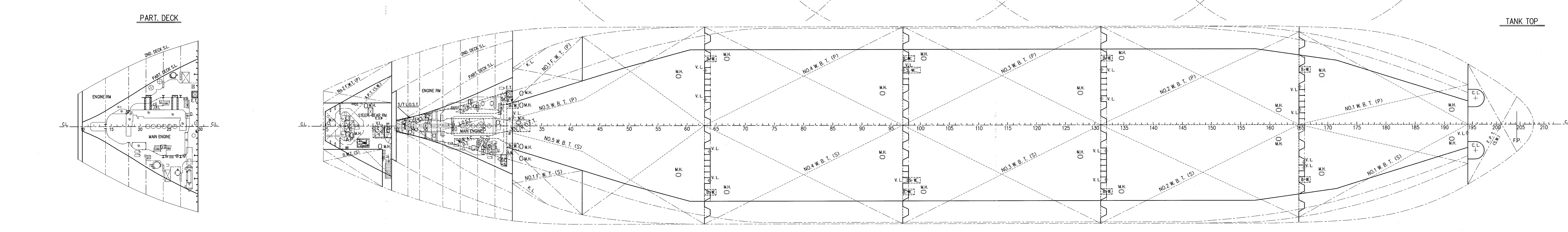
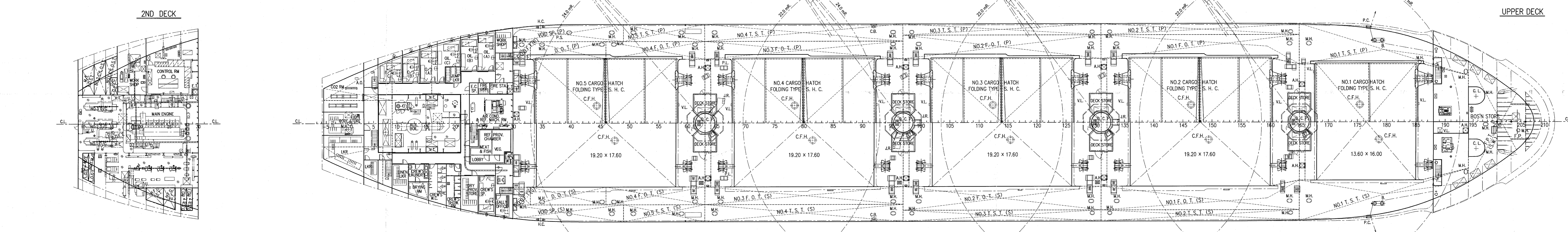
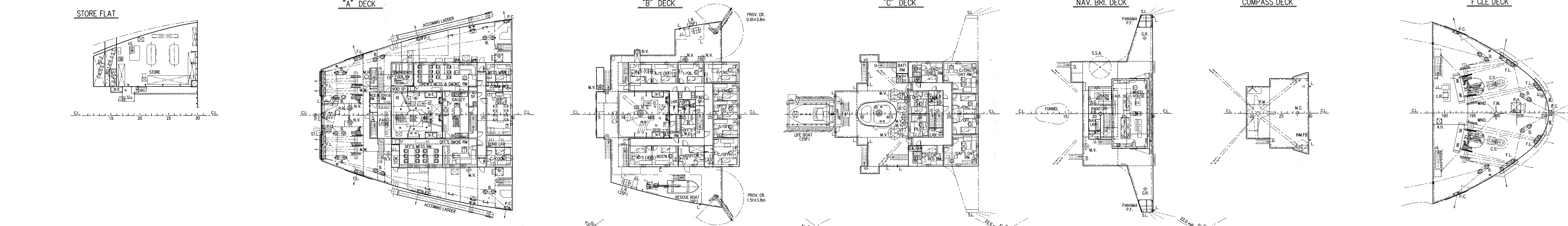
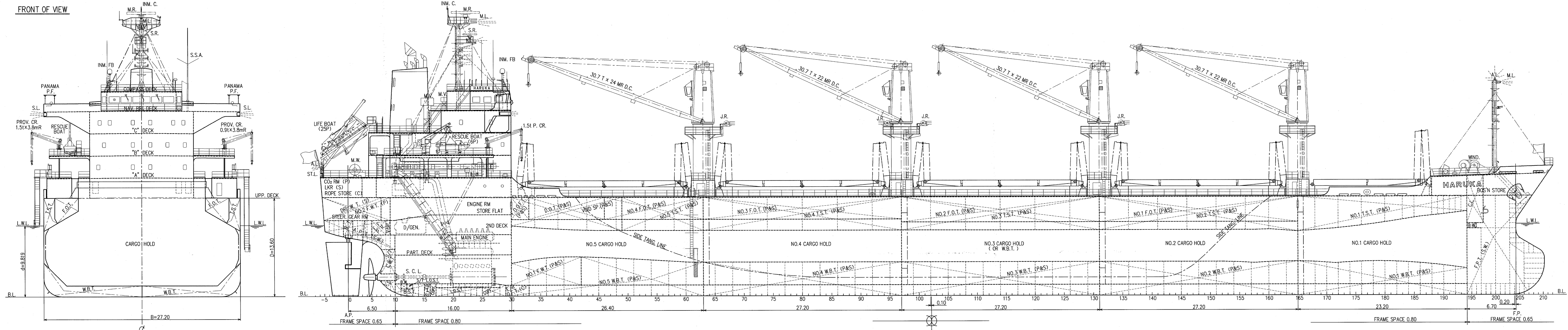


GENERAL ARRANGEMENT SCALE 1:200

M.S. HARUKA

HISTORY
DRAWN BY THIS WORKS.
June 4, 2011



PRINCIPAL PARTICULARS	
LENGTH (O.A.)	169.37 m
LENGTH (B.P.)	160.40 m
BREADTH (M.D.)	27.20 m
DEPTH (M.D.)	13.60 m
DRAUGHT (EXT.)	9.819 m
DEADWEIGHT	28,392 MT
GROSS TONNAGE (I.C.T.M.)	17,027
NET TONNAGE (I.C.T.M.)	10,108
MAIN ENGINE	B & W 6540C (MARK VI) x 1 set
MAXIMUM OUTPUT	5,850 kw (7,953 ps) x 122 rpm
NORMAL OUTPUT	4,970 kw (6,757 ps) x 122 rpm
(80% M.C.R.)	
HOLD CAPACITY : (GRAIN)	37,320.63 m³
(BALE)	35,742.85 m³
SPEED (d = 9.70 m M.D., 85 % MCR with 15 % S.M.)	abt. 14.0 knots
TRIAL MAX.	15.901 knots
CLASS	NIPPON KAIJI KYOKAI (NK)
CLASSIFICATION CHARACTERS	NK NO. 1 BC-A, BC-XI, GRAB, ED C DC (ESP) and MMS*
INSTALLATION CHARACTERS	CHC, MPP, LSA, RCF, MO, AFS
DESCRIPTIVE NOTE	STRENGTHENED FOR HEAVY CARGO LOADING WHERE HOLDS NOS. 2 & 4 MAY BE EMPTY

COMPLEMENT			
DECK PART	ENGINE PART	BUSINESS PART	
CAPTAIN	1 CHIEF ENGINEER	1	
CHIEF OFFICER	1 1ST ENGINEER	1	
2ND OFFICER	1 2ND ENGINEER	1	
3RD OFFICER	1 3RD ENGINEER	1	
BOATSWAIN	1 NO.1 OILER	1 CHIEF COOK	1
ABLE SEAMAN	3 OILER	3 MESS MAN	1
ORD. SEAMAN	3		
TOTAL NUMBER OF OFFICER CLASS		8 P.	
TOTAL NUMBER OF CREW CLASS		13 P.	
OFFICER'S SHARE (LAWYER OFFICER CLASS)		2 P.	
CREW'S SHARE (RATING CREW CLASS)		1 P.	
GRAND TOTAL		24 P.	
PILOT		1 P.	

CAUTION
THIS DRAWING OR DOCUMENT IS THE PROPERTY OF IMABARI SHIPBUILDING CO., LTD.
REPRODUCING, COPYING, UTILIZATION FOR PURPOSES OTHER THAN AGREED, DISCLOSURE TO A THIRD PARTY, ARE STRICTLY SUBJECT TO PRIOR WRITTEN AGREEMENT BY IMABARI SHIPBUILDING CO., LTD.



FINISHED PLAN			
CON. PERIOD	IMABARI DESIGN GROUP BASIC DESIGN TEAM		
APPROVED	<i>T. Tanaka</i>		
CHECKED	<i>S. Fujimori</i>		
DRAWN	<i>A. Tanaka</i>		
SHIP NO.	CLASS	SCALE	DWG. NO.
S-A011	NK	1/200	C-0200

M.S. "HARUKA"
IMO 9589619
GENERAL ARRANGEMENT