#### **VESSEL SPECIFICATIONS**

# (All Details about and without guarantee)

#### <u>VESSEL</u> Alam Makmur

**EX-NAME** N.A. REGISTRY Singapore OFFICIAL NO 388828 **CALLSIGN** S6QS7 IMMARSAT C GMDSS 456329740 INMARSAT TEL 356329750 INMARSAT FAX 356329760 356329780 INMARSAT TLX

OWNERS Ambi Shipping Pte Ltd
MANAGERS Pacific Ship Managers Sdn Bhd

CLASS Nippon Kaiji Kyokai

CLASS ID NUMBER 002414

CLASS NOTATION NK, NS\*, Bulk Carrier, Strengthened for heavy

cargoes, Hold no. 2 & 4 may be empty,

MNS\*(MO)

 TONNAGE
 GROSS
 NETT

 REGISTERED
 27,011.00
 16,011.00

 SUEZ
 27,746.56
 24,719.31

 PANAMA
 N.A.
 N.A.

YEAR BUILT 2000

KEEL LAID 11-April-2000 LAUNCHED 07-July-2000

BUILDER Mitsui Engineering & Shipbuilding Co. Ltd,

Tamano, Japan

HULL NUMBER 1515

VESSEL TYPE Dry Bulk Carrier

ICE CLASSED No NUMBER OF DECK 1

SERVICE SPEED 14 Knots
ECONOMICAL SPEED 13 Knots
FORECASTLE Raised
POOP DECK Flushed
NUMBER OF DECK HOUSES 4
BOW TRUSTER No
NUMBER OF SCREWS 1

TYPE OF PROPELLER Fixed Pitch, 4 Blades

SPARE PROPELLER SHAFT No

L.O.A. 189.80 M L.B.P. 181.00 M BREADTH 31.00 M

| DEPTH                       | 16.50 M   |
|-----------------------------|-----------|
| DRAFT                       | 11.62 M   |
| DEADWEIGHT                  | 46,664 MT |
| DISPLACEMENT                | 54,446 MT |
| TPC (SUMMER DRAFT)          | 51.50 M   |
| F.W. ALLWNCE @ SUMMER DRAFT | 0.264 M   |
| CONSTANT                    | 228 MT    |
| LIGHTWEIGHT                 | 7,802 MT  |
|                             |           |

| DISPLACEMENT AND DRA | FTDWT (MT) | DRAFT (M) | DISPLM'NT (MT) |
|----------------------|------------|-----------|----------------|
| TROPICAL FRESHWATER  | 47,865     | 12.126    | 55,667         |
| FRESHWATER           | 46,644     | 11.884    | 54,446         |
| TROPICAL SEAWATER    | 47,892     | 11.862    | 55,694         |
| SUMMER SEAWATER      | 46,644     | 11.620    | 54,446         |
| WINTER SEAWATER      | 45,400     | 11.378    | 53,202         |

# **CARGOHOLDS**

NUMBER OF HOLDS5NUMBER OF HATCHES5

| HOLD<br>S | FR.NO     | HATCH<br>SIZE(MxM)   | GRAIN(M3) | BALE(M3)  |
|-----------|-----------|----------------------|-----------|-----------|
| 1         | 180 - 216 | $17.60 \times 17.16$ | 10,355.50 | 9,885.60  |
| 2         | 144 - 180 | 20.80 x 17.16        | 12,547.20 | 11,974.70 |
| 3         | 108 - 144 | 20.80 x 17.16        | 12,583.40 | 11,930.90 |
| 4         | 72 - 108  | 20.80 x 17.16        | 12,679.70 | 12,137.10 |
| 5         | 37 - 72   | 20.80 x 17.16        | 11,654.60 | 11,308.40 |
| 6         | N.A.      | N.A.                 | N.A.      | N.A.      |
| 7         | N.A.      | N.A.                 | N.A.      | N.A.      |

# TWEEN HOLDS (IF APPLICABLE) HOLD FR.NO HATCH GRAIN(M3) BALE(M3) S SIZE(MxM) 1 N.A. N.A. N.A. N.A. 2 N.A. N.A. N.A. N.A.

| CARGO HOLD TANKTOP DIMENSIONS EXCLUDE CORRUGATIONS AND SLOPES |             |         |            |
|---|-------------|---------|------------|
| HOLD  | FORWARD (M) | AFT (M) | LENGTH (M) |
|   |             |         |            |
| 1   | 7.95        | 23.54   | 26.8       |
| 2   | 23.54       | 23.54   | 27.6       |
| 3   | 23.54       | 23.54   | 27.6       |
| 4   | 23.54       | 23.54   | 28.0       |
| 5   | 23.54       | 9.69    | 28.0       |
| 6   | N.A.        | N.A.    | N.A.       |
| 7   | N.A         | N.A     | N.A        |

#### **FEATURES OF CARGO HOLDS**

| TEATURES OF CARGO HOLDS               |             |
|---------------------------------------|-------------|
| HOLDS VENTILATION                     | Natural     |
| IF FORCED,NBR OF AIR CHANGE/MIN       | N.A.        |
| BALLAST CARGO HOLD                    | No.3        |
| WHETHER OTHER HOLDS ARE TO BE         | No          |
| BALLASTED TO REDUCE AIR DRAFT IN PORT |             |
| IF SO, STATE THE HOLD/S               | N.A.        |
| IF SO, STATE BALLAST QUANTITIES EACH  | N.A.        |
| HOLD                                  |             |
| UPPER WING TANKS IN ALL HOLDS         | Yes         |
| UPPER WING TANKS CONSTRUCTION         | Sloping     |
| LOWER HOPPER TANKS IN ALL HOLDS       | Yes         |
| UPPER STOOL IN WAY OF BULKHEADS       | Yes         |
| LOWER STOOL IN WAY OF BULKHEAD        | Yes         |
| BLEEDING UPPER WING TANKS             | No          |
| ORE STRENGTHENED                      | Yes         |
| ALTERNATE HOLD LOADING                | Yes         |
| HOLDS USED FOR ALTERNATE LOADING      | No. 1, 3, 5 |
| ALTERNATE LOADING MAX CARGO           | 45,097 MT   |
| CARGO BATTENS FITTED                  | No          |
| BATTENS PERMANENT TYPE                | N.A.        |
| IF NO, ANY PROVISIONSMADE FOR BATTENS | N.A.        |
| IF SO, FITTINGS AND BATTENS ONBOARD?  | No          |
| IN WHICH HOLDS?                       | N.A.        |
| LOCATION OF BATTEN - SHIPSIDE P/S     | N.A.        |
| LOCATION OF BATTEN - BULKHEAD F/A     | N.A.        |
| LOCATION OF BATTEN - TANKTOP          | N.A.        |
| AUSTRALIAN HOLD LADDERS               | Yes         |
| CO2 FITTED IN HOLDS                   | No          |
| SMOKE DETECTOR FITTED IN HOLDS        | No          |
|                                       |             |

#### GRAIN LOADING APPROVAL

| GRAIN ECADING AIT ROVIE               |      |
|---------------------------------------|------|
| CERTIFIED GRAIN LOADING BOOKLET       | Yes  |
| ONBOARD                               |      |
| GRAIN LOADING BOOK COMPLY WITH        | Yes  |
| CHAPTER V1 SOLAS 74                   |      |
| IF OTHERWISE, STATE                   | N.A. |
| CERTIFIED BY CLASS FOR ADMINISTRATION | Yes  |
| OR OTHER NATIONAL AUTHORATIES         |      |
| CERTIFIED FOR UNTRIMMED ENDS          | Yes  |

#### OTHER FEATURES OF CARGO HOLDS

| IS VESSEL LOG FITTED                 | No     |
|--------------------------------------|--------|
| COLLAPSIBLE STANCHIONS               | No     |
| SOCKET FOR STANDCHIONS FOR DECK      | Yes    |
| CARGO                                |        |
| MAXIMUM HEIGHT OF LOG CARGO ON       | N.A. M |
| DECK                                 |        |
| LOOSE LOG LASHING MATERIALS ON BOARD | No     |
| IS VESSEL CONTAINER FITTED?          | No     |

| CONTAINER FITTINGS PERMANENT?      | No   |
|------------------------------------|------|
| - IN HOLDS                         | No   |
| - ON DECKS                         | No   |
| - ON HATCH COVERS                  | No   |
| FULL CONTAINER SHOES, LASHINGS ETC | N.A. |
| MAXIMUM PERMISSIBLE STACK LOAD     | N.A. |
| - HOLDS                            | N.A. |
| - DECK                             | N.A. |
| - HATCH COVERS                     | N.A. |
| ANY REEFER POINTS                  | No   |
| POSITION OF REEFER POINTS          | No   |
| MAX REEFER TEU ALLOWED             | No   |
|                                    |      |

#### CONTAINER CAPACITY

| HOLD | IN HOLDS | TWEEN DK | H-COVERS | MAIN DK |
|------|----------|----------|----------|---------|
| 1    | N.A.     | N.A.     | N.A.     | N.A.    |
| 2    | N.A.     | N.A.     | N.A.     | N.A.    |
| 3    | N.A.     | N.A.     | N.A.     | N.A.    |
| 4    | N.A.     | N.A.     | N.A.     | N.A.    |
| 5    | N.A.     | N.A.     | N.A.     | N.A.    |
| 6    | N.A.     | N.A.     | N.A.     | N.A.    |

#### DECK STRENGTHS (MT/M<sup>2</sup>)

| HOLD | TANKTOP | UPPER DECK | H-COVERS |
|------|---------|------------|----------|
| 1    | 24      | 3.80       | 2.45     |
| 2    | 17      | 3.80       | 2.45     |
| 3    | 24      | 3.80       | 2.45     |
| 4    | 17      | 3.80       | 2.45     |
| 5    | 24      | 3.80       | 2.45     |
| 6    | N.A.    | N.A.       | N.A.     |
| 7    | N.A.    | N.A.       | N.A.     |

#### **HATCH COVERS**

MAIN DECK HATCH COVERS

MAKE: Nakata Mac Corp.

TYPE Jack-knife fore-aft folding type

OPERATION SYSTEM Hydraulic cylinders

SECURING SYSTEM Quick acting cleats & screw cleats

TWEEN DECK HATCH COVERS N.A.

MAKE N.A.

TYPE N.A.

#### DISTANCES (in metres)

STERN TO FRONT OF SUPERSTRUCTURE
31.80 M
STERN TO AFT END AFTMOST HATCH
BOW TO FORWARD OF HATCH NO 1
FWD END OF HATCH NO 1 TO AFT END
AFTMOST HATCH

31.80 M
35.00 M
132.80

#### SHIP'S RAIL TO OUTSIDE OF HATCH COAMING

| HATCH | FORE (M) | MID (M) | AFT (M) |
|-------|----------|---------|---------|
| 1     | 1.54     | N.A.    | 4.68    |
| 2     | 5.43     | N.A.    | 5.43    |
| 3     | 5.43     | N.A.    | 5.43    |
| 4     | 5.43     | N.A.    | 5.43    |
| 5     | 2.75     | N.A.    | 4.36    |
| 6     | N.A.     | N.A.    | N.A.    |
| 7     | N.A.     | N.A.    | N.A.    |

#### THICKNESS OF HATCH COAMING

LONGITUDINAL 635 - 362 MM TRANSVERSE 310 MM

#### CENTRE OF HATCH FROM BOW AND STERN

| HATCH | BOW (M) | STERN (M) |
|-------|---------|-----------|
| 1     | 30.80   | 159.00    |
| 2     | 58.00   | 131.80    |
| 3     | 86.80   | 103.00    |
| 4     | 115.60  | 74.20     |
| 5     | 144.40  | 45.40     |
| 6     | N.A.    | N.A.      |
| 7     | N.A.    | N.A.      |

#### **HEIGHTS** (in metres)

| KEEL TO HIGHEST POINT                | 47.60 M |
|--------------------------------------|---------|
| KEEL TO TOP OF FUNNEL                | 36.20 M |
| KEEL TO TOP OF CRANES                | 35.50 M |
| KEEL TO TOP OF FWD SAMSON POST       | N.A.    |
| KEEL TO TOP OF AFT SAMSON POST       | N.A.    |
| KEEL TO DK LEVEL AT SS RAIL, MIDSHIP | 16.50 M |
| KEEL TO DK LEVEL AT H-COAMING,       | 17.10 M |
| MIDSHIP                              |         |

#### HEIGHT KEEL TO TOP OF HATCH COAMING AND HATCH COVERS

| <u>HOLD</u> | HATCH COAMING | <u>HATCH CVR</u> |
|-------------|---------------|------------------|
| 1           | 18.70         | 19.62            |
| 2           | 18.70         | 19.62            |
| 3           | 18.70         | 19.62            |
| 4           | 18.70         | 19.62            |
| 5           | 18.70         | 19.62            |
| 6           | N.A.          | N.A.             |
| 7           | N.A.          | N.A.             |

#### HEIGHT FROM WATERLINE TO TOP OF HATCH COAMINGS

| HOLD NO | LIGHT SHIP    | FULLY BALLAST | LOADED      |
|---------|---------------|---------------|-------------|
| 1       | 17.82 / 17.54 | 10.79 / 10.74 | 7.08 / 7.08 |

| 2 | 17.42 / 17.09 | 10.72 / 10.66 | 7.08 / 7.08 |
|---|---------------|---------------|-------------|
| 3 | 16.97 / 16.67 | 10.64 / 10.59 | 7.08 / 7.08 |
| 4 | 16.55 / 16.22 | 10.57 / 10.51 | 7.08 / 7.08 |
| 5 | 16.10 / 15.77 | 10.49 / 10.43 | 7.08 / 7.08 |
| 6 | N.A.          | N.A.          | N.A.        |
| 7 | N.A.          | N.A.          | N.A.        |

#### **CARGO GEAR**

NO OF CRANE: 4
MANUFACTURER: IHI

TYPE Electro-hydraulic

| CRANE NO | S.W.L. (LT) | LOCATION                |
|----------|-------------|-------------------------|
| 1        | 30          | Between hatch no. 1 & 2 |
| 2        | 30          | Between hatch no. 2 & 3 |
| 3        | 30          | Between hatch no. 3 & 4 |
| 4        | 30          | Between hatch no. 4 & 5 |
| 5        | N.A.        | N.A.                    |
| 6        | N A         | N A                     |

# MAXIMUM CRANE OUTREACH FROM SHIPSIDE WITH FULL LOAD/ANGLE FROM HORIZONTAL WHEN CRANE FULLY EXTENDED IN WORKING POSITION

| CRANE | DISTANCE (M) | ANGLE  |
|-------|--------------|--------|
| 1     | 26           | 20 DEG |
| 2     | 26           | 20 DEG |
| 3     | 26           | 20 DEG |
| 4     | 26           | 20 DEG |
| N.A.  | N.A.         | DEG    |
| N.A.  | N.A.         | DEG    |

#### **SPEEDS OF CRANES**

HOISTING SPEED 30 / 18 / 6 MT x 18.5 / 24 / 50 M/MIN

SLEWING 0.55 RPM LUFFING 52 SECS

CAN 2 CRANES USE AN EQUALISING BEAM NO ELECTRIC CONNECTIONS FOR HYDRAULIC Yes

GRABS

IS UNION PURCHASE POSSIBLE? N.A. CAPACITY. OF UNION PURCHASE N.A. CAN 2 CARINES WORK IN TANDEM? N.A.

#### **BALLAST INFORMATION**

TOTAL BALLAST CAPACITY

INCLUDING BALLAST HOLD NO 3 26,600 M<sup>3</sup>

DRAFT FULLY BALLASTED FORE (M) AFT(M) MEAN

| GTR 98% IFO/DO CAPACITY        | 7.81                    | 8.80 | 8.31 |
|--------------------------------|-------------------------|------|------|
| GTR 10%IFO/DO CAPACITY         | 7.85                    | 7.85 | 7.85 |
| MAXIMUM DE-BALLASTING CAPACITY | 1,200 M <sup>3</sup> /H |      |      |
| BALLAST PUMP CAPACITY          | 600 M <sup>3</sup> /H   |      |      |

# **BUNKER INFORMATION**

| 100% IFO CAPACITY | 1,864.6 MT |
|-------------------|------------|
| 100% MDO CAPACITY | 194.8 MT   |

| FUEL OIL TANK     | FRAME POS | IFO 100% (M <sup>3</sup> ) |
|-------------------|-----------|----------------------------|
| NO 4 DB CENTRE    | 72 - 108  | 818.7                      |
| NO 5 DB CENTRE    | 36 - 72   | 479.8                      |
| NO DB CENTRE      | N.A.      | N.A.                       |
| NO DB CENTRE      | N.A.      | N.A.                       |
| NO DB CENTRE      | N.A.      | N.A.                       |
| DEEP FO TANK (P)  | 25 - 37   | 273.1                      |
| DEEP FO TANK (S)  | 25 - 37   | 253.2                      |
| HFO SETT TANK     | 32 - 35   | 19.9                       |
| HFO SERV TANK     | 29 - 32   | 19.9                       |
| HFO OVERFLOW TANK | 36 - 35   | 479.8                      |
|                   |           |                            |
| DIESEL OIL TANK   | FRAME POS | IFO 100% (M <sup>3</sup> ) |
| MDO (S) TANK      | 21 - 29   | 87.4                       |
| MDO (P) TANK      | 21 - 29   | 87.4                       |
| MDO SERV TANK     | 29 - 32   | 19.9                       |
| MDO SETT TANK     | N.A.      | N.A.                       |

#### **FRESH WATER INFORMATION**

DAILY CONSUMPTION (EST) 10 MT
MAX TANK CAPACITY 300 MT
MAX DAILY WATER PRODUCTION 20 MT
CURRENT WATER PRODUCTION 20 MT

#### FRESHWATER GENERATOR

MAKER Sasakura Engineering Co, Ltd

MODEL KM-20 RATED CAPACITY 20 MT/DAY

### **SPEED AND CONSUMPTIONS**

| SPEED<br>(KTS) | CONS (LOADED) | RPM  | CONS (BALASTED) | RPM  |
|----------------|---------------|------|-----------------|------|
| 10             | N.A.          | N.A. | N.A.            | N.A. |
| 10.5           | N.A.          | N.A. | N.A.            | N.A. |
| 11             | 18.31         | 80   | 15.31           | 80   |
| 11.5           | 19.14         | 85   | 16.01           | 85   |
| 12             | 19.97         | 88   | 16.70           | 88   |

| 12.5 | 20.80 | 92   | 17.39 | 92   |
|------|-------|------|-------|------|
| 13   | 21.64 | 97   | 18.90 | 97   |
| 13.5 | 24.90 | 100  | 19.79 | 100  |
| 14   | 26.50 | 102  | 22.13 | 102  |
| 14.5 | 27.45 | 104  | 22.92 | 104  |
| 15   | 28.39 | 105  | 23.71 | 105  |
| 15.5 | 29.34 | 106  | 24.50 | 106  |
| 16   | 30.28 | 108  | 25.29 | 108  |
| 16.5 | N.A.  | N.A. | N.A.  | N.A. |
| 17   | N.A.  | N.A. | N.A.  | N.A. |
| 17.5 | N.A.  | N.A. | N.A.  | N.A. |
| 18   | N.A.  | N.A. | N.A.  | N.A. |

#### **CONSUMPTION AT SEA**

DIESEL OIL CONSUMPTION 1.6 MT FUEL OIL CONSUMTPION 0.5 MT (BOILER + GENERATOR)

#### **CONSUMPTION IN PORT**

FUEL OIL
DIESEL OIL, IDLE
1.2 MT/DAY
DIESEL OIL, WORKING 8 HRS
DIESEL OIL, WORKING 16 HRS
DIESEL OIL, WORKING 24 HRS
3 MT/DAY

TYPE OF FUEL OIL Actual RMG 35, ISO 8217(E) 380 CST

TYPE OF DIESEL OIL Estimate Dmb Specs

#### **MAIN ENGINE**

MAKER Mitsui Engineering & Shipbuilding Co. td

MODEL Man B & W 6S50MC

BORE 500 MM STROKE 1,910 MM

MCR 7428 kw (10,100 bhp) x 111 rpm NOR 6317 kw (8,590 bhp) x 105.1 rpm

#### **GENERATORS**

NUMBER OF GENERATORS 3

MAKER Daihatsu Diesel Mfg. Co Ltd

MODEL 5DK-20

Document Created by: Vincent Lee

Date Created: 30-09-2002

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