

### **6.6.7 INFORMACIÓN REFERENTE DE LA NAVEGACIÓN EN EL RÍO ORINOCO**

Please send corrections and additions to Shipping Guides Ltd., 75 Bell Street, Reigate, Surrey, England

**ORINOCO RIVER**

Including : Section A - MATANZAS  
 Section B - PALUA  
 Section C - PUERTO ORDÁZ  
 (CVG Ferrominera Orinoco)  
 Section D - PUNTA CUCHILLO  
 (Lagoven S.A.)  
 Section E - VENALUM TERMINAL

**IMPORTANT:** VHF compulsory. Vessels without at least a VHF radio aboard will not be attended to by the Pilots at the Orinoco pilot station and so will not be allowed to enter the Orinoco River.

**GENERAL:**

- As early as possible, advise Puerto Ordaz Radio Station, call letters YVM, giving ETA at Buoy EO of North (natural) channel, or at Buoy O.1 of South (dredged) channel.
- Shipmaster's Report: October 1982.
- Contact with YVM was made 48 hours before arrival buoy O.1; accordingly, 72 hours ETA sent via Curacao Radio.
- 24 hours prior to arrival, send another ETA to YVM.
- Upon arrival, depending on whether Master intends to enter Orinoco waterway through North or South channel, adhere to following procedure:
  - North Channel.** Notify Port Captain, Ciudad Bolívar, via YVM, of time of arrival at Buoy EO and give ETA at Buoy 27.
  - South Channel.** Request permission to enter from "Amacuro Pilot", via Channel 16. Do not enter until granted permission; while awaiting, lay to or anchor at least 1 mile outside of Buoy O.1.
  - All vessels must also communicate with the Point Barima pilot station, call sign "Amacuro Pilot" 2182 kHz HF or 43.18 VHF to be informed of traffic.
- While navigating waterway, inbound or outbound, report position to YVM hourly on the hour.
- No Pilot required nor available for navigation along North or South channel at the Boca Grande at the Orinoco River.
- The International Rules for Preventing Collisions at Sea apply outside of Buoy 27.
- Given the case of 2 vessels navigating North and South channels respectively the one navigating the South channel is the privileged vessel.
- Anchoring either in North or South channels is forbidden.
- Throughout Orinoco waterway, the down-bound loaded vessel is the privileged vessel.
- It is compulsory to fly Venezuelan ensign inside of Buoy EO or Buoy O.1.
- Vessels can only carry clean ballast within Orinoco Waterway.
- Pilotage compulsory within Pilotage Zone No. 1 of the Orinoco. Pilots board at outer boundary of said pilotage zone in upstreamward vicinities of Buoy 27.
- Regulations for the Pilotage Zone No. 1 of the Orinoco apply inside of Buoy 27.

**APPROACHES:** (Also see "Radio" - paragraphs (d) and (e))

**1. The Waterway**

A Radio Direction Finder (non-operational October 1982), located at Lat. 08° 03' 45" N., Long. 60° 28' 28" W., transmits following signal continuously: YV - AYV. The transmitter has an output of 500 watts with a range of about 200 miles and operates on a frequency of 305 kHz. While navigating the waterway, ships should favour the shore on their starboard side to the extent possible, giving preference of manoeuvre to loaded vessels in all cases. Ships navigating upstreamward (thru-bound), upon approaching narrow channels should await the passing and give way to downbound vessels. It follows, therefore, that downbound loaded vessels are the privileged vessels.

**2. The Boca Grande (Barroa Bay) Channels**

There are 2 navigable channels across the Boca Grande (Barroa Bay), identified as follows: North channel (or natural channel), and South channel (or dredged channel). The 2 channels have converging courses and meet at mile 27.7 in the vicinity of Buoy 27. Vessels navigating the South channel are privileged, regardless of the direction in which they travel.

**(a) The North (Natural) Channel**

This channel has a min. depth of 12 ft., referred to Mean Low Water. The approach from the sea is marked by a battery-operated electric flashing black buoy, identified with the letters EO. This buoy is located in 46 ft. of water at Lat. 08° 00' 40" N., Long. 60° 18' 20" W. Its characteristics are: colour of light, white; flash, 1.0 seconds; eclipse, 5.0 seconds; height above water, 10.7 ft.; visibility, 7 miles. From seabuoy EO, the channel develops for 7.3 miles to Buoy EOA on a course of 213° 40' True, then for 2.8 miles to Buoy EOB on a course of 198° 57' True. From this point the channel follows an approximate straight course of about 205° True for a distance of 17 miles to Buoy 27. Starting from EOB distances between successive navigation aids are as follows: G1 at 1.9 miles; G1A at 1.5 miles; G3 at 2.1 miles; G3A at 2.3 miles; G5 at 3 miles; EL 24 at 2.6 miles. Buoy 27 at 3.7 miles. All navigation aids are black buoys fitted with white lights, except Buoy 27 and EL 24 which is a range structure indicating the West side limit alignment of the South (dredged) channel. This structure has been fitted with a white flashing light to mark the North (natural) channel.

**(b) The South (Dredged) Channel**

This South channel is a 400 ft. wide dredged channel. Depth is maintained to accommodate the maximum draft authorised by the Port Captain. The approach from the sea is marked by a battery-operated electric flashing black buoy, identified with the number O.1. This buoy is located in 45 ft.

of water at Lat. 08° 55' 52" N., Long. 60° 11' 17" W. Its characteristics are: colour of light, white; flash, 0.5 seconds; eclipse, 11.5 seconds; height above water, 25 ft.; visibility, 11 miles. From seabuoy O.1, the channel develops along 4 different courses over a total distance of 27.7 miles to Buoy 27. The course reduces by about 7° True at each of 3 turning points, located at miles 9, 15 and 21 respectively. The initial course of 234° 18' True continues to mile 9 where it changes to 227° 07' True; Upon reaching mile 15, the course again changes to 219° 51' True to mile 21. At mile 21, the course changes to 212° 45' True to Buoy 27 at mile 27.7. The centreline of the channel on all courses is visually marked by range structures fitted with green flashing, directionally oamed lights. The West (right ascending) side limit of the channel through mile 21 is also visually marked by range structures fitted with amber flashing, directionally beamed lights; the alignment given by the side ranges develops 200 ft. to the West and parallel to the centreline of the channel. Battery operated electric flashing navigation aids are located along both sides of the channel. All navigation aids along the East (left ascending) side of the channel are located 325 ft. from centreline or 125 ft. outside of the channel lateral limit. White flashing navigation aids are located at 1 mile intervals through mile 25.1; all aids along this side are black buoys, except beacons 8.1, 8.1, 14.1, 15.1, 20.1, 21.1, 23.1, 24.1, 25.1, 27.1 and 27.7 (Buoy 27). All navigation aids along the West (right ascending) side of the channel are located 200 ft. from centreline or on the exact lateral limit of the channel. Red flashing buoys painted red are located at 1 mile intervals from mile 1.6 to mile 11.6. From mile 11.6 to mile 27.7, there are only 2 aids; red buoys 13.6 and 25.0.

**3. The River Channel**

From mile 27.7, the navigable channel develops upstream. The river channel is generally deep and wide, except for the following 12 reaches which require periodic dredging: miles 27.7 to 36.6; miles 37.3 to 38.6; miles 82.1 to 64.3; miles 89.0 to 106.6; miles 109.1 to 111.0; miles 131.7 to 131.9; miles 136.6 to 139.0; miles 141.2 to 145.8; miles 148.2 to 149.4; miles 107.0 to 170.0; miles 170.4 to 182.4; miles 183.5 to 184.1. Dredged channels are normally 300 ft. in width, but occasionally can be restricted in a minimum of 250 ft. The depth maintained therein can accommodate the maximum draft authorised by the Port Captain. By Notice to Mariners, the Port Captain has instructed all Masters and Pilots to reduce speed and to proceed with caution while navigating the aforesaid reaches, especially during the low water season.

**4. River Stages**

In response to the cycle of wet and dry seasons, the flow of the Orinoco River follows a relatively regular pattern of rise and fall each year. The river normally begins rising in late March or early April and continues to rise until it peaks at about 10 ft. in late August. In September, the river begins a fairly steady recession until the extreme low-water stage is reached, generally in March. The amplitude of stage variation above the low water plane of reference (0.0 ft.) at Palm (Mile 181.7) averages about 35 ft. with min. variations of 31 ft. and max. variations of 39 ft. The effects of the flood rise decrease progressively below Palua and practically vanish in the upstreamward vicinities of the Boca Grande.

**5. Tides and Currents**

- The indicated mean tidal range is 5.4 ft. Tidal influence is not experienced above mile 80 during high river stages. At low river stages, a tidal effect can be observed throughout the waterway, although it progressively diminishes, moving upstreamward. However, the tidal effect is still significant at Puerto Ordaz, mile 184, where a max. semidiurnal change of 1.7 ft. has been recorded.
- The strength of river currents is generally commensurate with flow. The strongest currents occurring at high river stages. The velocity of currents at any one time generally decreases moving downstreamward. However, in certain locations, the pattern is affected by particular characteristics of river width and shape as well as by bottom gradient. Max. velocities of about 6 knots have been recorded.

**6. Navigation Aids**

- The navigation aids installed along the waterway consist of buoys, beacons and ranges. All aids are lighted. Identification is provided by means of numbers corresponding to the appropriate mileage of each aid, to the nearest one-tenth of a mile. The last digit of numbers identifying white lighted aids is odd, while the last digit of numbers identifying red lighted aids is even. White lighted aids mark the left ascending limit of the navigable channel, while red lighted aids mark the right ascending limit. Aids are placed as to be intervisible to the extent that — when abreast of any one aid — the preceding and following ones can be sighted. Consecutive aids always carry different light characteristics. Buoys are normally placed on the exact lateral limit of the channel (except for black buoys along the South channel at the Boca Grande), beacons, instead, are located at variable distances outside of the channel.
- During the execution of dredging along any of the reaches which require periodic maintenance, buoys are generally moved 100 ft. outside of the channel lateral limits. This information is made available to ships by YVM.
- The Ministerio de Comunicaciones, Dirección de Marina Mercante publishes semi-annually a complete list of navigation aids. Monthly lists of changes are also published so that the complete current list can be maintained up to date.
- Upon encountering damaged, inoperative, or misplaced navigation aids, vessels should immediately notify YVM.
- Vessels are forbidden to make fast to any navigation aid.

**7. Dredging Aids**

Range structures, generally located close to shore or over the bank, are normally used to mark the lateral alignments of the channel along the reaches which require periodic dredging. These ranges are generally fitted with amber flashing, directionally beamed lights. The lights are extinguished except during execution of dredging. Dredging ranges are not to be used for navigation.

## VENEZUELA

## Navigation Charts

Navigation charts of the Orinoco Waterway should be aboard vessels for use by the Master. These charts are sold by the Instituto Nacional de Hidrografía and are also available for purchase from the Orinoco Line Company. If requested, CVG will, if possible, arrange to make new charts and latest revisions available through the Pilot who boards at Santa Barima, provided such request is received by radio (YVM) at least 3 hours in advance of the Pilot's boarding. A set of navigation charts, directed to latest revisions, is maintained in the office of the Traffic and Tugs Agency of CVG in Puerto Ordaz. Masters may use this facility to keep their charts up to date.

DOCUMENTS: (Clearance, documentation and other requirements).

## Consignment of Inbound Vessels

The official documents of all vessels proceeding to Puerto Ordaz should show the following consignment: In CVG Ferrominera Orinoco, Ciudad Bolívar, Zona de Puerto Ordaz. The proper consignment of vessels proceeding to Palua, on official documents, is as follows: Iron Mines Company of Venezuela, Ciudad Bolívar, Zona de San Félix.

## Customs Requirements

Vessels bound for Venezuela in ballast, without passengers, from foreign ports outside the West Indies or Guianas, require the following documentation:

The vessel must have a clearance certificate (Certificado de Zarpe) or filing authorisation issued by the Customs Authorities of the port of departure, representing the government of the country the vessel is departing from. No consular certification need be placed upon this document.

Spare Parts List (Lista de Repuestos). It must contain a note of all the spare parts and objects for the service of the vessel, including fuel. To be signed by the Master and to be current as of the day of entering the Venezuelan port.

List of Effects for use of Captain and Crewman (Lista de efectos personales de la dotación). To be signed by the Master and to be current as of the day of entering the Venezuelan port. The Customs are very strict and will confiscate any article that appears new.

## Health, Immigration, and Police Requirements

Vessels bound for Venezuela in ballast, without passengers, from foreign ports outside the West Indies or Guianas, require the following documentation:

(1) Current individual International Vaccination Certificates for each member of the crew.

(2) Oral Exemption Certificate.

(3) Crew Lists (original and seven copies).

(4) Panama or Suez Canal or any comparable type measurement certificate.

Contraband: The Venezuelan law is very strict on this subject. It must be emphasised too strongly that all new articles, clothing, articles, liquor, etc., must be declared and sealed-up upon arrival. Vessels for Pilots and Government Officials. It is requested these men be granted the privilege of eating in the officers' dining salon. J.B. Masters of vessels calling at Trinidad for bunkers before proceeding to Venezuela must also have the documents stamped by the Venezuelan Consulate at Port of Spain.

NOTICE: In order to expedite the movement of shipping in the waterways, Masters are requested to establish contact with YVM station as soon as possible, giving ETA Seabuooy 0.1. At the same time a radio-telegraph message must be sent to Agents giving ETA Barima and ETA required. When vessels are 24 hours from pilot station, send either ETA via YVM.

After reporting the ETA in advance of arrival, try to contact directly, by IF, "Amacuro Pilot" when the ship approaches Seabuooy 0.1 off the bar entrance (about 2 hours before arrival at the pilot station). (It is possible to contact Pilots 100 miles before arrival Seabuooy 0.1.) After taking the Pilots aboard, report to Radio Marina and continue giving the ship's position according to the mile, up-river, at exactly every 10 minutes, and receive from Radio Marina the pertinent information concerning the traffic in the river waterway. If no communication can be established by voice radio aboard, comply by radio-telegraph by way of the YVM station. See "Ship's Officer's ports" in 1st Section - "General".

## Ship's Officer's Report: July, 1980.

Hourly position reports are made on W/T to YVM when the Pilot is aboard (He writes the telegrams in Spanish).

Pilots are the employees of the Venezuelan Government and act in an advisory capacity. The Master retains responsibility for the ship at all times.

- (1) Pilotage is not required and Pilots are not available for navigation outside the pilotage zone. Masters will take charge of inbound and outbound navigation on the North or South channel outside Buoy 27 at the Boca Grande without Pilot's assistance.
- (2) Pilotage is mandatory within the Pilotage Zone No. 1 of the Orinoco. Inbound vessels will embark the government River Pilot in the upstreamward vicinities of Buoy 27. It is important that vessels pass Buoy 27 and be in sight of the pilot station at Barima in order to avoid any delay, as Pilots may not proceed until vessel is sighted. The government River Pilot will pilot the vessel while navigating the waterway; a special government Docking Pilot will generally take the vessel into and out of the Puerto Ordaz harbour.

## Signals

- (1) All signals used outside of the pilotage zone (that is to say, seaward of Buoy 27 - mile 27.7) shall conform to the International Rules for Prevention of Collisions at Sea.
- (2) Within the pilotage zone (that is to say, inside of Buoy 27 - mile 27.7) the signals used shall be in accordance with the "Regulations for the Pilotage Zone No. 1 of the Orinoco". It should be noted that these signals are peculiar to the Orinoco Waterway, and are not necessarily in conformance with the International Rules.
- (3) Within the pilotage zone, special signals are used for passing

## Speed

The Captain of the Port has the authority to impose speed restrictions. By means of "Notices to Mariners", the Port Captain has ordered that all vessels reduce speed while navigating by the following locations: San Felix Dock, mile 179.8; El Toro, miles 95.4 to 98.6. It is recommended that speed be also reduced while navigating by the Palua Dock (mile 181.8), Barrancoas (mile 143.2), and Ourlapo (mile 80.4). At the inception of the low water season each year (generally in early January), the Port Captain has in the past issued a "Notice to Mariners" instructing all vessels to reduce speed and proceed with caution while navigating the following river reaches: (1) miles 184 to 178, (2) miles 171 to 167, (3) miles 150 to 141, (4) miles 140 to 137, (5) miles 133 to 131, (6) miles 112 to 108, (7) miles 106 to 98, (8) miles 55 to 53, (9) miles 39 to 36.

## ANCHORAGES:

- (1) No ships are permitted to anchor either in the North or South channel at the Boca Grande. Vessels are to anchor at least 1 mile outside of Buoy EO or Buoy 0.1.
- (2) Within the pilotage zone, no vessel is allowed to anchor in narrow channels, nor close to a turn.
- (3) Between Buoy 27 - mile 27.7 and mile 137, vessels which need anchoring may do so by coming as close as possible to shore on the ship's starboard side.
- (4) Between mile 137 and mile 184, the Pilotage Regulations provide for 3 permanent anchorages and 1 seasonal anchorage, as follows: Area No. 5 (permanent): miles 139.3 to 140.4, Area No. 6 (permanent): miles 150.1 to 151.7, Area No. 7 (permanent): miles 178.0 to 179.0, Area No. 8 (seasonal): at the junction of the Caroni and the Orinoco. It should be observed that Area No. 7, as determined in the Pilotage Regulations, partially encroaches on the narrow (drifted) channel and on shore. Vessels are to anchor in the naturally deep and wide part of the area.
- (5) The low-water anchorage (for 1 ship only) previously established by the Port Captain between miles 182 and 183 is no longer in use. This area is currently used as the turning basin for vessels exiting the Palua Channel, upon sailing from the new Palua Dock at mile 181.8.
- (6) If due to emergency a ship is required to anchor in places other than the designated areas, it should do so in such a way as not to obstruct the channel and by taking the necessary precautions to avoid swinging around.
- (7) Upon anchoring vessels should notify YVM.

## MAX. SIZE:

(1) Max. permissible draft. The Port Captain of Ciudad Bolívar can establish the permissible draft for the Orinoco waterway to a max. of about 43 ft.

## (2) Controlling Depths and Authorised Draft

The draft authorised by the Port Captain for the Orinoco Waterway is made public by means of a "Daily Bulletin of Depth and Draft" (Boletín Diario de Profundidades y Calado). Each daily bulletin issued by the Port Captain carries the following information, in Spanish and English:

- (a) Controlling (minimum) depth between miles 184 and 133, and corresponding location.
- (b) Controlling (minimum) depth between miles 133 and 42, and corresponding location.
- (c) Controlling (minimum) depth between miles 42 and 0, and corresponding location.
- (d) Predicted high tides (height and times) at mile 13.5.
- (e) River stage (height of river level above low water plane) at Puerto Ordaz and Palua.
- (f) Authorised draft, in feet and inches.

The controlling depths given for locations comprised between miles 184 and 42 are actual depths, and reflect depth conditions as of the date of the bulletin. The controlling depth given for locations comprised between miles 42 and 0 is referred to mean low water springs and does not include the height of tide at high water.

The authorised draft may be predicted either on the controlling depth existent between miles 184 and 42 or between miles 42 and 0, dependent upon whichever is the least.

When the controlling depth between miles 184 and 42 is the significant factor, the permitted draft authorised is at least 2 ft. less than the controlling depth in this sector.

When the controlling depth between miles 42 and 0 is the significant factor, the permitted draft authorised is generally less than the mean low water springs controlling depth but occasionally can be equal to the mean low springs controlling depth.

Whenever the MLWS controlling depth existing between miles 42 and 0 does not provide sufficient clearance under the keel of the vessel at low water, the Master is expected to navigate by the site where the controlling depth is located only at times when the height of tide will assure a safe passage.

## (3) Variations in authorised draft:

(a) The authorised draft is generally increased or decreased by multiples of 6 inches.

(b) Throughout the year the authorised draft is susceptible to variations, according to the conditions of the depth and width existing in the channel at any one time. On the basis of average river stages it is estimated that the authorised draft should be about 33 ft. in the dry season from December to May.

During the rainy season, from June to November, the max. permissible draft may be as high as 43 ft.

HEALTH: Radio Pratique may be obtained by sending a message, after picking up Pilot, to the Port Health Officer, advising that there is no sickness on board, name of last port, ETA, number of crew and nationality of vessel and name and nationality of Master. (This does not apply at Palua).

## RADIO:

Communications: Communications are generally handled through a radio-telegraph station at Puerto Ordaz, call letter YVIM. This station is operated on a 24 hour basis. The operating frequencies are: 440 kHz: 12 kHz; 4322 kHz; 6505.5 kHz; The GMT - CQ times and frequencies are: 0900 hrs., 4322 kHz; 1200 hrs. 6505.5 kHz; 1430 hrs. 8722 kHz; 2000 hrs. 8722 kHz; 0030 hrs. 4322 kHz; 0300 hrs. 4000 kHz.

There is no charge for messages from ship to shore or from shore to ship handled directly through YVIM. A VHF frequency modulated radio system provides voice communications along the Orinoco Waterway. Master sets for the system are installed in the Puerto Ordaz Radio Telegraph Station (voice call: "Master Radio"); Marine Radio handles shipping matters exclusively. The system consists of a high-band VHF frequency modulated voice radio network. To ensure a more efficient and satisfactory coverage, this system operates on dual frequencies alternating according to location, so that ships can either transmit on 161.700 MHz receiving on 159.000 MHz, or transmit on 161.150 MHz receiving on 159.850 MHz. For best results, ships should select frequencies according to the following: From sea to mile 50: transmit on 161.700 MHz, receiving on 159.000 MHz; From mile 50 to mile 112: transmit on 161.150 MHz, receiving on 159.850 MHz; From mile 112 to mile 159: transmit on 161.700 MHz, receiving on 159.000 MHz; From mile 159 to mile 184: transmit on 161.150 MHz, receiving on 159.850 MHz.

Pilot station at Barima Bar, Palua and Matanzas are equipped with this system. For the Puerto Ordaz area, ships will transmit to Marine Radio on a frequency of 43.22 kHz and to shore on a frequency of 43.18 MHz, receiving in both cases on a frequency of 43.18 MHz.

## Ship's Officer's Report: July, 1980.

The VHF Channels listed are not available on standard marine sets. All VHF work is done on Channel 16 (Pilot to Pilot), and reporting on WT to Radio Marina.

### (i) Control of Navigation:

Navigation on the North (natural) channel at Boca Grande is free. However, vessels are requested to notify the Port Captain, Ciudad Bolívar, via "Amacuro Pilots" on Channel 16, upon arrival at Buoy 0.1, giving ETA at Buoy 27, mile 27.7.

Simultaneous navigation in opposite directions by 2 or more vessels is not permitted on the South (dredged) channel at Boca Grande. The restriction is placed on Inbound traffic, to the extent that any vessel wishing to enter the South channel requires prior authorisation from the Port Captaincy of Ciudad Bolívar. The request for permission to enter the South channel is to be addressed to the Port Captain, Ciudad Bolívar, via "Amacuro Pilots" on Channel 16, and is to be transmitted before the vessel reaches Buoy 0.1. Upon receipt of the request, the Port Captain will notify the vessel via "Amacuro Pilots" on Channel 16, whether permission is or is not granted, indicating, in the latter case, the approximate waiting time. Until permitted to enter, vessels are to anchor at least 1 mile outside of Buoy 0.1. Once that authorisation has been granted, vessels are to enter the South channel at the earliest opportunity. Any vessel which has been notified to wait may elect to proceed and enter through the North (natural) channel; in this case, the vessel will have to satisfy the requirements outlined in paragraph (i) above.

(ii) While navigating the Orinoco Waterway inbound or outbound vessels are to report their position to YVIM hourly on the hour. Broadcast of Barima Barima, in "Amacuro Pilots".

### (c) Accident, Stranding, etc.

(i) Should a collision, stranding or other accident occur in the waterway, or should it be found necessary to take control of the vessel away from the Pilot for any reason, the Venezuelan law requires that a written report be made to the Captain of the Port by the Master of the vessel involved within 24 hours. The report is to be addressed to the Captain of the Port and may be handed to the Pilot or the ship's Agent for delivery. The Master need not appear in person before the Captain of the Port unless specifically ordered to do so.

(ii) Slight groundings or touching of banks and bottom may simply be noted on the reverse side of the receipt for pilotage signed by the Master.

(iii) In case of collision, stranding, slight grounding, touching of banks and bottom, or other accidents, vessels should immediately notify YVIM.

## Section A

**MATANZAS: 08.17 N, 62.52 W.** (See Plan Book)

N.B. See "Orinoco River" for all important entry requirements.

**LOCATION:** At Mile 195 from sea on Orinoco River.

**ANCHORAGE:** Between buoys Nos. 140 and 137, Orinoco River.

**MAX. SIZE:** Length 600 ft., breadth 74 ft., distance between rail and hatch coaming 23 ft., max. draft 41 ft. In rainy season May to November, and 28 ft. in dry season.

**RADIO:** See "Orinoco River". Cable address of Matanzas terminal operators is "Sidor Matanzas - Telex 96368" and cables may be routed through Caracas, Curaçao or Trinidad Radio.

**TUGS:** Every vessel over 2,000 registered tons is required to use a tug when berthing. Tug is 1,600 h.p.

**BERTHING:** Reinforced concrete structure consisting of 3 different sections running in a straight line, bearing 065°.

From West to East, 3 sections should be pointed out:

The first section, some 320 m. long, is used mainly for unloading bulk cargoes. Depth 10 m. below MSL.

The second section, 400 m. long, is for handling steel products. Depth 11 m. below MSL.

The third part, some 280 m. long, is for general cargo. Depth 11 m. below MSL.

The level of the river fluctuates from 0.6 m. over MSL at low river water in the dry season (February - March) to 14 m. over MSL at high river water in the rainy season (July - August).

The river bed drops sharply from the edge of the pier to the navigation channel where the depth reaches 30 m. below MSL.

Berth No. 1: Runs from bollard No. 1 to No. 7, length 155.30 m.

Berth No. 2: Runs from bollard No. 7 to No. 14, length 176.38 m.

Berth No. 3: Runs from bollard No. 14 to No. 24, length 204.25 m.

Berth No. 4: Runs from bollard No. 24 to No. 33, length 182.76 m.

Berth No. 5: Runs from bollard No. 33 to No. 39, length 160.45 m.

Berth No. 6: Runs from bollard No. 39 to No. 44, length 158.85 m.

In addition there is another berth, length 149 m., South of No. 6, with 24 ft. of water under MSL, that runs from bollard No. 38 to No. 44.

The reinforced concrete platform is 25 m. wide at the first section and 30 m. at the second and third sections. The surface of the pier is 15.5 m. over MSL.

**CRANES:** Berths No. 1 and No. 2 are served by 2 "Cereatti Tanti" bulk loaders of 22 tonnes capacity, able to handle clamshells of 4.5 cu.m. for iron ore, lime stone and other heavy bulk, 40 cu.m. clamshells for coke and other light bulk and orange peeler and magnets for unloading scrap iron.

The reach of these cranes is 10 m. from the pier edge. The working field is from bollard No. 2 to bollard No. 13.

Berths No. 3 and No. 4 are served by 6 "CMI" gantry/trolley cranes fitted with 2 hoists of 15 tonnes each, with a total capacity of 30 tonnes, with the 2 hoists in tandem. The working field is from bollards No. 15 to No. 31.

Berths No. 5 and No. 6 are served by 3 "Ansaldo" gantry/trolley cranes of 16 tonnes capacity. The working area is from bollards No. 35 to No. 44.

At bollard No. 34 there is a stationary rotary derrick of 400 tonnes capacity and a reach of 18 m.

In addition, there are 3 "Grove" auxiliary moving cranes, of the telescopic type, with a rated capacity of 80 tonnes able to work at any part of the pier.

**WAREHOUSES:** From bollard No. 14 to bollard No. 29, running along the South edge of the pier, there are 10 adjoining warehouses, 30 x 100 m. each, 3 of them open at either end and the four in the middle roofed. All of them are provided with 1 gantry crane of 25 tonnes each.

**STEVEDORES:** Operations are round the clock, 7 days a week.

**MEDICAL:** Private hospital and several doctors available.

**FRESH WATER:** Available at rate of 12 t.p.h.

**FUEL:** Available ex-barge.

**CUSTOMS ALLOWANCES:** 200 cigarettes and 1 bottle spirits allowed per crew member for personal consumption.

**IDENTIFICATION CARDS:** Provided by authorities, and necessary if crew going ashore.

**REPAIRS:** Local workshops undertake minor repairs.

**AIRPORT:** Matanzas is served by Puerto Ordaz Airport with several daily flights from Caracas.

**POLICE/AMBULANCE/FIRE:** The entire length of the pier is fitted with fire hydrants and at the steel mill, about 6 km. away, there is a well equipped fire brigade with firetrucks, ambulances and rescue vehicles.

A first aid centre is located close to the fire station.

**TELEPHONES:** No telephones or telex services are available at Matanzas for the use of vessel's personnel. Local telephones are available at the pier and dock supervisor's office. Recreational vessels use their VHF to communicate with their Agents while at anchorage and when alongside.

## REGULATIONS:

Pollution: Venezuelan law and Sidor's port regulations are very strict on air and river water pollution, the following restrictions being in force:

1. No smoke to be ejected from vessels' funnels while moored at Sidor's pier.

2. No waste, refuse or garbage to be dumped in the river while in the river channel, at Matanzas' roads or laying alongside the pier.

3. All waste, refuse or garbage kept on deck, to be sprayed with anti-vermin and kept covered.

4. No salt water ballast, bilge water, oil, refuse water from galleys and lavatories, etc., to be pumped into the river.

In addition to whatever penalty the vessel shall incur under Venezuelan law, Sidor reserves the right to place the offending vessel "off hire" until she has complied with the regulations.

**Safety:** Under Sidor's security norms, every person which, for whatsoever the reason or business, has to transit or stand on the pier platform is bound to use a hard hat. People doing any kind of work on the pier have also to use safety shoes.

**GENERAL:** Sidor's pier will discharge and/or load cargoes for other industries of the area provided a berth is available and no Sidor vessels are waiting. Permission for such operations must be requested prior to vessel's arrival.

Sidor require Agents to provide stowage plan and cargo documents prior to vessel's arrival otherwise Notices of Readiness will not be accepted.

**OPERATOR:** C.V.G. Siderurgica del Orinoco C.A., Código Postal 8014, Matanzas, Ciudad Guayana, Estado Bolívar, Venezuela. Tel: 991111 and 991118, Telex: 86366 and 86229 (Sidor). Cables: Sidor Matanzas. Contact: Superintendent, Port Services.