

STEEL STEAMER or MOTORSHIP.

Received at London Office

12 JUN 1930

State if Report has been sent on the Freeboard of the Vessel *Yes*State if Report is sent on the Machinery of the Vessel *Yes*Date of completion of report *9 May 1930*Port of *Yokohama*No. *4520*Survey held at *Yokohama*Date First Survey *1st Nov*Last Survey *7th May*

1930

On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw)

TWIN SCREW MOTORSHIP "HIKAWA MARU"

State Type (Full scantling, Complete Superstructure with or without Tonnage Openings)

Intermediate between full scantling & complete superstructure

State Type of Erections *Bridge & Castle*

TONNAGE under Tonnage Deck...

*4,144.55*CLASS *A 100 A 1*State if with freeboard as condition of Class *Yes*Built at *Yokohama*

Do. of space or spaces between Tonnage Dk. and Upper Dk.

2213.81

Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a)

L *510.00*Launched *30th Sept 1929* Yard No. *177*

Total

9,388.36

Breadth (greatest moulded)

B *66.00*Builders *Yokohama Dock Co. Ltd.*

Gross Tonnage

11,621.48

Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c)

D *41.00*Owners *Rippon Yusen Kaisha*

Register Tonnage

*6,787.95*1st Longitudinal Number (L x D) = *20910*

Managers

(Where necessary to be entered in Reg. Book.)

REGISTERED DIMENSIONS.

FEET.

Length

510.00

Breadth

66.00

Depth

41.00

Framing Depth "d," at middle of length. See Sec. 3 (1d)

See *approved plan*

Proportions—Depth to Length—Uppermost continuous deck to top of keel

12.44

Do. Long Bridge to top of keel

10.20

Draught Moulded

30.148

Residence

Port of Registry *Tokio.*

If surveyed while building, afloat, or in dry dock

Building.

FRAMES, DOUBLE BOTTOM AND BEAMS.

	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
FRAMES, Spacing amidships	<i>33</i>		Bracket Floors, Frame	<i>✓</i>	
" " from $\frac{1}{2}$ length to Collision bulkhead	<i>27</i>		" " Reversed Frame	<i>✓</i>	
" " in peaks	<i>24</i>		" " Vertical Struts	<i>✓</i>	
SIDE FRAMING.			Centre Girder, depth and thickness amidships	<i>51.64</i>	
Frame Amidships, Angle <i>✓</i>	<i>10 3 40</i>		" " top Angles <i>DOUBLE</i>	<i>3 3 60</i>	
" " Extends up to <i>Upper & 2nd dls alternately</i>			" " bottom Angles	<i>5 5 70</i>	
Reversed Frame Amidships, Angle	<i>5 3 34</i>		Side Girders, No. each side and thickness	<i>Three 46</i>	
" " Extends up to <i>3rd dl.</i>			Margin Plate depth (excl. of flange) and thickness	<i>43.60</i>	
Depth of Framing Girder	<i>10</i>		" " Vertical Angle to Tank side	<i>6 6 52</i>	<i>SINGLE</i>
Frames in Uppermost Continuous 'tween Decks, Angle <i>✓</i>	<i>9 3 38</i>	<i>alternately.</i>	" " Bracket abaft $\frac{1}{2}$ len. from stem	<i>6 6 52</i>	<i>SINGLE</i>
" " Second 'tween Decks, Angle <i>✓</i>	<i>10 3 40</i>		" " Vertical Angle to Tank side	<i>6 6 52</i>	<i>SINGLE</i>
" " Third " " " "	<i>✓</i>		" " Bracket forward $\frac{1}{2}$ len. from stem	<i>continuous</i>	
Framing in Peaks, Angle <i>✓</i>	<i>10 3 40</i>		" " Gussets, spacing and scantling abaft $\frac{1}{2}$ len. from stem	<i>.58-.50</i>	
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	<i>7/8 5 1/4</i>		" " Gussets, spacing and scantling forward $\frac{1}{2}$ len. from stem	<i>Every frame 46</i>	
State if Frame Joggled	<i>Yes</i>		Tank Side Brackets, height above base line at toe of Frame and thickness	<i>80 1/2 52</i>	
PANTING ARRANGEMENTS (Sec. 7), state system and particulars	<i>Ret frames & panting stringers as per approved plan.</i>		INNER BOTTOM PLATING.		
STRENGTHENING OF BOTTOM FORWARD. State Particulars	<i>Bottom plating maintains midship thickness to collision bulkhead. Bottom frames 6x6x.50 from 3/5 L to collision bulkhead. (see plan)</i>		Breadth and thickness of Middle Line Strake	<i>58 58</i>	
SINGLE BOTTOM.			Thickness of remainder in Holds	<i>50</i>	
Floors, Depth and thickness at mid-line in Holds	<i>✓</i>		Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunkers and Boiler Room?	<i>Yes.</i>	
Height of Brackets at side above base line at toe of frame	<i>✓</i>		BEAMS.		
Middle Line Keelson, on Floors, Angles, <i>✓</i>			Uppermost Continuous Deck, amidships in Wells, Angle, <i>✓</i>	<i>8x3 1/2 x 3 1/2 x 54</i>	<i>see plan</i>
" " " Through Plate or Intercostal Plate	<i>✓</i>		" " in way of Bridge, Angle, <i>✓</i>	<i>8x3 1/2 x 3 1/2 x 54</i>	<i>42</i>
" " " Foundation Plate on Floors	<i>✓</i>		" " Spacing	<i>33</i>	
" " " Flat Plate Keel Angles	<i>✓</i>		Second Deck, amidships, Angle, <i>✓</i>	<i>8x3 1/2 x 3 1/2 x 42</i>	
Side Keelsons, No. each side	<i>✓</i>		Spacing	<i>33</i>	
" " thickness of Intercostal Plate	<i>✓</i>		Third Deck, amidships, Angle, <i>✓</i>	<i>9x3 1/2 x 3 1/2 x 34</i>	<i>see plan</i>
" " Angles	<i>✓</i>		Spacing	<i>33</i>	
DOUBLE BOTTOM.			Fourth Deck, amidships, Angle, <i>✓</i>	<i>10x3 1/2 x 3 1/2 x 44</i>	
Solid Floors, thickness and spacing	<i>every frame 46</i>		Spacing	<i>33</i>	
" " Are Frame and Reversed Frame joggled?	<i>Yes</i>		AFT BOAT		
Bracket Floors, breadth and thickness at middle line	<i>✓</i>		Peep Deck, Angle, <i>✓</i>	<i>6 3 32</i>	
" " breadth and thickness at margin plate	<i>✓</i>		Spacing	<i>33</i>	
			Bridge Deck, Angle, <i>✓</i>	<i>8x3 1/2 x 3 1/2 x 40</i>	
			Spacing	<i>33</i>	
			Forecastle Deck, Angle, <i>✓</i>	<i>8x3 1/2 x 3 1/2 x 40</i>	
			Spacing	<i>27 x 24</i>	

PILLARS AND DECKS.

	INCHES IN SHIP.			Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.			Any Departure from Approved Plans to be Noted.
PILLARS, No. of Rows.....					Stringer Plate, breadth and thickness in way of Bridge	52	42		/
" in 'tween Decks, Size and Spacing.....				Ride spaced pillars & girders as per approved plans.	Thickness of Plating abreast Deck openings in way of Wells		44		/
" " " " "					Thickness of Plating abreast Deck openings in way of Bridge		38		(replan)
" in Holds " "					Thickness of Plating within line of openings...	36	32		/
" " " " "					If Sheathed, material and thickness	3"	O.P.		/
Centre Line Bulkhead.					Third Deck.				
Stiffeners and Spacing.....				✓	Stringer Plate, breadth and thickness.....	52	42	34	(replan)
Plating, thickness of				✓	If Plated, state thickness.....		36	32	-
STRINGERS AND DECKS.					Fourth Deck. 117-133				
Uppermost Continuous Deck. BRIDGE ENDS					Stringer Plate, breadth and thickness.....	52	34		/
Stringer Plate, breadth and thickness in Wells DOUBLING	41	84	/	/ /	If Plated, state thickness		30		/
" " " " in way of Bridge	52	56	48	/ (replan)	AFT BOAT POOP DECK.				
" Angle in Wells BRIDGE ENDS	7	7	86	/ ✓	Stringer Plate, breadth and thickness	36	40		/
Thickness of Plating abreast Deck openings in way of Wells70	✓ /	Plating, Sheathing, material and thickness ...	3"	O.P.		/
Thickness of Plating abreast Deck openings in way of Bridge48	(replan)	Bridge Deck.				
Thickness of Plating within line of openings...			.36	B/	Stringer Plate, breadth and thickness.....	41	50		✓
If Sheathed, material and thickness			3½ O.P.	/	Plating, Sheathing, material and thickness	46	2½	TEAK	✓
Second Deck. BRIDGE ENDS					Forecastle Deck.				
Stringer Plate, breadth and thickness in Wells...	52	48	/	/	Stringer Plate, breadth and thickness	37	40		/
					Plating, Sheathing, material and thickness ...	38	3"	O.P.	/

H" TEAK UNDER WINDLASS

SHELL PLATING.

SCANTLINGS.					RIVETING.								
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.			BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		State if jogged?	SINGLE OR DOUBLE.	RIVETS.		No. of ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.				Diam.	Spacing cr. to cr.		Diam.	Spacing cr. to cr.	
	Inches.	Inches.	Inches.	Inches.			Inches.	Inches.		Inches.	Inches.		
FLAT PLATE KEEL	57	.98	.86	.86	✓	DOUBLE	1 1/8	4 1/2	3 R	1 1/8	4 1/2	DOUBLE STRAPS	
„ DBLG. (if any)													
BOTTOM PLATING, No. of Strakes 4	77 3/4	.72	.72	.58	✓	“	7/8	3 1/2	4 R - 3 R	7/8	3 1/2	LAPPED	
BILGE PLATING, No. of Strakes 2	74	.72	.56	.58	✓	“	7/8	3 1/2	4 R - 3 R	7/8	3 1/2	“	
SIDE PLATING, No. of Strakes 4	78 3/8	.72	.52	.60	✓	“	7/8	3 1/2	4 R - 3 R	7/8	3 1/2	“	
UPPER DECK, Sheer- strake in Wells.	60	1.02	.52	.52	✓	“	1 1/8	4 1/2	5 R - 3 R	1 1/8	4 1/2	“	
BRIDGE ENDS	DOUBLING	.88				“	7/8	3 1/2	4 R	7/8	3 1/2	“	
UPPER DECK, Sheer- strake in Bridge ...	60	.72				“							
STRAKE BELOW Sheer- strake in Wells.	76 3/8	.88	.52	.52	✓	“	1	4	5 R - 3 R	1	4 1/2	“	
BRIDGE ENDS						“	7/8	3 1/2	4 R	7/8	3 1/2	“	
STRAKE BELOW Sheer- strake in Bridge ...	76 3/8	.72				“							
POOP SIDE PLATING													
BRIDGE SIDE PLATING ...	68	.76	.74			DOUBLE	1	4	4 R	1	4	“	
FOREC'TLE SIDE PLATING	56		.46		✓	SINGLE	3/4	3	2 R	3/4	2 5/8	“	

WATERTIGHT BULKHEADS.

FORGINGS and CASTINGS.

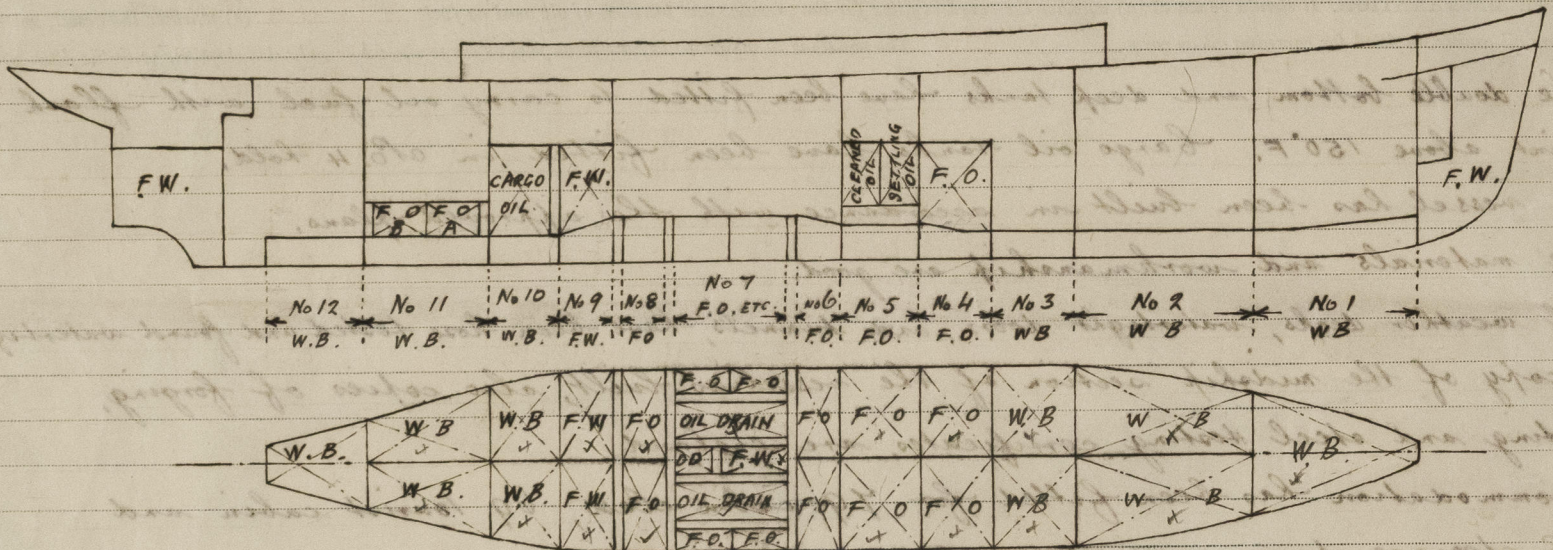
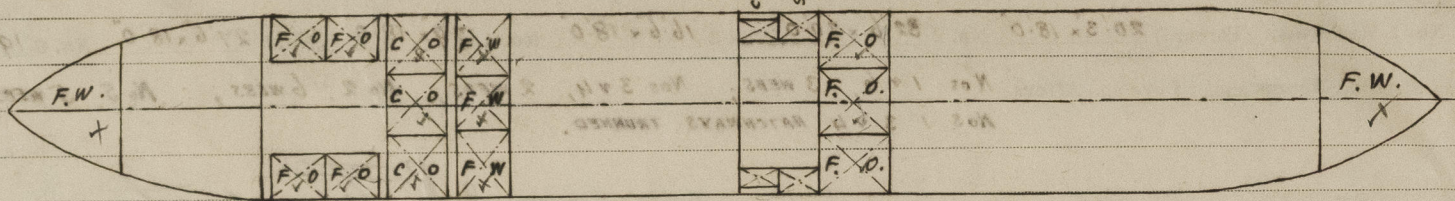
Total No. of W.T. BULKHEADS in Vessel—						Casting or Forging.		Scantlings.		Maker's Name.		Any departure from approved plans to be noted.		
Extending to Upper Deck (Sec. 3 c)						9								
" Deck next below						0								
As per Rule.														
						STIFFENERS.								
						Plating Thickness.	VERTICAL.		HORIZONTAL.					
							Scantlings.	Spacing.	Scantlings.					Spacing.
No 104						L								
MIDSHIP BULKHEAD Upper tween decks						30-28	5x3x40	24x33	✓					
" " Second "						34-32	5x3x32	32	✓					
" " Third "														
" " Holds						50-36	12x3x56	33	✓					
COLLISION (in Hold)						56-34	11x3x48	24	✓					
AFTER PEAK " "						54-38	12x3x54	24	✓					
KEEL, Bar										✓		✓		
STEM								CASTING		✓		✓		
PROPELLER BRACKETS								CASTING		✓		✓		
STERN FRAME { Propeller Post								CASTING		✓		✓		
" { Rudder								CASTING		✓		✓		
RUDDER—A x D												✓		
Speed of Vessel										17 KNOTS		✓		
RUDDER mainpiece at head								FORGING		14 1/2		✓		
" " heel								" 12"		" "		✓		
" " how constructed								SEMI BALANCED		ARMS SHRUNK TO MAIN PIECE		✓		
" " double or single plate								SINGLE		1-18		✓		
" " coupling, vertical or horizontal								VERTICAL				✓		

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) —
Arans L.P. Co. Rippon Kahan Kaasila Pearce & Partners, Dorman Long, Vereinigte Stahlwerke A.G. Cornett Iron Co.
Appleby Iron Co. Bolchow Paughan & Co. Lancashire Steel Co. Frodingham Iron & Steel Co. Cargo Fleet. David White & Co.
 Has the Steel been tested as required by the Rules? *Yes.*

GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

WATER BALLAST			FUEL OIL			FRESH & FEED WATER		
	LENGTH	35 C.F. TONS		LENGTH	35 C.F. TONS		LENGTH	36 C.F. TONS
No 1 D.B.	58.5	112.91	No 4 D.B.	19.25	116.12	No 7 D.B. (CENTRE)	35.75	31.83
" 2 "	65.75	237.14	" 5 "	22.00	188.30	" 9 "	16.50	131.06
" 3 "	38.5	223.48	" 6 "	11.00	103.38	DEEP F.W. TANK	16.50	506.26
" 10 "	27.5	128.34	" 7 " A	30.25	152.52	FORE PEAK TANK	30.50	110.22
" 11 "	52.25	161.54	" " B	27.50	132.66	AFT PEAK TANK	32.00	166.28
" 12 "	46.75	66.31	" " OIL DRAIN SIDE	57.75	127.84			
			" " OIL DRAIN CENTRE	19.25	18.59			35 C.F. TONS
			" 8 "	8.25	90.16	CARGO OIL TANK (INCL EXP. TRUNKS)	22.00	800.28
			FORE FUEL OIL TANK	19.25	639.66			
			CLEANED OIL TANK	11.00	64.16			
			SETTLING TANK	11.00	85.08			
			AFT FUEL OIL TANK A	24.75	186.36			
			" " " B	24.75	107.24			



Particulars of Drop Test of Cast Steel Anchors, viz. :—
Weight, Surveyor's Initials, Number of Certificate, Date of Test.

1st Bower	60-12-13	A.W.	992	4/6/29
2nd "	61-0-19	"	993	13/5/29
3rd "	61-1-20	"	994	23/2/29
Stream	27-3-1	"	995	13/3/29

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop _____ ft., R.Q.D. _____ ft., Bridge 228.25 ft., Forecastle 73.75 ft.
(in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated _____

No. and Material of Decks (this information is to be given as it should appear in the Register Book) 3 decks (All weather at ft w s) and 4th deck in Po 3 hold

Official No. 35340 ; Signal Letters VC GT

Is bottom of Vessel coated with cement _____ if not give

particulars of composition In ballast and fresh water tanks only.

PARTICULARS OF WATER BALLAST.— see above

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,			Fore peak tank,		
Double bottom, under Engines and Boilers,			After peak tank,		
Double bottom, if under Engines only,			Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward,		
Double bottom, forward,			Other tanks, if fitted,		
		Total capacity of double bottom	(If necessary, furnish further information by sketch.)		

* The wells are not to be included in the lengths of the tanks.

Order for Special Survey No. 13

Date 20-8-28

Dates of Surveys held while building

7/11, 20/11, 23/11, 27/11, 13/12, 19/12, 28. 8/1, 11/1, 22/1, 24/1, 4/2, 14/2, 19/2, 22/2, 25/2, 28/2, 11/3, 26/3, 2/4, 4/4, 9/4, 11/4, 16/4, 22/4, 24/4, 2/5, 4/5, 7/5, 15/5, 20/5, 24/5, 28/5, 29/5, 30/5, 31/5, 3/6, 5/6, 7/6, 12/6, 17/6, 20/6, 24/6, 25/6, 28/6, 1/7, 2/7, 4/7, 6/7, 8/7, 10/7, 11/7, 12/7, 15/7, 18/7, 19/7, 25/7, 30/7, 31/7, 2/8, 3/8, 5/8, 6/8, 8/8, 12/8, 15/8, 17/8, 19/8, 20/8, 22/8, 23/8, 30/8, 2/9, 4/9, 6/9, 9/9, 13/9, 14/9, 16/9, 17/9, 19/9, 25/9, 26/9, 27/9, 12/10, 15/10, 22/10, 24/10, 28/10, 1/11, 15/11, 26/11, 28/11, 3/12, 16/12, 24/12, 29. 9/1, 14/1, 20/1, 23/1, 14/2, 25/2, 4/3, 5/3, 7/3, 11/3, 12/3, 22/3, 1/4, 6/4, 9/4, 30/4, 7/5/30

Total No. of Visits 112.