PANAMA CANAL REGULATIONS

Compulsory pilotage

Pilotage is compulsory in Canal waters. The Authority shall determine the number of pilots assigned to each vessel navigating in Canal waters, including the ports of Cristobal and Balboa.

Article 92, Chapter V, REGULATION ON NAVIGATION IN PANAMA CANAL WATERS

The pilot assigned to a vessel shall have control of the navigation and movement of such a vessel.

Provision of meals

Vessels shall furnish meals without charge to Authority personnel whose assignment will require them to be aboard the vessel for four or more hours. If a vessel is unable to provide meals, or if such meals are unsuitable, they may be furnished by the Authority at the expense of the vessel.

Sanitary facilities

Vessels should have suitable sanitary facilities for Authority personnel aboard. If a transiting ship does not have adequate sanitary facilities, the interval for which each pilot is assigned will be shortened, with the consequential delay, particularly in the case of vessels whose progress is slow.

Proper Display of the Panamanian Flag

The Panamanian flag is divided into four rectangles of equal size. The top two quadrants are white with a five point blue star in the center on the hoist side and plain red. The bottom two quadrants are plain blue on the hoist side and white with a five point red star in the center. The flag must be displayed with the white quadrant with the blue star on top, adjacent to the flagpole, leaving the blue quadrant directly below and also adjacent to the flagpole.

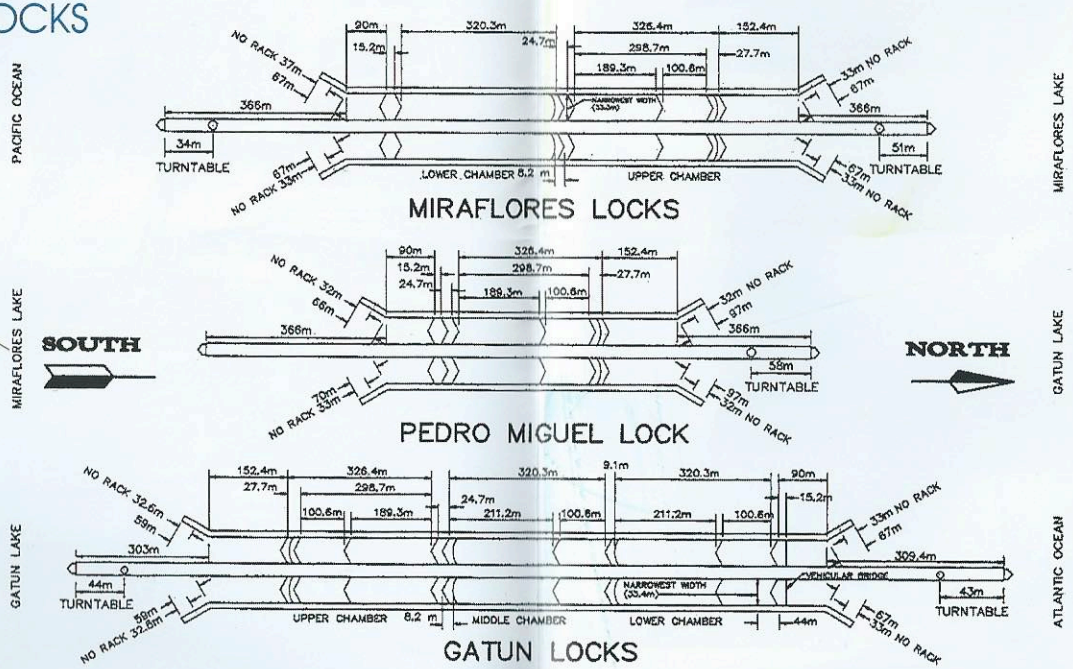
Smoking Prohibition in Canal Waters

Pursuant to the Regulation on Sanitation and Communicable Disease Prevention, the ACP has prohibited smoking in enclosed areas on vessels in Panama Canal waters in the presence of ACP officials performing their duties.

Mooring Lines

Vessels are required to have on deck six manila or synthetic mooring lines forward and six aft in good conditions prior to commencing transit. The size and strength suitable for the vessel to dock, moor at a lock approach wall or secure in a lock chamber are the vessel's responsibility. Wire ropes and ropes composed of both wire and fiber or filaments, are not acceptable for Canal operations and shall not be used.

LOCKS



TIE-UP OPERATION

RELAY OPERATION

TANDEM LOCKAGE

NORTHBOUND
TRANSIT

1. Pacific Sea buoy (call FSS 10 miles away for instructions)
2. Merchant vessel anchorage area (55 ft. FSS)
3. Explosive Anchorage (depth 55 ft. used for bunker operations and dangerous cargo ships, FSS)
4. Channel entrance. (7 NM to Miraflores locks)
5. Bridge of the Americas and dock 6 (deckhands, Tug operations)
6. Balboa Harbor - (basin)
7. PSA piers
8. Miraflores Locks - sea entrance (currents, tide differences - elevation - two steps up)
9. Miraflores lake (tug operations, 1NM length, 54ft. above sea level, depth 43 ft.)
10. Miraflores moorings (FSS)
11. Pedro Miguel Locks - lake entrance (elevation, one step up)
12. Paraiso landing (deckhands, tug operations)
13. Cartagena / Cucaracha tie-up station (FSS)
14. Gaillard Cut (7 NM length to Gamboa signal st.)
15. Gamboa signal station (tug operations)
16. Gamboa moorings (FSS)
17. Gatun Lake (21 NM to Gatun Locks, depth 48 ft.)
18. Gatun anchorage for merchant vessels (depth 48 ft., CSS)
19. Gatun explosive Anchorage (depth 48 ft, CSS, deckhands)
20. Gatun Locks - lake entrance (lower - 3 steps down)
21. Davis Landing (deckhands)
22. Mindi Dock
23. Mole Buoy (exit of the channel)
24. Cristobal Harbor
25. Anchorage area "A" (draft 39'06", length over 525 ft. x over 81 ft., CSS)
26. Anchorage area "B" (draft less than 30'00", length over 525 ft. x less 81ft., CSS)
27. Anchorage area "D" (draft less than 30'00", length less 525 ft. x less 81 ft., CSS)
28. Anchorage area "C" (authorized by Canal port captain only with a pilot, CSS)
29. Break water (exit/entrance)
30. Outer Atlantic Anchorage (CSS)
31. Atlantic Sea buoy

Tropical Fresh Water Draft (TFW):

Tropical Fresh Water draft of Gatun Lake, density 0.9954 gm/cc at 85o F (29.4o C). [Transition to fresh water frequently alters the trim of large vessels 3 to 4 inches (8 to 10 cm) by the head.]

CSS: Cristobal Signal Station (call on VHF channel 12) for information about pilot boarding time, anchoring instructions, permission to heave up anchor, permission to move the ship general information.

FSS: Flamnco Signal Station (call on VHF channel 12) for information about pilot boarding time, anchoring instruction, permission to heave up anchor, permission to move the ship, and general information.

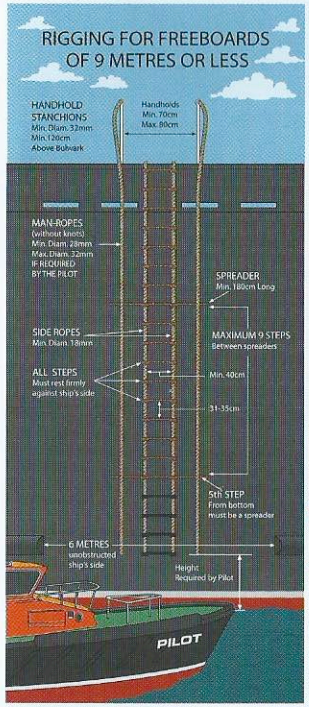
TUG OPERATIONS: Depending on ship size, could be one or two tugs.

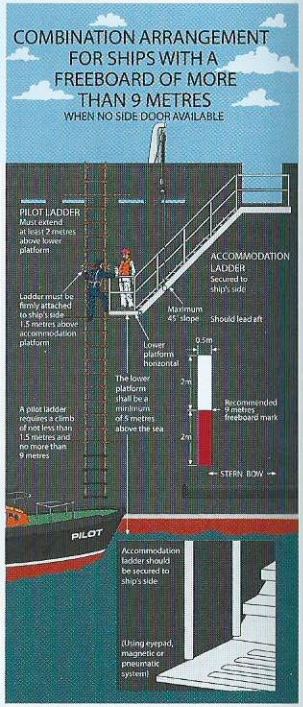
DECKHANDS: Canal seamen (location where the ship will be getting Canal personnel by launch or getting them off)

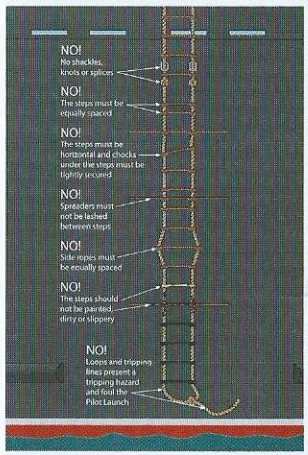
SOUTHBOUND
TRANSIT

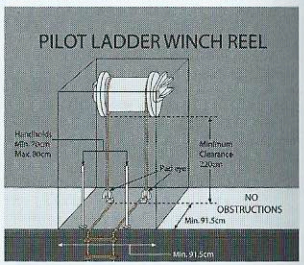
31. Atlantic Sea buoy (CSS 10 miles away for instructions)
30. Outer Atlantic Anchorage (CSS)
29. Break water (exit/entrance)
28. Anchorage area "C" (authorized by Canal port captain only with a pilot, CSS)
27. Anchorage area "D" (authorized by canal port captain only with a pilot, CSS)
26. Anchorage area "B" (draft less than 30'00", length less 525 ft. x less 81 ft., CSS)
25. Anchorage area "A" (draft less than 30'00", length over 525 ft. x over 81 ft. or dangerous cargo any size, CSS)
24. Cristobal Harbor
23. Mole buoy (entrance of the channel)
22. Mindi Dock (tug operations, deckhands)
21. Davis landing
20. Gatun Locks - sea entrance (elevation -3 steps up, 28 NM to Pedro Miguel Locks, deckhands)
19. Gatun explosive anch (depth 48 ft., CSS).
18. Gatun Anchorage for merchant vessels (depth 48 ft, CSS)
17. Gatun Lake (depth 48 ft.)
16. Gamboa moorings (FSS)
15. Gamboa signal station. (tug operations)
14. Gaillard Cut (7 NM length to Pedro Miguel locks)
13. Cartagena / Cucaracha Tie-Up Station (FSS)
12. Paraiso landing (deckhands, tug operations)
11. Pedro Miguel Locks - lake entrance (lower down, one step)
10. Miraflores moorings (FSS)
9. Miraflores Lake (tug operations, 1NM length, 54 ft. above sea level, draft 43 ft.)
8. Miraflores Locks - sea entrance (currents, tide differences - lower down - two steps, 7nm to channel exit, deckhands)
7. PSA Piers
6. Balboa Harbor
5. Bridge of the Americas and dock 6
4. Channel exit
3. Explosive anchorage (depth 55 ft. used for bunker operations and dangerous cargo ships, FSS)
2. Merchant vessel anchorage area (depth 55ft., FSS)
1. Pacific Sea buoy

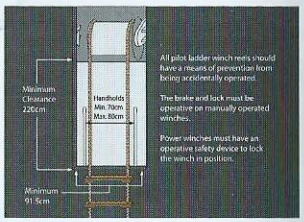
BOARDING FACILITIES

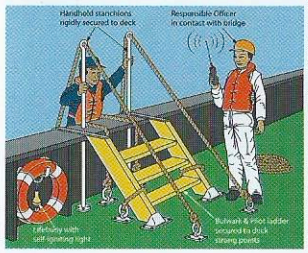


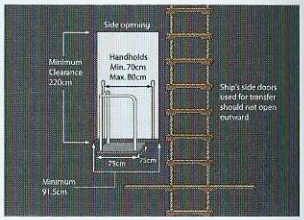












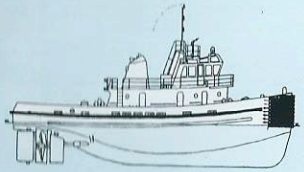
CUT STYLE

ON THE BOW

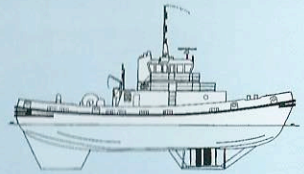
ON THE QUARTER

TYPES OF TUGS

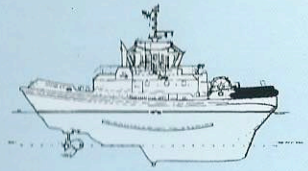
MEHAFFEY CLASS
96'-00x28'-00" conventional
2EMD-645-E2 2X1500hp
APPROX33tons
JOSEPH MEHAFFEY
CHESTER HARDING



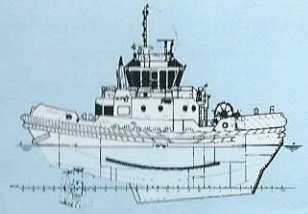
AMISTAD CIASS
103'-02x30'-00" 2-KORT
NOZZEL/FLK 2X1500hp
APPROX39tons
AMISTAD



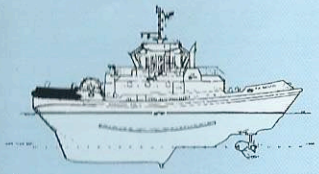
CACIQUE CLASS
95'-00"x34'-00" 2 V-S CYCLOIDAL
Voith-Schneider 2X1500hp
APPROX32tons
CACIQUE I, GILBERTO GUARDIA F.,
GUIA, CECIL F. HAYNES, LIDER,
D.P. McAULIFFE, UNIDAD



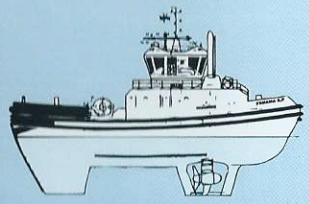
COCLE CLASS
101'-00"X36'-07"2 SCHOTTEL
kort orientable 360°. 2x2200hp
APPROX55tons
COCLE, COLON, HERRERA,
LOS SANTOS



BOCAS DEL TORO CLASS
89'-10"x38'-03" (LCT= Lips
Controllable Thruster) 2X2414hp
APPROX60tons
BOCAS DEL TORO, DARIEN,
VERAGUAS II, CHRIQUI III,
PANAMA XIV, RIO INDIO,
RIO BAYANO I, RIO TUIRA

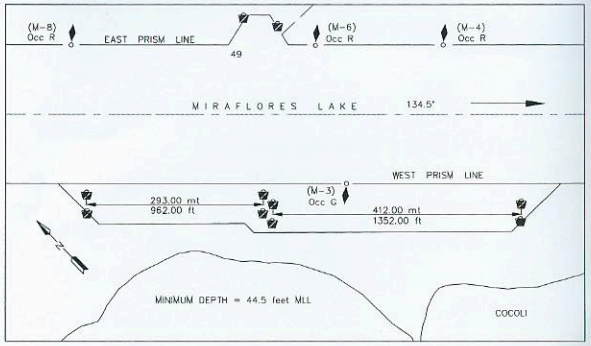


CALOVEBORA CLASS
89'-10"x40' SCHOTTEL Azimutal,
Z-Drive rudder props 2X2923hp
APPROX65tons
CALOVEBORA, CHANGUINOLA,
SIXAOLA, TERIBE, SAJALICES,
PEQUENI, BELEN, DOLEGA, ESTI,
FARFAN, PACORA, PARITA, TONOSI

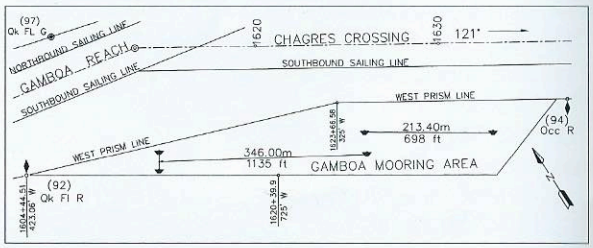


CERRO CLASS
14 new tugs TRACTOR APPROX
70tons

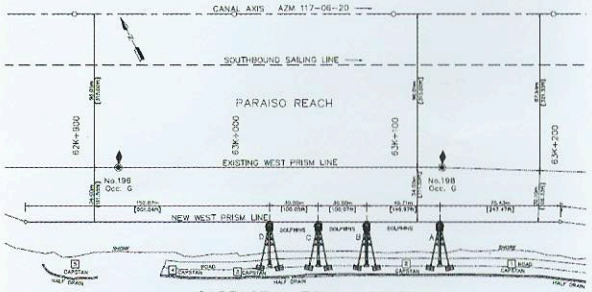
MIRAFLORES MOORINGS



GAMBOA MOORINGS

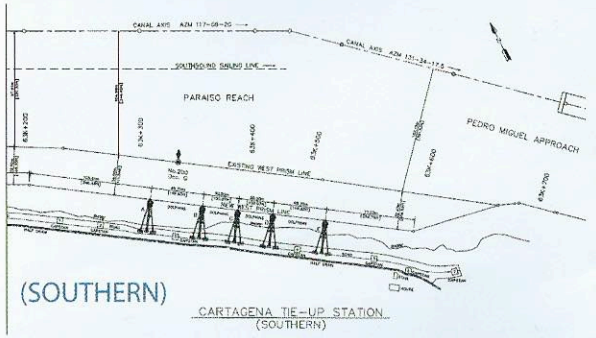


CARTAGENA TIE-UP STATION



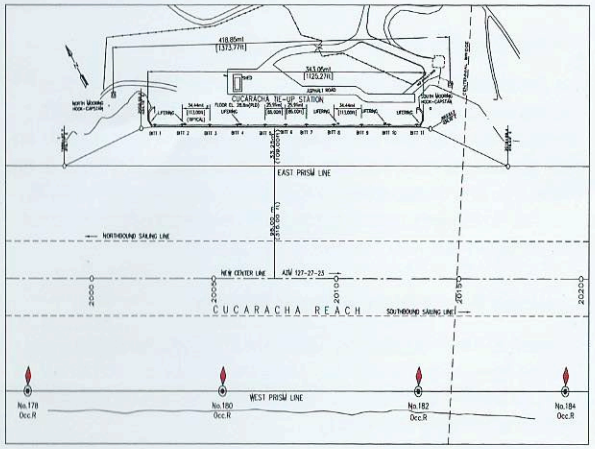
(NORTHERN)

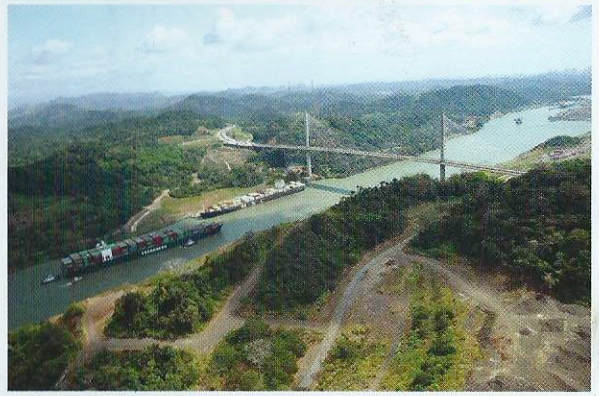
CARTAGENA TIE-UP STATION



(SOUTHERN)

CUCARACHA TIE-UP STATION





SIDMAR™
CENTRO DE SIMULACIÓN, INVESTIGACIÓN Y DESARROLLO MARÍTIMO