

# M/V SUPERIOR ENDURANCE

## Marine Division Liftboat Specifications



**Class  
170**

Official No.: 653622

Year Built: 1982

Call Sign: WDA 5225

- 170' Legs
- 3,700 Square Feet of Total Deck Area
- 250,000 Lbs. Maximum Deckload
- Works In Water Depths Up To 115'
- Sleeps 36 Persons, Including a Standard Crew Complement of 8
- Can travel with 16 Passengers

- Gross Tons: 289    ITC:
- Net Tons: 196
- USCG Inspected
  - ABS Classed
  - SOLAS Classed
  - SOLAS Ready
  - Moonpool Equipped
  - Zero Discharge Capable
  - Zero Discharge Ready

## Vessel Characteristics

### Hull Dimensions

|                           |        |
|---------------------------|--------|
| Length Overall (ft.)      | 120.5' |
| Length (Barge Only) (ft.) | 105'   |
| Beam Overall (ft.)        | 76'    |
| Beam (Barge Only) (ft.)   | 45'    |
| Hull Depth (ft.)          | 9'     |
| Design Draft (ft./in.)    | 5' 6"  |
| Open Deck Area (sq. ft.)  | 3,100  |
| (45 x 70 Tapers)          |        |

### Leg Dimensions

|   |                        |      |
|---|------------------------|------|
| <input checked="" type="checkbox"/> Internally Braced | Number of Legs         | 3    |
|   | Leg Length (ft.)       | 170' |
|   | Leg Diameter (in.)     | 48"  |
|   | Leg Wall (in.)         | 3/4" |
|   | Leg Tower Height (ft.) | 20'  |

### Pad Dimensions

|                          |                  |      |
|--------------------------|------------------|------|
| Triangle 78 P/S x 95 AFT | Pad Length (ft.) | 34'  |
|                          | Pad Width (ft.)  | 16'  |
|                          | Pad Depth (ft.)  | 2.6' |

Comments: Raked at both ends

### Crane Specifications

|                    | Port             | Starboard   |
|--------------------|------------------|-------------|
| Make               | Nautilus         | EBI Cranes  |
| Model              | 42 Ton DTH126-77 | C20B50      |
| Load Rating (tons) | 42               | 5           |
| Boom Type          | Fixed (Box)      | Fixed (Box) |
| Boom Length (ft.)  | 80'              | 50'         |
| Crane Inst. Type   | Pedestal         | Pedestal    |

All published load ratings are based upon a 20 ft. radius

### Propulsion

|  |                            |                |
|--|----------------------------|----------------|
| <input type="checkbox"/> Bow Thruster Equipped | Mains - Make               | Detroit Diesel |
|  | Mains - Model              | 16V71          |
|  | Horsepower                 | 1076           |
|  | Clutch Make/Reduction Gear | 3.94-1         |

### Generators

|   |                |
|---|----------------|
| Generator Engine Make                           | Detroit Diesel |
| Generator Engine Model                          |                |
| Generator Output                                | Two (2) 99 kw  |
| <input type="checkbox"/> Equipped w/ Aux Genset | Output:        |

### Capacities

|  |        |
|--|--------|
| Diesel Fuel (gal.)                           | 6,280  |
| Potable Water (gal.)                         | 10,500 |
| <input type="checkbox"/> Watermaker Equipped |        |

### Electronic Aids & Communications

|   |   |
|---|---|
| <input checked="" type="checkbox"/> Compass         | <input type="checkbox"/> Cellular Phone                   |
| <input checked="" type="checkbox"/> GPS/DGPS        | <input type="checkbox"/> Private Freq Radiotelephone      |
| <input type="checkbox"/> Loran                      | <input checked="" type="checkbox"/> VHF Radio             |
| <input checked="" type="checkbox"/> Radar           | <input checked="" type="checkbox"/> Single Sideband Radio |
| <input checked="" type="checkbox"/> Fathometer      | <input type="checkbox"/> GMDSS                            |
| <input checked="" type="checkbox"/> Loudhailer      |   |
| <input checked="" type="checkbox"/> Satellite Phone |   |

### Personnel Accommodations Features

|                               |    |
|-------------------------------|----|
| Total Sleeping Accommodations | 36 |
| VIP Accommodations            | 2  |
| Crew Accommodations           | 8  |
| Contractor Accommodations     | 26 |

### Other Features

|   |  |
|---|--|
| <input checked="" type="checkbox"/> VIP Office      | <input checked="" type="checkbox"/> Laundry Facility       |
| <input checked="" type="checkbox"/> Galley & Dining | <input checked="" type="checkbox"/> Air Conditioned/Heated |
| <input checked="" type="checkbox"/> TV Lounge       |  |

### Performance Characteristics

|                                   |                   |
|-----------------------------------|-------------------|
| Estimated Speed                   | 5 mph/ 4.34 knots |
| Max Separation, Pad to Deck (ft.) | 150'              |
| Max Working Water Depth (ft.)     | 115'              |
| Min Working Water Depth (ft.)     | 9'                |
| Max Jacking Sea States (ft.)      | Soft Bottom 5'    |
|                                   | Hard Bottom 4'    |

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## LOAD CHART



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| I<br>CRANE          | MODEL - DTH 126-77                |         |                           |         |                      |          |                      |           | PORT |
|---------------------|-----------------------------------|---------|---------------------------|---------|----------------------|----------|----------------------|-----------|------|
|                     | BOOM LENGTH 77'                   |         |                           |         |                      |          |                      |           |      |
|                     | PERSONAL LIFTS<br>AUXILIARY HOIST |         | 1-PART<br>AUXILIARY HOIST |         | 4-PART<br>MAIN HOIST |          | 8-PART<br>MAIN HOIST |           |      |
| ANGLE IN<br>DEGREES | STATIC                            | DYNAMIC | STATIC                    | DYNAMIC | STATIC               | DYNAMIC  | STATIC               | DYNAMIC   |      |
| 82.9                | 4,704 B                           | 4,704 B | 9,406 B                   | 9,406 B | 55,626 B             | 55,626 B | 106,872 B            | 106,667 A |      |
| 75                  | 4,704 B                           | 4,704 B | 9,406 B                   | 9,406 B | 55,626 B             | 55,626 B | 85,000 A             | 56,667 A  |      |
| 60                  | 4,704 B                           | 4,704 B | 9,406 B                   | 9,406 B | 42,000 A             | 28,000 A | 42,000 A             | 28,000 A  |      |
| 45                  | 4,704 B                           | 4,704 B | 9,406 B                   | 9,406 B | 29,300 A             | 19,533 A | 29,300 A             | 19,533 A  |      |
| 32                  | 4,704 B                           | 4,704 B | 9,406 B                   | 9,406 B | 21,800 A             | 14,533 A | 21,800 A             | 14,533 A  |      |
| 15                  | 4,704 B                           | 4,704 B | 9,406 B                   | 9,406 B | 15,500 A             | 10,333 A | 15,500 A             | 10,333 A  |      |
| 0                   | 4,704 B                           | 4,704 A | 8,500 A                   | 5,667 A | 8,500 A              | 5,667 A  | 8,500 A              | 5,667 A   |      |

### IMPORTANT

1. STATIC RATED LOADS are to be used for lifts to or from STATIONARY PLATFORM
2. DYNAMIC RATED LOADS are to be used for lifts to or from a VESSEL
3. "A" LOADS are limited by STRUCTURAL CRANE CAPACITY
4. "B" LOADS are limited by WIRE ROPE CAPACITY
5. "C" LOADS are limited by AVAILABLE HOIST LINE PULL
6. lb-AUXILIARY BALL must be deducted from the above loads
7. lb-LOAD BLOCK must be deducted from the above loads
8. 48,000 BREAKING STRENGTH 3/4" DIAMETER 19 X 7 CLASS-AUXILIARY WIRE ROPE
9. 73,000 BREAKING STRENGTH 3/4" DIAMETER CONSTRUCTEX CLASS-MAIN WIRE ROPE

| III<br>CRANE      |                  | MODEL - EBI CRANE C20B-50 |         |               |         | STBD |
|-------------------|------------------|---------------------------|---------|---------------|---------|------|
| RADIUS<br>IN FEET | ANGLE<br>DEGREES | LOAD LINE LBS             |         | FAST LINE LBS |         |      |
|                   |                  | STATIC                    | DYNAMIC | STATIC        | DYNAMIC |      |
| 10                | 77               | 9,750                     | 9,750   | 4,900         | 4,900   |      |
| 15                | 71               | 9,750                     | 9,750   | 4,900         | 4,900   |      |
| 20                | 65               | 9,750                     | 9,750   | 4,900         | 4,900   |      |
| 25                | 59               | 9,750                     | 8,675   | 4,900         | 4,900   |      |
| 30                | 52               | 9,750                     | 6,575   | 4,900         | 4,900   |      |
| 35                | 44               | 7,888                     | 5,075   | 4,900         | 4,900   |      |
| 40                | 36               | 6,388                     | 4,075   | 4,900         | 4,075   |      |
| 45                | 25               | 5,113                     | 3,225   | 4,900         | 3,225   |      |
| 50                | 0                | 3,988                     | 2,475   | 3,988         | 2,475   |      |

### IMPORTANT

#### NOTES:

VALUES SHOWN ARE HOOK LOADS

EBI LOAD LINE BLOCK AND HOOK WEIGHT IS 250 LBS

EBI FAST LINE BLOCK AND HOOK WEIGHT IS 100 LBS

THE LOADS SHOWN ARE LESS THAN THE ALLOWABLES TO ACCOUNT FOR THE WEIGHT OF THE BLOCKS AND HOOKS

LOAD LINE: 2-PART LINE, 9/16" 19X7 EIPS IWRC

25,000 LB NORMAL STRENGTH, 5,000 LB WORKING

FAST LINE: 1-PART LINE, 9/16" 19X7 EIPA IWRC

25,000 LB NOMINAL STRENGTH, 5,000 LB WORKING

STATIC LOAD=1.5 \*DYNAMIC LOAD. STATIC RATING MAY BE LIMITED (EXAMPLE WIRE ROPE CAPACITY)

PERSENNEL HANDLING LOAD = LESSOR OF: DYNAMIC LOAD DIVIDEDBY 2 OR NOMINAL STRENGTH DIVIDED BY 10

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## LIFTBOAT SPECIFICATIONS



Class  
**170**

