

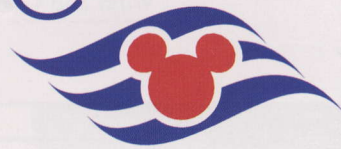
# Welcome



to the

# Bridge

of the *Disney Magic*

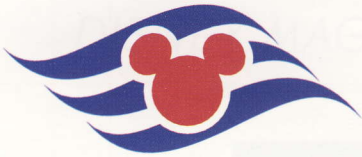


## SHIP PARTICULARS

Length • 294 m • 964 ft  
Beam • 32.25 m • 105.8 ft  
Gross Tonnage • 83,338 mt  
Net Tonnage • 59,476 mt  
Draft • 7.7m • 25.3 ft  
Guest Capacity • 2,809 Persons  
Crew Capacity • 945 Persons  
Total Capacity • 3,754 Persons

Cruising Speed • 21.5 kts  
Max. Speed • 25.36 kts  
Engines • 5 X 16 Cylinder ZA40  
(Total 80,000 hp • 62,000 Kilowatts)  
Generators • 2 X 19 megawatts GE Propulsion Motors  
Bow Thrusters • 3 X 1800 Kilowatts (2300 hp X 3)  
Stern Thrusters • 2 X 1800 Kilowatts (2300 hp X 3)  
Propellers • 2 Fixed Pitch Outward Turning  
Water Making Capacity • 300,000 Gallons/Day

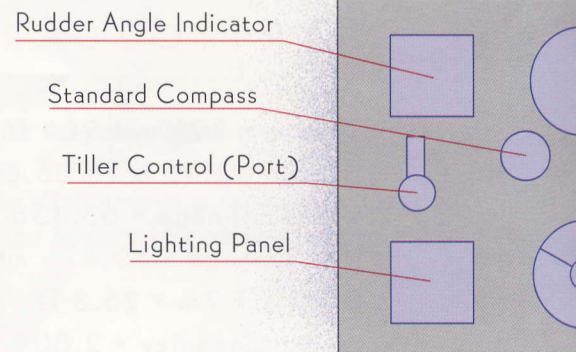
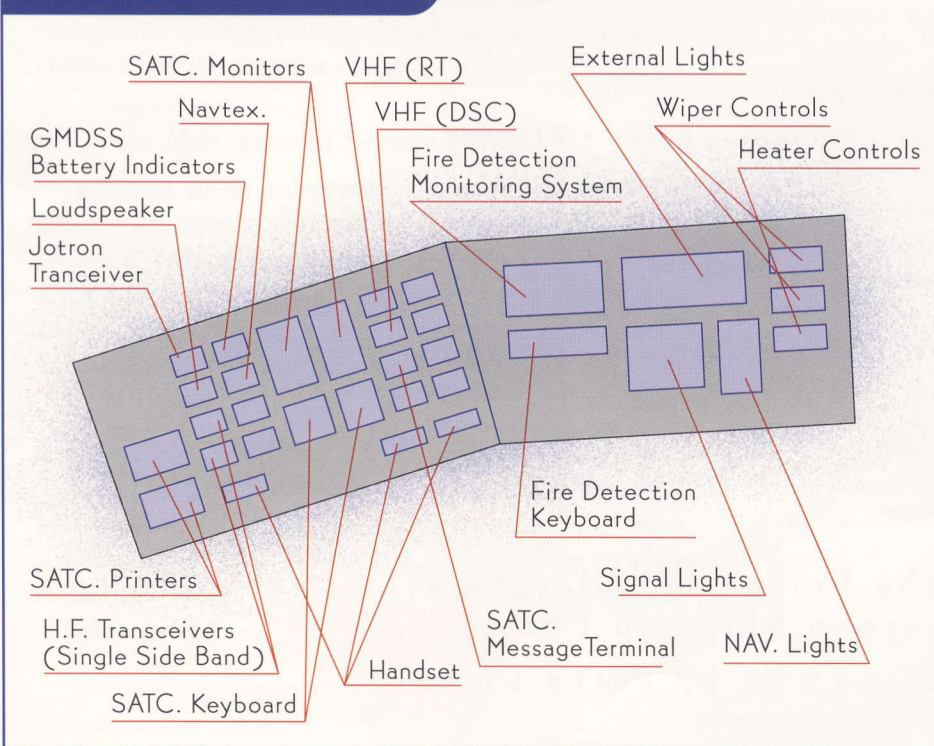
- Built in Italy at the Fincantieri Marghera Shipyard (Stern) and Fincantieri Ancone Shipyard (Bow)
- Christened July 30, 1998 by Patty Disney



# MAGIC & DISNEY WONDER BRIDGE TOUR



## Port Side Console



## MAIN CO

Window Heaters

VHF

Handset

VMS Screen 2

Wind Ind.  
E.R. Duty

Radar 3

Whistles

Whistle Controls (Timers)

(VMS) Voyage  
Monitoring System

Wind Direction/  
Speed Indication

Doppler Log

Standard Compass  
Repeater

Compass Magnetic  
Variation

Echo Sounder

Alarm Panel

P&S Propulsion Alarm

P&S Shaft & Load Ind.

STBD Telegraph

Control Transfer Panel

Over-Riding  
Steering Control

P&S Steering Control

Joystick Maneuvering Panel

Satellite  
Phone

Saturn B Distress

Sailor Distress

Steering Pumps  
- Start/Stop and Alarms

GMDSS Alarm Unit

Searchlight Controls

Searchlight Selection

River Radar

Per Limit

Switch

Gyro Repeater

Rudder Angle Indicator

Rate of Turn Indicator

Tiller Control (Starboard)

Gyro Compass  
Repeater Alignment

Wheel

### Starboard Side Console

Wiper Control

CCTV

GPS

Transas Monitor

DGPS

Master Clock

Chart Table

Bridge Door  
Speaker  
(I.D. Purposes)

'Moland' Voyage  
Recorder

CCTV Keyboard

Heated Window Control

Emergency Phone  
(Wind Handle)

Weather Fax

# CONSOLE

# DISNEY MAGIC & DISNEY WONDER BRIDGE TOUR

- **Main Maneuvering Console**

The Main Maneuvering Console contains the ship's throttles which determine the power and direction for each propeller shaft. This console also contains various alternative steering modes for backup and emergency purposes.

Also within the console are the bow and stern thruster controls, which allow the vessel to move in a sideways direction.

The joystick uses a combination of all of these controls and integrates them all together allowing the Captain to dock the vessel.

- **Radars**

The ship's radar sends out electro-magnetic pulses for up to 96 miles from 4 independent scanners around the vessel. When these reflect off land or other ships in the area, they display an image on the screens. From this information, we can obtain the speed, course and position of other ships and even determine how close other ships will pass. Radars also provide us with a crucial method of position fixing and also act as our eyes in heavy fog and weather conditions. Each of our radar screens is touch sensitive.

- **GPS (Global Positioning Satellite System)**

The GPS determines the vessel's position on the earth's surface by using various satellites. Accuracy is initially around 100 meters although the differential GPS unit increases the accuracy to within 8 meters.

The positions obtained are then fed into the voyage management system to provide a visual indication of the vessel moving across the electronic charts.

- **Voyage Management System (VMS)**

VMS uses all the independent components of the Bridge allowing the vessel to maneuver for pre-planned routes, so in theory we could program the ship to leave the berth and arrive at the berth at a set time. This system is not used to this extent and can be overridden by various other back-up systems at any time as may be required by the Duty Officer.

- **Stabilizers**

These are large fins that can be extended from the ship's hull, around the Midship's section, to reduce the ship's rolling movement by up to 90 percent. There is one on each side measuring 30 feet by 9 feet and they are most effective at higher speeds.

- **Echo Sounders**

These send pulses from the ship's hull to the ocean floor, which are then reflected back to the hull. This gives us an accurate indication of the water's depth, and can also produce a graph-like display indicating the shape and depth contours of the ocean floor.

- **Transas Monitor**

This electronic chart computer provides a feedback to our black box, which constantly records the vessel's position, speed, course and similar data on other vessels so that in the event of any dispute, evidence can be provided. The black box also records all speech on the Bridge.

- **Fire Detection Systems**

This system allows us to constantly monitor all the smoke detectors, sprinklers and various other detection forms around the vessel. They are extremely sensitive and will give us warnings when the temperature starts increasing.

- **Communications, GMDSS Console**

Gone are the days of the radio operator as most of this system is automated. Most communications are by satellite, including several forms of distress calling. VHF, MF and HF frequencies can also be monitored automatically from this station to listen for distress calls, and if any were picked up, alarms would sound to alert the officer on duty to take the appropriate action.

- **Chart Table**

This is where the Navigation Officer prepares the passage plan for the voyages. This is also where the present chart will be displayed for the ship's position at that time so that radar and GPS positions can be plotted for reference to confirm the vessel's position.

