

Mobile Bay to Mississippi River

This chapter describes the coasts of Alabama, Mississippi and Louisiana bordering the Gulf of America from Mobile Bay to the Mississippi River and the numerous bodies of water emptying into the Gulf, including Breton Bay, Mobile Bay, Mississippi Sound, Lake Borgne, Lake Pontchartrain, Chandeleur Sound, Breton Sound and their tributaries. Also discussed are Mobile, Pascagoula, Biloxi, and Gulfport and other smaller ports and landings.

The Intracoastal Waterway for this section of the coast is described in chapter 12.

COLREGS Demarcation Lines

The lines established for this part of the coast are described in **33 CFR 80.815**, chapter 2.

Weather

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The warm, temperate climate of the coast from Mobile Bay to the Mississippi River is influenced by the Gulf of America, which is partly responsible for the warm, humid summers and the relatively mild winters. During spring and summer, the Bermuda High generates moist southeast to south winds that keep the temperatures cooler than those farther inland and also aids in thunderstorm development. Cold continental air pushes far enough south in winter to occasionally drop temperatures below freezing and even produce some snow. Cold spells usually last about 3 days.

About 15 to 20 significant frontal systems penetrate the Gulf of America each year, bringing cool air and strong north winds. The collision of this air with the warm air to south sometimes generates strong low-pressure systems. This pattern continues until the Bermuda High begins to exert its influence in spring. At sea, gales blow about 1 percent of the time from November through March, while waves of 8 feet or higher are encountered 4 to 6 percent of the time. Fog is also a problem in winter and spring, particularly when warm air invades the region and moves over relatively cooler water. Near shore, visibilities drop below 2 miles from 2 to 7 percent of the time from December through April; January and March are the worst months.

While tropical cyclones can affect this coast at any time, late May to early November is considered the hurricane season. A tropical cyclone (tropical storm or hurricane) moves across this stretch of coast every other year, on the average, while the hurricane frequency is about once in 5 years. Intense hurricanes can generate 175-knot winds, 40-foot seas, tides 10 to 25 feet above

normal and 15 inches of rain. Of all the storms that have affected this coast, about 45 percent occurred in September; about one-half of these were hurricanes. Most tropical cyclones approach from southeast through southwest. The two most devastating storms to hit this coast in recent years were hurricanes Katrina, in August 2005, and Ivan, in September 2004.

Mobile Bay

Mobile Bay, 40 miles west of Pensacola and 90 miles northeast of South Pass, Mississippi River, is the approach to the city of Mobile and to the Alabama and Tombigbee Rivers. The bay has depths of 7 to 12 feet outside the dredged channels. The entrance is 3 miles wide between Mobile Point on the east and Pelican Point on the west, but most vessels will prefer to follow the dredged channel rather than chance passage between the breakers and shoals that extend 4 miles south on both sides.

Shipping Safety Fairways

Vessels should approach Mobile Bay through the prescribed Safety Fairways. (See 33 CFR 166.100 through 166.200, chapter 2.)

Prominent features

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(14) The general appearance of the land is a guide to finding the entrance to Mobile Bay. For a distance of 40 miles east of the entrance, the shore, although low, is populated with high-rise condominiums. For 50 miles west of the entrance there is a chain of islands which, although wooded in places, is generally low and bare.

The most conspicuous landmark near the entrance is the 131-foot black conical tower (30°11.3'N., 88°03.0'W.), which was the base for the former Sand Island Light.

Fort Morgan, an historic state shrine, is on **Mobile Point** on the east side of the entrance. The walls of this old brick pentagon-shaped fort are conspicuous when approaching the entrance. **Mobile Point Light** (30°13'41"N., 88°01'27"W.), 125 feet above the water, is shown from a skeleton tower on Mobile Point. A lighted range light (rear) is shown below and on the same structure as Mobile Point Light.

The concrete gun emplacements of later fortifications east of the old fort are also conspicuous.

Fort Gaines, an historic landmark and museum on the east end of Dauphin Island, is on the west side of the

entrance. A spherical elevated tank is 2 miles west of the fort.

COLREGS Demarcation Lines

The lines established for Mobile Bay are described in **33 CFR 80.815**, chapter 2.

Channels

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(22) **Main Ship Channel** leads from the Gulf and across the bar, just west of Mobile Point—federal project depth is 47 feet. (See Notice to Mariners and latest editions of charts for controlling depths.) The channel is marked by lighted buoys and a **020.7°** lighted range on Mobile Point. The rear range light is on the same structure and below Mobile Point Light. The wreck of the MAGNOLIA is on the east side of the channel, 0.7 mile southwest of Mobile Point.

(23) From west, boats drawing up to 6 feet can enter Mobile Bay via **Pelican Bay**. Local knowledge is necessary, owing to the shifting character of the bottom. The best water can be found by passing to the south of **Dauphin Island Spit** before shaping a course north into Mobile Bay.

Mobile Bay Channel extends from the lower anchorage off Fort Morgan through Mobile Bay to Mobile river. The federal project depth is 45 feet to and in a turning basin off Magazine Point at the head of Mobile Ship Channel. Although the channel is subject to shoaling, the project depth is generally maintained. For detailed channel information and minimum depths as reported by the U.S. Army Corps of Engineers (USACE), use NOAA Electronic Navigational Charts. Surveys and channel condition reports are available through a USACE hydrographic survey website listed in Appendix A. The channel is well marked with lighted ranges, lights and lighted and unlighted buoys.

Caution

The Coast Guard advises vessels exercise particular caution where the channel intersects the Intracoastal Waterway, about 3 miles above Mobile Point at Lighted Buoys 25 and 26. Situations resulting in collisions, groundings and close quarters passing have been reported by both shallow and deep-draft vessels. The Coast Guard has requested vessels make a SECURITE call on VHF-FM channel 13 prior to crossing the Intracoastal Waterway, particularly during periods of restricted visibility.

(27) The secondary and other channels are covered geographically under their respective headings.

Anchorages

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Vessels should anchor in the Mobile Bay Anchorage, south of and between the safety fairways. (See 33 CFR 166.100 through 166.200, chapter 2.) The best anchorages in the lower bay for deep-draft vessels are found north and northwest of Mobile Point in depths ranging from 20 to 45 feet with excellent holding ground.

This anchorage is secure, but during a norther a short heavy choppy sea is raised that may be uncomfortable for small vessels. A circular **explosives anchorage** is just north of Mobile Point. (See **33 CFR 110.1** and **110.194**, chapter 2, for limits and regulations.) A **general anchorage** for unmanned and other nondescript vessels is near Cedar Point. (See **33 CFR 110.1** and **110.194a**, chapter 2, for limits and regulations.)

(30) Vessels are not permitted to anchor in the Bar Channel, Mobile Bay Channel or Mobile River Channel.

(31) In emergencies, light-draft vessels can anchor in Mobile River above Cochrane (U.S. Route 90) highway bridge with permission of the harbormaster.

Small boats sometimes anchor north and east of Fort Morgan in **Navy Cove**. Several piles and other obstructions are in this locality.

Dangers

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The wreck of the Civil War vessel TECUMSEH is north of Mobile Point Light in 30°13'47.5"N., 88°01'37.5"W. The wreck is marked by a buoy. The vessel is reported to be in an unstable condition, and ammunition and powder aboard the wreck could be detonated if the vessel shifts. Mariners are cautioned not to anchor in the area of the buoy and to reduce speed producing as little wake as possible when transiting Mobile Channel between Buoys 15 and 17.

A nearly continuous spoil bank extends along either side of the bay channel from just inside Mobile Bay entrance to the mouth of Mobile River. Through these spoil banks are several charted openings for passage to various points in Mobile Bay.

Fish havens

Fish havens, consisting of concrete pipe, lie within a 3.5-mile-square area that extends offshore from 2.7 miles to 6.2 miles east of Mobile Point.

Fish havens, consisting of old automobile bodies lashed together, scrap iron and concrete, have been or may be established on the bottom along the 10-fathom curve off the Alabama coast. While they are not dangerous and are reported to have a minimum depth of 10 fathoms over them, vessels are advised not to anchor in their vicinity.

Ferry

(40) Scheduled daytime ferry crossings are frequent between Fort Gaines and Fort Morgan. The ferries monitor VHF-FM channel 16.

Currents

in modifying the times and velocities of the current; in using the tables, allowance should be made for such effects. (See the Tidal Current Tables for daily predictions of current in Mobile Bay entrance and other locations in Mobile BaySee the Tidal Current prediction service at tidesandcurrents.noaa.gov for specific information

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about times, directions, and velocities of the current at numerous locations throughout the area. Links to a user guide for this service can be found in chapter 1 of this book.

(43) The tidal current near the outer end of the Main Ship Channel is rotary. Both the flood and ebb currents set somewhat to the left of the channel direction before reaching their strength and to the right of the channel direction after the times of strength. During 3 days of current observations at this location there was an outflow of 0.5 knot average velocity combined with the tidal current.

It has been reported that velocities of 8 to 10 knots have been observed in the Bar Channel and Mobile Bay Channel on the runoff of the ebb after protracted periods of strong south winds. Low-powered and deep-draft vessels should be guided by the advice of the pilots under these conditions.

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Weather

The climate of Mobile Bay is influenced by the waters of the north Gulf of America and of the bay itself. While summers are warm, the heat is tempered by the ocean and bay breezes. Temperatures climb to 90°F or above on about 75 days each summer, compared to 80 days just a few miles inland. During winter, the waters help moderate the colder temperatures. Minimums fall below freezing on about 21 days each season, compared to 20 to 25 days, on average, inland. The annual average temperature at Mobile is 67.6°F with an average high of 77.4°F and an average low of 57.4°F. January is the coolest month with an average temperature of 50.9°F while July is the warmest month with an average temperature of 82.2°F. The warmest temperature on record is 104°F, recorded in July 1952, while the coolest temperature on record is 3°F, recorded in January 1985. Precipitation is moderate, averaging about 66 inches in any given year. The wettest month is July, averaging nearly eight inches, and the driest month is October, which averages about three inches. Thirty percent of the average annual rainfall occurs during the summer months of June, July and August. Cold snaps usually last about 3 days, and occasionally they will bring some snow flurries. Overall, snowfall is light and averages less than one inch in any given year. The greatest 24-hour snowfall occurred in February 1973 when 3.6 inches accumulated. The winds behind these fronts sometimes blow for an extended period and are known as "northers." If they persist, they can lower the water in the bay and this can interfere with the deeper draft vessels bound through the dredged

In addition to these northers, strong winds and rough seas on the bay are generated by extratropical storms, thunderstorms, and tropical cyclones. While gale-force winds are infrequent, winds in the 17- to 33-knot range occur about 5 to 10 percent from November through May. March and April are often the windiest months.

Thunderstorm winds are usually in the form of gusts and can reach 50 to 60 knots. Frontal thunderstorms, which are usually the most severe, can occur in any month and are most likely in spring. Air mass thunderstorms are most frequent in summer; during June, July and August, thunderstorms are observed on about 10 to 17 days per month, often in the afternoon. The strongest winds are generated by hurricanes, except for those in a rare tornado. Hurricane winds have reached 175 knots along the north Gulf coast.

While a tropical cyclone may be expected to affect this region about every 2 years on average, destructive storms have been infrequent on Mobile Bay during this century. Nine tropical storms have come within 50 miles of Mobile Bay since 1950. In September 1979, hurricane Frederic, generating 115-knot sustained winds and a 12-foot storm tide, became the first hurricane since 1926 to directly strike Mobile. During the storm, Dauphin Island reported gusts to 126 knots.

Tropical cyclones are a threat from late May through early November, while September is the most active month. Most storms approach the area from southeast through southwest. They are often in the process of recurving and intensifying before moving inland. Mobile Bay is protected by Dauphin Island to the west and banks and shoals to the east. However, during southerly gales it is not usually safe for vessels of over 25-foot draft to attempt to cross the bar.

Visibilities may be briefly restricted to near zero in heavy showers or thunderstorms throughout the year. However, fog is more persistent and is most likely in winter and spring when warm air from south occasionally moves across relatively cooler waters. During this period, it is associated mainly with southeast and south winds. From November through April, visibilities fall below 0.5 mile on 4 to 8 days per month. Conditions are usually worst during the late night and early morning hours, improving during the early afternoon.

The National Weather Service maintains offices in Mobile. **Barometers** may be compared at these offices or by telephone. (See Appendix A for addresses.)

Pilotage, Mobile and Mobile Bay

Pilotage is compulsory for all foreign vessels and U.S. vessels under register in foreign trade. Pilotage is optional for coastwise vessels that have on board a pilot licensed by the federal government.

The Mobile Bar Pilots Association maintains a station on Dauphin Island and operates two pilot boats, ALABAMA and MOBILE PILOT, based at Fort Gaines. The boats have gray hulls and white superstructures with blue trim and the word PILOT on each side of the wheelhouse. The boats monitor VHF-FM channels 13 and 16, and the station monitors channel 16. The pilot boats and harbor tugs are interconnected with the harbormaster's office on the intraport radiotelephone system, VHF-FM channel 65A. The pilots board vessels

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day or night in the vicinity of Mobile Entrance Lighted Buoy M (30°07'31"N., 88°04'07"W.). For boarding, the pilots request that the pilot ladder be rigged 6 feet above the water on the lee side of the vessel.

Pilots can be reached by telephone (251–432–2639 or 251–432–2630) by radiotelephone through the Mobile Marine Operator, or through ships' agents. The pilots request a 48-hour advance notice of arrival and a 1½-hour notice of sailing.

Bon Secour Bay extends about 14 miles east of Mobile Bay entrance. Oyster beds are very extensive along the northeast shore of the bay. The bay is the route of the Intracoastal Waterway, which crosses Mobile Bay Channel at a point 2.6 miles north of the latter's entrance. The waterway is described in chapter 12. A marina on the north side of Mobile Point about 0.8 mile east of Fort Morgan provides berths with water and electricity, gasoline, diesel fuel, ice, a launching ramp, wet and dry storage, marine supplies, pump-out station and a 20-ton lift. The approach to the facility is marked by private daybeacons and was reported navigable by craft drawing 8 feet or less in 1982.

Bon Secour River empties into the east part of Bon Secour Bay. A dredged channel leads from the Intracoastal Waterway through Bon Secour Bay and into Bon Secour River, a total distance of 3.9 miles. There are two turning basins on the south side of the river at miles 1.6 and 2.5, respectively. The channel is marked by a light and daybeacons. In 1982, it was reported that a depth of 4 feet could be carried for about 1.3 miles above the dredged channel.

South Fork Channel leads south from about 1 mile above the mouth of Bon Secour River for about 1.1 miles to shallow **Oyster Bay**. A fixed highway bridge crossing South Fork Channel limits navigation into Oyster Bay to skiffs only.

The town of **Bon Secour** is on the north side of Bon Secour River about 1.5 miles above the mouth.

Small-craft facilities

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Small-craft facilities on the east side of South Fork Channel and at the town of Bon Secour can provide berths, gasoline, diesel fuel, water, ice, marine supplies, launching ramps, storage and hull and engine repairs. The largest marine railway, at a boatyard on the east side of the arm leading to Oyster Bay, about 0.4 mile north of the fixed highway bridge, can handle craft to 80 feet. A channel marked by private stakes, with a reported depth of 7 feet in 1982, leads to the boatyard.

Weeks Bay, on the east side of Mobile Bay about 6.8 miles northwest of Bon Secour River, has an average depth of 2 to 5 feet. A marked channel, with a reported controlling depth of about 4 feet in 1982, leads through the entrance and across the bay to Fish River. About the same depth can be carried into Magnolia River on the east side of the bay.

The approach to the bay is marked by a light about 1 mile west of the entrance. An overhead power cable with a clearance of 56 feet crosses the bay at the entrance.

Small boats go to **Marlow** on Fish River and **Magnolia Springs** on Magnolia River. State Route 98 highway bridge over Fish River at **Yupon** has a fixed span with a clearance of 35 feet. A small marina on the west side of the river just below the bridge has berths, gasoline, diesel fuel, water, electricity, ice, some marine supplies and a launching ramp.

State Route 32 highway bridge crossing Fish River at Marlow, about 5.5 miles above the mouth, has a fixed span with a clearance of 22 feet. Gasoline is available at a small marina just below the bridge on the west side of the river.

East Fowl River enters the west side of Mobile Bay about 13.8 miles north of the bay entrance. It extends generally southwest. The entrance is marked by lights and daybeacons. State Route 193 highway bridge, about 1.0 mile above the mouth of the river, has a fixed span with a clearance of 45 feet. An overhead power cable with a clearance of 47 feet crosses the channel connecting with West Fowl River at about 30°23'53"N., 88°08'39"W. A marina on the north side of East Fowl River just east of the bridge has berths with water and electricity, gasoline, diesel fuel, ice, a launching ramp, limited marine supplies and a pump-out station. East Fowl River leads into West Fowl River, and thence into Fowl River Bay; these are discussed later in this chapter.

Fowl River, the northwest branch, joins East Fowl River about 2 miles above the mouth. It is navigable for about 3 miles by small craft with local knowledge.

Great Point Clear is on the east side of the bay about 16 miles north of the entrance; a light marks the shoals extending west from the point.

Point Clear, Battles Wharf, Seacliff and Daphne are summer resorts along the east shore. Many of the numerous boat landings are in ruins and constitute a danger to small boats navigating close inshore. A large hotel on Great Point Clear has a prominent water tank. A privately dredged channel with a reported controlling depth of 5½ feet in 1999. The channel, marked by private lights and daybeacons, leads to a yacht basin at the hotel. Berths, electricity, gasoline, diesel fuel and water are available at the basin.

Fairhope, on the east side of the bay about 17.6 miles above the entrance, is a town with bus connections. There is a 1,450-foot municipal pier at the town. A channel marked by private daybeacons, with a reported approach depth of 9 feet and alongside depth of 5 feet in 2005, leads to a marina in a basin adjoining the north side of the pier. Gasoline, water, ice, electricity and a launching ramp are available. In 2005, the marina was reported to be temporarily closed. Fairhope Yacht Club is located in Fly Creek, north of the municipal pier. A dredged channel leads east from Mobile Bay to a turning basin about 0.1 mile above the mouth of the creek. An overhead power cable, northeast of the turning basin,

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has a reported clearance of 48 feet. The entrance to the channel is marked by a light. A municipal fish dock, on the west side of Fly Creek about 0.3 mile above the entrance, can provide gasoline and diesel fuel. Marinas on the creek can provide berths with water and electricity, pump-out, gasoline, diesel fuel and marine supplies. Lifts to 36 tons can handle craft for hull, engine and electronic repairs.

Fairhope Yacht Club race course, west of Fly Creek and about 2.2 miles in diameter, is marked by private daybeacons.

Theodore Ship Channel leads from a point in Mobile Bay Channel about 15 miles north of the entrance northwest for 4.5 miles to an anchorage area and thence through a 1.5-mile landcut to a turning basin at an industrial park. The federal project depth is 40 feet to and in the turning basin. The channel is marked by lights and a 123°35' lighted range. The south side of the anchorage area is marked by daybeacons. A barge channel extends 1.2 miles from the head of the turning basin. A fixed highway bridge with a clearance of 45 feet crosses the barge channel about 0.15 mile above the turning basin. An overhead power cable close west of the bridge has a clearance of 73 feet.

Dog River, emptying into the west side of Mobile Bay at a point about 21 miles north of the entrance, is used considerably by yachts and small boats. A channel marked by daybeacons and lights leads northwest from a point in Mobile Bay Channel about 1.3 miles above

Gaillard Island to the mouth of Dog River. State Route 163 highway bridge crossing the mouth of Dog River has a fixed span with a clearance of 73 feet. The railroad bridge 7 miles above the mouth has a 22-foot fixed span with a clearance of 8 feet.

Small-craft facilities

(75) There are several small-craft facilities on the river at which berths, electricity, gasoline, diesel fuel, water, ice, storage, marine supplies and lifts to 70 tons are available; engine and electronic repairs can be made.

Along the west shore of the bay, north and south of Dog River, there are numerous small-craft landings; many, however, are in ruins.

Mobile, 28 miles north of the bay entrance, is one of the largest and most important seaports on the Gulf of America. A fully equipped ocean terminal, excellent transportation facilities, large shipyards and all kinds of marine supplies are available at Mobile. Principal foreign exports are marine supplies, paper products, lumber, wood pulp, flour, aluminum, chemicals, grain, soybeans, coal and bunker oil, iron and steel products and fertilizer. The principal foreign imports are bauxite, mahogany, crude rubber, sugar, newsprint, seafood, rubber, pig iron, ores, molasses, automobiles, fishmeal, frozen foods and chemicals. The coastwise trade consists mainly of petroleum products, shell, lumber, iron and steel products, chemicals and food products. Inland waterway

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transportation facilities for handling iron and steel products, ore, sugar, grain and coal serve the Warrior, Tombigbee and Alabama River systems with connections to the Mississippi River.

Prominent features

From about the center of the bay, the industrial complex on Hollingers Island and the battleship ALABAMA moored at the entrance to Tensaw River are conspicuous. On nearing the city, the 37-story RSA Tower and other tall buildings near the waterfront are first seen. Next seen are the water tanks northwest of Garrows Bend. At night, the fixed red lights on the water tank at Great Point Clear are visible from Mobile Bay Channel. An aviation light at Brookley Field, south of Mobile, and the occulting red lights on the radio towers at the mouth of Tensaw River are prominent.

Channels

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Main Ship Channel, the dredged bar channel and Mobile Bay Channel leading from the entrance to Mobile River Channel were discussed earlier in this chapter.

From a point 25.7 miles north of the bay entrance, **Arlington Channel**, a dredged channel, leads west-northwest from Mobile Bay Channel to a turning basin in the west part of Garrows Bend. The channel is marked by a **289.3°** lighted range, lights, buoys and daybeacons.

Coast Guard

Sector Mobile Office is at the west end of the channel.

Garrows Bend Channel, a dredged channel, leads northeast from the turning basin to a causeway between McDuffie Island and the mainland.

Mobile River Channel extends from Mobile Bay Channel for 4 miles to the bridge at St. Louis Point. Federal project depths are 40 feet from the mouth of the river to and inside Mobile Turning Basin, thence 40 feet to St. Louis Point, and thence 25 feet to the mouth of and in Chickasaw Creek for about 2 miles to just below Shell Bayou entrance.

Threemile Creek leads west from Mobile River Channel just south of Magazine Point. About 0.6 mile above the creek entrance, Industrial Canal leads south for about 1 mile. Depths of about 9 feet can be carried in the creek to the canal, thence 12 feet in the canal. Cement, gypsum, sand, gravel and lumber terminals are on the canal. The large bulk material handling plant of the Alabama State Docks, with over 1,600 feet of berthing space in 40 feet, is on the south side of the entrance to Threemile Creek. (See Wharves.)

The old ship channel around the south end of **Pinto Island** leads to Tensaw River. The channel is unmarked.

Anchorages

(91) In emergencies, light-draft vessels may anchor in Mobile River above Cochrane (U.S. Route 90) highway

bridge crossing at St. Louis Point with the permission of the harbormaster.

Bridges

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There are no bridges over the main channel from the Gulf to the state docks. Above the docks, at St. Louis Point, Mobile River is crossed by Cochrane (U.S. Route 90) fixed highway bridge; the vertical clearance is 140 feet. Just above the Cochrane bridge, at the mouth of Chickasaw Creek, is the CSX railroad bridge with a swing span with a clearance of 6 feet; the channel is through the south draw. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KQ-7197. (See 33 CFR 117.1 through 117.49, chapter 2, for drawbridge regulations.)

A CSX railroad bridge with a lift span and a clearance of 5 feet down and 60 feet up crosses the Mobile River about 1.5 miles above Twelvemile Island. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KQ-7197.

Twin fixed highway bridges with clearances of 125 feet cross the river about 18 miles above the mouth.

Five bridges cross Threemile Creek below the fixed highway bridge at the head of navigation. The first, CSX railroad bridge, has a swing span with a clearance of 10 feet. The channel is through the north draw. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KQ-7197. The second, the Alabama Terminal Docks railroad bridge, has a bascule span with a clearance of 6 feet. In the open position, the draw overhangs the channel above a height of 59 feet. Beyond the Industrial Canal are the U.S. Route 43 highway and the Southern railway bridge with swing spans having a minimum clearance of 1 foot. The channel is through the north draw. (See 33 CFR 117.1 through 117.59 and 117.115, chapter 2, for drawbridge regulations.) About 0.15 mile below Route 43 highway bridge, an overhead power cable crosses with a clearance of 53 feet. About 0.4 mile above the Southern railway bridge, the Gulf, Mobile and Ohio railroad bridge has a fixed span with a clearance of 12 feet.

Twin highway tunnels cross under Mobile River between Mobile and **Blakeley Island** about 1.5 miles above McDuffie Island.

(98) Weather and pilotage information for Mobile is discussed earlier in this chapter.

Towage

Diesel-powered tugs and oceangoing tugs up to 4,000 hp are available at Mobile.

Quarantine, customs, immigration and agricultural quarantine

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

Quarantine laws are enforced in accordance with regulations of the U.S. Public Health Service. (See Public

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		Berthing		Deck		
Name	Location	Space (feet)	Depths* (feet)	Height (feet)	Purpose	Owned/ Operated by:
Facilities on the west side of	Mobile River					
Alabama State Port Authority McDuffie Terminal Ship Wharf No. 1	30°39'13"N., 88°01'58"W.	1,015	45	15½	Shipment of coal Mooring and bunkering vessels	Alabama State Port Authorit
Alabama State Port Authority McDuffie Terminal Ship Wharf No. 2	30°39'25"N., 88°01'58"W.	1,050	45	15	Receipt and shipment of coal Bunkering vessels	Alabama State Port Authorit
Mobile River Terminal Co. Ship Pier	30°40'13"N., 88°02'09"W.	1,225	12 to 42	10	Receipt of iron, manganese, fluorspar ores and other bulk materials	Warrior & Gulf Navigation Co./Mobile River Terminal Co.
Alabama Sate Dock Berth 2	30°41'41"N., 88°02'16"W.	989	40	11	Receipt and shipment of containerized & conventional general cargo	Alabama State Port Authorit
Alabama Sate Dock Berths 3, 4 and 5	30°41'53"N., 88°02'18"W.	1,505	40	11	Receipt and shipment of conventional general cargo, steel, forestry and heavy-lift items	Alabama State Port Authorit
Alabama Sate Dock Berths 6, 7 and 8	30°42'05"N., 88°02'20"W.	1,722	40	11	Receipt and shipment of conventional and roll-on/roll-off general cargo, steel, forestry and heavy-lift items	Alabama State Port Authorit
Alabama Sate Dock Pier A, South Wharf	30°42'15"N., 88°02'24"W.	690	40	11	Receipt and shipment of conventional general cargo	Alabama State Port Authorit
Alabama Sate Dock Pier A, North Wharf and Slip B, End Wharf	30°42'24"N., 88°02'31"W.	1,959	40	6 to 11	Receipt and shipment of conventional general cargo and forest products	Alabama State Port Authorit
Alabama State Dock Pier B and Slip C; End Wharf	30°42'27"N., 88°02'23"W.	1,532	40	11	Receipt and shipment of conventional general cargo and forest products	Alabama State Port Authorit
Alabama State Dock Pier C	30°42'39"N., 88°02'26"W.	2,417	40	11	Receipt and shipment of conventional general cargo, steel, aluminum, forestry and heavy-lift items	Alabama State Port Authorit
Alabama State Dock Pier D, South Wharf	30°42'50"N., 88°02'35"W.	1,000	40	11	Mooring vessels	Alabama State Port Authorit
Alabama State Dock Pier D, River End Grain Elevator Wharf	30°42'54"N., 88°02'49"W.	800	40	11	Shipment of grain Receipt of conventional cargo	Alabama State Port Authorit
Bulk Material-Handling Plant Barge Wharf	30°43'26"N., 88°02'37"W.	550	40	8	Shipment of of dry bulk commodities (coal, coke, bauxite, gravel, potash, manganese, and iron ore)	Alabama State Port Authorit
Plains Energy Corp. Mobile Terminal Ship Dock	30°43'40"N., 88°02'37"W.	800	40	12	Receipt and shipment of crude oil	Plains Energy Corp.
BP Oil Co. Mobile Terminal Barge Wharf	30°43'56"N., 88°02'38"W.	400	20	8	Receipt and shipment of petroleum products by barge	BP Oil Co.
Facilities on east side of Mol	oile River					
Vulcan Materials Co. Blakeley Island Yard Dock	30°43'48"N., 88°02'24"W.	740	40	N/A	Receipt and shipment of limestone	Alabama State Port Authority/Vulcan Materials Co.
Alabama State Port Authority, Blakeley Terminal Wharf	30°43'49"N., 88°02'24"W.	700	30	11	Receipt and shipment of general cargo	Alabama State Port Authorit
Gulf Atlantic Blakeley Terminal	30°43'00"N., 88°02'20"W.	750	34	12	Receipt and shipment of crude oil and petroleum products	
Midstream Fuel Service Mobile Wharf	30°43'03"N., 88°02'19"W.	200	22	8	Loading barges for bunkering	Midstream Fuel Service, Inc. and Tenn-Tom Towing, Inc.
Midstream Fuel Service Supply Wharf	30°43'01"N., 88°02'17"W.	200	18	8	Handling of materials, supplies and equipment to and from barges	Midstream Fuel Service, Inc
Shell Chemical Co., Blakeley Island Terminal Wharf	30°42'51"N., 88°02'15"W.	1,000	40	15	Receipt and shipment of crude oil and petroleum products	Shell Chemical Co.
Gulf Coast Asphalt Co. Mobile Terminal Wharf	30°42'26"N., 88°02'11"W.	900	42	8	Receipt and shipment of asphalt and petroleum products	Gulf Coast Asphalt Co., L.L.C.
Alabama Bulk Terminal Co., Blakeley Island Wharf	30°41'45"N., 88°02'06"W.	800	40	10	Receipt and shipment of petroleum products, petrochemicals, asphalt and crude oil	Alabama Bulk Terminal Co.

Facilities at Port of Mobile, Alabama						
Name	Location	Berthing Space (feet)	Depths* (feet)	Deck Height (feet)	Purpose	Owned/ Operated by:
Mobile Marine Terminal Chickasaw Wharf	30°45'47"N., 88°03'02"W.	934	23	9	Receipt and shipment of conventional and containerized general cargo	Crimson Shipping
Gulf Atlantic Chickasaw Barge Wharf	30°45'50"N., 88°03'08"W.	680	20	12	Receipt and shipment of crude oil and petroleum products	Gulf Atlantic
Dunhill Terminal	30°45'50"N., 88°03'15"W.	456	19 to 23	12	Barge petroleum terminal	

Health Service, chapter 1.) Mobile has several hospitals and clinics

(104) Mobile is a **customs port of entry**.

(105)

Harbor regulations

jurisdiction over the bay, harbor and that part of all the tributary streams in which the tide ebbs and flows, and extends to the outer shoal 5 miles south-southwest of Fort Morgan at the entrance to the harbor. It has supervision over harbor pilotage, state wharves and shipping, as well as authority in all matters relating to the arrival, departure, loading and discharging of all vessels at state wharves. Most routine functions are administered through the harbormaster.

traffic in the area, assigns berths and enforces the rules and regulations of the port. Ships are normally taken to their berths by the bar pilots, but any subsequent shifting or redocking of vessels in the harbor is done by the harbormaster and his deputies. The harbormaster's office is in the Administration Building at the State Docks and is connected by the intraport radiotelephone system with all pilot boats and tugs on VHF-FM channels 16 and 65A. The harbormaster can be reached by telephone (251–441–7250).

(108)

Speed limit

(109) No vessel, except launches, shall exceed 6 mph in the inner harbor between Mobile Channel Light 76 to and including Chickasaw Creek and shall take all possible precautions to prevent disturbance of vessels berthed at marginal wharves.

(110)

Wharves

(III) The Port of Mobile has more than 150 piers and wharves, most of which are located on both sides of the Mobile River between the mouth and the confluence with Chickasaw Creek about 4 miles above the mouth. Facilities are also on Theodore Industrial Park Ship Canal, Arlington Channel, Threemile Creek, Industrial Canal, Chickasaw Creek, Hog Bayou and Black Bayou.

(112) The facilities on the west side of the Mobile River are generally for handling cargo, while the facilities on

the east side are service and industry related—only the deep-draft facilities are listed in the facilities table. The alongside depths of given in the table are reported; for information on the latest depths contact the Alabama State Port Authority or the private operators. General cargo at the port is usually handled by ship's tackle. Floating cranes to 110 tons are available. All deep-draft facilities have rail and direct highway connections, and almost all have water and electrical shore power connections.

and private companies operate warehouses and transit sheds having a total of more than 3 million square feet of dry storage space. About 36 acres of open storage space is available.

(115)

Supplies

Marine supplies of all kinds are available in Mobile.

Bunker fuel, diesel oil and lubricants are available. Large vessels can be bunkered at the Texaco Terminal Pier, Alabama State Docks, Piers B, C, and D North Wharf or at other berths by tank barges. Water, almost chemically pure, is available at most of the berths.

(117)

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Repairs

all types of repairs can be made to deep-draft vessels. The largest floating drydock, at a shipyard on the west side of Pinto Island, has a capacity of 19,400 tons, an overall length of 732 feet, a minimum clear inside width of 105 feet and a depth of 27 feet over the blocks. Smaller shipyards with marine railways and smaller floating drydocks are on Blakeley Island, on the west side of Mobile River at Mobile, at Chickasaw and on Dog River.

(119) Salvage tugs, seagoing and equipped for heavy work, are available. Barges, derricks, pumps and diving outfits are available for virtually any type of work.

Small-craft facilities

(121) Berths and other facilities for small craft are limited at Mobile due to heavy commercial traffic. Facilities for small craft at Fort Morgan, East Fowl River, Fairhope, Fly Creek and Dog River are discussed earlier in this chapter.

(122)

Communications

Mobile is served by four trunkline railroads, major airlines and highway connections. Regular steamer communications with most major ports in the world and all the important Gulf, Atlantic, Caribbean and Pacific ports are made from Mobile. Inland boats and barges serve the river ports in the interior of the state and also connect with Gulf ports. Radio station WLO at Mobile handles general commercial radio and radiotelephone business between the hours of 0430 and 0030. The station is equipped to handle traffic on VHF-FM radiotelephone and cable traffic. Radio station WNU, New Orleans, handles traffic for station WLO between the hours of 0030 to 0430. The harbormaster's office is equipped with VHF-FM channel 16 and channel 65A on the intraport radiotelephone system, which connects all pilot boats, tugs and all waterway traffic in the area.

Mobile River and Tensaw River are formed by the confluence of Alabama River and Tombigbee River about 45 miles above Mobile. In 1972, the reported depth to the confluence was about 14 feet. The channel in Mobile River is marked by lights, buoys and daybeacons.

Tensaw River is crossed at its mouth by two U.S. Route 90 highway bridges, which have fixed spans with a minimum clearance of 26 feet. An overhead power cable with a clearance of 46 feet crosses the river just north of the bridges. Twin fixed highway bridges with a clearance of 24 feet cross the river about 0.3 mile north of the U.S. Route 90 bridges. The south end of Blakeley Island has been extended east by dredged fill to the west side of the entrance to Tensaw River. The battleship ALABAMA is permanently moored on the east side of the fill at a state park.

two rivers about 8 miles above Mobile. The cutoff had a reported depth of about 13 feet in 1972. From the cutoff the channel into Tensaw River is marked by buoys and an unlighted range on the east bank of the river; the controlling depth on the range is about 3 feet. For craft drawing more than 3 feet, it is necessary to turn south at the east end of the cutoff, pass around the south end of **Gravine Island** and then proceed upriver in the east branch.

(127) A railroad bridge over Mobile River, 8.3 miles above the city, has a swing span with a clearance of 4 feet. (See **33 CFR 117.1** through **117.49**, chapter 2, for drawbridge regulations.)

A railroad bridge crossing Tensaw River about 13 miles above the mouth has a swing span with a clearance of 11 feet. (See **33 CFR 117.1** through **117.59** and **117.113**, chapter 2, for drawbridge regulations.) Tensaw River is crossed by overhead power cables on both sides of Gravine Island. The cable crossing the west channel about 1.7 miles below the cutoff has a clearance of 74 feet, and the cable over the east channel about 1.2 miles below the cutoff has a clearance of 68 feet. Interstate Route 65

twin fixed highway bridges, with clearances of 42 feet, cross the Tensaw River about 19.6 miles above the mouth.

Light-draft boats can reach Tensaw River either by going up Mobile River to **Spanish River** and thence down that river, or from the main channel through the channel south of Pinto Island. An overhead power cable with a clearance of 68 feet crosses Spanish River about 0.1 mile below its confluence with Mobile River.

Blakeley River and Apalachee River are crossed at their mouths by twin fixed highway bridges with clearances of 16 feet. About 0.7 mile above the bridges, the rivers are crossed by U.S. Route 90/State Route 31 fixed highway bridges, which have a minimum vertical clearance of 16 feet. Overhead power cables on the north side of the U.S. Route 90/State Route 31 bridges have minimum clearances of 37 feet. A fish camp about 0.4 mile south of **Vessel Point** has berths, water, ice and a launching ramp.

(131) **D'Olive Bay**, on the east side of Blakeley River, is entered through a channel marked by private daybeacons about 0.9 mile below the U.S. Route 90 bridges. In 1982, the reported controlling depth was about 3 feet across Blakeley River Bar and through the lower river into the bay. A yacht club in the bay has gasoline, diesel fuel and limited marine supplies.

Navigation is possible above Mobile to the inland Alabama ports of Jackson, mile 78, Demopolis, mile 214, Tuscaloosa, mile 340, Port Birmingham, mile 396.5, and various landings via dredged channels in the Black Warrior-Tombigbee River System. Mobile River joins the Tombigbee River about 45 miles above Mobile. Just above Demopolis, at the junction of the Black Warrior and Tombigbee Rivers at about mile 217, the waterway continues via the Black Warrior River and thence at about mile 385 divides into two navigable forks. The head of navigation on Mulberry Fork is at about 385 and on Locust Fork at mile 385. A federal project provides for a 9-foot channel in the Black Warrior-Tombigbee River System. (See Local Notice to Mariners for latest controlling depths.)

Six lock and dam systems are on the waterway. Each lock is 600 feet long and 110 feet wide, with a least depth of 11 feet over the sill.

cables cross the waterway. Bridges over the section of the waterway from the mouth of Tombigbee River to the junction with the upper forks are of the vertical-lift or fixed-span type; least clearance is 40 feet for the fixed spans and 15 feet for the vertical-lift spans. (See 33 CFR 117.1 through 117.49,117.106, and 117.118, chapter 2, for drawbridge regulations.) Only bridges of the fixed type cross Mulberry and Locust Forks; least clearance is 31 feet over Mulberry Fork and 38 feet over Locust Fork. Least clearance of overhead power cables crossing the waterway is 40 feet.

(135) Waterborne commerce on the waterway between Mobile and Port Birmingham is in pulpwood, chemicals,

petroleum products, shell, sand and gravel, limestone, ores, pig iron, coal, grain and steel products.

(136) Charts for the Black Warrior-Tombigbee Rivers System are available from the U.S. Army Corps of Engineers Mobile office. (See Appendix A for address.)

From just above Demopolis, AL, at the confluence on the Tombigbee and Black Warrior Rivers, the **Tennessee-Tombigbee Waterway** (Tenn-Tom Waterway) extends north through the Tombigbee River and land cuts for about 203 miles connecting the Black Warrior-Tombigbee River System with the Tennessee River. The waterway provides a link between the deepwater port of Mobile and the inland waterways that were formerly accessible only via the Mississippi River system.

(138) From Demopolis, the waterway extends up the Tombigbee River for about 127 miles to just south of Amory, MS. For the next 42 miles to Bay Springs, MS, the waterway consists of a canal parallel to and separated from the river by a levee. The remaining 34 miles of the system traverse a cut through the divide between the Tennessee and Tombigbee River basins.

(139) The federal project provides for a 9-foot channel from Demopolis to Amory and thence a 12-foot channel to the Tennessee River. The waterway's 341-foot ascent is accomplished by 5 dams and 10 locks. The locks are 100 feet wide and 600 feet long and have a minimum depth over the sill of 15 feet.

The minimum clearance of the bridges crossing the Tennessee-Tombigbee Waterway is 52 feet at normal pool. Overhead cables have a minimum clearance as great or greater than the minimum bridge clearance.

(141) Waterborne commerce on the waterway includes coal, grain and other farm products, metallic and nonmetallic ores, chemicals and allied products, pulp, paper and other wood products and petroleum.

(142) Charts for the Tennessee-Tombigbee Waterway are available from the U.S. Army Corps of Engineers Mobile office. (See Appendix A for address.)

(143) Mobile River joins Alabama River about 45 miles above Mobile. A federal project provides for a 9-foot channel in Alabama River from the mouth to Montgomery, AL, about 290 miles above Mobile. In 1981, the controlling depth was 9 feet to Claiborne, about 58 miles above the mouth; thence in 1972, 3½ feet to the head of the project. Greater depths can normally be carried from November to June. The channel is marked by buoys and daybeacons. Least clearance of bridges crossing the river is 17 feet for swing bridges, 42 feet in the up position for vertical lift bridges and 36 feet (at Montgomery) for fixed bridges. The bridgetender of the Burlington Northern railroad bridge at Coy monitors VHF-FM channel 16 and works on channel 13; call sign WXY-960. (See 33 CFR 117.1 through 117.59 and 117.101, chapter 2, for drawbridge regulations.) Least known clearance of overhead power cables crossing the river is 50 feet. Least vertical clearance is 27 feet at the cable ferry guide cable about 112 miles above Mobile.

Cable ferry

A cable ferry crosses the river about 112 miles above Mobile. The ferry carries vehicles and passengers and operates between 0700 and 1700 daily. The ferry guide cable is suspended 27 feet above the water. The ferry crossing is marked by signs on both sides of the river. DO NOT ATTEMPT TO PASS A MOVING CABLE FERRY.

146) The lock and dam systems on the river are Claiborne Lock and Dam, mile 63.0, Millers Ferry Lock and Dam, mile 115.6, and Henry Lock and Dam, mile 205.2. Operating hours of the locks are as follows: Claiborne Lock, 24 hours; and Millers Ferry and Henry Locks, 0600 to 1400 and 1800 to 0200. The locks are each 600 feet long and 84 feet wide and have 13 feet over the sills.

Waterborne commerce on the river consists of pulpwood, petroleum products, sand and gravel.

(148) Navigational charts for the Alabama River are available from the Mobile Corps of Engineers Office. (See Appendix A for address.)

(149)

Mississippi Sound

(150) Mississippi Sound extends 70 miles west of Mobile Bay between a chain of narrow, low sand islands and the mainland, providing a sheltered route for the Intracoastal Waterway from Mobile to New Orleans. Natural depths of 12 to 18 feet are found throughout the sound, and a channel 12 feet deep has been dredged where necessary from Mobile Bay to New Orleans. (See chapter 12 for Intracoastal Waterway.) Mississippi Sound can be entered from Mobile Bay through Pass aux Herons; from the Gulf through Petit Bois, Horn Island, Dog Keys, and Ship Island Passes, and Cat Island Channel; from Lake Borgne through Grand Island Passe.

(151) Ship, Horn and Petit Bois Islands, barrier islands separating Mississippi Sound from the Gulf of America, are part of Gulf Islands National Seashore and subject to the rules and regulations of the U.S. Department of the Interior, National Park Service. Petit Bois Island National Wildlife Refuge and Horn Island National Wildlife Refuge are within the National Seashore.

(152) **COLREGS Demarcation Lines**

(153) The lines established for Mississippi Sound are described in **33 CFR 80.815** chapter 2.

(154)

Pass Aux Herons to Bayou Coden

(155) **Pass aux Herons** connects the southwest corner of Mobile Bay with the east end of Mississippi Sound and is part of the Intracoastal Waterway. (See chapter 12 for Intracoastal Waterway.)

(156) **Grants Pass**, 0.3 mile north of Pass aux Herons, connects Mobile Bay and Mississippi Sound. The channel is unmarked and is used only by small boats.

Dauphin Island is a fishing village and summer resort at the northeast part of Dauphin Island. A dredged channel leads from Mississippi Sound through Bayou Aloe to an anchorage basin at Dauphin Island Village. The channel is marked with lights and daybeacons. There are a marina and fish camps at the village; berths, gasoline, diesel fuel, water and marine supplies are available.

end of Dauphin Island Bay is a shallow bay at the east end of Dauphin Island between Dauphin Island Bridge and Little Dauphin Island. The bay is accessible from Mississippi Sound through a privately marked and dredged channel and from Mobile Bay through an inlet protected by a jetty about 0.2 mile north of Pelican Point. A channel marked by lights and daybeacons leads from Mobile Bay to the inlet entrance, thence a dredged channel leads through the inlet to an anchorage basin at Fort Gaines, thence a connecting channel leads from the anchorage basin to Dauphin Island Bay.

(159) **Dauphin Island Coast Guard Station** is on the south side of the inlet.

Customs boat and pilot boat moor. On the south side of the anchorage basin, just inside the inlet, there are eight surfaced launching ramps, five piers and a bulkhead docking area. A ferry operates from Fort Gaines to Fort Morgan.

A large marina on the west shore of the bay has a 7½-ton mobile hoist. Engine and electronic repairs are available, as well as open and covered storage. Berths, electricity, gasoline, diesel fuel, water, ice and marine supplies are available. An offshore breakwater protects the marina from north. In 1972, there was reported to be 8 to 9 feet at the berths and 5 feet in the privately maintained and marked channel that leads along the south and west shores of the bay from the connecting channel to the marina and north and west into Mississippi Sound. Dauphin Island Bridge across the mouth of Dauphin Island Bay has a fixed span with a clearance of 25 feet. An overhead power cable west of the bridge has a clearance of 44 feet.

(162) **Heron Bay** is a shallow bay used mainly by skiff-size crabbing and oyster boats; local knowledge is advised.

about 1.8 miles north of Cedar Point, is a pass joining Heron Bay with Mobile Bay. Tidal currents of considerable velocity run through this pass, which is used only by small boats. See the Tidal Current prediction service at *tidesandcurrents.noaa.gov* for specific information about times, directions, and velocities of the current at numerous locations throughout the area. Links to a user guide for this service can be found in chapter 1 of this book. A fixed highway bridge over the pass has a clearance of 16 feet.

West Fowl River enters Fowl River Bay about 4 miles northwest of Cedar Point. It extends northeast along the west side of **Mon Louis Island**, separating it from the

mainland, and is joined to East Fowl River by a channel reported to be navigable by craft drawing about 2 feet or less. State Route 188 highway bridge, about 2 miles above the mouth, has a 30-foot fixed span with a clearance of 25 feet. An overhead power cable close southwest of the bridge has a clearance of 33 feet. An overhead power cable with a reported clearance of about 30 feet crosses the channel connecting with East Fowl River at about 30°23'53"N., 88°08'39"W. The entrance to the river from Mississippi Sound is marked by private daybeacons from east of Cat Island to just below the highway bridge. A small marina on the east bank of the river about 0.5 mile below the highway bridge can provide berths with water and electricity, gasoline, diesel fuel, ice, a launching ramp, limited marine supplies and engine repairs.

Coden is a small fishing village on Bayou Coden on the north shore of Portersville Bay, northeast of Isle aux Herbes. A dredged channel leads from Bayou La Batre channel through Portersville Bay to the mouth of Bayou Coden, thence north to the State Route 188 highway bridge about 0.5 mile above the mouth of the bayou. A turning basin is on the west side of the channel about 500 feet below the bridge. State Route 188 fixed highway bridge has a 35-foot span with a clearance of 15 feet. There are seafood packing plants and several commercial shipyards that specialize in the construction of steel tugs and supply vessels.

(166)

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Bayou La Batre to Petit Bois Pass

(167) A dredged channel leads from deep water in Mississippi Sound through **Bayou La Batre** to a turning basin about 0.5 mile below State Route 188 highway bridge at the town of **Bayou La Batre**, thence to the bridge. The channel is marked by buoys, lights and daybeacons. State Route 188 highway bridge has a vertical lift span with clearances of 6½ feet down and 73 feet up. (See **33 CFR 117.1** through **117.59** and **117.103**, Chapter 2, for drawbridge regulations.) An overhead power cable at the bridge has a clearance of 60 feet.

(168) Shrimp, fishing and party-boat fleets operate out of Bayou La Batre. The town has several seafood packing plants and canneries. Several boatyards on the bayou build commercial steel and wooden vessels up to about 115 feet in length. Machine shop facilities are also available.

Small-craft facilities

(170) There are several small-craft facilities on Bayou La Batre; most are along the east side.

(171) The Alabama-Mississippi boundary is about 6.5 miles west of Bayou La Batre.

Petit Bois Pass, an entrance from the Gulf between Dauphin Island and Petit Bois Island, is used primarily by fishing vessels with local knowledge drawing about 6 feet or less. The pass is no longer maintained and subject to frequent changes; passage can generally be made by following the deep green water during calm weather

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and by avoiding the breakers during rough weather. A lighted buoy is at the north end of the pass. The chart and knowledge of local conditions are the best guides.

(173)

Pascagoula

(174) **Pascagoula Harbor**, one of the important deepwater ports on the Gulf Coast, is on Mississippi Sound about 9 miles north of **Horn Island Pass**. By water, it is 72 miles west of Mobile and 51 miles east of Gulfport. The facilities in the port area include a cold storage facility, shipyards and other industries at the mouth of Pascagoula River and an industrial area centered around Bayou Casotte, about 3 miles east of Pascagoula River.

(177) Pascagoula, at the mouth of Pascagoula River, is a city with many large industries in shipbuilding and ship repair, manufacture of paper products, textiles, containers, seafood packing and processing, oil refining, fertilizer and chemicals. A hospital is in the city. Waterborne traffic in addition to those mentioned above is in petroleum products, crude oil, sand and gravel, liquid sulphur, ores and logs.

(178)

Prominent features

179) The refinery flares, east of Bayou Casotte, are very prominent from offshore at night. At the north end of Bayou Casotte, a 140-foot gypsum pile is prominent. The cranes of the shipyard and the twin tanks in Pascagoula are prominent from the sound. The range light towers on the west end of Petit Bois Island, the cracking towers and tanks at the oil refinery east of Bayou Casotte, and the towers, tanks, and elevators of the fertilizer plant on the east bank of Bayou Casotte are also prominent.

Horn Island Pass Lighted Buoy HI (30°08'30"N., 88°34'40"W.) marks the approach to Horn Island Pass.

Shipping Safety Fairways

Vessels should approach Horn Island Pass and Pascagoula Harbor through the prescribed Safety Fairways. (See 33 CFR 166.100 through 166.200, chapter 2.)

COLREGS Demarcation Lines

(184) The lines established for Horn Island Pass are described in **33 CFR 80.815**, chapter 2.

Channels

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(186) A dredged entrance channel leads north across the bar at **Horn Island Pass** and through Mississippi Sound. The channel divides about 4 miles above the pass into channels leading north towards **Bayou Casotte** and northwest to the Port of Pascagoula at the mouth of the Pascagoula River. (See Notice to Mariners and

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the latest editions of the charts for controlling depths.) The channels are well marked by lights, lighted buoys and lighted ranges. Some of the inner ranges are often obscured by cranes and floodlights.

caution where the channel intersects the Intracoastal Waterway, about 2.4 miles above the west end of Petit Bois Island near Lighted Buoys 27 and 29. Situations resulting in collisions and groundings are reported here by both shallow and deep-draft vessels. The Coast Guard has requested vessels make a **SECURITE** call on VHF-FM channel 13 prior to crossing the Intracoastal Waterway, particularly during periods of restricted visibility.

Pascagoula River channel above Pascagoula and Escatawpa River channel are discussed later in this chapter.

Anchorages

(189)

(190) Deep-draft vessels may anchor 1 to 2 miles south or southeast of the sea buoy, weather permitting. Anchorage for vessels up to 15-foot draft is available in Mississippi Sound east of the channel.

(191) **Explosives anchorages** are north and south of the west end of Petit Bois Island. (See **33 CFR 110.1** and **110.194b**, chapter 2, for limits and regulations.)

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Caution

(193) Petit Bois Island and Horn Island are poor radar targets when approaching Pascagoula Harbor from seaward. Caution should be exercised when making landfall at night and during poor visibility.

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Dangers

95) Spoil areas are along the sides of the dredged channels leading to Pascagoula. Vessels should not enter the channel before the pilot boards, especially light vessels during periods of strong winds and adverse weather.

Currents

In Horn Island Pass, the tidal current is reported to flood north and ebbs south averaging 1.2 knots at strength. In the dredged cut across the bar, the ebb and flood follow the direction of the cut. Winds greatly affect the velocity and direction of the currents, as well as the rise and fall of the tides. It is reported that strong east winds and seas create strong currents along the shore. See the Tidal Current prediction service at *tidesandcurrents.noaa. gov* for specific information about times, directions, and velocities of the current at numerous locations throughout the area. Links to a user guide for this service can be found in chapter 1 of this book.

(198)

Weather

Pascagoula is in a low-lying area heavily wooded with pines and live oaks. Its climate is characterized by warm, humid summers and relatively mild winters. This is reflected by the temperatures that climb to 90°F or more on about 70 summer days, while falling below 32°F on only about 15 days each winter. Precipitation is frequent year round, but most likely from July through September. This is due, in part, to thunderstorms, which occur on about 9 to 16 days per month in June, July and August. Strong winds, which can occur in thunderstorms or tropical cyclones, are most frequent from November through April when winter storms and cold fronts are prevalent. Gales are unlikely, but sustained winds of 17 to 33 knots occur 3 to 5 percent of the time. Poor visibilities are most likely during this same period and fall below 0.5 mile on 3 to 8 days per month. The tropical cyclone threat, which is rare in May and November, gradually increases through June, July and August, reaching a peak in September and then falling off in October. During hurricane Katrina in August 2005, the Gulf coast was battered by wind gusts up to 175 mph along with severe flooding. During hurricane Camille in August 1969, the Northrup Grumman Ingalls (formerly Ingalls Shipbuilding Corporation) recorded a peak gust of 181 mph, while storm tides in the area rose to 11.2 feet above mean sea level. During Frederic in September 1979, Pascagoula was battered by gusts of 127 mph, 11 inches of rain and 6-foot storm tides.

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Pilotage, Pascagoula

all U.S. vessels over 250 tons under register in foreign trade. Pilotage is optional for U.S. coastwise vessels that have on board a pilot licensed by the federal government. Pilotage is available from Pascagoula Bar Pilots' Association, 3309 Frederick Street, Suite 3, Pascagoula, MS 39567, telephone 228–762–1151, FAX 228–762–0660. Pilots board vessels about 1 mile south to southeast of Horn Island Pass Lighted Whistle Buoy HI, day or night. Shoaling in certain areas of the channel restricts movement of larger vessels to daylight hours only, and the narrowness of the channels limits ocean traffic to one way at all times.

River Island" and 39 feet long M/V "Horn Island" and 38 feet long M/V "Round Island". All pilot boats have unpainted aluminum hulls with PILOT in black lettering. The pilot station monitors VHF-FM channels 74 and 16 and the pilots work harbor traffic on VHF-FM channels 13 and 16 while transiting the channel. Vessels to be boarded should contact the pilot boat for vessel speed and boarding side. The pilot ladder should be rigged 2 meters above water for "Singing River Island" and 1 meter above water for "Horn Island" and "Round Island". Pilots can be arranged for by telephone (228–762–1151), VHF-FM

channel 16 or through ships' agents. A minimum of 2 hours advance notice is requested.

Towage

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Tugs up to 6,000 hp are available at Pascagoula. Full shipyard repair services and a 600-ton marine travel lift are also available. Arrangements should be made in advance through the ship's agent.

Quarantine, customs, immigration and agricultural quarantine

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

(207) Quarantine laws are enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

The Singing River Hospital, which is operated by Jackson County, is at Pascagoula.

(209) Pascagoula is a customs port of entry.

Coast Guard

(211) Pascagoula Coast Guard Station is on the north side of Singing River Island at the entrance to the Pascagoula River.

Harbor regulations

The Port of Pascagoula is under the control of the Jackson County Port Authority, which is responsible jointly with the Jackson County Board of Supervisors for the industrial development of the port. The Jackson County Port Authority through its **Port Director** is responsible for port and harbor improvement, harbor management and regulation enforcement. The office of the Harbormaster assigns berths; telephone 228–762–4041.

Speed limit

No oceangoing vessel shall proceed in excess of 5 mph in Pascagoula River or Bayou Casotte.

Bridges

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No bridges cross the channel from the Gulf to the municipal wharf. The CSX railroad bridge crossing the Pascagoula River about 1.5 miles above the mouth has a bascule span with a clearance of 8 feet. The bridgetender monitors VHF-FM channel 13; call sign KQ-7197. U.S. Route 90 highway bridge 0.2 mile above the railroad bridge has a fixed span with a clearance of 80 feet.

Noverhead power cables 1.5 miles and 2.6 miles above the mouth of the river have clearances of 68 feet and 80 feet, respectively.

Wharves

The **Port of Pascagoula**, which includes the lower 5.9 miles of the Pascagoula River, the lower 5.2 miles of the Escatawpa (Dog) River and Bayou Casotte, has

(222)

Facilities at the Port of Pascagoula, Mississippi							
Name	Location	Berthin Space (feet)	Depths* (feet)	Deck Height (feet)	Purpose	Owned/ Operated by:	
Facilities on Pascagoula River, west side							
Jackson County Port Authority, Terminal A Wharf	30°21'40"N., 88°33'58"W.	500	38	10	Receipt and shipment of conventional general cargo, lumber, wood pulp and line board	Jackson County Port Authority	
Jackson County Port Authority, Terminal B Wharf	30°21'46"N., 88°33'58"W.	544	38	10½	Receipt and shipment of conventional general cargo, lumber, wood pulp and lineboard	Jackson County Port Authority	
Jackson County Port Authority Terminal C Wharf	30°21'52"N., 88°34'00"W.	718	38	13	Shipment of general cargo lumber ETC	Jackson County Port Authority	
Jackson County Port Authority Terminal D Wharf	30°21'54"N., 88°34'03"W.	732	38	13	Receipt and shipment of conventional and roll-on/roll-off general cargo	Jackson County Port Authority	
Facility on Pascagoula River, east side:							
National Marine Fisheries Service, Pascagoula Wharf	30°21'59"N., 88°33'46"W.	535	20	9	Mooring oceanographic research vessels	U.S. Government and Department of Commerce NOAA, NMFS	
Facilities on Bayou Casotte							
Chevron Texaco Refinery, Pascagoula Refinery, Berth No. 6	30°20'05"N., 88°30'37"W.	260	42	15	Receipt of crude oil and naphtha	Chevron Texaco Refinery	
Chevron Texaco Refinery, Pascagoula Refinery, Berth No. 7	30°19'56"N., 88°30'48"W.	765	42	15	Receipt of crude oil and coker feed	Chevron Texaco Refinery	
Chevron Texaco Refinery, Pascagoula Refinery Wharf No. 1 Berths 1-5	30°20'27"N., 88°30'30"W.	1,433	38	12	Receipt and shipment of liquified petroleum gas, methanol, clean oil, chemicals and asphalt	Chevron Texaco Refinery	
Jackson County Port Authority, Terminals G and H	30°20'42"N., 88°30'27"W.	516	38	12	Receipt and shipment of conventional general cargo and miscellaneous dry bulk materials	Jackson County Port Authority	
Jackson County Port Authority, Terminals E and F	30°20'48"N., 88°30'22"W.	737	38	12	Receipt and shipment of conventional general cargo and miscellaneous dry bulk materials	Jackson County Port Authority and First Chemical Corp.	

more than 60 piers, wharves and docks. The principal facilities are on both sides of the Pascagoula River and at the Bayou Casotte. General cargo piers operated by the Jackson County Port Authority are on the west side of the Pascagoula River and on the east side of Bayou Casotte. The other major deep-draft facilities are privately operated by petroleum, chemical and shipbuilding/repair companies. Only the deep-draft facilities are listed in the facilities table for Pascagoula. All the piers described have direct highway connections, and most have railroad connections. Water connections are available at most of the piers, and shore power is available at a few of the wharves described.

General cargo at the port is usually handled by ship's tackle; special handling equipment, if available, is mentioned in the description of the particular facility. Floating cranes to 50 tons and mobile cranes to 150 tons are normally available. Cranes to 400 tons may be obtained by special arrangement.

(223)

Supplies

(224) Marine supplies of all kinds are available in Pascagoula. Bunker fuel, diesel oil and lubricants are available. Large vessels are bunkered at their berths by barge. Water is available at most of the berths.

(225)

Repairs

Ingalls Shipbuilding is engaged primarily in new construction and major overhauls. Their facilities are on the east and west sides of Pascagoula River just above the mouth and include shipbuilding and launching ways, outfitting piers and electrical, electronic, sheet metal, hull, pipe and machine shops. The shipyard's floating drydock on the west side of the river has a docking capacity of 70,000 long tons with a depth of 41 feet over the deck. The west bank also supports a deep water 400-foot by 1,300-foot launch pit with a depth of approximately 74 feet. The shipyard also supports seven outfitting berths with crane capacities of up to 300 tons.

Several other shipbuilding and repair yards are in Pascagoula where numerous tugs, barges and offshore vessels are built. Signal International operates two yards and Halter Marine concentrates operations at one yard at the Jackson County Port Authority. Providing multiple cranes with lifting capacities to 550 tons and service to semi-submersible and jack-up oil rigs as well as a vast assortment of ships and boats. There are other independently operated repair yards, one of which is on the south side of Krebs Lake. A floating drydock at the yard can handle vessels to 190 feet long and 45 feet wide,

has a depth of 12 feet over the keel blocks and has a lifting capacity of 800 tons. A 100-ton marine railway that can handle most vessels to about 100 feet long and a 60-ton mobile hoist are at the yard. Other yards have marine lifts and facilities with marine ways for handling vessels and barges. Machine shops are available. Several of the smaller yards build wooden and steel vessels up to 140 feet and barges up to 250 feet.

(228)

Communications

The port is served by freight service of Class I and Class II railroads that connect with a Class II railroad at **Evanston** about 35 miles north of the city. Trent Lott International Airport, which provides charter or private aircraft service but no scheduled airline services, is about 2 miles northeast of the city. Major bus lines and several motor freight lines serve the city.

(230)

Small-craft facilities

craft up to 40 feet at the head of Lake Yazoo, which is entered through a channel on the east side of the river entrance. In 1983, a reported depth of 5½ feet could be carried to the basin. There are no services. An unlighted buoy marks the entrance. There are several marinas, service wharves and boatyards along the Pascagoula River, above and below the bridges at Pascagoula. Berths, electricity, gasoline, diesel fuel, water, ice, marine supplies and launching ramps are available. Hull, engine and electronic repairs can be made, and dry storage is available.

(232) A dredged channel in **Pascagoula (Singing) River** leads from the deep-draft turning basin just below the CSX railroad bridge at Pascagoula to a junction with **Escatawpa (Dog) River**, thence to the State Route 613 highway bridge crossing the river 0.7 mile above the mouth, thence to a commercial, industrial park about 3.5 miles above the State Route 613 bridge. The channel is marked by lights and daybeacons.

Pascagoula River is navigable to the confluence of Leaf River and Chickasawhay River about 64 miles above its junction with Escatawpa River. In 1982, the reported controlling depth was 12 feet to Caswell Lake about 18 miles above the junction with Escatawpa River, thence 2 feet to the confluence of the Leaf and Chickasawhay Rivers.

(234) A privately dredged channel leads from the dredged channel in Pascagoula River about 0.3 mile north of U.S. Route 90 highway bridge to a shipyard pier at the southwest corner of **Krebs Lake**. The channel is marked by buoys and a daybeacon.

Moss Point is a city on the Escatawpa River about 2 miles above the junction with the Pascagoula River. There are industries in chemicals, rubber, paper products, shipbuilding, fertilizer, seafood processing and lumber. State Route 613 highway bridge crossing the river about 0.7 mile above the mouth has a fixed span with

a clearance of 77 feet. Above the bridge are shipyards that build vessels up to 185 feet and several menhaden processing plants. State Route 63 fixed highway bridge with a clearance of 73 feet crosses the river about 2.4 miles above the mouth. About 2.6 miles above the mouth, the Mississippi Export railroad bridge has a swing span with a clearance of 5 feet. (See 33 CFR 117.1 through 117.49, chapter 2, for drawbridge regulations.) Overhead power cables crossing at the bridge have clearances of 80 feet.

Pascagoula, a privately dredged canal, with a reported controlling depth of about 6 feet in 1982, leads from Pascagoula River through **Marsh Lake** to West Pascagoula River. The canal is unmarked.

About 2.5 miles north of the U.S. Route 90 highway bridge at Pascagoula, a cutoff leads from Pascagoula River through **Bayou Chemise** and **West Pascagoula River** to Mississippi Sound. It is marked by a daybeacon at its east entrance and a daybeacon in Bayou Chemise. The controlling depth is about 7 feet. An overhead power cable crossing Bayou Chemise has a clearance of 80 feet. West Pascagoula River is crossed about 0.8 mile above the mouth by a CSX bridge with a fixed span with a clearance of 7 feet, and about 1 mile from the mouth by U.S. Route 90 highway bridge with a fixed span with a clearance of 13 feet. Overhead power cables just above and 1.1 miles above the highway bridge have clearances of 33 and 80 feet, respectively.

238) In 1986, unmarked pilings extending 2 feet above water were reported to be at the mouth of West Pascagoula River, in about 30°21'18"N., 88°36'06"W.

Mary Walker Bayou enters West Pascagoula River about 0.2 mile north of the highway bridge. Several marinas are along the south side of the bayou and on the west side of West Pascagoula River.

(240)

Biloxi

(241) **Dog Keys Pass** forms a connection between Mississippi Sound and the Gulf at the west end of Horn Island. The pass has a depth of about 13 feet over the bar and is used primarily by local fishing craft. Most vessels entering from the Gulf prefer to use Ship or Horn Island Pass over Dog Keys Pass. The pass is marked by lighted and unlighted buoys.

(242)

COLREGS Demarcation Lines

(243) The lines established for Dog Keys Pass are described in **33 CFR 80.815**, chapter 2.

(244) Little Dog Keys Pass, about 2.5 miles west of Dog Keys Pass, is used by sport fishermen and some fishing craft. Depths of 14 feet or more were reported available in the pass, and it was often used in preference to Dog Keys Pass.

(245) **Biloxi** is a city on a peninsula jutting east into Mississippi Sound about 40 miles west of Mobile Bay

and 11 miles east of Gulfport. It is an important sport fishing center and resort with a large commercial seafood industry. Hundreds of shrimp and oyster boats operate from the port in the season. Numerous hotels and casinos are along the east part of the waterfront on the sound and in Back Bay of Biloxi. Keesler Air Force Base and a large veterans hospital are at the west end of the city. The waterfront on the sound is protected by **Deer Island**. The port is accessible from the Gulf through Dog Keys Pass and Little Dog Keys Pass and from the Intracoastal Waterway, which passes through Mississippi Sound about 6 miles south of the city. (See chapter 12 for Intracoastal Waterway.) Principal shipments through the port are seafood, coal, building materials, wood products, petroleum products, machinery, iron and steel.

(246)

Prominent features

The tank and radio tower at Ocean Springs, five tanks at **Keesler Field**, the Biloxi Lighthouse and several large hotels in and west of Biloxi are prominent from offshore. At night the aviation light at Keesler Field is conspicuous. **Biloxi Light** (30°23'42"N., 88°54'06"W.), 61 feet above the water, is shown from a 53-foot white conical tower with black balustrade on the shore in the southwest part of Biloxi proper.

(248)

Shipping safety fairways

Vessels bound for Biloxi via Dog Keys Pass should approach the pass through the Biloxi Safety Fairway. (See **33 CFR 166.100** through **166.200**, Chapter 2.)

250

Channels

Two channels connect Mississippi Sound and the Biloxi waterfront and Biloxi Bay. Biloxi East Channel, a dredged channel, leads from a point in Mississippi Sound 2.5 miles north of Dog Keys Pass, through Biloxi Bay east of Deer Island, to U.S. Route 90 highway bridge. The channel is marked by lights and daybeacons. Biloxi Channel, a dredged channel, leads north from Mississippi Sound west of Deer Island, thence east along the south Biloxi waterfront to a junction with Biloxi East Channel at a point about 1 mile southeast of U.S. Route 90 highway bridge. The channel is marked by lights and daybeacons.

A privately dredged side channel leads northeast from Biloxi East Channel, about 1 mile southeast of U.S. Route 90 highway bridge, to a small-craft basin at **Ocean Springs**. The channel is marked by a light.

(253) A dredged channel leads from the junction with Biloxi East Channel at the U.S. Route 90 highway bridge through Back Bay of Biloxi and Big Lake to the entrance to Industrial Seaway. The channel is marked by lights and daybeacons.

A channel leads north from Biloxi East Channel, about 0.5 mile above the U.S. Route 90 highway bridge, to the entrance of **Old Fort Bayou**, just north of **Fort**

Point. The natural channel in the bayou is marked by private daybeacons for about 1.2 miles above Fort Point.

A dredged branch channel leads southwest from the dredged channel in Back Bay of Biloxi, about 0.2 mile above U.S. Route 90 highway bridge, to a turning basin in **Ott Bayou**; daybeacons mark the channel. The East Harrison County Canal Channel, an unmarked dredged channel 0.8 mile above the U.S. Route 90 highway bridge, leads south from the channel to a turning basin.

(256)

Anchorages

of Deer Island or in Back Bay of Biloxi where there is excellent anchorage in depths of 5 to 15 feet, soft bottom, and good protection from all directions. A general anchorage for unmanned barges and scows is in Mississippi Sound south of Biloxi. (See 33 CFR 110.1 and 110.194a, chapter 2, for limits and regulations.)

(258)

Dangers

A visible wreck was reported about 1.5 miles southeast of Biloxi Channel Light 2, in 30°20.2'N., 88°53.6'W.

(260)

Weather

(261) Biloxi winters are mild and moist, while summers are hot and humid. The Gulf of America is the primary moisture source and moderating influence. Severe weather is usually in the form of tropical cyclones or thunderstorms with damaging winds. Large hail and tornado outbreaks are usually confined to the interior, although there are occasional reports of waterspouts and tornadoes throughout the year. During winter, freezing precipitation and temperatures are much more frequent inland than at Biloxi.

During winter, there are usually three types of weather problems that affect navigation in this area. Lowpressure systems sometimes develop off Texas and move northeast across the area. These systems can bring drizzle, fog and thunderstorms. Polar outbreaks usually bring cool, dry weather. The most impressive cold front is one that accompanies continental polar air. It is rare, except in a decayed state, but if active can bring extremely cold temperatures and snow. Usually there is little weather associated with it except for gusty winds. Most of the cold fronts are of the maritime variety that push in from west accompanied by widespread precipitation and often squall lines with thunderstorms. Advection fog creates a third winter weather problem in the Biloxi area. It is caused by the coastal waters being cooled by cold river discharges. When warm air flows across these waters a fog blanket forms. Visibilities may improve somewhat by midday, with fog returning before evening. A less common problem is the formation of a fog bank if a south flow persists. These banks can fluctuate between the shore and offshore for a period of several days.

(265)

		Horizontal	Wasting Division	
Name•Description•Type	Location	Clearance (feet)	Vertical Clearance at Mean High Water (feet)	Information
Back Bay of Biloxi				
US Route 90 bridge (fixed)	30°24'20"N., 88°50'45"W.	150	95	Note 2
CSX Railroad bridge (swing)	30°24'31"N., 88°51'10"W.	132	14	Notes 3 and 4
Overhead power cable	30°24'29"N., 88°51'03"W.			Submerged at the draw of railroad bridge. Reported missing in 1987.
Overhead power cable	30°25'15"N., 88°53'25"W.	97		
Interstate 110 bridge (bascule)	30°25'21"N., 88°53'40"W.	132	60 (center)	Note 1
Overhead power cable	30°25'24"N., 88°56'25"W.	40		84 feet across the main channel
Popps Ferry Road bridge (bascule)	30°24'50"N., 88°58'35"W.	180	25	Notes 1 and 5
Industrial Seaway				
Overhead power cables	30°25'21"N., 89°01'23"W.	81		
Overhead power cable	30°25'27"N., 89°01'49"W.	97		
Wilkes Bridge (bascule)	30°25'29"N., 89°01'51"W.	132	35	
Overhead power cable	30°25'52"N., 89°05'00"W.	80		
Old Fort Bayou				
Washington Avenue bridge (bascule)	30°25'09"N., 88°49'40"W.	85	20	25 feet at center
Overhead cable	30°25'10"N., 88°49'42"W.	73		
Bernard Bayou				
Overhead power cable	30°24'44"N., 89°00'42"W.	80		
Highway Bridge (fixed)	30°24'19"N., 89°01'40"W.	80	28	

Note 1 - See 33 CFR 117.1 through 117.49 and 117.675, chapter 2, for drawbridge regulations.

Note 2 – The swing span of a former highway bridge just above the US Route 90 bridge has been removed; approach structures remain and are used for public recreation.

Note 3 – The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KQ-7197

Note 4 - The clearances listed are for the west side of the swing span. The east side is not dredged and is obstructed by piles awash at low water.

Note 5 – The bridgetender monitors VHF-FM channel 16; call sign WXZ-590

High brings warm, moist air to this coast. This air mass is responsible for the thunderstorms that develop almost daily. They usually form inland during the day and, if conditions are right, move toward the coast during the afternoon or early evening, sometimes bringing winds gusting to 30 knots or more. If the air mass is unstable, nocturnal thunderstorms may develop offshore after midnight and intensify to a peak just before sunrise. The most severe thunderstorms to affect Biloxi are those that move southwest from inland areas northeast of the city. They often form late in the afternoon and bring strong winds.

November. Usually one passes within 500 miles of Biloxi each year, on average, but a direct hit is likely once every 10 years, on average. In September 1979, hurricane Frederic generated sustained winds of 61 mph and gusts to 98 mph at Biloxi. During Camille in August 1969, storm tides between Biloxi and Gulfport reached 20 feet in some spots.

(266)

Pilotage, Biloxi

(267) See Pilotage, Gulfport, indexed as such, later this chapter.

(268)

Towage

The nearest tugs are based at Gulfport.

(270)

Quarantine, customs, immigration and agricultural quarantine

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

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

(273) The city has three hospitals and numerous clinics.

(274)

Harbor regulations

(275) The harbor is controlled by the Biloxi Port Commission, headed by a Port Director, who establishes regulations. A **harbormaster** enforces the regulations and assigns berths at the small-craft harbor.

(276)

Wharves

(277) The south waterfront has many docks. Some of these are private facilities for fishing companies, but several are open to the public. The Biloxi small-craft harbor is a basin protected by breakwaters and located north of the west end of Deer Island. Private lights mark the entrance



to the harbor. In 1982, the reported controlling depth in the basin and the channel leading to it was 8 feet.

(278)

Supplies

Gasoline, diesel fuel, water, ice, provisions and marine supplies are available at Biloxi.

(280)

Repairs

Several shipyards are located on the waterfront and in Back Bay of Biloxi. A yard on Back Bay of Biloxi, about 0.4 mile east of Rhodes Point, has a 60-ton mobile hoist. Boats up to 140 feet are built at Biloxi.

(282)

Small-craft facilities

Berths, electricity, gasoline, diesel fuel, water, ice, launching ramps and marine supplies are available, and hull, engine and electronic repairs can be made at small-craft facilities at Biloxi proper, Ocean Springs and Back Bay of Biloxi.

(284)

Communications

U.S. Route 90 passes through the city, and State Route 15 leads north to the central part of the state. Interstate Route 110 serves Biloxi by joining U.S. Route 90 to Interstate Route 110. Scheduled airline service is available at Gulfport-Biloxi International Airport, about 8 miles

west of the city. Bus lines and several motor freight lines serve the city.

(286) **Biloxi River** empties into the northeast side of Big Lake and is reported navigable for a draft of 6 feet for 6 miles and for a draft of 3 feet for an additional 5 miles.

about 1 mile north of Big Lake from the northeast. The river is reported navigable for drafts up to 5 feet to **New Bridge**, about 7.2 miles above the mouth, and for drafts of 3 feet for an additional 6 miles.

Bernard Bayou empties into Big Lake from the west. A dredged channel leads from the entrance at Shallow Point in Big Lake to a junction with Industrial Seaway at Gulfport Lake, north-northeast of Gulfport-Biloxi Regional Airport. Overhead power cables cross the bayou about 0.5 mile above the mouth and have a clearance of 80 feet. The highway bridge at Handsboro has a fixed span with a clearance of 28 feet.

(289) Small-craft facilities about 1.5 and 1.8 miles above the mouth of the bayou can provide berths with electricity, gasoline, water, ice, a launching ramp, open and dry storage, pump-out station, marine supplies and complete engine and hull repairs. A 110-foot marine railway and a 70-ton fixed lift are also available.

(290) Industrial Seaway, a canal privately dredged by the Harrison County Development Commission, affords access to industrial areas along the seaway and Bernard Bayou north of Gulfport. The canal leads from a junction

with the dredged channel section at the west end of Big Lake through a landcut from Shallow Point on the north side of the entrance to Bernard Bayou for about 2.5 miles, thence through Bernard Bayou and Gulfport Lake for about another 2 miles to a turning basin in the vicinity of Three Rivers Road. The channel is marked by lights. Plans provide for the extension of the seaway farther west to Wolf River and Bay St. Louis at a later date. Pilots for the seaway are available at Gulfport.

power cables crossing the seaway have a minimum clearance of 81 feet. An overhead power cable about 4.5 miles west of Shallow Point has a clearance of 80 feet.

Beauvoir, part of the city of Biloxi about 6 miles west of Biloxi Bay, has a large domed convention center and a tank that are prominent. A privately dredged channel leads north from Mississippi Sound to a yacht basin in front of the hotel. This area has suffered significant hurricane damage; local knowledge is advised.

Mariners are advised to use caution while transiting between Biloxi Channel and Beauvoir due to various wrecks, oyster reefs and possible shoaling.

(294)

Gulfport

Ship Island Pass lies immediately west of Ship Island, about 50 miles west of Mobile Bay entrance and 11 miles north of the northernmost of the Chandeleur Islands. The pass is approached from the Gulf through a dredged channel about 6 miles long and is marked by lighted buoys.

Gulfport, the seat of Harrison County, is a seaport and tourist center. It is about midway between Mobile and New Orleans by rail, and on U.S. Route 49 and 90 highways. Fishing, steel products, construction of barges and heavy cranes, chemicals, canning, glass making and aluminum are some of the city's important industries. Waterborne commerce includes frozen meats and poultry, bananas, shell, sisal and jute, fertilizers, chemicals, seafood, flour, woodpulp and products, lumber, general and containerized cargo and scrap iron. A cotton compress is at Gulfport.

(298) **Gulfport Harbor Basin** is a state-owned and controlled harbor about 10 miles northwest of Ship Island Pass. The rectangular deepwater ship basin is between two moles at the head of Gulfport Channel.

,9) _

Prominent features

(300) On a clear day vessels from the east, bound for Ship Island Pass, usually sight the light on a skeleton tower and Fort Massachusetts, a semicircular brick fort with sodded parapet, located near the west end of Ship Island.

gantry cranes and 150-foot tall silos at the end of the port's western mole are the most conspicuous landmarks.

Various tall buildings and a few water tanks in Gulfport are also visible. At night the occulting red lights on the tops of the three gantry cranes at the port and several radio towers can be seen from the sound. An aviation light is shown from a 62-foot tower at the municipal airport.

(302) Ship Island Light (30°12'45"N., 88°57'59"W.), 82 feet above the water, is shown from a skeleton tower on a concrete block. The light is on the same structure as Ship Island Range Rear Light.

Shipping Safety Fairways

Vessels should approach Ship Island Pass and Gulfport through the prescribed Safety Fairways. (See 33 CFR 166.100 through 166.200, chapter 2.)

COLREGS Demarcation Lines

(306) The lines established for Ship Island Pass are described in 33 CFR 80.815, chapter 2.

Channels

(303)

(307)

(308) Ship Island Bar Channel leads for 10 miles northwest from the Gulf in a dredged cut to Ship Island Pass; it is marked by lighted buoys. Gulfport Ship Channel leads 10 miles northwest through a dredged cut from the pass through Mississippi Sound to Gulfport Harbor Basin; it is marked by lighted ranges, lights and lighted and unlighted buoys. Federal project depths are 38 feet for Ship Island Bar Channel, 36 feet for Gulfport Ship Channel, and 32 to 36 feet for the Anchorage Basin. For detailed channel information and minimum depths as reported by the U.S. Army Corps of Engineers (USACE), use NOAA Electronic Navigational Charts. Surveys and channel condition reports are available through a USACE hydrographic survey website listed in Appendix A.

A dredged commercial small-craft harbor and entrance channel are just west of Gulfport Harbor Basin. The entrance channel leads northwest from Gulfport Ship Channel for about 1.7 miles to the small-craft harbor. The channel is marked by daybeacons, lights and an unlighted buoy.

Anchorages

(310)

Large vessels can anchor outside the sound anywhere west of a line between the northern end of Chandeleur Islands and Ship Island Light and have rather smooth water. Deep-draft vessels generally anchor within a 2-mile radius of Gulfport Ship Channel Lighted Buoy GP in depths of about 36 feet.

Ship Island Harbor, north of Ship Island, is one of the best natural harbors on the Gulf Coast and is easily accessible at all times for vessels with drafts up to 20 feet, but there is swinging room for only one large vessel. Depths in the harbor range from about 20 to 30 feet with a soft bottom.

(313)

Dangers

(314) Ship Island was cut into two parts by Hurricane Camille in August 1969. The water between the existing parts is shoal with depths of 2 to 5 feet.

Point is moving west and is unmarked. Mariners should use caution if passing between the shoal and the edge of Gulfport entrance channel.

(316)

Currents

(317) Northeast to south winds raise the level of the water, and southwest to north winds lower the level. A continued norther makes a current on Ship Island Bar of as much as 3 knots. Current velocities up to 1.5 knots have been measured in Ship Island Pass during normal weather.

(318)

Weather

Gulfport, located on Mississippi Sound, is sheltered (319) somewhat from temperature extremes of winter and summer by these waters and the Gulf of America. At the port, summer temperatures climb to 90°F or above on about 68 days, while winter readings fall to freezing or below on just 17 days, on average. The average annual temperature for Gulfport is 68.2°F with an average high of 77.3°F and an average low of 58.6°F. July is the warmest month within an average temperature of 82.3°F and January is the coolest with an average temperature of 51.9°F. The warmest temperature on record is 103°F recorded in July 1980 and the coolest temperature on record is 4°F recorded in January 1985. Each month from June through September has recorded temperatures of 100°F or greater while each month, November through March has recorded temperatures below freezing. Precipitation is frequent year round, but most likely during summer when showers and thunderstorms are numerous. Twenty-eight percent of the annual rainfall occurs during the summer months of June, July and August. The average annual precipitation at Gulfport is 63.77 inches. The wettest month is July, averaging 7.22 inches and October, the driest, averaging 2.92 inches. The wettest 24-hour period occurred in October 1967 when 10.7 inches accumulated. Extreme winds, both sustained and gusts, are most often associated with tropical cyclones and thunderstorms. However, extratropical cyclones and fronts produce a greater frequency of windspeeds in the 17- to 33-knot range (3 to 5 percent) from February through April. Visibilities are restricted mainly in precipitation and fog. Fog is most likely during winter and spring; visibilities fall below 0.5 mile on about 4 to 7 days per month from November through April.

The hurricane season represents a serious threat to marine activities at Gulfport. Between 1998 and 2018, there have been nine tropical cyclones that have come within 60 miles of Gulfport. During the 21st century, through the 2018 hurricane season, tropical cyclone storm tides have exceeded 8 feet three times along this section

of the coast; during Katrina, a 28-foot storm tide was produced. The hurricane season extends from late May through early November, in general, while September is the major threat month. Most storms approach Gulfport from southeast, south, and southwest. Gulfport Harbor is not considered a hurricane haven. There is an absence of sheltered facilities and anchorages for deep-draft vessels, and there is the danger of severe shoaling in the narrow Gulfport Channel. It is recommended that deep-draft vessels, if unable to leave the region entirely, anchor in the shallow waters adjacent to the sand barrier islands about 10 miles offshore. Shallow-draft vessels, if not removed from the water, should seek shelter in the Back Bay of Biloxi and the creeks, bayous and rivers leading inland.

Pilotage, Gulfport

Pilotage is compulsory for all foreign vessels and (322)U.S. vessels over 250 net registered tons under register in the foreign trade. Pilotage is optional for American vessels laden with coastwise cargo not destined for foreign ports. Pilotage is available from Gulfport Pilots Association, Inc., 2300 Twentieth Street, Gulfport MS 39501, 228-863-6559 (Administrative only), FAX 228-863-6952. The Association services vessels bound for or from the state Port at Gulfport via Gulfport Ship Channel; also small vessels transiting Biloxi Channel when requested. Pilots board vessels in the vicinity of Gulfport Ship Channel Lighted Buoy GP (30°07'10"N., 88°52'40"W.) to 2 miles south of the west end of Ship Island. Buoy GP is about 18 miles southeast of Gulfport Harbor or about 8 miles southeast of west end of Ship Island. The aluminum hull pilot boats have a grey or white hull with white superstructure with PILOT clearly displayed in black letters on the superstructure. The pilot boat monitors VHF-FM channels 16 and 10; works on channel 10. For boarding, the pilots request that the pilot ladder be rigged 2 meters (about 6 feet) above the water on the lee side and dead slow speed. The Mississippi State Port Authority at Gulfport monitors VHF-FM channels 16 and 10 (voice call "KJC-768 State Port"), 24-hours; works on channel 10. Arrangements for pilots may be made through ships' agents. A 24-hour advanced notice of ETA is requested; then at minus 12 hours, then at minus 2 hours if practical; minimum initial request not less than minus 2 hours of ETD for an outbound ship, and not less than 4 hours of ETA for an inbound ship.

(323) Local Pilotage Regulations, Gulfport

(324) The following regulations have been issued by the Mississippi State Port Authority at Gulfport.

It shall be unlawful for any vessel of over 250 tons net registered tonnage to enter the harbor or passes leading thereto without being piloted and under the direction of a licensed pilot, and all such vessels shall be subject to compulsory pilotage, except American vessels laden with coastwise cargo not destined for foreign ports.

(321)

(326) Any vessel which by reason of its size or draft would be unable to leave the deep water channel to avoid collision with an outbound or inbound ocean-going vessel shall be subject to compulsory pilotage.

or other dangerous cargoes shall be navigated under the direction of a licensed pilot. Vessels navigated under the direction of a pilot shall have preferential use of the Gulfport Harbor and Ship Channel.

(328) All vessels shall contact the Port Authority on VHF-FM channel 16 to obtain permission to navigate the Gulfport Harbor and Ship Channel. The Port Authority may at its discretion impose additional requirements in the event of severe weather or other extraordinary circumstances.

(329) Towage

(331)

(330) A tug of 2,250 hp and a tug of 3,000 hp are based at Gulfport. They monitor VHF-FM channel 16, use channel 10 as a working frequency, and have portable radiotelephone equipment to communicate with the pilots. Arrangements for tugs are usually made in advance by ships' agents or through Gulfport Towing, 228–864–0171 or email Gulfport@enbisso.com. Vessels usually enter or leave under their own power and use tugs only for docking, undocking and shifting berths.

Quarantine, customs, immigration and agricultural quarantine

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

(333) **Quarantine** laws are enforced in accordance with regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.) There are hospitals and clinics in Gulfport.

(334) Gulfport is a customs port of entry.

Coast Guard

Coast Guard patrol boats moor on the west side of the Bert Jones Yacht Basin at Gulfport.

3/)

Harbor regulations
Gulfport Harbor

Gulfport Harbor is administered and controlled by the Mississippi State Port Authority at Gulfport. The Port Director is in charge of all operations and assigns berths. Berthing arrangements can be made through the Director of Operations at 228-865-4318 or online at www.shipmspa.com. Mississippi State Port Authority (MSPA) line handlers are required for all vessel arrivals/departures; at least a 2-hour advance notice is required by contacting the radio operator on VHF-FM channels 16 or 10; or by telephone at 228-865-4323, 228-323-1539, 228-323-0299 or 228-323-0314.

Speed limit

(340) All craft passing other vessels, boats, barges, scows, etc., in motion, moored or anchored, shall slow down and take every precaution to avoid damage.

Wharves

(341)

ores (110 acres of open storage and 400,000 square feet of covered warehouse storage.) The open storage areas, used principally for dry container and refrigerated container storage, are on the North Harbor and West Pier. A specialized ramp for roll-on/roll-off shallow draft (drawing less than 20 feet) vessels, and one 100-ton mobile harbor crane and three ship-to-shore gantry cranes are available for handling cargo. The port facilities have rail/highway connections and water connections.

with a dry pipe sprinkler system and constructed of concrete and metal. Shed 50 has a total storage area of 230,000 square feet. Shed 53 has 60,240 square feet and is currently leased to McDermott.

(344)

East Pier Ter	East Pier Terminal Berths					
Berth 1	700 feet (length overall)	36 feet alongside				
Berth 2	767 feet (length overall)	36 feet alongside				
Berth 3	767 feet (length overall)	36 feet alongside				

(345) **West Pier Terminal** has two warehouses: Shed 16 and the West Pier Terminal Warehouse; leased by Dole, Chiquita and Crowley.

(346)

West Pier Terminal Berths						
Berth 1	700 feet (length overall)	36 feet alongside				
Berth 2	600 feet (length overall)	36 feet alongside				
Berth 3	600 feet (length overall)	36 feet alongside				
Berth 4	550 feet (length overall)	36 feet alongside				
Berth 5	550 feet (length overall)	36 feet alongside				
Berth 6	740 feet (length overall)	36 feet alongside				
Berth 7/catwalk	1,100 feet (length overall)	36 feet alongside				
RoRo Berth	767 feet (length overall)	about 20 feet alongside				

Supplies

(347)

(348) Blended fuel is available by barge. Fuel oil is available at several commercial wharves by truck. Freshwater is piped to all berths. Marine supplies of all kinds are available.

(349) Repairs

(350) Gulfport has no shipyard facilities. Above- and below-the-waterline repairs are available.

(351)

Small-craft facilities

The Bert Jones Yacht Basin, in the yacht harbor close east of the Gulfport Harbor Basin, has facilities for yachts and party fishing vessels. Berths, electricity, gasoline, ice, water, pump out, launching ramps and marine supplies are available. In 1982, the reported controlling depth in the privately dredged channel to the basin was 7 feet. A channel **dockmaster** is on duty at the yacht basin 24 hours/day.

(353)

Communications

(354) Gulfport has regular steamer connections with Europe, South and Central America and Far East ports. Banana ships call frequently at the port. The port is served by a Class I railway. Bus and motor freight lines connect the city with all points. The Gulfport Municipal Airport, about 3 miles northeast of the port, has regular airline service.

(355)

Cat Island Channel to Bayou Boudreau

(356) Cat Island Channel and its extension South Pass, lying between Cat Island and Isle au Pitre, form the most west connection between the Gulf and Mississippi Sound. The marked channel has a depth of about 12 feet, but leads to lesser depths in the sound. The passage is little used, except by small local craft; the chart is the best guide. Cat Island is wooded nearly its whole length east and west. The east shore of the island extends in a south-southwest direction for 4.5 miles with Raccoon Spit off the northernmost point, and low and narrow South Spit and Phoenix Spit on the south. A light is off Phoenix Spit.

Isle au Pitre, on the south side of Cat Island Channel, is low and marshy with scattered clumps of bushes.

The Intracoastal Waterway leads through the shoals in the west part of Mississippi Sound about 2 miles northwest of Cat Island. (See chapter 12 for Intracoastal Waterway.)

the shoals extending across the west end of Mississippi Sound; natural depths are 7 to 18 feet. The pass is south of Tail of the Square Handkerchief Shoal and Square Handkerchief Shoal and is frequently used by tugs and barges. The channel is marked by lights and daybeacons. Caution should be exercised when navigating this channel as it is subject to change. In 1966, a depth of 4 feet was reported about 0.3 mile west-southwest of Merrill Shell Bank Light. Grand Pass, about 7 miles south of Merrill Shell Bank Light, connects Mississippi Sound with Oyster Bay.

about 2.5 miles west of Gulfport Harbor. There is some industry in commercial fishing and candy making. Gulf Park College, at the east end of the city, has a 1,000-foot pier. The buildings at the college and a white church near the waterfront are prominent. The Long Beach small-craft

harbor, formed by a long mole and jetty west of the college pier, has berths with water and electricity, ice and launching ramps. The entrance to the small-craft harbor is marked by private lights and daybeacons. In 1982, the reported controlling depth in the channel to the basin was 6 feet. In 1987, a pile of rocks was reported obstructing the entrance to the harbor in about 30°20'31"N., 89°08'32"W. An unmarked visible wreck was about 1 mile southeast of the harbor entrance in about 30°20'12"N., 89°07'30"W. U.S. Route 90 highway passes through the city. Clinics and medical service are available. Buses serve the city.

(361) Pass Christian is a city and summer resort 8 miles west of Gulfport on the north shore of Mississippi Sound. A dredged entrance channel leads from Mississippi Sound to a harbor formed by two moles and protected from the south by two breakwaters extending from the moles. A light marks the seaward end of the east breakwater. The harbor entrance can be approached from the east or southwest; both approaches are marked by lights. Sunken wrecks are in the harbor approaches. A large white church just east of the harbor is prominent.

Pass Christian Yacht Club is at the outer end of the east mole. Fishing vessels unload at the bulkhead of the City Wharf on the east mole. Berths, gasoline, diesel fuel, water, electricity, ice and launching ramps are available in the harbor. The **harbormaster** assigns berths in the harbor and has an office on the west mole.

(363) There is some industry in fishing and garment making. U.S. Route 90 highway passes through the city. Clinics and medical services are available. Buses serve the city.

Henderson Point is at the west extremity of Pass Christian and on the east side of the entrance to St. Louis Bay. Just north of the point, and between the bridges over the bay, is a small bayou that is connected to Mallini Bayou. A marina is on the north side of the entrance. In 2002, a reported depth of 3 feet could be carried to the marina. An obstruction covered about 3 feet was reported in about 30°18'46"N., 89°17'37"W.; caution is advised. Berths, electricity, gasoline, diesel fuel, water, ice, pumpout station, a launching ramp, dry storage and marine supplies are available at the marina. Engine repairs can be made. Above the marina the channel is crossed by several fixed highway bridges with a minimum width of 10 feet and clearance of 4 feet.

In 1985, a sunken wreck was reported about 0.5 mile southeast of Henderson Point in about 30°17'42"N., 89°16'54"W.

of Mississippi Sound, 11 miles west of Gulfport. Depths in the bay vary from 4 to 7 feet and decrease gradually toward the shore. The bottom is soft. An unmarked submerged wreck, covered 5 feet, is southeast of the entrance to the bay about 1.2 miles south of Henderson Point and about 0.4 mile north of Square Handkerchief Shoal. Two bridges cross the entrance to St. Louis Bay, the first, CSX bridge, has a swing span with a clearance of 13 feet through the west draw. The bridgetender monitors

VHF-FM channel 16 and works on channel 13; call sign KUF-721. (See **33 CFR 117.1** through **117.49**, chapter 2, for drawbridge regulations.) And the second, the fourlane U.S. Route 90 highway bridge has a fixed span with a clearance of 85 feet.

St. Louis Bay, is used by small craft as a harbor of refuge during minor storms. The Harrison County Development Commission has dredged a channel from the bay through Bayou Portage to a dredged slip that extends about 0.8 mile south-southeast to Pass Christian. Lights, buoys and daybeacons mark the channel. A bascule bridge about 2 miles above the mouth of the bayou has a clearance of 29 feet. An overhead power cable crossing just east of the bridge has a clearance of 48 feet. A marina on the north side of the bayou, across from the dredged slip, has berths, electricity, launching ramp, wet and dry storage, water and ice available.

(368) Wolf River empties into the east side of St. Louis Bay just above Bayou Portage. A dredged entrance channel leads north from a junction with Bayou Portage Channel for 1.6 miles to the mouth of the river. The channel is marked by a daybeacon, a light and a lighted buoy.

69) **De Lisle**, a small village on **De Lisle Bayou** about 1.4 miles above the mouth of the Wolf River, has a fish camp at which berths and ice are available. A natural launching ramp and gasoline are available nearby. The reported controlling depth from the Wolf River to the yard was about 5½ feet in 1982; local knowledge is advised.

near De Lisle has a fixed span with a clearance of 28 feet. Overhead power cables at the bridge have a least clearance of 73 feet. A fixed highway bridge about 6.8 miles above the river mouth has a clearance of 16 feet. An overhead power cable about 0.4 mile west of the bridge has a clearance of 83 feet.

(371) The dome of a private school at **Shell Beach**, about 3 miles west of De Lisle, is prominent from seaward.

Jourdan River empties into the west side of St. Louis Bay. A dredged channel leads west in St. Louis Bay for 1.7 miles above the mouth of the river. A marina on **Joes Bayou**, just inside the river entrance, has berths, electricity, water, ice, a launching ramp and wet storage available.

Watts Bayou empties into Jourdan River about 1 mile above the latter's mouth. In 1982, the reported controlling depth in the bayou was about 5 feet; local knowledge is advised. A boatyard on the south side of the Jourdan River, between Joes Bayou and Watts Bayou, has a 50-ton lift for boat storage or hull, engine and electronic repairs.

(374) **Edwards Bayou** flows into Watts Bayou at the mouth. In 2002, the unmarked channel leading to the marina about a mile above the mouth had a reported controlling depth of about 5 feet. Berths, electricity, gasoline, diesel fuel, water, ice, pump-out station, a launching ramp and marine supplies are available. Craft

to 30 feet can be hauled out on a trailer for hull, engine and electronic repairs or covered storage.

(375) **Bayou La Croix** enters Jourdan River from the west about 2.9 miles above the mouth. State Route 603 highway bridge crossing the bayou about 1.6 miles above the mouth has a 38-foot fixed span with a clearance of 12 feet. Overhead power cables on either side of the bridge have a clearance of 40 feet.

Bay St. Louis is a city and summer resort on the west side of St. Louis Bay. A depth of 7 feet can be carried to within 0.3 mile of the town. The city has a hospital and several clinics. The Class I railroad has freight service, and through bus service is available on U.S. Route 90 highway, which passes through the city.

The small-craft harbor of Bay and Waveland Yacht Club about 0.4 mile northwest of U.S. Route 90 highway bridge is protected by two moles. In 1982, a reported depth of 4 feet could be taken to the harbor. The harbor facilities, including berths and gasoline, are available to club members and friends.

empties into Mississippi Sound 7 miles southwest of St. Louis Bay. The bayou is entered from the sound through a dredged channel to a turning basin just inside the mouth, thence continues for about 1.6 miles to a second turning basin, thence about 0.1 mile to the head of the project. The channel is marked by lights and daybeacons to the mouth of the bayou. Diesel fuel, water and ice are available at the fuel dock. Berths, gasoline, pump-out station, wet and dry storage, marine supplies, a launching ramp and an 8-ton mobile hoist that can handle craft for hull and minor engine repairs are available at the marina.

Boudreau from the south part of the extreme west end of Mississippi Sound. The channels are little used. **Bayou Boudreau** is a shallow body of water enclosed by irregularly shaped, low, swampy islands and other shallow bays.

(380)

Chandeleur Sound to Black Bay

of Mississippi Sound and north of the Mississippi River
Delta; no clear line of demarcation lies between them—
Chandeleur is the north of the two sounds.

Chandeleur Islands, forming the east boundary of Chandeleur Sound, comprise a narrow, crescent-shaped chain of low islands starting 15 miles south of Ship Island and continuing in a general south-by-west direction for a distance of 20 miles. Southwest from these islands are Curlew Island, Grand Gosier Islands and Breton Islands. The Breton Islands mark the east limit of Breton Sound. Chandeleur Sound offers smoother water than the passage east of the islands to shallow-draft vessels bound from Mississippi Sound to Mississippi River.

North Islands, Freemason Island, New Harbor Islands and Old Harbor Islands Shoal are on the east

side of Chandeleur Sound. Only fishermen and trappers frequent these, which are separated from each other by shallow unmarked channels. Protected anchorage for small boats in stormy weather can be found in **Shoalwater Bay**, **Smack Channel** and other passages.

(384) An unmarked sunken wreck is about 1.9 miles south-southwest of Old Harbor Island Shoal, in about 29°42.5'N., 89°03.0'W.

(385) Chandeleur Islands, Curlew Island, Grand Gosier Islands, Breton Islands, North Islands, Freemason Islands, New Harbor Islands and Old Harbor Island Shoal lie within the **Breton Island Wildlife Refuge** and are subject to the rules and regulations prescribed by the U.S. Department of Interior.

Ostrica Canal extends north from the Mississippi (386) River at the village of **Ostrica** about 25.5 miles above Head of Passes. The canal, together with channels through Bayou Tortillon and Quarantine Bay, affords passage to Breton Sound. The lock at the south end of Ostrica Canal is 247 feet long and 40 feet wide with a depth of 10 feet over the sills. The lock operates 24 hours a day. Red and green traffic lights at each end of the lock should be obeyed by all vessels waiting to enter the lock. The lock foreman can be contacted on VHF-FM channel 16 and uses channel 10 as a working frequency. In 1994, the controlling depth was 4½ feet from the Mississippi River to the lock, thence 4 feet from the lock through Quarantine Bay to Light 16. The channel through Quarantine Bay is marked by private lights and buoys. A cluster of partially submerged pilings is reported in 29°25'15"N., 89°27'00"W., about 1 mile east of the entrance to Quarantine Bay channel from Breton Sound.

The west shore of Breton Sound consists of a network of marshy islands separated by shallow bayous and bays. The land is so low that extremely high tides will submerge it in some sections nearly to the banks of the Mississippi River. Of the several shallow canals leading from the south part of Breton Sound to the river bank, only the Ostrica Canal and Baptiste Collette Bayou lead into the river. These canals are used by the large fleet of oyster boats operating in the sound to deliver their catch to canneries and packing houses on the river bank or to highways for trucking to New Orleans, and by oil companies for the development of oil fields. Oil drilling equipment will be found throughout the area. There are numerous unlighted oil well structures in Chandeleur and Breton Sounds and the waters to the west.

(388) The waterways connecting Lake Borgne and Chandeleur Sound via Lake Eloi are discussed under Lake Borgne.

The entrance to **Bayou Terre aux Boeufs**, on the northeast side of Black Bay, is marked by daybeacons. Local knowledge is advised. Overhead power cables crossing the waterway have a minimum clearance of 30 feet. **Delacroix** is a small settlement on the waterway about 8 miles south of Lake Borgne. There is a marine lift at Delacroix that can handle craft up to 25 feet. Gasoline, diesel fuel, water, ice and limited marine supplies may

be obtained. From Delacroix, a highway extends to Poydras on the Mississippi, and thence to New Orleans. The marshlands about **Black Bay** are used extensively for hunting, trapping and oil development. Private lights, buoys and daybeacons mark oil company channels in Black Bay.

(390)

Lake Borgne to Bayou Sauvage

Lake Borgne, the west extension of Mississippi Sound is partly separated from Mississippi Sound by Grassy Island, Half Moon (Grand) Island and Le Petit Pass Island and their outlying shoals. Between the islands and shoals are several navigable passages including St. Joe and Le Petit Passes. In 2008, Grassy Island was reported to be submerged; caution is advised. Lake Borgne is separated from Lake Pontchartrain by a low marsh through which the Rigolets and Chef Menteur Pass are the principal passages. Lake Borgne is about 23 miles in length, 5 to 10 miles in width, and 6 to 10 feet in depth. Charted and uncharted obstructions are in the lake; caution is advised. The shores of the lake are low, marshy and sparsely populated. The lake is of importance chiefly as a connecting link for the Intracoastal Waterway. (See chapter 12 for Intracoastal Waterway.) Lake Borgne is tidal, but the tides are small and greatly modified by the winds. The tidal currents through St. Joe Pass exceed velocities of 1.5 knots at times.

Wessels coming from the east generally enter Lake Borgne through St. Joe (Grand Island) Pass, which leads between Half Moon (Grand) Island and Lighthouse Point (Lower Point Clear). The channel is marked and is a portion of the Intracoastal Waterway. (See chapter 12 for Intracoastal Waterway.)

3) Le Petit Pass, between Le Petit Pass Island and Malheureux Point, is little used. In 2005, Le Petit Pass Island was reported to be submerged except at extreme low tide; caution is advised.

of Mississippi and Louisiana. A dredged channel leads from north of the Intracoastal Waterway in Lake Borgne for 1.1 miles to the mouth of the Pearl River. In 1980, the controlling depth from Lake Borgne to deeper water in the river was 6½ feet. The channel is marked by lights and daybeacons. The CSX swing bridge, with a clearance of 14 feet, crosses Pearl River at Baldwin Lodge, about a mile above the mouth; the channel is through the east draw. (See 33 CFR 117.1 through 117.59, 117.488, chapter 2, for drawbridge regulations.)

About 3.5 miles above the mouth, Pearl River joins with Little Lake Pass, which leads west to Little Lake. East Pass. at the west end of Little Lake, connects the lake and The Rigolets. A dredged channel extends from The Rigolets east-northeast through the East Pass, Little Lake and Little Lake Pass, thence up the Pearl River to a turning basin and slip at the NASA National Space

Technology Laboratory near Gainesville, about 14 miles above the mouth of Pearl River. The channel is marked by lights and daybeacons.

Port Bienville Industrial Park, a dredged slip and waterfront industrial park under development by the Hancock County Port and Harbor Commission, is entered through a privately dredged channel on the east side of the river about 1.5 miles above Little Lake Pass. The channel is marked by a light and daybeacons. Several shipyards at the park can perform complete repairs to barges to 150 tons and above-the-waterline repairs to ships at their berths using portable equipment.

U.S. Route 90 highway bridge across the Pearl River at **Pearlington**, 4 miles above the mouth, has a swing span with a clearance of 10 feet through the east draw. About 5.3 miles above this swing bridge, Interstate Route 10 fixed bridge with a clearance of 73 feet crosses the river. An overhead power cable just south of the fixed bridge has a clearance of 99 feet.

A marina just above U.S. Route 90 highway bridge has berths, electricity, gasoline, water, ice, a launching ramp and a 3-ton hoist that can haul out craft for covered dry storage.

(399) From the north side of Little Lake, just west of Little Lake Pass, a marked channel leads to **North Pass** and a junction with **West Middle River**. From North Pass an unmarked channel leads west to **East Mouth**, which connects to the mouth of the West Pearl River, thence, through **West Mouth**, to The Rigolets; about 7 feet can be carried over this route to the mouth of West Pearl River, thence about 8 feet to The Rigolets.

A highway bridge crossing **East Middle River**, a tributary of **Old Pearl River**, about 3.4 miles above Pearl River has a 45-foot fixed span with a clearance of 11 feet; an overhead power cable is at the bridge. A highway bridge crossing **Middle River**, a tributary of Old Pearl River, about 3.9 miles above Pearl River, has a fixed span with a clearance of 10 feet; an overhead power cable is at the bridge. A highway bridge crossing West Middle River about 5 miles above North Pass has a fixed span with a clearance of 10 feet; an overhead power cable is at the bridge.

West Pearl River empties through West Mouth into (401) the east end of The Rigolets. About 5 miles above the junction of East Mouth and West Mouth there is a vertical lift bridge (U.S. Route 90) with a clearance of 10 feet down and 50 feet up. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KTD-552. The overhead cable 1.9 miles above this bridge has a clearance of 55 feet. At Gauss Bluff, about 11 miles above the mouth, the twin fixed spans of Interstate Route 10 highway bridges with clearances of 35 feet cross the river. Near the town of Pearl River, 19 miles above the mouth, there are three bridges; the first two are the twin fixed spans of the Interstate Route 59 highway bridge with clearance of 35 feet. About 200 yards farther upstream, the Norfolk Southern Railroad bridge has a fixed span

with a clearance of 7 feet. The overhead power cables at the railroad bridge have clearances of 60 feet.

The Rigolets is a deep passage 7 miles long and (402)about 0.4 mile wide connecting Lake Borgne and Lake Pontchartrain. The pass is bounded by low, marshy shores. In 2005, the controlling depth was 11.2 feet. The entrance from Lake Borgne is 8 miles west of St. Joe Pass. The CSX swing bridge crosses The Rigolets about 0.4 mile north of Catfish Point in Lake Borgne and has a clearance of 11 feet; navigation is through the east draw. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KQ-7197. (See 33 CFR 117.1 through 177.49, chapter 2, for drawbridge regulations.) About a mile east of Lake Pontchartrain is U.S. Route 90 fixed highway bridge that has a clearance of 66 feet. Submerged obstructions are along the southeast side of the bridge with a least depth of 9 feet; caution is advised.

Currents

by winds. They set with great velocity through The Rigolets at times, and especially through the draws of the bridges. Velocities of 2.5 knots off Rigolets Light 5 and 3.8 knots at the railroad bridge have been observed. At the railroad bridge westerly currents set west-southwest onto the fender on the southwest side of the draw, and easterly currents set east by north onto the fender on the northeast side. The current has an average velocity of 0.6 knot.

(405) The bridge should not be approached closely until the draw is opened, and then only with caution.

Good anchorage for small craft is available in Blind Rigolets either north or south of the Intracoastal Waterway crossing. Depths of 12 feet or more are available for vessels entering Blind Rigolets via the Intracoastal Waterway. Piles cross the width of the channel approximately 300 feet south of the Chesapeake Seaboard X Transportation, Inc. (CSX) bridge, which crosses Blind Rigolets 0.3 mile north of the Intracoastal Waterway. Mariners are cautioned not to attempt passage of this bridge. An overhead power cable, 250 feet north of the bridge, has a clearance of 25 feet.

(407) **Fort Pike**, an old circular brick fort with sodded top, is just inside the west entrance to The Rigolets.

Small-craft facilities

Small-craft facilities on **Fort Pike Canal**, east of the fort, and on **Geoghegan Canal**, northeast of the fort, can provide berths, electricity, gasoline, diesel fuel, water, ice, storage, launching ramps and hull, engine and electronic repairs. The largest mobile hoist, on the northwest side of Geoghegan Canal just above the entrance, can haul out craft to 63 feet.

In 1982, the reported controlling depths were 4½ feet in Fort Pike Canal and 8 feet in Geoghegan Canal.

(403)

(411) Lake St. Catherine can be reached through Fort Pike Canal or through a natural unmarked channel in Sawmill Pass. The lake has numerous oil well structures.

Chef Menteur Pass, a connecting passage between Lake Borgne and Lake Pontchartrain, is located about 10 miles southwest of The Rigolets. The pass is about 6 miles long and 0.2 mile wide. There is a considerable range in depths in the pass with shallow water off the entrances. The pass, used by pleasure and fishing craft, is usually entered through the Intracoastal Waterway. A light marks the entrance from Lake Borgne, and another light marks the entrance from Lake Pontchartrain; two lights mark the Intracoastal Waterway crossing. An Intracoastal Waterway alignment channel crosses Chef Menteur Pass 1 mile southeast of the original Intracoastal Waterway crossing. Two swing bridges cross the Chef Menteur Pass. The Chesapeake Seaboard X Transportation, Inc. (CSX) bridge has a clearance of 10 feet. The U.S. Route 90 highway bridge, crossing 0.3 mile northwest of the railroad bridge, has a clearance of 10 feet. (See 33 CFR 117.1 Through 117.49 and 117.436, chapter 2, for drawbridge regulations.) Various obstructions with a least depth of 7 feet are just north and south of the CSX railroad bridge; caution is advised. The town of Chef Menteur is between the bridges. A large spherical tank 0.4 mile northwest of the highway bridge is conspicuous.

(413) In 2007, shoaling to 3 feet was reported across the entrance from Lake Borgne and the entrance from Lake Pontchartrain.

(414)

Small-craft facilities

(415) Several small-craft facilities are on both sides of the pass from the highway bridge north for about 1 mile. Berths, electricity, gasoline, diesel fuel, water, ice, storage, launching ramps and marine supplies are available, and hull and engine repairs can be made. The largest mobile hoist, at a boatyard about 0.9 mile northeast of the highway bridge, can handle craft to 20 tons.

about 2.7 miles west from Chef Menteur Pass about 0.3 mile northwest of the highway bridge. In 2001, depths of 13 feet were reported in the bayou. There are fish camps, marinas and a shipyard on the bayou. Several oil companies maintain marine bases on the bayou. The shipyard builds steel tugs and crew boats to 228 feet. Gasoline, diesel fuel, water, ice, launching ramps and marine supplies are available.

(417)

Bayou Bienvenue to Bayou St. Malo

(418) **Bayou Bienvenue** empties into the west side of Lake Borgne about 5 miles southwest of Chef Menteur Pass. The bayou connects Lake Borgne with the Mississippi River-Gulf Outlet Canal, thence leads west for about 6.3 miles. At the junction with the Mississippi River-Gulf

Outlet Canal, the bayou is crossed by a swing bridge/floodgate with a vertical clearance of 8 feet. The bridge is maintained in the open to navigation position. About 2 miles west of the Mississippi River-Gulf Outlet Canal, the State Route 47/Paris Road bridge has a 17-foot fixed channel span with a clearance of 3 feet. An overhead power cable with an unknown height is immediately west of the bridge. Another overhead power cable with a clearance of 60 feet crosses the bayou about 1 mile west of the Mississippi River-Gulf Outlet Canal.

Lake Borgne at Martello Castle, about 3.5 miles southsoutheast of Bayou Bienvenue. A dredged channel leads
from Lake Borgne into and through Bayou Dupre and
Violet Canal to Violet. An overhead power cable with a
clearance of 60 feet crosses the canal about 1.2 miles east
of Violet. Twin fixed highway bridges with a clearance
of 35 feet are about 0.4 mile east of Violet. Petroleum
products and fish are the principal commerce on the
bayou. Shrimp fishermen report that the canal is difficult to
navigate during winter low water. A light and daybeacons
mark the entrance to the bayou. A small marina at Violet
provides gasoline, berths, water, electricity, ice and a
hoist that can handle small craft to 3 tons.

Bayou Yscloskey empties into the southernmost part of Lake Borgne. A dredged channel leads from Lake Borgne to the mouth of Bayou Ysclosky. The channel is marked by a light and daybeacons. From the mouth of the bayou, the channel is privately maintained for 2 miles to Bayou la Loutre at the settlement of Yscloskey. Overhead power cables crossing Bayou Yscloskey have a minimum clearance of 30 feet. Gasoline, diesel fuel, water, ice and limited marine supplies are available on the bayou. From Yscloskey, Bayou la Loutre flows southeast for 25 miles to Eloi Bay. The dredged channel in the bayou is privately maintained from Yscloskey to Hopedale, a small settlement 3 miles southeast. The bridge over Bayou la Loutre at Yscloskey has a vertical lift span with a width of 45 feet and clearance of 2 feet down and 53 feet up. (See 33 CFR 117.1 through 117.49, chapter 2, for drawbridge regulations.) An overhead power cable crossing at Hopedale has a clearance of 68 feet. Hopedale has several wharves at which gasoline, diesel fuel, water, ice and marine supplies are available. A small boatyard at Hopedale has a mobile hoist that can haul out craft to 45 tons. Repairs are normally made by the boat owners.

(421) From Hopedale, Bayou la Loutre Channel is a federal project. In 1997, the controlling depths were 5 feet to Bayou St. Malo, thence 5 feet through **Bayou Eloi** and the bar channel to deep water in **Lake Eloi**.

2) **Bayou St. Malo**, a dredged channel, leaves Bayou la Loutre 5 miles east of Hopedale and flows northwest for 5 miles to Lake Borgne. Principal traffic on the waterway consists of commercial fishing boats, oil well equipment and support vessels.

(423)

Lake Pontchartrain

is 36 miles long, 22 miles wide at the widest part, 10 to 16 feet deep, and lies north of the Mississippi River at New Orleans. The lake connects with the Mississippi River through the Inner Harbor Navigation Canal, with Lake Borgne through The Rigolets and Chef Menteur Pass, and with Lake Maurepas through Pass Manchac and North Pass. Considerable commerce is carried on Lake Pontchartrain, the principal items being sand and gravel, shell, stone, petroleum products, lumber, cement, chemicals, steel products and foodstuffs.

(425) The periodic tide is negligible, but the variation in the water level due to winds has an extreme range of 3.5 to 4 feet. It is reported that the surface of the lake is lowered at least 2 feet during the winter when northwest winds prevail.

(426) There are numerous well platforms, piles, pipes and other reported obstructions in Lake Pontchartrain. Caution is advised.

Three causeways cross the east end of Lake (427) Pontchartrain. U.S. Interstate Route 10 highway causeway, about 3.5 miles west of The Rigolets and crossing between Pointe aux Herbes and Howze Beach, has a bridge with a fixed span over the navigation channel about 1.2 miles from its northeast end with a clearance of 73 feet. U.S. Route 11 highway causeway, west of U.S. Interstate Route 10 highway causeway and crossing from Pointe aux Herbes to North Shore, has two bascule bridges; one, about 1 mile southwest of North Shore, has a clearance of 13 feet; the other, about 0.4 mile northeast of Pointe aux Herbes, has a clearance of 12 feet. The north span is equipped with a radiotelephone. The bridgetender can be contacted on VHF-FM channel 13; call sign, KMC-226. The overhead power cable just west of this bridge has a clearance of 94 feet. The Southern Railway causeway, west of U.S. Route 11 highway causeway and crossing between South Point and North Shore, has a bascule bridge about 1 mile southwest of North Shore. The bridge has a clearance of 4 feet closed and 106 feet open (leaf overhangs the channel). The bridgetender monitors VHF-FM channel 13; call sign KA-5070. The overhead power cable just west of this bridge has a clearance of 12 feet but is submerged at the channels. (See 33 CFR 117.1 through 117.59 and 117.467, chapter 2, for drawbridge regulations.)

(428)

Small-craft facilities

(429) Small-craft facilities at the north and south ends of U.S. Interstate Route 10 highway causeway can provide berths, gasoline, water, ice, launching ramps and some marine supplies.

(430) Lake Pontchartrain Causeway, twin toll highway bridges, extends 20.9 miles across Lake Pontchartrain from Indian Beach on the south shore to Lewisburg on

the north shore. Five bridge openings, four twin fixed and one twin bascule, are at intervals of about 3.5 miles along the causeway. The first three openings north from Indian Beach are crossed by twin fixed bridges with clearances of 22 feet, 50 feet and 22 feet, respectively. The next opening is crossed by twin bascule spans with clearances of 42 feet, and the northernmost opening is crossed by a twin fixed bridge with a clearance of 22 feet. (See 33 CFR 117.1 through 117.59 and 117.467, chapter 2, for drawbridge regulations.)

NOTICE TO COMMERCIAL MARITIME INTEREST IN LAKE PONTCHARTRAIN

(432) Local Regulations.

(431)

(433) Effective July 14, 1988, the Louisiana Legislature passed and Governor Roemer signed into law La. Acts (1988) No. 552, regulating navigational safety near the Lake Pontchartrain Causeway Bridges. Key features of this Act:

- (434) (1) Require all tugs, towboats, self-propelled dredges, jack-up barges, jack-up rigs and all self-propelled vessels of one hundred net tons or greater, or one hundred feet in overall length or greater, and all vessel flotillas of one hundred aggregate net tons or greater operating on Lake Pontchartrain to be equipped with Loran C Equipment suitable for use with the Lake Pontchartrain Collision Avoidance Warning System (CAWS);
- (2) Establish a "prohibited zone" paralleling each side of the entire length of the Lake Pontchartrain Causeway Bridge and extending outward for a distance of one mile from the easterly and westerly outboard sides of the causeway bridge twin spans;
- (3) Prohibit all privately-owned vessels within the classes listed in paragraph (1), above, from entering, navigating, mooring, or anchoring in any manner within the "prohibited zone," except: (a) as required to navigate through the Lake Pontchartrain Causeway Bridge openings upon such course and upon such directions as may be given by the causeway bridge tender, (b) as required in an emergency to protect against loss of life or property, or (c) as otherwise permitted in accordance with permitting procedures set forth by the Act and the Rules and Regulations of the Greater New Orleans Expressway Commission;
- (437) (4) Provides for the assessment of a civil penalty in the amount of up to \$1000 per vessel per violation against the owner, operator, or charterer of any vessel within the classes listed in paragraph (1), above, which impermissibly enters the "prohibited zone," or which enters the "prohibited zone" without the Loran C equipment required by the Act;
 - (5) Requires that all collisions, accidents or other casualties involving a vessel within any of the classes listed in paragraph (1), above, be reported to the Greater New Orleans Expressway Commission within 48 hours if such casualty has resulted in death or injury, or within

5 days, if such casualty resulted in property damage exceeding \$200.

At its regular meeting on October 4, 1988, the Greater New Orleans Expressway Commission adopted rules and guidelines for the administration and enforcement of Act No. 552.

(440) ALL MARINERS ARE ADVISED THAT THE GREATER NEW ORLEANS EXPRESSWAY COMMISSION STRICTLY ENFORCE THE PROVISIONS OF ACT NO. 552.

(441) Three pipelines, marked by private lights, cross the lake. The first extends from the east shore about 1 mile south of The Rigolets west to Pointe aux Herbes. The second begins at a point about 0.75 mile west-southwest of South Point and extends across the lake in a north direction. The third crosses the lake beginning at a point in the vicinity of **Bayou Piquant** and extends in a northeast direction to Mandeville.

Middle Ground is the shoal portion of Lake Pontchartrain near The Rigolets. North Shore Channel extends across the northeast part of Middle Ground between The Rigolets and deeper water in the vicinity of U.S. Interstate Route 10 fixed bridge. In 1999, the reported controlling depth was 11 feet. The channel is marked by daybeacons and a light.

(443) **Bayou Bonfouca**, which empties into Lake Pontchartrain 3 miles northwest of the Southern Railway causeway north swing bridge, is the approach to the town of Slidell. There is some waterborne commerce in shell, sand and gravel. A dredged channel leads for about 6 miles from deep water in Lake Pontchartrain to Slidell. The channel across the bar is marked by lights, buoys and daybeacons. The bridge at Slidell has a swing span with a clearance of 6 feet.

call sign KMC-226. The bridgetender lives near the bridge and will open on signal, but there may be a slight delay. The overhead power cable at the bridge has a clearance of 58 feet. In 1982, the cable was reported to have been removed. (See 33 CFR 117.1 through 117.59 and 117.433, chapter 2, for drawbridge regulations.) An overhead power cable about 0.4 mile above the bridge has a clearance of 59 feet.

slidell is a town on U.S. Route 11 highway and the Southern Railway leading to New Orleans. A well-equipped shipyard has facilities for construction or repair of steel or wooden vessels including a commercial graving dock 350 feet long, 70 feet wide, with 20 feet over the sill, two marine ways that can handle craft up to 225 feet, and a 60-ton gantry crane, and a 300-ton floating crane. Tugs, barges and diving equipment are available for towing or salvage work. Other facilities at the yard include several loading slips and a railroad siding. Gasoline and water are available at a marina on the west side of the river just above the highway bridge.

Bonfouca 0.5 mile above the mouth. In 1994, the controlling depth was 3½ feet for about 5.2 miles to **Camp**

Salmen, thence 4 feet to the railroad bridge at the head of the channel. A swing bridge crosses the bayou about 1.5 miles above its junction with Bayou Bonfouca and has a vertical clearance of 7 feet. (See 33 CFR 117.1 through 117.59 and 117.469, chapter 2, for bridge regulations.) An overhead power cable just below the swing bridge has a clearance of 75 feet. Small-craft facilities on the south side of the bayou below the highway bridge provide berths with water and electricity, ice, a launching ramp and marine supplies. A 30-ton mobile hoist can haul out craft for complete repairs.

Lacombe Bayou empties into Lake Pontchartrain 4.5 miles west of Bayou Bonfouca. A dredged channel leads from the entrance bar in Lake Pontchartrain to a fish hatchery about 7.1 miles above the mouth of the bayou. The channel is obstructed by submerged logs and overhanging trees above this point. The entrance channel is marked by a light.

the mouth, has a bascule span with a clearance of 9 feet. The U.S. Route 190 highway bridge at **Lacombe** has a swing spans with a minimum channel width of 45 feet and a clearance of 5 feet. (See **33 CFR 117.1** through **117.59** and **117.463**, chapter 2, for drawbridge regulations.) Overhead power cables crossing at the bridges have a minimum clearance of 60 feet. Commerce on the bayou includes shipments of shell, sand and gravel and drilling equipment. The bayou has several fish camps and a seaplane base.

Mandeville is a summer resort on the north shore of Lake Pontchartrain 20 miles north of New Orleans. Many of the boat landings on the north shore are in ruins. A protected landing is in **Bayou Castine**. The entrance to the bayou is protected by jetties and a detached breakwater west of the channel. Lights mark the entrance to the bayou and the east end of the breakwater. An overhead power cable with a clearance of 60 feet crosses the bayou. In 1994, the controlling depth was 5 feet across the bar and in the bayou.

berths, water and electricity are available are on the west side of the entrance. A marina and boatyard on the bayou has a 15-ton mobile hoist that can haul out craft for complete repairs. Berths, electricity, water, a sewage pump-out facility and marine supplies are available. In 1982, the basin had reported depths of 5 feet.

Tchefuncta River flows into Lake Pontchartrain about 21 miles north of New Orleans. Commerce on the river is in shell and steel products. A dredged channel leads from the 10-foot depth in Lake Pontchartrain for about 12.2 miles up Tchefuncta River and its tributary, Bogue Falaya, to the town of Covington, LA. In 1993, shoaling to 4 feet was reported between Daybeacons 4 and 6 in about 30°22'24"N., 90°10'12"W. The entrance is marked by a light, a lighted range and daybeacons. State Route 22 highway bridge crossing the river at Madisonville has a swing span with a clearance of 1 foot. (See 33 CFR 117.1 through 117.49 and 117.500, chapter

2, for drawbridge regulations.) An overhead power cable with a clearance of 85 feet crosses the river about 6 miles above the bridge at Madisonville.

The twin fixed spans of Interstate Route 12 highway bridge with a clearance of 30 feet cross the river about 9.4 miles above the mouth.

Tows through the bridges are limited to one barge. The towing vessel must be made up rigid, astern of the barge, and the barge shall be pushed through the draw at dead slow speed and under full control.

(454) Madisonville, a town 1.5 miles up Tchefuncta River, has berths at public landings above and below the west side of the bridge. Two shipyards build commercial vessels and barges, and another repairs company-owned dredging equipment. There are several marinas above the highway bridge. Berths, electricity, gasoline, diesel fuel, water, ice, marine supplies and launching ramps are available.

(455) An overhead power cable extends generally around the perimeter of the west and southwest part of Lake Pontchartrain, from the shore near Madisonville to a point about 6.4 miles west of New Orleans. Clearance is 40 feet throughout except for 60 feet where the cable crosses over the entrance to the bar channel to Tangipahoa River and 90 feet over the entrance to Pass Manchac. Private lights partly mark the cable.

Lake Pontchartrain 6 miles southwest of Tchefuncta River. A dredged channel leads from Lake Pontchartrain across the bar to the river mouth. In 1993, shoaling to 1 foot reportedly extended about 100 feet in a southwest direction from Light 8. Lights and daybeacons mark the entrance channel. Gasoline, berths, water, electricity, ice and launching ramps are available at Lees Landing. There are numerous overhead power cables, with minimum clearance of 60 feet, over Tangipahoa River up to Lees Landing.

(457) Bedico Creek branches east from Tangipahoa River about 2.3 miles above its mouth.

Pass Manchac is a passage 5.5 miles long connecting Lake Pontchartrain with Lake Maurepas. Principal commerce is in shell and petroleum products. The approaches in both lakes are across long bars, which limit the utilization of the relatively deep water inside the pass. From Lake Pontchartrain there are two approach channels, North Channel and South Channel. The east side of the entrance to each is marked by a light. Both lead to Pass Manchac Light on the north point at the east end of the pass.

(459) Once over the bar, midchannel courses should be followed through Pass Manchac. **Stinking Bayou** and **North Pass** branch from the north side of Pass Manchac about 1.3 miles west of the east entrance. Stinking Bayou leads east-northeast. North Pass meanders west-northwest parallel with Pass Manchac and connects with Lake Maurepas.

At the west end of North Pass just east of the bridges
 is Port Manchac, a shallow-draft freight terminal on

the north shore owned by the South Tangipahoa Parish Port Commission. The facility is about 6 miles west of Lake Pontchartrain. The 160-foot wharf is operated by South Tangipahoa Parish Port Commission, which handles general and containerized cargo. Warehouses to 30,000 square feet and a 60-foot lower docking facility are available. Barges with a 9-foot draft are loaded and discharged by heavy lift cranes and lift trucks. A 1,800foot railroad siding with three in-car trans-loading ramps is at the port. Easy highway access is available via Interstate Route 55 and U.S. Route 51. Mainline railroad service is provided by a Class I railroad on a daily basis. General and containerized cargo, such as lumber, plywood, agriculture products, paper, steel, fertilizers, gravel, oil field supplies and equipment and machinery for export/import of domestic markets are trans-loaded.

At the west end of the pass, a marked northerly channel and an unmarked southerly channel separated by a shallow middle ground lead into Lake Maurepas. In 1995, the controlling depth in the north channel was 7½ feet.

Overhead power cables crossing over the pass about (462) 0.3 mile and 2 miles from the east entrance have clearances of 90 feet and 76 feet respectively. Three bridges and the remains of two former bridges cross the west end of the pass. The easternmost bridge, the Illinois Central Railroad bridge, has a bascule span with a clearance of 56 feet and is equipped with a radiotelephone. The bridgetender monitors VHF-FM channel 16 and works on channel 13; call sign KC-9501. (See 33 CFR 117.1 through 117.59 and 117.484, chapter 2, for drawbridge regulations.) An overhead power cable at the bridge has a clearance of 64 feet. Immediately west of the Illinois Central Railroad bridge are the remains of the former railroad and highway bridges (center portions removed), and U.S. Interstate Route 55 fixed highway bridge with a clearance of 51 feet. A fixed highway bridge immediately west of the U.S. Interstate Route 55 highway bridge has a clearance of 50 feet.

Note: Tows passing through Pass Manchac bridges are limited to no more than two barges, not to exceed a combined tow length of 400 feet, excluding the towboat. Operators wishing to pass tows exceeding these limits must request and receive permission from the Captain of the Port, New Orleans. (See 33 CFR 162.75(b)(5)(vi), chapter 2.)

Gasoline, diesel fuel by truck, water, ice and some marine supplies are available at wharves just east of the north and south ends of the U.S. Interstate Route 55 highway bridge.

Lake Maurepas, lying west of Lake Pontchartrain, is 11.5 miles long in a northeast and southwest direction and from 4 to 8 miles wide. Depths range between 7 to 12 feet, but numerous submerged tree stumps are reported along the lake shore. Strangers are advised to keep at least a mile offshore and to approach the entrances to the tributaries with caution. No cities or towns are along the lake shores, which are low and thickly wooded. Other

than Port Manchac on the north shore at the west end of North Pass just east of the bridges (described earlier in this chapter, under Pass Manchac), the lake is of little commercial importance except as the approach to Tickfaw and Amite Rivers, which have some trade to New Orleans.

Maurepas about 3.5 miles northwest of Pass Manchac. The entrance is marked by a light and a daybeacon on the west side of the mouth. A large shoal extends south of the light on the west side of the entrance, and stumps are on the east side. State Route 22 highway bridge crossing the river about 6.2 miles above the mouth, just below the junction with Blood River, has a fixed span with a vertical clearance of 50 feet. Two overhead power cables, just west and parallel to the swing bridge and about 2 miles west of the bridge, have clearances of 70 feet. A marina just below the south side of the bridge has berths, gasoline, diesel fuel, electricity, water, ice, launching ramps and marine supplies.

67) **Natalbany River**, a tributary of Tickfaw River, in 1996, had a controlling depth of 7½ feet for about 4.5 miles, thence 2 feet for 3.5 miles to the head of the federal project, about 1.3 miles above the highway bridge at **Springfield**.

(468) **Ponchatoula River**, a tributary of Natalbany River, joins that river about 3.3 miles above the mouth. State Route 22 highway bridge at **Wadesboro** has an 18-foot fixed span with a clearance of 4 feet.

Blood River, a tributary of Tickfaw River, joins that river 6.3 miles above the mouth. Blood River has several small marinas about 0.9 mile above its junction with the Tickfaw River at **Warsaw Landing**. Berths, water, electricity, gasoline, ice, limited marine supplies and launching ramps are available.

(470) Principal shipment on Tickfaw, Natalbany, Pontchatoula and Blood Rivers is shell.

(471) **Amite River** empties into Lake Maurepas 8 miles west of Pass Manchac. The entrance is marked by a light. Principal shipment on the river is shell.

In entering Amite River, pass well to the east of the (472) light; submerged stumps are reported in an area extending 0.4 mile south of the light and up to 0.4 mile offshore. In 1994, the controlling depth was 5½ feet across the bar, thence 61/2 feet to Port Vincent, and thence 41/2 feet to the junction with its tributary Bayou Manchac about 31 miles above the mouth. Above a point about 12 miles above the mouth there are overhanging trees and snags. Overhead power cables crossing Amite River about 0.1 mile, 2.6 miles, 3.0 miles and about 13.9 miles above the mouth have clearances of 70 feet, 60 feet, 60 feet and 42 feet, respectively. Three highway bridges cross the river between the mouth and Port Vincent, about 27 miles above the mouth. The bridge at Clio, about 5 miles above the mouth, has a swing span with a clearance of 4½ feet. The bridge at French Settlement, about 19 miles above the mouth, has a swing span with a clearance of 15 feet. An overhead power cable at this bridge has a clearance of 60 feet. Another overhead power cable crosses the river about 27.6 miles above the mouth; clearance is 70 feet. The bridge at Port Vincent has a swing span with a clearance of 7 feet. (See **33 CFR 117.1** through **117.59** and **117.422**, chapter 2, for drawbridge regulations.)

(473) Berths with water and electricity, gasoline, ice, a launching ramp and some marine supplies are available at a small marina about 2.5 miles above the mouth of Amite River. Launching ramps are on either side of the river above the highway bridge.

(474) **Bayou Manchac** joins Amite River about 4.2 miles above Port Vincent. Submerged logs are reported above this point; caution is advised.

Bayou Manchac is crossed by two highway bridges and a railroad trestle. The bridge at **Hope Villa**, about 5.8 miles above the mouth of the bayou, has a fixed span with a clearance of 11 feet. The Airline Highway (U.S. Route 61) bridge, about 6.5 miles above the mouth, has a fixed span with a width of 30 feet and a clearance of 6 feet, and is at the head of navigation in the bayou. The Louisiana and Arkansas Railroad trestle is about a mile above the Airline highway bridge.

(476) **Blind River** enters Lake Maurepas 5.7 miles south of Amite River. A light and a daybeacon mark the best water. Caution is advised when entering the river. Numerous overhead power cables with a least known clearance of 66 feet cross the river.

(477) The **Bonnet Carre Spillway** is located on the southwest side of Lake Pontchartrain. When the spillway is in operation, as a result of high stages of the Mississippi River, vessels in the vicinity of the discharge end are cautioned to be on the lookout for possible logs or stumps that may enter the lake and should give that end a wide berth.

(478) The city limits of New Orleans extend from Lake Pontchartrain to the Mississippi River. Pleasure resorts and suburbs are on the lake front. A concrete seawall is along the south shore of the lake from the protected yacht harbor about 2 miles east of the Lake Pontchartrain Causeway to Lakefront Airport. The protected yacht harbor, which is entered from east, is just east of the New Orleans city limits.

(479) The Municipal Yacht Harbor is the outer basin, which has direct access to the lake. The Southern and the New Orleans Yacht Clubs, and the New Orleans Power Squadron are in the Municipal Yacht Harbor. There are numerous private beach homes with covered boat slips on the breakwater. Lights mark the entrance to the harbor. The Orleans Marina, owned and controlled by the Levee Board, is the inner basin which has access to the lake through New Basin Canal. In 1982, the controlling depth in the canal and basins was reported to be about 8 feet. There are several boatyards in Orleans Marina and several marinas along the east bank of New Basin Canal. There are cranes and lifts that can handle craft to 35 tons for hull and engine repairs or open or covered dry storage. Electronic repairs can be made. Berths for vessels up to 100 feet, electricity, gasoline, diesel fuel, water, ice, marine supplies and launching ramps are available.

(480)

Coast Guard Station

(481) **New Orleans Coast Guard Station** is close west of the Municipal Yacht Harbor on Lake Pontchartrain.

Navigation Canal is 4.1 miles east of New Canal Light. An aerolight at the Lakefront Airport is east of the entrance.