



Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.
SECTOR 3 — CHART INFORMATION

SECTOR 3

GOLFO DE VENEZUELA AND LAGO DE MARACAIBO

Plan.—This sector describes Golfo de Venezuela (Maracaibo) and Lago de Maracaibo. The E and W side of the gulf are described in an N to S sequence. The lake is described from its N approaches.

General Remarks

3.1 Golfo de Venezuela and Lago de Maracaibo form the outlet of one of the world's most important petroleum producing regions. Both crude and refined oil products are exported. The region supplies the important refineries at both Aruba and Curacao, the ports at Amuay, Las Piedras, and Puerto Cardon on the Peninsula de Paraguana, and various ports in North America and Europe. The oil terminals within the gulf are situated along the E shore and the major terminals within the lake are similarly situated. Large tankers can be accommodated at some of the terminals within the gulf and lake.

Golfo de Venezuela is bordered to the E by Peninsula de Paraguana and to the W by Peninsula de La Guajira. The important oil ports of Bahia de Amuay, Bahia de Las Piedras, International Puerto Paraguana, and Puerto Cardon stand on the W side of Peninsula de Paraguana. Golfete de Coro, a large, foul, shallow bay lies along the S side of the peninsula and has no commercial importance. Ensenada de Calabozo, an extensive but relatively unimportant open bay, indents the SE side of Peninsula de La Guajira. Lago de Maracaibo is approached through a dredged channel at the head of the gulf.

Maracaibo, the principal city and port bordering the lake, is a port of entry.

Winds—Weather.—The weather is very irregular. The annual mean temperature is about 28°C. Winds in the vicinity of the outer channel are stronger from November through April and invariably from the NE quadrant. They vary in intensity from 10 to 55 knots, with the strongest winds being experienced in the late evening during February to April. During the months of June through August, the zone experiences frequent local squalls, generally from the E, known locally as “Chubacos,” which can suddenly spring up with gusts up to 50 knots. These squalls usually occur in the late afternoon and the first part of the night lasting for 30 minutes to 1 hour. They have been experienced also outside the aforementioned session of normal occurrence. During “Chubacos,” no maneuver can be effected.

The rainy season is generally from May through October. Rains are intense from May through October. Rains are intense but of short duration and are concentrated in the months of May, June, and August. Annual precipitation ranges from 460 to 500mm.

Tides—Currents.—The currents generally set W off the gulf entrance and attain rates up to 3.5 knots. An E set has been experienced in October and November between Punta Galleons and Los Monges. Apparently, there is a circulation S into the W part of the gulf, because the currents along the SE

coast of Peninsula de la Guajira set SW and turn E along the S side of the gulf as far as Punta Punas, where they turn N and dissipate in the middle of the gulf. Along the S shore the axis of the flow is just outside the 10m curve, where it sometimes attains a rate of 1 knot during the strength of the trade winds.

Along the E shore of the gulf the currents set SW and attain rates of 0.5 to 1 knot.

Depths—Limitations.—Depths range between 30m, lying 10 miles N of the entrance points of the gulf, and 10m and less lying within 0.5 to 8 miles of the shores in places. The S half of Ensenada de Calabozo has depths of less than 20m lying not more than 5 miles offshore. The dredged entrance channel leading to Lago de Maracaibo passes through a shoal area, with depths of 11m and less, which extends up to about 6 miles off the SW shore of the gulf.

3.2 Los Monjes (12°26'N., 70°54'W.), a group of barren islets and rocks, lies in the approach to the gulf, on the W side of the entrance. The channels which lie between these dangers are deep and clear. Monjes del Sur, the two S islets of the group, are steep-to, with one being 70m high. A light, with racon, is shown from Monjes del Sur. Monjes del Este, lying 3 miles ENE of Monjes del Sur, is 43m high and also steep-to. Monjes del Norte, lying 7.3 miles NNW of Monjes del Este, consists of five rocks, the largest being 41m high. The rocks of the group are difficult to distinguish at night.

A pinnacle rock, awash, the position of which is doubtful, was reported to lie about 18 miles S of Monjes del Sur. An unsuccessful search was made for this rock in 1940 and again in 1970.

Discolored water, with yellow patches, is frequently encountered within the gulf. In the outer part, it has no significance.

Caution.—Unlighted fishing boats, with nets out, may be encountered up to 8 miles offshore in this area.

East and Southeast Coasts of Golfo de Venezuela

3.3 Cabo San Roman (12°11'N., 70°00'W.), composed of red cliffs, is the N extremity of Peninsula de Paraguana. The sea breaks heavily on the fringing rocks. The cape, marked by a light, has been reported to be radar prominent.

From Cabo San Roman to Punta Macolla, 14 miles WSW, the coast consists of sand dunes interspersed with low rocky cliffs. Rocky ledges extend up to 1 mile offshore in places.

Anchorage can be taken, in depths of less than 18m, sheltered from E breezes, between Cabo San Roman and Punta Las Cruces, 9.5 miles WSW. Vessels should not anchor in a depth of less than 11m as the shorebank is steep-to.

Punta Macolla (12°06'N., 70°13'W.) is surmounted by a sand dune, 15m high. A few mangroves and the town of La Macolla stand on this point. A light is shown from the point and is sometimes visible across the peninsula from E of Cabo San Roman. Vessels should round this point at a distance of at

least 3 miles to avoid the rocky ledges which extend up to 0.8 mile seaward. A dangerous wreck lies 10 miles SW of the point.

At Punta Jacuque, 7 miles SSW of Punta Macolla, there is a 2.9m shoal about 1.3 miles offshore. A dangerous wreck lies close to this shoal, 3 miles offshore. The area is always marked by discolored water and occasionally by breakers.

From Punta Macolla to Punta Salinas, 14 miles SSW, the coast is bordered by foul ground which extends up to 1.5 miles offshore in places. Punta Salinas consists of a sand spit, with mangrove trees on it. A conspicuous house stands on the shore of the Bahia Salinas, close E of the point.

Bahia Salinas is sheltered from winds between the NNE and SSE. Good anchorage can be found in depths of 5 to 18m close SE of Punta Salinas. No current is felt in the bay.

Bahia Los Taques (Punta Estanques) (11°49'N., 70°16'W.), entered close E of Punta Los Taques (Punta Estanques), has the town of Los Taques at its head. A prominent church stands in the town and a conspicuous water tower stands 0.5 mile E of it.

Anchorage can be taken, in depths of 9 to 13m, sand and shells, within the bay. The anchorage is approached until a conspicuous white house on a cliff just SE of the town bears 075°. A ship repair yard, consisting of a jetty and several buildings, has been established 2 miles SE of Punta Los Taques.

Caution.—Vessels transiting between Punta Macolla and Punta Los Taques should remain at least 6 miles clear of the coast. The coastal area between the two points is reserved for the use of shallow draft fishing vessels.

3.4 Bahia de Amuay (11°45'N., 70°14'W.), entered between Punta Chiraguara and Punta Adaro, lies 4.5 miles SSE of Punta Los Tacques. It consists of a large landlocked bay, foul in its N and S parts. The port facilities lie directly E of the entrance points and are used almost exclusively by large tankers loading oil products.

Amuay (11°45'N., 70°14'W.) ([World Port Index No. 12070](#)) lies in the NW portion of the bay. The entrance to the bay is fouled by a detached shoal, with depths of 2.1 to 5.2m, which lies close N of the fairway, about midway between the entrance points. Punta Judibana, which has berthing facilities extending from it, has a conspicuous white house about 1 mile E of it and a similar house 1.5 miles SSE of it. A conspicuous water tank stands 2.3 miles NNE of the same point.

The entrance channel leading to port facilities has a dredged depth of 13.4m over a width of 0.1 mile and is marked by a lighted range in line bearing 075°. The channel is marked by lighted buoys.

Winds—Weather.—There is little rainfall at Amuay, where annual precipitation averages 300mm. The rainy season usually coincides with the Caribbean hurricane season, from August to November, although Amuay lies S of the usual hurricane track. During these months, calms are often experienced and winds from a W direction may be expected. Normal winds are steady from the NE, average force 4, with a maximum of force 8. Temperatures average about 30°C, with little variation from day to night or season to season.

Depths—Limitations.—The berthing facilities consist of four finger piers connected to Punta Judibana by a common

causeway. Each pier provides a berth on each side; they are numbered 1 to 8 from the S to N. Crude oil and fuel oil are handled at all eight berths.

Berth No. 1 and Berth No. 2 can accommodate ships up to 305m in length and 13.1m draft. Berth No. 1 and Berth No. 2 each have a 112,000 dwt maximum for departure. Gas products are handled at Berth No. 1.

Berth No. 3 can accommodate vessels up to 198m in length and 12.2m draft. Berth No. 4 through Berth No. 6 can accommodate vessels up to 213m in length and 12.2m draft. Berth No. 7 and Berth No. 8 can accommodate vessels up to 261m in length and 11.4m draft. Flaked and liquid sulphur is handled at Berth No. 3. General cargo is handled at Berth No. 3 and Berth No. 4.

Pilotage.—Pilotage is compulsory and is available on a 24 hour basis. Pilots board from a tug about 1.5 miles WNW of Punta Adaro.

The numerical pennant of the International Code of Signals indicating the order of arrival of a vessel should be displayed. Pennant No. 1 indicates the first arrival. Vessels should forward their ETA at least 72 hours in advance to Amuay.

Signals.—A signal station stands on Punta Culata, situated close NE of Punta Adaro, and will give berthing instructions to arriving vessels.

Anchorage.—Good anchorage can be taken off the entrance to the bay, in depths of 18 to 32m, in the charted area W of Punta Chiraguara, heavy sand and silt, but care should be taken not to obstruct the entrance channel. Care should also be taken to avoid a patch, with depth of 8.8m, located about 0.8 mile WNW of Punta Chiraguara. Additional anchorage is available in the charted reserved anchorage area close W of Punta Adaro. Small vessels can anchor within the bay, but clear of the turning basin off the finger piers.

3.5 From Punta Adaro (11°44'N., 70°14'W.), the coast trends nearly 2 miles SSE to Punta Piedras, a low point. The coast to within 0.5 mile of Punta Piedras is bordered by cliffs. There are no dangers outside the 10m curve, which lies 0.3 to 0.5 mile off this part of the coast.

Bahia Boca de Las Piedras, entered between Punta Piedras and the N extremity of Punta Carirubana to the S, is a sheltered bay. There are depths of 9m about midway between the entrance points, gradually shoaling toward the shores. Meneven Shoal, with a least depth of 4.7m, lies 0.8 mile SW of Punta Piedras. The shoal is marked on its SW side by a lighted buoy; vessels should pass at least 0.2 mile clear of the shoal.

Las Piedras (11°43'N., 70°13'W.) ([World Port Index No. 12060](#)) is a village standing on the NW side of the bay.

Depths—Limitations.—Muelle Naval projects about 0.5 mile WNW from the S part of the bay. Tanker berths, each 198m long, with a depth of 9.1m alongside, are situated on either side of the pier head. Additional berths, with alongside depths of 7 to 8m, are situated farther inshore along the pier. Strong NE trade winds, during the winter, sometimes make it difficult for a vessel to go alongside this pier.

Muelle de las Piedras extends 350m WSW from the N part of the bay.

Muelle de Avencasa projects 350m WSW from the N extremity of Punta Avencasa.

Aspect.—A conspicuous 12m high sandhill stands on Punta Avencasa; a noticeable monument is situated close WSW of it. A light is shown from the head of Muelle Naval.

Pilotage.—Pilotage is compulsory and is available 24 hours. Pilots board 1.5 miles WNW of the SSW pier head from a power boat.

Anchorage.—Anchorage can be taken about 1 mile NW of Muelle Naval, in depths of 16 to 24m, sand or mud. This holding ground is poor, so vessels may find better holding ground closer to the pier in a depth of 11m. However, vessels generally do not have to anchor, but go directly alongside.

Caution.—Two submarine cables, best seen on the chart, encumber the middle of the bay.

3.6 Caleta Guaranao (11°40'N., 70°13'W.), a small cove open to the W, lies 2 miles S of Boca de Las Piedras. The head of the cove is low and sandy, but the coast N and S is cliffy.

An obstruction lies close SSW of the W extremity of the pier. Three detached shoals, ranging from 3.6 to 4.7m, lie 0.2 to 0.5 mile SW of the pier complex.

Aspect.—A water tower stands close inland of Punta Guaranao, the N entrance point; a similar tower stands SE of the root of the port pier.

Pilotage.—Pilotage is compulsory. The pilot boards 0.5 to 1.0 mile W of the pier head. Vessels should provide an ETA at least 72 hours in advance of arrival. The pilots and port utilize VHF channels 12 and 16.

Pilots for vessels bound for Lago de Maracaibo board off Caleta Guaranao. The pilot station is operated from Las Piedras and also provides service for Cardon.

Anchorage.—Anchorage can be taken in a depth of 9m, mud and sand, about 0.5 mile offshore.

Caution.—A stranded wreck is located 0.2 mile WNW of Punta Zarobon.

3.7 Puerto Cardon (11°37'N., 70°14'W.) ([World Port Index No. 12050](#)) is entered between Punta Gorda to the N and Punta Cardon to the S. It is the site of a large oil refinery and several piers. Punta Cardon is a low, sandy spit with a village on it.

In the approach to the berthing facilities, there are no off-lying dangers. Depths of 12.2m and greater exist off the ends of all the piers.

Depths—Limitations.—There are four general cargo piers with alongside depths of 6.7 to 9.1m. Two of the piers are 180m long, the third pier is 159m long, and the fourth pier is 120m long. There are two additional piers, 170m and 50m long, for coastal vessels.

Aspect.—Two prominent 122m high chimneys stand 1.5 miles E of Punta Gorda. Two red and white banded chimneys stand near the root of Pier No. 1. A white church stands 0.3 mile ESE of Punta Botija and two radio masts stand close N of it. The gas flares and the lights of the refinery are conspicuous at night.

Pilotage.—Pilotage is compulsory. Pilots board from a tug, 0.5 to 0.8 mile off the pier heads, and operate on 24 hours. Vessels requiring berthing must give at least 72 hours advance notice of arrival. Because of the strong prevailing winds, vessels of over 9,000 grt must be ballasted prior to going alongside the piers.

Vessels should maintain a listening watch on VHF channel 12. A signal station, whose position is approximate, stands 0.2 mile ESE of the root of Pier No. 2.

Anchorage.—Within 2 miles W of the heads of the jetties, anchorage can be obtained, in depths up to 30m, mud, with some patches of small stones, sand and shells; the holding ground is reported to be good.

3.8 Golfete de Coro (11°35'N., 70°00'W.) is entered between Punta Cardon and Punta Codore (Punta de Cauca), about 16 miles SSW. It is shallow, unsurveyed, fouled by numerous coral heads, and available only to small craft with local knowledge.

The coast between Punta Codore and the entrance to Lago de Maracaibo, about 80 miles WSW, is low, backed by sand dunes and occasionally interspersed by cliffs. The 10m curve lies between 2.5 miles and 5 miles offshore, and the bottom is fairly regular.

The mountains which stand in the interior can be seen from a considerable distance in clear weather.

From Cerro de la Teta, a 1,253m high peak rising 35 miles ESE of Punta Codore, a range extends SW, decreasing in elevation toward Lago de Maracaibo.

Zararida, a village with several large red-roofed buildings, is situated 12 miles WSW of Punta Codore at the mouth of the Rio Zazarida.

Punta Borojo (Punta Cienagas) (11°11'N., 70°52'W.) consists of a bluff point rising to a prominent 35m high hill close inland. A coastal light is shown 4 miles E of the point. A 12m high hill rises close to the coast, 19.5 miles SW of Punta Borojo. A white church with a steeple stands in the village of Casigua, about 4 miles inland and 8 miles E of the latter hill. A dangerous wreck, parts of which show above water, lies 21.5 miles NNW of Casigua; the wreck is reported to be radar conspicuous. An additional dangerous wreck lies 20.5 miles NNW of Casigua. A stranded wreck lies 23 miles NW of Casigua.

3.9 Punta Gallinas (12°28'N., 71°40'W.), the N extremity of Peninsula de La Guajira, is low, inconspicuous, marked by a light, and fronted by a sandy beach. A detached 7.3m shoal is located 8.0 miles ENE of the point.

From Punta Gallinas, the coast trends 5.5 miles E to Punta Taroa. The first part of this coast is low and difficult to distinguish, but from about 2 miles W of Punta Taroa, it is rocky, with cliffs from 15 to 18m high. Close SW of Punta Taroa is Puerto Taroa, in which a small bay affords good anchorage for small craft with local knowledge.

Between Punta Taroa and Cabo Falso, located 16.5 miles ESE and marked by a light, the coast is generally low, sandy, and fringed by foul ground.

A stranded wreck was reported (1985) to lie close NE of Cabo Falso and to be radar conspicuous.

A customs house stands near the cape and a conspicuous white house is situated on the beach about 4.5 miles SE of it.

Between Cabo Falso and Cabo Chichibacoa, 6.5 miles SE, the coast is backed by sand dunes for 4 miles. The latter point consists of 12m high rocky cliffs.

Between Cabo Chichibacoa and Punta Espada, 14 miles SSE, the coast is backed by sand dunes as far as Punta de Santa

Cruz, and then it is rocky in places. A pyramidal peak, 414m high and conspicuous from the SE, stands 8.8 miles SSW of Cabo Chichibacoa. This coast is fringed by reefs in places.

Sierra de Macuira, a mountain range extending W and inland of Punta Espada, has several high peaks. The most prominent peak is 820m high and stands 14 miles W of the point. Pan de Azucar, 300m high and 5.5 miles WSW of the same point, is the E peak of this range.

Punta Espada (12°05'N., 71°07'W.), marked by a light, is the E extremity of Peninsula de La Guajira. Between this point and Punta Castilletes, 18.5 miles SW, the coast is rocky for about 8 miles and fringed by foul ground which extends up to 1.8 miles offshore in places. This section of coast should be given a wide berth when passing because of the irregular coral bottom.

3.10 Castilletes Anchorage (11°49'N., 71°20'W.), which lies between Punta Castilletes and Punta Perrett to the S, is encumbered by numerous shoals and rocks and has been declared a danger area to shipping. The village of Castilletes is situated 0.8 mile N of Punta Castilletes; conspicuous flat-topped cliffs stand in the vicinity. Isla Fuerte, small in extent, lies near the middle of the bight located between the two entrance points. A detached 8.5m shoal lies 3 miles SE of Punta Perrett.

Ensenada de Calabozo (11°24'N., 71°40'W.), the large bay forming the SW part of Golfo de Venezuela, recedes between Punta Perrett and the NE side of Isla San Carlos, 50 miles SSW. The NW side of the bay is backed by a few sand dunes and several mountain peaks with defined summits. The principal peak is 615m high and stands 27.5 miles WSW of Punta Perrett. The W and SW shores of the bay are low and fronted by a sandy beach.

The 10m curve lies 1 to 3 miles off the N shore and 1 to 1.5 miles off the W and SW shores. There are few known dangers within the bay, including an obstruction reported to lie about 18 miles NNW of the E end of Isla San Carlos. A wreck, marked by a buoy, is located 10 miles SSE of Punta Bandola. A wreck lies 9.5 miles NNE of Lighted Buoy EM. Ensenada de Calabozo has no commercial value to shipping, except as a temporary anchorage.

Lago de Maracaibo

3.11 Lago de Maracaibo, an extensive, almost landlocked body of water, is approached through a dredged channel. It leads S through Bahia de Tablazo and between the islands separating the shallow bay from Golfo de Venezuela.

The approach and the fairways of the various channels are marked by navigational aids. The deepening of the channels by continuous dredging has made the lake accessible to large tankers at the various oil terminals.

Numerous submarine cables are laid across the channel.

Maracaibo, the second largest general cargo port in Venezuela, is situated on the W side of the strait, 37 miles S of the outer sea buoy. Puerto Miranda, Cabimas, La Salina, Bachaquero, and San Lorenzo are the largest of the oil terminals situated within the lake proper.

Tides—Currents.—The tide ranges decrease toward the head of the lake and the influences are not felt above La Salina,

where the range is negligible. There is about 0.3m difference between the range at Isla Zapara and the inner part of the dredged channel.

Tide gauges are situated at Malecon and at Beacon E34 and Beacon T43. The tidal currents are generally weak at the entrance channel, but under some conditions, rates of up to 3 knots have been observed.

Depths—Limitations.—The Outer Channel begins at Lighted Buoy EM (11°14'N., 71°34'W.). Pairs of lighted buoys mark the channel S to Isla Zapara, a distance of 14 miles. When entering and leaving the channel, vessels must leave this lighted buoy to port. This channel is dredged to a depth of 12.8m. The depths are subject to constant change and a copy of the latest depth bulletin, published by the Venezuelan government, should be obtained by vessels planning to enter the lake. It should be kept in mind that the controlling depths indicated in this bulletin refer to a 60m wide track lying on each side of the channel centerline.

The Inner Channel continues on the same course as the Outer Channel for about 10 miles, where the direction changes to 150°. The entire length of the Inner Channel is 12 miles.

At Punta de Palmas, the dredged channel joins the deeper strait leading into the lake proper; however, this channel is divided into two marked fairways for inbound and outbound traffic.

Within the lake, the channel depths in the middle part of the lake are in excess of 30m. The depths in the various access channels leading to oil terminals vary with the particular terminal.

Vessels must take care to stay within the limits of the marked fairways. Inbound vessels must not use fairways for outbound traffic, and must not, under any circumstances, cross the bow of outbound vessels. Where vessels must cross fairways to reach terminals, outgoing traffic has the right-of-way.

Aspect.—Few details of the coast can be seen from the outer buoy, which is moored 14 miles N of the lake entrance. Isla San Carlos, on the W side of the entrance, is low, with some sand dunes and low vegetation. Castillo San Carlos, with a pilot station, stands on the E end of the island. Isla San Bernardo and Isla Pajaros are both low. Isla Toas, with hills up to 122m high, lies 1 mile S of the E part of Isla San Carlos. Three framework towers stand on a hill on the W part of Isla Toas. A cross stands on the summit of a hill, 76m high, near the E end of the island.

Isla Zapara, on the E side of the entrance channel, consists of sand dunes. A breakwater lining the E side of the entrance extends N from the NW end of Isla Zapara. The sand dunes attain heights of 32m toward the E part of the island; a village is situated on the S side.

Pilotage.—Pilotage is compulsory from Lighted Buoy EM inbound to any port area or terminal within the lake. Vessels should provide their ETA at Lighted Buoy EM 72 hours and 48 hours in advance and request permission to enter the Outer Channel 24 hours and 12 hours in advance.

Pilots board off Punta Guaranao within the pilot embarking/disembarking zone bound by the following positions:

- a. 11°40.0'N, 70°15.5'W.
- b. 11°41.5'N, 70°15.5'W.
- c. 11°41.5'N, 70°16.5'W.
- d. 11°40.0'N, 70°16.5'W.

The government pilot station is situated at the SE end of Isla San Carlos. Radiotelephone or VHF channel 16 contact with the pilot station is to be established when within 10 miles of Lighted Buoy EM. A shift to VHF channel 12 or 14 will be directed. The pilot station should be advised of the ETA at Lighted Buoy EM and Buoy 28, draft, and destination. Permission to enter the Outer Channel should be requested during this call.

Masters are warned to keep adequate speed in the Outer Channel, even when embarking the pilot, as strong cross currents are encountered near Isla San Carlos and Isla Zapara. Pilot boats are fast and are fitted with a flying bridge.

Maracaibo Pilotage Regulations require that inbound tankers, in ballast, while crossing the bar, shall not have greater than 2.4m difference between the fore and aft drafts. Unless this requirement is met, the pilot will not board the vessel.

The average speed of the vessels within the navigation channels will be 10 knots, and its masters and official pilots remain authorized to alter the same if required by navigational safety.

Vessels will keep a continuous watch on VHF channel 16 at disposition of the official pilot, until arriving at the port of destination within Lago de Maracaibo, and when outbound, until the pilot has disembarked.

Masters will report to the Pilot Station at 5 mile intervals referencing starboard hand buoys when underway in the channel.

Loaded vessels in outbound navigation within the outer channel will have priority over vessels entering the same channel. Therefore, the inbound vessels should not meet outbound vessels within the "critical zone" included between Buoys B21-B22 and Buoys E33-E34.

Regulations.—The following are extracts from the regulations issued by the Captain of the Port.

- To define which vessels give way, the channels are classed as Primary Channels or Secondary Channels:

- Primary Channels include the Outer Channel, from Lighted Buoy B1 to Lighted Buoy E31; the Inner Channel, from Lighted Buoy E31 to Lighted Beacon T55; and Maracaibo Lake, from Lighted Beacon T55 to 10°37'N.

- Secondary Channels lead from Primary Channels, and minor channels are the access or exit channels to the Secondary Channel. Ships not in any of the channels, but about to enter one, give way to ships in the channel. Ships entering major channels from minor ones, give way to ships already in the major channel. In the Inner Channel, no vessel shall pass another except in emergency.

- The maximum speed for vessels in the reaches between Isla Zapara and Punta de Palmas is 10 knots. Every vessel navigating the channel should decrease speed when passing or being passed by another vessel in order to eliminate the effect of suction.

- A vessel engaged in towing another will not be permitted to pass another vessel in any part of the channel, but must give way to vessels passing it who have made the prescribed signals, providing circumstances permit.

- Vessels entering in ballast must have no greater difference in draft forward and aft than 2.4m.

- The distance apart of vessels in the channel passing in the same direction should be 1 mile.

Signals.—A signal station is situated on the tower of the fort on the E end of Isla San Carlos. All vessels are required to salute the fort by dipping the ensign during daylight hours.

The following traffic light signals are displayed at night from the yardarm of the above signal station:

- One red light—Entry prohibited.
- One green light—Entry permitted.
- Two green lights—A vessel is aground, but there is passage inward.
- Two red lights—A vessel is aground, and entry is prohibited.

Vessels navigating in the pilotage zone may use the signals listed in the accompanying table.

Lago de Maracaibo—Pilotage Zone Signals		
Whistle signal	Additional day signal	Meaning
One long blast and one short blast	A cone, with point up, displayed at the starboard yardarm	I am proceeding at full speed
Three short blasts and one long blast	A cone, with point up, displayed midway up the starboard yardarm	I am proceeding at half speed
Three short blasts and one long blast, repeated twice	A cone, with point down, displayed at the starboard yardarm	I am proceeding at quarter speed
One short blast, two long blasts, and one short blast	A cylinder displayed at the port yardarm	My engines are stopped
One long blast and three short blasts	Allow me to pass	Allow me to pass
One long blast	—	You may pass me
Two long blasts and two short blasts	—	You cannot pass me
One long blast and four short blasts and the immediate hoisting of the signals prescribed by the Regulations for the Prevention of Collisions at Sea	—	I am aground or not under control

Lago de Maracaibo—Pilotage Zone Signals		
Whistle signal	Additional day signal	Meaning
One short blast repeated at short intervals	—	I am to starboard of the channel; you can pass with care on my port side
Two short blasts repeated at short intervals	—	I am to port of the channel; you can pass with care on my starboard side
Four long blasts repeated at short intervals	—	I am obstructing the channel; do not attempt to pass

Anchorage.—Vessels can anchor, in depths of 15 to 18m, in the vicinity of Lighted Buoy EM when waiting for the tide. Good ground tackle is necessary because of sea and weather conditions that may be encountered.

Vessels are to anchor under the direction of the Port Captain.

If a vessel finds it necessary to anchor in the pilotage zone, anchorage must be taken in such a way so as not to obstruct traffic.

Caution.—The General Raphael Urdaneta Bridge, connected to both shores by a causeway, crosses the channel at a position close S of Punta Piedra. The maximum speed allowed in the approaches to and between the bridge piers is 5 knots. The vertical clearance of the bridge over the fairway of the channel is 45.1m.

Numerous uncharted oil rigs and drilling platforms are situated outside the channel fairways in Lago de Maracaibo. Their lights and positions may be subject to frequent change. Vessels must strictly adhere to fairways to avoid collision with these structures.

Vessels must use extreme care in anchoring within the lake to avoid anchoring in the vicinity of submerged pipelines and cables.

The traffic concentration within the lake is dense. Small vessels will be encountered crossing the main fairways to the numerous small terminals in the lake area.

Dredges may be encountered at work in the main entrance channels. Ships are required to stop their engines and proceed at slow speed when passing these vessels.

Ports and Terminals in Lago de Maracaibo

3.12 Palmarejo de Mara (10°48'N., 71°40'W.) is a small terminal that comprises an oil pier and a tank farm. There are four berths, but only the northernmost outer berth is used; the other three berths are no longer in use. This N berth is 129m long and has a depth of 6.5m alongside. Depths in the approaches from the SE are 5.5 to 7.3m. The terminal is used primarily by local tankers.

3.13 Puerto Miranda (10°46'N., 71°33'W.) ([World Port Index No. 12035](#)) is an oil terminal that consists of two jetties whose inner ends are joined and met by a causeway running from the shore and extending to the SW.

Tides—Currents.—The tidal range at this terminal is about 0.3m. The current, which sets at right angles to the pier, can at times be very strong and subject to sudden change. The ebb runs for 7 or 8 hours while the flood runs for 4 to 5 hours.

On arrival at Puerto Miranda, a berthing master will board to assist in docking the vessel as well as in undocking.

Depths—Limitations.—Pier 1 (Jetty No. 2), with two berths on each side, will accommodate vessels up to 277.5m in length and 11m draft at either outer berth. The inner berths will accommodate vessels up to 174m in length with a maximum draft of 7.3m. Vessels up to 60,000 dwt have been accommodated.

Pier 2 (Jetty No. 3) will accommodate vessels up to 277.5m in length and 12m draft. Vessels up to 115,000 dwt have been accommodated at either berth.

The jetties are each 488m long. The turning basin lying adjacent to these jetties has a depth of 12.8m maintained by dredging.

Anchorage.—The anchorage is situated 1 mile NW of the terminal and is marked by buoys. The bottom is soft mud.

Directions.—When approaching from the S, vessels leave the primary channel after passing W of Lighted Buoy B65. The maximum permitted draft in this approach is 10.4m. It has been reported (1992) that Canal Puerto Miranda, the approach channel, is no longer in use and is now part of the N anchorage. A new channel, marked by buoys, leads from Canal Interior between Lighted Buoy B61 and Lighted Buoy B63 through the S anchorage to the berths.

3.14 El Tablazo (10°45'N., 71°32'W.) is situated 1 mile E of Puerto Miranda and handles petrochemical products. The port, with two main jetties, each extending approximately 0.8 mile SW from the shore, can handle vessels up to 50,000 dwt, 198m in length, and 9m draft.

The port is approached by a channel running NE from the main channel in the vicinity of Lighted Buoy B63 and Lighted Buoy B64.

The jetties have berths on either side. On the N side of the Solid Cargo Pier, there is a berth, 200m long, with an alongside depth of 8.5m. The S side has a berth, 259m long, with an alongside depth of 8.8m. Dry cargo is handled at this jetty.

The Liquid Cargo Pier has a berth, 261m long, at its head and berths, each 240m long, on both sides. There are depths of 8.9m alongside the jetty. Bulk liquid vessels up to 50,000 dwt may be accommodated.

Altgracia (La Estacada) (10°42'N., 71°32'W.) ([World Port Index No. 12045](#)) has a berth used as a crude oil storage terminal; it is only used for loading in an emergency. The mooring buoys have been removed.

3.15 Maracaibo (10°38'N., 71°36'W.) ([World Port Index No. 11960](#)), the second largest city and cargo handling port in Venezuela, stands on the W side of the lake, about 20 miles S of Isla San Carlos. The chief export is crude oil, but coffee is also exported in major quantities.

Winds—Weather.—Squalls, known locally as chubascos, occur most frequently between May and August, usually between 1400 and 1900, and last from about 30 minutes to 1 hour. Winds in the squall are generally S to SE and may attain a velocity of nearly 50 knots. A heavy rain usually follows these squalls.

Depths—Limitations.—The following berthing facilities are situated on the N side of Bahia de Maracaibo:

No.	Length	Depth	Remarks
1	106m	4.5m	General cargo
2	106m	4.5m	General cargo
3	159m	4.5m	General cargo
4	159m	6.7m	General cargo
5	135m	7.6m	General cargo
6	135m	7.6m	General cargo
7	135m	7.6m	General cargo
8	135m	7.6m	General cargo
9	120m	7.6m	General cargo
10	120m	6.7m	Grain
11	120m	6.7m	Container

Pilotage.—Pilotage is compulsory. Vessels should send an ETA message 72 hours prior to arrival. Messages are normally sent through Radio Curacao (PJC). A harbor pilot will board after clearance at the anchorage and take the vessel alongside one of the wharves. No vessel with explosives aboard is allowed in the dock area. The pilot may be contacted by VHF.

Anchorage.—There are two anchorage areas off the port for large vessels and one for smaller vessels. There are general depths of 6.5 to 15.7m in the anchorages, which may best be seen on the chart. An explosives anchorage area, which may also best be seen on the chart, lies centered about 2 miles SE of the harbor berths.

3.16 Punta Piedra (10°35'N., 71°36'W.) is a terminal that consists of an offshore oil mooring berth, with mooring buoys moored about 0.3 mile E of the T-head pier. Vessels up to 35,000 dwt, 175m in length, and 9.1m draft can use this berth. Berthing is by day only; unberthing is by day or night.

A jetty extends 0.5 mile ENE from a position 0.3 mile S of the W root of the General Rafael Urdaneta Bridge. Four mooring buoys are reported to lie off the head of the jetty.

Bajo Grande (10°31'N., 71°38'W.) (World Port Index No. 12034) is a terminal that consists of an offshore oil platform with three loading berths.

Berth No. 1 is 229m long and has an alongside depth of 12m. It can accommodate tankers up to 55,000 dwt.

Berth No. 2 is 229m long and has an alongside depth of 9.7m. It can accommodate tankers up to 36,000 dwt.

Berth No. 3 is 260m long and has an alongside depth of 12m. It can accommodate tankers up to 85,000 dwt. The approach to this berth has a dredged depth of 13.7m.

Muelle de Caballetes, a natural gas liquid terminal, extends 1.8 miles E from a point on the shore a little over 1 mile S of Bajo Grande. A berthing platform at the head of the pier is 21m long. Vessels up to 213m in length and 11m draft can be handled.

3.17 Punta de Palmas (10°24'N., 71°34'W.) (World Port Index No. 12032) is situated 15 miles S of the port of Maracaibo. Punta de Palmas del Sur, situated close N, has a number of oil tanks and a submarine pipeline which extends 4.5 miles SE to Punta de Palmas platform.

Berth No. 1 and Berth No. 2, each consisting of two pairs of mooring buoys, are situated close E of the platform. They can accommodate vessels up to 254m in length with respective drafts up to 11.6m and 11.4m. Vessels up to 80,000 dwt can be handled.

Berth No. 3 can be used by vessels up to 271.5m in length and 12.8m draft. Vessels up to 100,000 dwt can be handled.

Material Dock, on the S shore of Punta de Palmas del Sur, consists of two barges secured together. Only small shallow draft vessels can be accommodated.

3.18 Cabimas (10°23'N., 71°29'W.) (World Port Index No. 12030) and **La Salina** (10°22'N., 71°28'W.) (World Port Index No. 12025) are oil terminals that are operated by the Mene Grande Oil Company and the Creole Petroleum Corporation, respectively. The access channel leading to the berths has a least depth of 12.8m. There are two piers at Cabimas; the NW pier has only a depth of 4.6m alongside its outer end and is not used. The SE pier, with a depth of 4.3m alongside, can accommodate three small lake tankers and a small cargo vessel. The offshore oil berth, which is 203m long, has a depth of 10.7m alongside. Vessels up to 202m in length and 10.4m draft can be handled.

The La Salina terminal consists of an artificial island, with two finger piers extending from its SW side. These piers, designated No. 6 Pier and No. 7 Pier, extend about 335m from the island and have depths of 12.5m alongside. However, a depth of 10.3m exists on the S side of No. 7 Pier, lying approximately 68m from its root. Tankers up to 274.5m in length and 11.9m draft can be accommodated alongside.

Pier No. 3 is an offshore loading facility situated W of the W extremity of the artificial island. Two berths are available at the pier. The W berth will accommodate vessels up to 210m in length and 7.9m draft. The E berth will accommodate vessels up to 175m in length and 7.9m draft.

3.19 Lagunillas (10°08'N., 71°15'W.) (World Port Index No. 12000) is a terminal consisting of two piers and is frequented only by small lake tankers. The Creole Petroleum Pier is 869m long and has depths of 4.9 to 6.1m alongside. The Venezuelan Oil Concessions Pier is 549m long and has a depth of 5.2m alongside.

3.20 Bachaquero (9°57'N., 71°10'W.) (World Port Index No. 11990) terminal is operated by both Shell and the Mene Grande Oil Companies; it consists of a pier extending about 0.8 mile SW from the shore and has two berths on each side of its outer end. The N and S outer berths will accommodate vessels up to 20,000 dwt and 10.4m draft with respective lengths up to 186m and 181m. The inner berths have less water alongside.

An anchorage area for Bachaquero is situated about 0.5 mile SW of the pier. A mooring buoy is situated in the anchorage.

3.21 San Lorenzo (9°47'N., 71°04'W.) ([World Port Index No. 11980](#)) is situated about 10 miles SSE of Bachaquero.

Depths—Limitations.—A pier at San Lorenzo, with dolphins, extends about 0.5 mile SW from the shore and has a berth on each side of its outer end. The terminal is used only for handling crude oil and its product. Vessels up to 20,000 dwt can be berthed alongside. Maximum permissible drafts are 9.1m on the S side of the pier and 7.1m on the N side. Vessels up to 170m in length may use the N side of the pier and vessels up to 202m in length may use the S side. Tugs are required for mooring.

Aspect.—A lighted range, bearing 050°30', leads to the pier.

Anchorage.—Anchorage is available in the approach to the terminal in accordance with depths available and ship's draft.

3.22 Le Ceiba (9°28'N., 71°04'W.) is a cement port. Pier No. 1 is 170m long and has an alongside depth of 7m. It can

accommodate vessels up to 8,000 dwt. Coastal bulk and bagged cement vessels are berthed. Pier No. 2 is 180m long and has an alongside depth of 11.5m. It can accommodate commercial vessels up to 30,000 dwt.

Coloncha (9°12'N., 71°45'W.), situated at the SW end of Lago de Maracaibo, is an oil terminal. A submarine pipeline extends 1.3 miles E from the shore to a platform. Another pipeline extends 4 miles ENE from the shore to a platform.

An offshore loading berth is situated close E of the easternmost platform. It consists of four mooring buoys and has a depth of 10.7m alongside. Tankers are berthed heading N. Anchorage can also be obtained off Coloncha.

A number of other small oil terminals are situated on the shores of the lake. They are available only to shallow-draft lake tankers and local knowledge is required to reach them.