

## Panama Canal Authority – Tugboat Fleet – Principal Particulars



**CHESTER HARDING**

### GENERAL

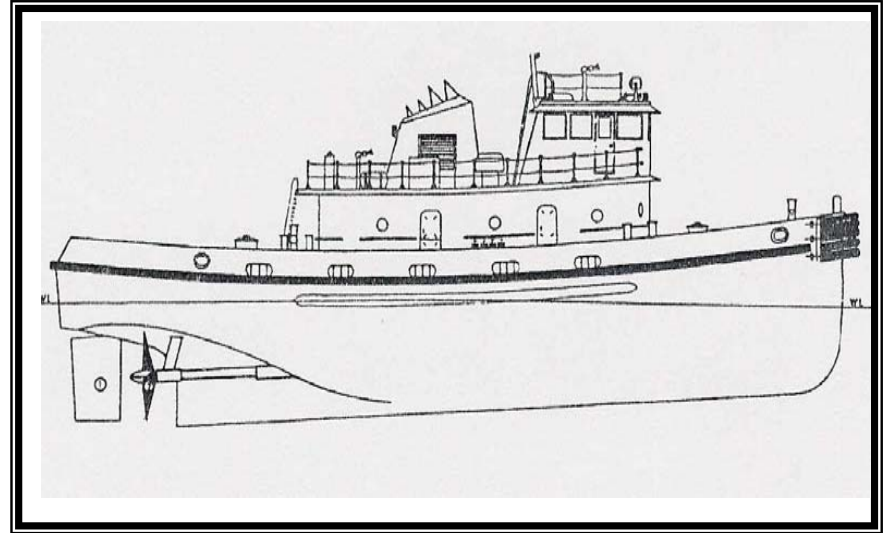
Registered Owner : Panama Canal Authority  
Owner/Operator : Panama Canal Authority  
Category : Harbour Tug  
Type : Conventional Twin Screw  
Built : 1970  
Yard : Southern Shipbuilding Corp.  
Hull No. 89 – U.S.A.  
Classification : ABS (Declassed)  
Flag : Panama  
Port : Cristobal, Panama  
Call Sign : HP-9789  
Bollard Pull : About 33.0 tons  
Speed : 12 Knots

### TONNAGE/DIMENSIONS

GRT : 303.00 tons  
LOA : 96 ft 0 in  
Beam : 28 ft 0 in  
Draught : FWD 9 ft 0 in; AFT 12 ft 7 in  
Moulded Depth : 16 ft 0 in

### TANK CAPACITIES

Bunker : 24,701 gal  
Fresh Water : 2,441 gal



### MACHINERY

Main Engines : 2  
Make : General Motors EMD  
Model : 645-E2  
BHP : 3,000  
Propulsion : Conventional  
Propulsion description : Twin Screw, fixed pitch

### EMERGENCY INTERVENTION

One (1) 2-Stage Centrifugal Pump : 2,000 GPM @ 150 PSI  
No foam capabilities.  
One (1) Firefighting Monitor : SKUM MK 100

### TOWING EQUIPMENT

Two (2) electrical driven vertical Capstans  
One (1) on the bow and one (1) on the stern

Manufacturer : Markey Machinery Company Inc.  
Model : CEV 80 Electric  
Motor Rating : 15 HP, 208V, 3-phase, 60Hz.  
Bollard Rating : 40 ft/min @ 4.5 tons Pull  
80 ft/min @ 2.25 tons Pull