1. GENERAL

Name: DLB KUROSHIO (K-1)
Type: Non-propelled, steel flat bottom type Derrick & Lay Barge, right ramp
Year of Construction: January, 1972
March, 1984 (Derrick Crane Upgrade)
June, 1996 (Hull Modification Upgrade)
March, 1998 (Derrick Crane Upgrade)
January, 2000 (Additional Accommodation)
December, 2009 (Living Quarter Upgrade)
Condition of Barge: Good
Classification: ABS Maltese Cross +A-1 E
Gross Reg. Tonnage: 15,983 tons (ABS)
Length: 465.9 ft (142 m)
Width: 131.2 ft (39.99 m)
Depth: 29.3 ft (8.93 m)
Towing Draft: about 14 ft (4.3 m)
Operating: 14 ft - 18 ft (4.3 m - 5.5 m)
Displacement: 25,346 tons
Accommodations: Air-conditioned quarters for 323 men
Galley: All necessary messing facilities to support 323 men
Hospital: An attendant and equipped clinic for immediate first aid (2 beds)
Helideck: 72 ft x 72 ft with loading capacity for SIKORSKY S-6IN class
F.O. Storage Capacity: 2,355.3 m³
F.W. Storage Capacity: 2,259 m³
Ballast Capacity: 7,761.9 tons
Fresh Water Maker: 100 tons/day x 2 sets
Deck Storage: 1,700 m² (wooden deck)
4.4 - 28 tons/m²

2. ANCHOR & MOORING SYSTEM

1) Mooring Winch
   Type: KITAGAWA single drum, electric driven
   Stall: 146 tons
   Rating: Max. 60 tons x 18 m/min.
          Min. 6 tons x 182 m/min.
SPECIFICATION OF DLB KUROSHIO

Brake : 200 tons
Wire : 6 x Fore lines, 4 x Aft lines
      56mm Ø x 1,700 m
Anchor : Delta Flipper 12 tons x 8 sets

2) Anchor Windlass
   Capacity : 32 tons x 9 m/min.
   Chains : 70 mm (Gr. 2) x 12 shots
   Anchor : Stockless 6,450 kg
   Number : 2 sets

3. DERRICK CRANE

   Type : GUSTO-SHI E2500/2000 DB-B
   Main : 2,500 S.tons at 30.5 m radius
   Main : 2,500 S.tons at 40 m radius with tiebacks fitted in fixed over stern lifting mode
   Aux. No. 1 : 800 S.tons at 65 m radius
   Aux. No. 2 : 300 S.tons at 95 m radius
   Whip Line : 80 S.tons at 100 m radius
   Boom Length : 72.5 m / 11.66 m / 6.54 m / 4.98 m
   Slewng : 0.3 rpm

4. AUXILLIARY EQUIPMENT

   1) Shipboard Power
      Diesel Generator : CAT 3606TA 1820 kw x 3 sets
                         800 KVA x 1 unit

   2) Air Compressor
      Diesel : Hokuetsu Industries Co. Ltd. x 3 sets
               PDSH 850S / J750S

   3) Jetting Pump
      Motor Driven : Double Suction Multistage Volume Pump
                     No.1: 5.7 m³/min. x 180 m x 1 set
                     No.2: 5.95 m³/min. x 180 m x 1 set

   4) Crawler Crane
      Type : KOBELCO 7250-2F
      Main Hoist : 54 MT (12.5 m) 70 MT Hook
SPECIFICATION OF DLB KUROSHIO

Aux. Hoist : 13.5 MT
Boom Length : 51.8 m

5) Service Winches
   Type : Mitsubishi Heavy Industries
   Electric-hydraulic twin drum
   Rating : Max. 10 tons x 24 m/min.
   Brake : 15 tons
   Wire : 32 mm Ø x 500 m x 2 lines
   Number : 2 sets

6) Pipelay Stations
   Welding Stations : 4 stations
   NDT Station : 1 station
   Repair Station : 1 station
   Coating Station : 1 station

7) Tensioning System
   Type : WESTERN GEAR LPT 150S
   Capacity : 68 MT x 1 set

8) Laydown Winch
   Type : KITAGAWA, auto-tension
   Single drum diesel driven
   Rating : Max. 90 m tons
   Brake : 215 tons
   Wire : 56mm x 1,000 m
   Number : 1 set

9) Davit System
   Removable : 50 tons x 5 sets

10) Pipelay Stinger
    Rigid Type : 40 m x 2 units

5. NAVIGATION & COMMUNICATION SYSTEM

1) Navigation Equipment
   Radar : JRC
   NCT-27
SPECIFICATION OF DLB KUROSHIO

Gyro compass : TOKYO KEIKI CO.
   ES-11A
Echo sounder : JRC
   JFE-570S
Wind Indicator : KOSHIN DENKI KOGYO
   F-35-1 6A & MP-3800

2) Communication equipment
IF/H S-SSB : JRC.JSB-450 type, 1.6 - 2,999 MHz, 400/800W
Marine VHF : JRC.JHV-227 type. All channels, 20 W
Inmarsat “B” : JRC.JUE-300 B type, Tel / Telex / Fax
Inmarsat “M” : SP 1600 M Tel / Fax / Data
Beacon : LWX-100A, 200 - 535 Khz, 100W
Air Band Radio : BECKER Type # GK415 / AR4201, 118 – 136KHz
V-sat : 512Kbps or 1Mbps Dedicated Satellite bandwidth on T-18 (Duplex)
BARGE PARTICULARS:

LENGTH (O.A) = 142.0 M
BREADTH = 40.0 M
DEPTH = 9.0 M
DRAFT (DESIGN) = 5.5 M
DISPLACEMENT = 25,348 M TONS
GROSS TONNAGE = 14,552 TONS
NET TONNAGE = 4,365 TONS

GENERAL LAYOUT OF EQUIPMENT ON K-1