2, 50 feet; and CAPT BOB MOORE, 53 feet. The pilot boats fly International Code flag P by day and monitor VHF-FM channels 9, 16 and 67, with channels 9, 6, 67 and 79A used as working frequencies. Arrangements for pilots are generally made in advance by telephone 985-898-1949 or through vessel agents. The Associated Federal Pilots e-mail address is fedpilot@federalpilots.com. The Federal Pilots request a 24-hour advance notice of arrival.

Towage

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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

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 west 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 33 CFR 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.

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

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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 services

The U.S Citizenship and Immigration Service maintains a field 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. (See Appendix A for addresses.)

Coast Guard

(86) **District, Sector** and **Captain of the Port** offices are in New Orleans. (See Appendix A for addresses.)

Harbor regulations

Federal regulations for navigation of the river are given in 33 CFR 162.80, 165.1 through 165.40,165.803,165.810,165.839, and 207.200, chapter 2.

Supplies

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

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

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.

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Southwest Pass to Boothville

(96) **Southwest Pass**, the westernmost of the passes of the Mississippi, is 18 miles west-southwest of South Pass entrance and 295 miles east of Galveston entrance. The pass has been improved by the construction of jetties on both sides at the entrance. Wooden pile dikes, or wingdams, extend channelward from along the inner bulkhead of the jetties. 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.

(97) The approach to Southwest Pass is marked by a lighted buoy, 1.6 miles south from the jetty ends. From the buoy to abreast of Southwest Pass Entrance Light, the channel leading northward is marked by a lighted buoy on the west side of the channel and by lighted ranges. The first turn in the channel towards the northeast is also marked by ranges ("B" Range).

Depths in Southwest Pass Entrance are subject to some change. 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). The Associated Branch Pilots, Port of New Orleans, advise that Southwest Pass has a recommended draft limit of 45 feet. The current, so far as is known, can be depended upon to set nearly straight out from between the jetties—crosscurrents can be present due to winds and seas.

(99) The sides are a sufficient guide once inside the pass. Lights mark the channel to Head of Passes. There are several wharves—used mainly 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.

(100) **Burrwood Bayou** is on the east bank 5 miles above the jetties.

and 90 miles southwest of Mobile Bay entrance. Jetties are on both sides of the entrance. The area in the approach and inside the entrance channel between the jetties is subject to considerable change and severe shoaling. The latest information on controlling depths can be obtained through the Office of the District Engineer, Corps of Engineers New Orleans. In 2014, the east jetty was reported to be completely submerged. Several vessels have been damaged attempting to cross this jetty in order to bypass the shoaling at the entrance. In 2007, the west jetty was reported to be visible at high tide; however during rough sea conditions, it could become submerged; extreme caution is advised.

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).

(103) Note—the Associated Branch Pilots, Port of New Orleans, advise that South Pass has a recommended draft limit of 15 feet.

The entrance approach is marked by a lighted buoy, 1.5 miles southeast 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 west side of the channel. This dangerous shoal has depths of 2 to 17 feet over it. The buoy marks the east 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 west side of the channel.

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). Lights mark Cypress Range Channel and lighted ranges mark Head Range Channel.

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 Junction Light** (29°08'53"N., 89°15'06"W.). From this point, measurement is made of all distances on the river south or below the mouth of the passes, referred to as below Head of Passes (BHP), and north of or above Head of Passes (AHP) to Cairo, IL. Head of Passes Junction Light separating Southwest Pass and South Pass is shown from a skeleton tower on piles.

North Pass, Northeast Pass, flow east 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. The approaches to North Pass and Pass a Loutre are marked by lighted buoys.

An abandoned lighthouse is on the north side of Pass a Loutre, 2.3 miles inside the entrance. Another abandoned lighthouse, a grayish-white tower, is 1.7 miles west of the entrance to Northeast Pass.

(109) 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.

(110) 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 east 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.

Above Bohemia on the east side, at about Mile 45, and The Jump on the west side, at about Mile 10.0, levees prevent overflow at high water. Below Bohemia, the absence of levees permit floodwaters to flow east 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.

The land back of the levees on the east 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 west side. New Orleans is reached by river boats and also by railroads and highways which extend down the west side to Venice (The Jump), at about Mile 10.0, and down the east side to Bohemia, about Miles 10.4 and 45.8, respectively, AHP.

Caution during high stages of the river

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.

Under these conditions, between Baton Rouge, Mile 232.0, and Head of Passes, Mile 0.0, 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. Mariners are also advised to exercise extreme caution when navigating or mooring their vessels in the forebays of Algiers, Harvey, Inner Harbor Navigation Canal, Port Allen and Old River locks to prevent vessels and tows from coming in contact with the controlling levee line in those areas.

of Algiers Point will be encountered during high stages of the river. These conditions may make hazardous the operation of a tow that 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 that may be expected.

(117) 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.

(118) **Pilottown**, a small village on the east 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. The pilots' wharf about 2 miles AHP and a wingdam inshore on the east side are marked by private lights.

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.

(120) **Cubits Gap Light 4**, on the southeast side of the gap, is shown from a skeleton tower with a red triangular daymark.

Main Pass, in 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.

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

(123) The Jump is an opening on the west side 10.6 miles AHP, where Grand Pass, Tiger Pass and several smaller passes connect with the river.

124) Tiger Pass, close west of Grand Pass, connects the Mississippi River via the Jump with the Gulf. The entrance from the Gulf is protected by jetties. Lights and daybeacons mark the entrance and the lower 5 miles of the pass. Venice Coast Guard Station is on the west side of the head of the pass at Venice.

Venice is a fishing and marine repair center on the west 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 west side just north of The Jump, Mile 10.7 AHP. Wharves and small-craft landings are at Venice on Grand Pass and on the west side of the river between Venice and Boothville.

Plains Marketing Petroleum, Mile 11.9, ships crude oil from a wharf on the west 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.

(127) **Baptiste Collette Bayou**, on the east side of the river 11.5 miles AHP, connects the Mississippi River with Breton Sound. The entrance from Breton Sound is protected by jetties. The channel is marked by lights and daybeacons.

(128) **Boothville** is a small town on the west side of the river about 16.1 miles AHP.

(129)

Fort Jackson to Algiers

(130) **Fort Jackson** is on the west side of the river on the point of the river about 19.6 miles AHP. Here the river takes a southwest trend for about 2.3 miles, then trends west-northwest.

Ostrica is a small village on the east 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.)

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

29.5 miles AHP; a church spire is prominent. **Empire**Canal leads from the river at Empire to the Gulf west of the river. The canal, lock and dam and the port facilities on the canal at Empire are described in chapter 9.

134) **Port Sulphur** is on the west bank of the river about 39.4 mile AHP. The Morgan Energy dock is well lit at about 29°28'24"N., 89°41'05"W.

(135) **Bohemia** is a small village on the east bank of the river about 45.8 miles AHP. State Route 39 leads along the east bank of the river behind the levee from Bohemia to New Orleans. Several wrecks lie on the west side, across the river from Bohemia.

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. In 2020, a submerged obstruction was reported with a least depth of 15 ft in about 29° 34' 48.6"N., 89° 48' 04.6" W. On the west 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.

37) At **Bellevue**, on the east 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.

On the west bank of the river about 57 miles AHP, (138)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.

Harvest State Cooperatives (29°40'27"N., 89°57'51"W.) is on the west 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.

An offshore barge wharf and an offshore oil transfer tanker wharf operated by Conoco Phillips 66 Co. are at **Alliance** on the west 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.

(141) At **Oak Point**, on the west 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.

about 75.5 miles AHP. A T-shaped wharf (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 west bank to **Scarsdale** on the east bank of the river. The ferry landings are marked by privately maintained lights.

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

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.

Meraux, on the east bank of the river about 87.5 miles AHP, has an oil refinery 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.

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

chalmette, on the east 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.

(148) A ferry crosses the river from Chalmette on the east bank to Algiers on the west bank about 88.6 miles AHP.

Chalmette Slip indents the east bank of the river at about 90.7 miles AHP. Chalmette National Monument, a tall white obelisk, is conspicuous close east of the slip. Berthing for deep-draft cargo vessels is available on the north and south sides of the slip.

of the river just upriver of Chalmette. A deep-draft wharf and a smaller wharf are at a large sugar refinery. One wharf is used by ship service boats and the other by the refinery company.

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.

On the west 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.

(153) The Inner Harbor Navigation Canal entrance is on the north 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.

(154) 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.

(155)

Port of New Orleans

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 east bank; and Algiers, McDonoghville, Gretna, Harvey, Marrero, Westwego, Bridge City and Avondale on the west 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.

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 south 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, containers and coal.

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.

(159) The city proper is bounded on three sides by the Mississippi River. The city limits extend north to Lake Pontchartrain, which is connected to the river by the Inner Harbor Navigation Canal along the east 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.

(160) 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.

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.

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.

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

Channels

(164)

The main deepwater channels leading to and in the Port of New Orleans are in the river and the Inner Harbor Navigation Canal. (See Channels at the beginning of this chapter.) Secondary channels for shallow-draft vessels

(167)



and barges are on Algiers, Harvey and other canals and waterways that radiate from the river in all directions.

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 north of the Mississippi River Levee; inside dimensions are 626 feet long, 74 feet wide and 31 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.

(168)

Caution

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

(171) New Orleans Coast Guard Base is on the west side of the Inner Harbor Navigation Canal, just north of the lock.

miles AHP. The canal and locks connect the Mississippi River with an extensive network of inland waterways southwest of New Orleans. The canal is the route of the Intracoastal Waterway. (See chapter 12 for description of canal and locks.)

(173)

Anchorages

General, quarantine and emergency anchorages are on the west side of the river at New Orleans. (See 33 CFR 110.1 and 110.195, chapter 2, for limits and regulations.) Vessels may also take anchorage as directed by the Coast Guard District Commander.

(175)

Dangers

bottom on both sides in the port area; anchorage is prohibited in these areas. See **33 CFR 207.200**, chapter 2, for revetment areas and regulations.

(177) **Rric**

Bridges

high-level fixed highway bridges connecting Algiers and New Orleans, about 0.7 mile above Canal Street, have clearances of 150 feet over a central 750-foot width. The Huey P. Long Bridge, a combined highway and railroad bridge crossing the river 11 miles above Canal Street, has a clearance of 132 feet through the west span for a channel span width of 500 feet. These are the only bridges over the Mississippi River in the vicinity of New Orleans. The other bridges and tunnels in the port are covered in the description of the respective waterways which they cross.

(170)

	С		Clearance (feet)		
Name•Description•Type	Location	Horizontal	Vertical*	Information	
State Route 46 / St. Claude Avenue bridge (bascule)	29°57'50"N., 90°01'39"W.	70 (open) 75 (closed)	0	Notes 1 and 2 Call sign WG-401.	
State Route 39 / Judge Seeber / Claiborne Avenue bridge (vertical lift)	29°58'09"N., 90°01'32"W.	302	156 (up) 40 (down)	Note 1	
Florida Avenue and Southern Railway combination bridge (vertical lift)	29°58'50"N., 90°01'19"W.	300	156 (up) 0 (down)	Notes 1 and 2 Call sign WUG-409	
Overhead power cable			166		
Gentilly Road and Seaboard System Railroad (L&N) combination bridge (bascule)	30°00'16"N., 90°01'33"W.	90 (open) 96 (closed)	0	Note 2 Call sign KZV-719.	
U.S. Interstate 10 bridge (fixed)	30°00'17"N., 90°01'33"W.	250	115 120 (middle 200 feet)		
Overhead power cable			136		
Chef Menteur / U.S. Route 90 bridge (vertical lift)	30°00'30"N., 90°01'37"W.	313	120 (up) 50 (down)	Notes 1 and 2 Call sign KRS-864.	
Southern Railway railroad bridge (bascule)	30°01'53"N., 90°02'03"W.	93	1		
Senator Ted Hickey / Leon C. Simon Blvd. / Seabrook bridge (bascule)	30°01'54"N., 90°02'04"W.	84 (open) 95 (closed)	44	Notes 1 and 2 Call sign KZV-819.	

(179)

Cables

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.

(181)

Regulated Navigation Areas

The Mississippi River from 88 to 240 miles AHP is a regulated navigation area, as are portions of the Inner Harbor Navigation Canal, the Harvey Canal and the Algiers Canal. (See 33 CFR 165.1 through 165.13, 165.803, 165.838, and 165.845 in chapter 2, for limits and regulations.)

(183)

Weather

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 America. Throughout the year, these water areas modify the relative humidity and temperature conditions, decreasing the range between the extremes; when south 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 southeast to southwest 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.

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 north 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.

River is usually colder than the air temperature, favoring the formation of river fogs, particularly with weak south 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.

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 America. 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 24hour snowfall total was 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.

While thunder usually accompanies summer (191) showers, thunderstorms with damaging winds are relatively infrequent. The most damaging thunderstorms are those that 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 northeast 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 west of the city in September 1965.

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.

office located near the airport in Slidell, Louisiana. (See Appendix A for address.)

Pilotage

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

Towage

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

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

Agricultural quarantine procedures are discussed at the beginning of this chapter.

Customs

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 services

The U.S. Citizenship and Immigration Service maintains a field 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

New Orleans Coast Guard Air Station is at the naval air station about 2.8 miles southwest of Belle Chasse.

Harbor regulations

The navigation of vessels in the Mississippi River and the Inner Harbor Navigation Canal to its junction with 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.

(209)

Movement of Vessels in Vicinity of Algiers Point

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.

(211) 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.

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; 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.

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.

(214) 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.

Control of the Port of New Orleans:

(215)

(216)

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.

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.

(218) Fire prevention

(219) 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.

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

(221)

General

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.

(223)

Obstructing Navigation-Anchoring and Mooring

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.

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.

(226) 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.

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.

(244)

Facilities at Port of Ne	w Orieans, Louisian					
Name	Location	Berthing Space (feet)	Depths* (feet)	Deck Height (feet)	Purpose	Owned/ Operated by:
Facilities on east bank of rive	r, from Meraux to Inner Har	bor Navigation	n Canal			
Murphy Oil USA Meraux Refinery Wharf	29°55'30"N., 89°56'15"W. (87.0 miles AHP)	757	35 to 40	24	Receipt of crude oilShipment of petroleum	Murphy Oil USA, Inc.
Chalmette Refining Crude Wharf	29°55'36"N., 89°57'56"W. (88.3 miles AHP)	580	35	21	Receipt of crude oil	Chalmette Refining, LLC/ ExxonMobil Corp.
Chalmette Refining No. 5 Dock	29°55'34"N., 89°57'54"W.	380	12	20	Receipt of crude oil	Chalmette Refining, LLC/ ExxonMobil Corp.
Chalmette Refining No. 6 Dock	29°55'38"N., 89°58'10"W.	310	25	20	Receipt and shipment of petroleum by barge	Chalmette Refining, LLC/ ExxonMobil Corp.
Chalmette Refining No. 4 Dock	29°55'45"N., 89°58'39"W.	390	42 to 50	27	Receipt of crude oil Shipment of petroleum products and petrochemicals	Chalmette Refining, LLC/ ExxonMobil Corp.
CCI Carbon Chalmette Coke Dock	29°55'53"N., 89°58'52"W.	300	55		Receipt and shipment of coke by barge	CCI Carbon, LLC, a division of Calciner Industries, Inc.
Chalmette Slip Dock No. 2	29°56'33"N., 89°59'47"W.	1,680	32 to 36	20	Receipt and shipment of conventional and containerized cargo	St. Bernard Port, Harbor and Terminal District/International Shi Services, Inc.
Chalmette Slip Dock No. 1	29°56'42"N., 89°59'50"W.	1,280	30 to 36	20	Receipt and shipment of general bulk cargo	St. Bernard Port, Harbor and Terminal District/International Ship Services, Inc.; Bulk Material Transfer, Inc.
Tate and Lyle North American Sugars, Chalmette Refinery Wharf	29°56'36"N., 90°00'05"W.	1,115	45	21.8	Receipt of raw sugar Shipment of refined sugar	Tate and Lyle North American Sugars, Inc.
Pacorini USA Wharf	29°57'10"N., 90°01'06"W.	1,314	27 to 33	20	Receipt and shipment of conventional general cargo Landing for water taxis serving anchored vessels	Board of Commissioners of the Port of New Orleans/Pacorini USA, Inc., and Belle Chasse Marine Transportation, Inc.
Facilities on east side of Inne	r Harbor Navigation Canal	and Industrial	Canal			
Southern Scrap Material Co. Industrial Canal, Main Wharf	29°59'00"N., 90°01'13"W.	451	32	7	Receipt and shipment of scrap metal by barge	Port of New Orleans/Southern Scrap Material Co., LLC.
Dwyer Road Wharf	30°01'14"N., 90°01'50"W.	340	22	7	Mooring of transient vessels	Board of Commissioners of the Port of New Orleans
United States Gypsum Co. Industrial Canal Wharf	30°01'17"N., 90°01'49"W.	362	25	7½	Receipt and shipment of gypsum and limestone	Board of Commissioners of the Port of New Orleans/United States Gypsum Co.
Morrison Yard Wharf	30°01'29"N., 90°01'53"W.	970	28 to 30	7	Mooring of transient vessels	Board of Commissioners of the Port of New Orleans
Halliburton/Baroid Drilling Fluids, Industrial Canal, Ore Wharf	30°01'48"N., 90°02'00"W.	490	23	6	Receipt of baroid ore by barge	Board of Commissioners of the Port of New Orleans/Halliburton; Baroid Drilling Fluids, Inc.
Facilities on west side of Inne	er Harbor Navigation Canal	and Industrial	Canal			
Holcim (US), New Orleans Cement Wharf	30°01'08"N., 90°01'51"W.	560	17	5	Receipt of bulk cement by barge	Board of Commissioners of the Port of New Orleans/Hocim (US), Inc.
France Road Terminal Berth No. 5	29°59'31"N., 90°01'22"W.	900	30 to 33	10	Receipt and shipment of containerized and roll-on/ roll-off cargo	Board of Commissioners of the Port of New Orleans/P&O Ports Louisiana, Inc.
France Road Terminal Berth No. 4	29°59'18"N., 90°01'18"W.	700	30 to 33	10	Receipt and shipment of containerized and roll-on/ roll-off cargo	Board of Commissioners of the Port of New Orleans/Ceres Gulf, Inc.
France Road Terminal Berth No. 1	29°59'00"N., 90°01'19"W.	830	32	10.8	Receipt and shipment of containerized cargo	Board of Commissioners of the Port of New Orleans/Universal Maritime Service Corp.
Florida Avenue Wharf	29°58'46"N., 90°01'30"W.	482	30	9	Mooring of barges	Board of Commissioners of the Port of New Orleans/The Kearne Co.
Lafarge Corp. New Orleans Cement Wharf	29°58'40"N., 90°01'33"W.	600	11	10	Receipt of cement by barge	Board of Commissioners of the Port of New Orleans/Lafarge Corp.
Namasco Corp. New Orleans Wharf	29°58'36"N., 90°01'30"W.	180	12	12	Receipt of structural steel shapes Flat-rolled steel and wire products by barge	Board of Commissioners of the Port of New Orleans/Namasco Corp.
Facilities on the Mississippi F	River-Gulf Outlet Canal					
	30°00'18"N., 89°56'10"W.	590	12	7		Entergy Corp.

Facilities at Port of Ne	Oricans, Louisidii					
Name	Location	Berthing Space (feet)	Depths* (feet)	Deck Height (feet)	Purpose	Owned/ Operated by:
Facilities on Michoud Canal						
Vulcan/ICA Distribution Co., Michoud Canal Wharf	30°01'20"N., 89°54'21"W.	585	38	3	Receipt of crushed limestone by self-unloading vessel	Vulcan/ICA Distribution Co.
Lone Star Industries Michoud Plant Ship Wharf	30°01'30"N., 89°54'21"W.	840	34	10	Receipt of bulk cement, urea, ammonium nitrate, fertilizer and granulated slag by ship	Lone Star Industries, Inc.
Lone Star Industries Michoud Barge Slip	30°01'39"N., 89°54'21"W.	324	15	4.4	Shipment of fertilizer by barge	Lone Star Industries, Inc.
Facilities on the east bank of	river from Inner Harbor Na	vigation Cana	west to South	nport		
Poland Avenue Wharf Berths Nos. 4 and 5	29°57'32"N., 90°02'08"W.	932	35	22	Receipt and shipment of conventional general cargo	U.S. Government/Board of Commissioners of the Port of Ne Orleans
Pauline Street Wharf	29°57'36"N., 90°02'16"W.	581	35	22	Receipt and shipment of conventional general cargo	Board of Commissioners of the Port of New Orleans
Esplande Avenue Wharf	29°57'38"N., 90°03'20"W.	584	35	22	Shed used for ware-housing	Board of Commissioners of the Port of New Orleans
Governor Nicholls Street Wharf	29°57'33"N., 90°03'28"W.	1,210	35	22	Receipt and shipment of conventional general cargo	Board of Commissioners of the Port of New Orleans
Bienville Street (Aquarium Landing) Wharf	29°57′03"N., 90°03′46"W.	580	30 to 35	22	Boarding and discharge of passengers for excursion vessels	Board of Commissioners of the Port of New Orleans/New Orlean Steamboat Co.
International Rivercenter Excursion Vessel Landing	29°56'49"N., 90°03'42"W.	840	35	22	Boarding and discharge of passengers for excursion paddlewheeler	Board of Commissioners of the Port of New Orleans/New Orlean Paddlewheels, Inc.
Julia Street Wharf	29°56'32"N., 90°03'40"W.	1,189	35	22	Boarding and discharge of cruise ship passangers	Board of Commissioners of the Port of New Orleans
Erato Street Wharf	29°56'19"N., 90°03'39"W.	1,067	35	22	Mooring transient vessels	Board of Commissioners of the Port of New Orleans
Thalia Street Wharf	29°56'13"N., 90°03'39"W.	860	35	22	Mooring transient vessels	Board of Commissioners of the Port of New Orleans
Robin Street Wharf	29°56'04"N., 90°03'40"W.	1,216	35	22	Passenger landing for excursion vessels	Board of Commissioners of the Port of New Orleans/Delta Quee Stamboat Co.
First Street Wharf	29°55'19"N., 90°04'20"W.	1,275	35	22	Receipt and shipment of conventional and containerized general cargo	Board of Commissioners of the Port of New Orleans/Empire Stevedoring (LA), Inc.
Seventh Street Wharf	29°55'07"N., 90°04'50"W.	1,196	35	20½	Receipt and shipment of conventional general cargo	Board of Commissioners of the Port of New Orleans/Coastal Cargo Co., Inc.
Harmony Street Wharf	29°55'04"N., 90°05'00"W.	1,231	35	20½	Receipt and shipment of conventional and containerized general cargo	Board of Commissioners of the Port of New Orleans/Coastal Cargo Co., Inc.
Louisiana Avenue Wharves E, F and G	29°54'58"N., 90°05'18"W.	1,590	35	24	Receipt and shipment of conventional general cargo	Board of Commissioners of the Port of New Orleans/Coastal Cargo Co., Inc.
Milan Street Wharf	29°54'49"N., 90°05'53"W.	1,271	35	24	Receipt and shipment of conventional general cargo	Board of Commissioners of the Port of New Orleans/Stevedoring Services of America
Napoleon Avenue Open Wharf	29°54'45"N., 90°06'03"W.	375	35	24	Receipt and shipment of conventional general cargo and heavy-lift items	Board of Commissioners of the Port of New Orleans/Stevedoring Services of America
Napoleon Avenue Wharf C	29°54'44"N., 90°06'11"W.	1,000	35	24	Receipt and shipment of conventional general cargo	Board of Commissioners of the Port of New Orleans/Stevedoring Services of America
Napoleon Avenue Container Terminal Wharf	29°54'42"N., 90°06'03"W.	2,000	35	24		Board of Commissioners of the Port of New Orleans/Ceres Gulf and P&O Ports of LA
Nashville Avenue Wharf C,	29°54'42"N., 90°06'45"W. (99.8 miles AHP)	1,658	35	22	Receipt and shipment of conventional general cargo	Board of Commissioners of the Port of New Orleans/P&O Ports of Louisiana
Nashville Avenue Wharf B	29°54'42"N., 90°07'08"W.	1,785	35	22	Receipt and shipment of conventional general cargo	Board of Commissioners of the Port of New Orleans/P&O Ports of Louisiana
Nashville Avenue Wharf A	29°54'46"N., 90°07'27"W.	2,759	35	22	Receipt and shipment of conventional general cargo	Board of Commissioners of the Port of New Orleans/P&O Ports of Louisiana

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.

Responsibility for Vessel

(229)

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.

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.

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.

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.

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.

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.

(236) 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.

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

(238) 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.

(239) Steel-pile dolphins and other facilities are on the east and west 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.

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

(242) 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 listed in the facilities table. The alongside depths are reported; for information on the latest depths contact port authorities or the private operators. All the facilities listed 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. Shorebased 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.

Of the facilities listed, 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.

Supplies

(245)

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

New Orleans has numerous commercial plants that 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 west 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

Name	1	Berthing Space	Depths*	Deck Height	B	Owned/
Name	Location	(feet)	(feet)	(feet)	Purpose	Operated by:
Henry Clay Avenue Wharf	29°54'53"N., 90°07'49"W.	842	38	22	Receipt and shipment of conventional general cargo	Board of Commissioners of the Port of New Orleans/P&O Ports of Louisiana
Facilities on west bank of rive	er from Algiers Alternate Ro	oute west to A	vondale			
Perry Street Wharf	29°56'02"N., 90°03'19"W.	1,100	50	24½	Mooring vessels for repairs and maintenance	Board of Commissioners of the Port of New Orleans/Boland Marine Services and Delta Queer Steamboat Co.
John W. Stone Oil Distributor, Gretna Dock No. 5 (SP Dock)	29°55'23"N., 90°03'43"W.	590	28 to 29	20	Shipment of molasses Receipt of petroleum products by ship and barge	John W. Stone Oil Distributor, LLC/CHR Hansen Ingredient Technology Co.
John W. Stone Oil Distributor,Gretna Dock No. 8 Mooring Wharf	29°55'15"N., 90°03'49"W.	180	30	20	Mooring vessels in transit to and from nearby John W. Stone docks	John W. Stone Oil Distributor, LLC.
International Matex Tank Terminals, Gretna Lower Dock	29°55'00"N., 90°04'16"W.	900	45 to 55	3	Receipt and shipment of petroleum productsBunkering vessels	International-Matex Tank Terminals, Ltd.
Delta Terminal Services Harvey Wharf No. 3	29°54'40"N., 90°05'15"W.	240	38	24	Receipt and shipment of petroleum products, chemicals, and misc. bulk liquids by vessel and barge	Delta Terminal Services, Inc.
Delta Terminal Services Harvey Wharf No. 2	29°54'39"N., 90°05'20"W.	700	38	24	Receipt and shipment of petroleum products, chemicals, and misc. bulk liquids by vessel and barge	Delta Terminal Services, Inc.
Delta Terminal Services Harvey Wharf No. 1	29°54'36"N., 90°05'27"W.	700	32	20	Receipt and shipment of petroleum products, chemicals, and misc. bulk liquids by vessel and barge	Delta Terminal Services, Inc.
Delta Terminal Services Harvey Wharf No. 4	29°54'31"N., 90°05'38"W.	326	60	19	Receipt and shipment of petroleum products, chemicals, and misc. bulk liquids by vessel and barge	Delta Terminal Services, Inc.
Marlex Terminal Harvey Mooring Pier	29°54'31"N., 90°05'44"W.	460	35	24	Mooring large commercial vessels	Diversified Group, Inc.
Fuel and Marine Marketing Marrero Terminal Wharf	29°54'23"N., 90°06'09"W.	746	34	18	Receipt and shipment of petroleum products by barge	Fuel and Marine Marketing, LLC.
Williams Energy Partners Marrero Terminal Dock No. 1	29°54′21″N., 90°06′18″W.	850	48	8	Receipt of crude oil Receipt and shipment of petroleum products by vessel and barge	Williams Energy Partners, LLC.
ST Services Westwego Terminal Wharf	29°54'49"N., 90°08'16"W.	250	30	24	Receipt and shipment of molasses, misc. chemicals, bulk liquids, fats and oils	ST Services, LLC.
National Gypsum Co., and Vopak Terminal Westwego Plant Wharf	29°55'19"N., 90°08'34"W.	720	29	23	Receipt of synthetic gypsum by barge Receipt of misc. bulk liquids by vessel and barge	National Gypsum Co./Vopak Terminal Westwego, Inc.
Cargill Westwego Elevator Wharf	29°56'18"N., 90°08'30"W.	1,837	45	22	Receipt and shipment of grain	Board of Commissioners of the Port of New Orleans/Cargill, Inc.
International–Matex Tank Terminals, Dock No. 1	29°55'18"N., 90°11'41"W.	700	40	7	Receipt and shipment of petroleum products, liquid chemicals, petrochemicals, lard, vegetable, fish and tung oils by barge and vessel	International-Matex Tank Terminals, Ltd.
International–Matex Tank Terminals, Dock No. 2	29°55′20″N., 90°11′35″W.	400	40	6	Receipt and shipment of petroleum products, liquid chemicals, petrochemicals, lard, vegetable, fish and tung oils by barge and vessel	International-Matex Tank Terminals, Ltd.

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.

(249)

Salvage facilities

(250) 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.

(251)

Communications

railroads including the Canadian National Railroad, the CSX Railroad, the Union 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.

and its tributaries as far as Minneapolis and St. Paul on the Mississippi, 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, AL, 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 east to Mobile, Pensacola, Panama City and Apalachicola and west to New Iberia, Port Arthur, Galveston, Houston, Texas City, Port Lavaca, Corpus Christi, Port Mansfield and Brownsville.

New Orleans International Airport (Moisant Field) about 12.7 miles northwest 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 east side of the north end of the Inner Harbor Navigation Canal. Alvin Callender Field is a naval reserve training facility on the south side of the river east of Algiers.

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

(256

Small-craft facilities

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 west 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.

258)

(272)

New Orleans to Baton Rouge

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

(260) Channels

(261) 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. There are 11 Mississippi River Crossings and they are located at:

Fairview Crossing, 116.0 miles AHP; (262) Lower Belmont Crossing, 152.3 miles AHP; (263)Rich Bend Crossing, 156.4 miles AHP; (264)Smoke Bend Crossing, 174.4 miles AHP; (265)Philadelphia Crossing, 183.0 miles AHP; (266)Alhambra Crossing, 189.3 miles AHP; (267)Bayou Goula Crossing, 197.0 miles AHP; (268)Granada Crossing, 203.0 miles AHP; (269)Medora Crossing, 211.3 miles AHP; (270) Sardine Point Crossing, 218.9 miles AHP; (271)

Red Eye Crossing, 223.2 miles AHP;

(273) Federal project depth for the crossings is 45 feet. The controlling depths are published in Navigation Bulletins issued periodically by the Army Corps of Engineers, New Orleans District. (See Appendix A for contact information.) Lighted ranges mark the channels at most of the crossings. In some cases the channel edges are marked by lighted and unlighted buoys that are maintained only at low river stages.

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

(275)

(277)

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 33 CFR 110.1 and 110.195, chapter 2, for anchorage limits and regulations.)

Dangers

(278) 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.

(279)

Ferries

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

(281)

Bridges

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.

(283)

Cables

Overhead power cables with a minimum clearance of 145 feet cross the river near Harahan, between 107 and 108 miles AHP; about 0.9 mile above the Huey P. Long Bridge at Bridge City.

(285)

Pilotage, above New Orleans

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

(287)

Towage

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

(289

Facilities on the Mississippi River above New Orleans to Baton Rouge

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

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 and 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.

On the west 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.)

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

At **Ama**, on the west 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.

St. Rose, on the east 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.

East of **Luling**, on the west 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.

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.

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.

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.

(300) At **Norco**, on the north 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.

The **Bonnet Carre Spillway** is on the north 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 south bank to avoid possible crosscurrents or draw resulting

from water being diverted through the spillway and flowing toward and into Lake Pontchartrain.

Taft, on the west 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.

On the west 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.

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.

On the east 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.

LaPlace, on the north bank of the river 134 miles AHP, is a truck-farming center and prosperous sugar section. About 2 miles above LaPlace on the north 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.

(307) **Edgard**, on the west bank of the river about 137.9 miles AHP, has a large brick church with twin towers.

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.

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

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.

(311) Several wharves are on the east 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 vesselloading 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.

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

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

Gramercy, 146.6 miles AHP, has a large aluminum reduction and chemical plant and a sugar refinery on the east 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.

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

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

At **Remy**, on the east 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.

Several crude oil wharves are on the west 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.

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.

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 National/Illinois Central Railroad and operated by IC Railmarine, a subsidiary of Canadian National/Illinois Central Railroad.

At **Romeville**, on the west 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.

At Central, on the north 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.

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.

Just above **Union**, about 167.4 mile AHP, the **Sunshine/SR 70 Bridge** has a fixed span with a vertical clearance of 133 feet and a horizontal clearance of 750. The lower limit of the Port of Baton Rouge is about 0.8 mile above the bridge. Shell Oil Co. has two wharves on the east side of the river 168.2 miles AHP. The lower wharf (30°06'33"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°06'44"N., 90°54'44"W.) has 900 feet of berthing space with dolphins, 40 feet alongside and a deck height of 32 feet.

Burnside, on the east bank of the river 169.6 AHP, has a bulk-handling terminal owned by the Greater Baton Rouge Port Commission and operated by Ornet bulkhandling 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 north 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.

Co., is on the east bank just north 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.

Donaldsonville, on the west bank of the river 175.4 (327)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.

Geismar, on the east 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.

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

St. Gabriel, on the east 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.

The Gulf States Utilities Co. is at **Sunshine**, on the east 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 east 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.

Plaquemine, on the west 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 west 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 west 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 west 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 west 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.

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

(334)

Baton Rouge

The Port of Greater Baton Rouge is located (335) adjacent to the capital city of Louisiana with its deepwater general cargo docks located on the west 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.

shallow-draft terminals, are owned and operated by the Greater Baton Rouge Port Commission. General cargo docks are located on the west 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 east 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.

The principal industries in the Baton Rouge (337) 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 include 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.

Waterway (Port Allen, the north 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.

(339)

Prominent features

(340) 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.

(341)

Channels

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.

(343)

Anchorages

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 33 CFR 110.1 and 110.195, chapter 2, for anchorage limits and regulations.)

(345)

Dangers

Ommission 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.

(347)

Bridges

Besides the U.S. Interstate 10 fixed highway bridge (348) 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.

(349)

(351)

Cables

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

Weather

Located on the east bank of the Mississippi River, the area is near the first evident relief north of the deltaic coastal plain. Marsh and swamp terrain stretch south to the Gulf of America. The general climate is humid subtropical, but the city is subject to significant polar influences during winter, as masses of cold air periodically move south across the plains and the Mississippi Valley. The prevailing winds are from a south 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

(369)

aton Rouge, Louisia	ana	Facilities at Port of Baton Rouge, Louisiana								
Location	Berthing Space (feet)	Depths* (feet)	Deck Height (feet)	Purpose	Owned/ Operated by:					
30°28'54"N., 91°11'39"W.	• 3,000 face • 1,250 rear	• 60-70 • 15	50	Receipt and shipment of petroleum products and petrochemicals Loading barges for fueling tugboats in midstream	ExxonMobil Refining & Supply Co.					
30°30'04"N., 91°11'40"W.	763	40-60	50	Receipt and shipment of liquid caustic soda Shipment of ethylene dichloride	Formosa Plastics Corp., USA					
30°33'06"N., 91°12'48"W.	250	17	6	Receipt of limestone by barge	Dravo Lime Co.					
30°33'23"N., 91°13'05"W.	• 399 east • 490 west	12	• 47 east • 50 west	Receipt and shipment of coal; coal handling facility	Kanorado Corporation					
t bank)										
30°28'55"N., 91°12'00"W.	520	40		Receipt and shipment of butadiene	ExxonMobil Corp.,/Intercontinental Terminals Co.					
30°28'35"N., 91°12'00"W.	820	50	4	Receipt of petroleum products, petro-chemicals and crude oil	Placid Refining, LLC					
30°26'40"N., 91°12'00"W.	864	45		Receipt and shipment of petroleum products and asphalt Occasional bunkering of vessels	Greater Baton Rouge Por Commission/Petroleum Fuel and Terminals Co., Division of Apex Oil Co.					
30°26′33″N., 91°12′00″W.	831	45	50	Receipt and shipment of conventional general cargo and dry bulk materials	Greater Baton Rouge Por Commission					
30°26'13"N., 91°12'01"W.	• 1,408 face • 400 rear	• 45 • 50	12	Receipt and shipment of conventional general cargo, dry bulk cargo, molasses, and chemicals by barge	Greater Baton Rouge Por Commission and Westwa Trading Corp.					
30°26′00"N., 91°12′02"W.	600	40	47	Receipt and shipment of grain	Greater Baton Rouge Por Commission/Cargill, Inc.					
t	30°28'54"N., 91°11'39"W. 30°30'04"N., 91°11'40"W. 30°33'06"N., 91°12'48"W. 30°33'23"N., 91°13'05"W. bank) 30°28'35"N., 91°12'00"W. 30°26'40"N., 91°12'00"W. 30°26'33"N., 91°12'00"W.	Location Space (feet) 30°28'54"N., 91°11'39"W.	Location Space (feet) (feet) 30°28'54"N., 91°11'39"W. • 3,000 face • 60-70 • 15 30°30'04"N., 91°11'40"W. 763 40-60 30°33'06"N., 91°12'48"W. 250 17 30°33'23"N., 91°13'05"W. • 399 east • 490 west 12 bank) 520 40 30°28'35"N., 91°12'00"W. 820 50 30°26'40"N., 91°12'00"W. 864 45 30°26'33"N., 91°12'00"W. 831 45 30°26'13"N., 91°12'01"W. • 1,408 face • 45 • 50	Location Berthing Space (feet) Depths* (feet) Height (feet) 30°28′54″N., 91°11′39″W. •3,000 face •15 •60-70 •15 50 30°30′04″N., 91°11′40″W. 763 40-60 50 30°33′06″N., 91°12′48″W. 250 17 6 30°33′23″N., 91°13′05″W. •399 east •490 west 12 •47 east •50 west bank) 520 40 30°28′35″N., 91°12′00″W. 820 50 4 30°26′40″N., 91°12′00″W. 864 45 50 30°26′33″N., 91°12′00″W. 831 45 50 30°26′13″N., 91°12′01″W. *1,408 face *45 *50 12	Location Berthing Space (feet) (feet) Receipt and shipment of petroleum products and petrochemicals - 1,250 rear - 1,25					

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.

The winter months are normally mild, with cold (353) 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.

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

Rouge and the Gulf of America. (See Pilotage, Mississippi River (indexed as such) at the beginning of this chapter.)

Towage

(355)

(357)

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

(0.0)

(359)

(361)

Quarantine, customs, immigration and agricultural quarantine

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

Baton Rouge is a **customs port of entry**.

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

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

(364)

Harbor regulations

(365) Federal regulations for the navigation of the Mississippi River are given in 33 CFR 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.

(366)

Wharves

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 listed in the facilities table for Baton Rouge. All the facilities listed have direct highway and railroad connections. Water and electrical shore power connections are available at most piers and wharves.

(368) General cargo at the port is usually handled by ship's tackle. Cranes up to 150 tons, warehouses and open storage facilities are adjacent to the waterfront.

(370)

Supplies

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.

(372)

Repairs

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.

(374) 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.

(375)

Small-craft facilities

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

(377)

Communications

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 Class I 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 north of the city.

(379

Mississippi River to Illinois River at Grafton

In 1978, depths of 9 feet were being maintained between Baton Rouge and the junction with the Illinois River at Grafton, IL, 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, IL, 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.

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

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

(383)

Old River to Atchafalaya River Route

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 east entrance to prevent the Mississippi from flowing uncontrolled into the Atchafalaya Basin. Outflow channels with control structures are on the west 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.

(385)

Caution

The outflow channels are not navigation channels. A flashing amber light on the south 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.

The upper Old River control structure, at mile 314.5 AHP, is within a **safety zone**. (See **33 CFR 165.1** through **165.7**, **165.20** through **165.25**, and **165.802**, chapter 2, for limits and regulations.)

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 west 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.

Atchafalaya River Route flows south into the Gulf of America 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 America 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.

(390) 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.

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