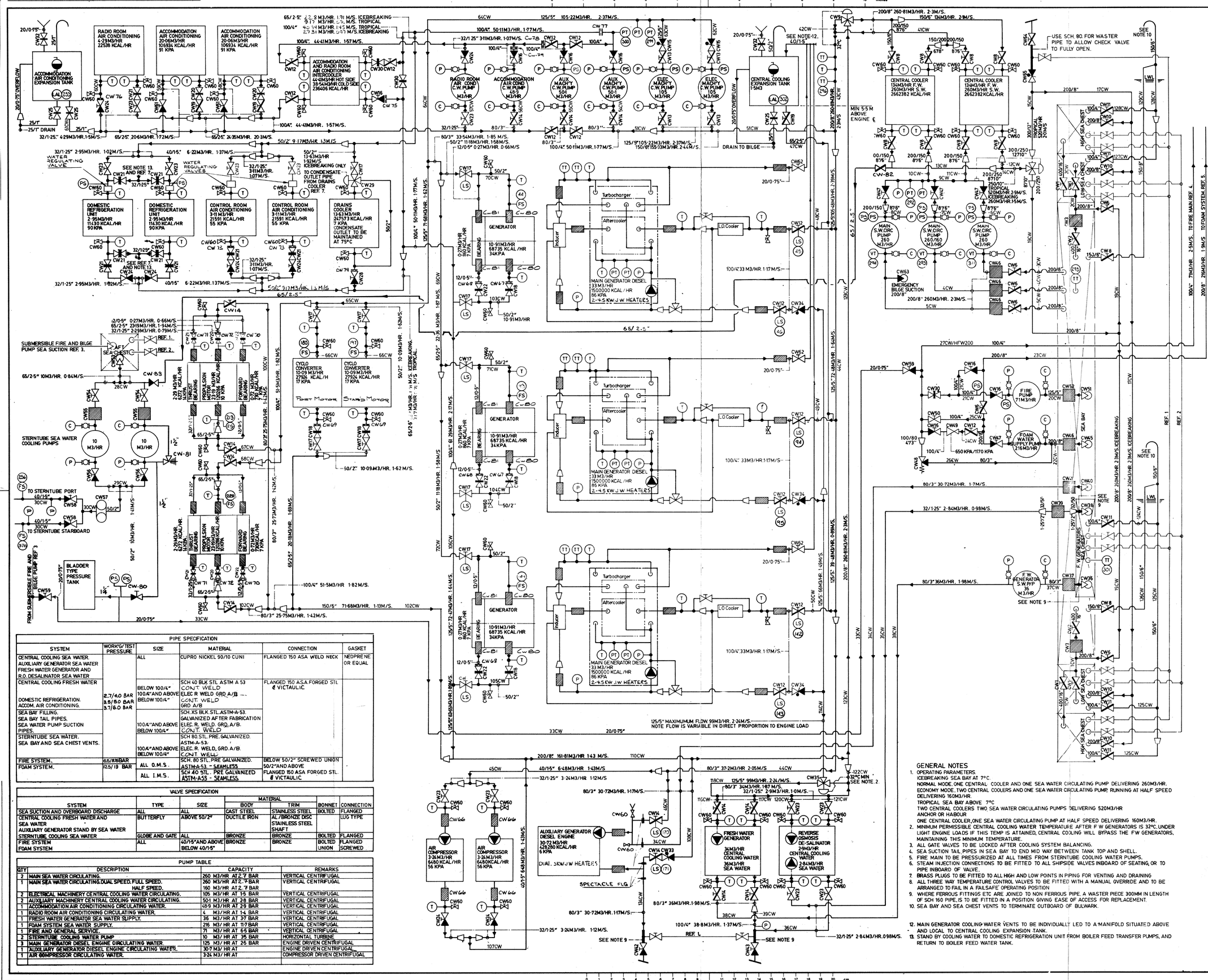

REFERENCES

1	SEE STEAM AND EXHAUST DIAGRAM	DRG NO 72-759
2	SEE COMPRESSED AIR DIAGRAM	DRG NO 72-758
3	SEE BILGE AND BALLAST DIAGRAM	DRG NO 72-751
4	SEE FIRE AND WASHDECK DIAGRAM	DRG NO 72-257
5	SEE FOAM SYSTEM DIAGRAM	DRG NO 72-266
6	SEE DOMESTIC HOT AND COLD WATER DIAGRAM	DRG NO 72-260
7	SEE CONDENSATE AND DRAINS DIAGRAM	DRG NO 72-760

MONITORING POINT SYMBOLS

- (P) PRESSURE GAUGE
- (C) COMPOUND GAUGE
- (T) THERMOMETER (LOCAL)
- (PT) PRESSURE TRANSDUCER
- (VT) VACUUM TRANSDUCER
- (TT) TEMPERATURE TRANSDUCER
- (PS) PRESSURE SWITCH
- (FS) FLOW SWITCH
- (LS) LIMIT SWITCH
- (AL) LEVEL ALARM LOW

PIPE SPECIFICATION

SYSTEM	WORK'G/TEST PRESSURE	SIZE	MATERIAL	CONNECTION	GASKET
CENTRAL COOLING SEA WATER. AUXILIARY GENERATOR SEA WATER FRESH WATER GENERATOR AND R.O. DESALINATOR SEA WATER	2·7/4·0 BAR 3·5/5·0 BAR 5·7/8·0 BAR	ALL	CUPRO NICKEL 90/10 CUNI	FLANGED 150 ASA WELD NECK	NEOPRENE OR EQUAL
CENTRAL COOLING FRESH WATER. DOMESTIC REFRIGERATION. ACCOM. AIR CONDITIONING.		BELOW 100/4" 100/4"AND ABOVE BELOW 100/4"	SCH 40 BLK STL ASTM A 53 CONT. WELD ELEC R WELD GRD A/B CONT. WELD GRD A/B	FLANGED 150 ASA FORGED STL ℄ VICTAULIC	
SEA BAY FILLING. SEA BAY TAIL PIPES. SEA WATER PUMP SUCTION PIPES.		100/4"AND ABOVE BELOW 100/4"	SCH.XS BLK STL.ASTM-A-53. GALVANIZED AFTER FABRICATION ELEC. R. WELD. GRD. A/B. CONT. WELD		
STERNTUBE SEA WATER. SEA BAY AND SEA CHEST VENTS.		100/4"AND ABOVE BELOW 100/4"	SCH 80.STL. PRE. GALVANIZED. ASTM-A-53. ELEC. R. WELD. GRD. A/B. CONT. WELL.		
FIRE SYSTEM.	6·5/8·5BAR	ALL O.M.S.	SCH. 80 STL. PRE GALVANIZED. ASTM-A-53. - SEAMLESS	BELOW 50/2" SCREWED UNION 50/2"AND ABOVE	
FOAM SYSTEM.	12·5/19 BAR	ALL I.M.S.	SCH 40 STL. PRE GALVANIZED ASTM-A53 - SEAMLESS	FLANGED 150 ASA FORGED STL. ℄ VICTAULIC	

VALVE SPECIFICATION

SYSTEM	TYPE	SIZE	MATERIAL BODY	MATERIAL TRIM	BONNET	CONNECTION
SEA SUCTION AND OVERBOARD DISCHARGE	ALL	ALL	CAST STEEL	STAINLESS STEEL	BOLTED	FLANGED
CENTRAL COOLING FRESH WATER AND SEA WATER AUXILIARY GENERATOR STAND BY SEA WATER	BUTTERFLY	ABOVE 50/2"	DUCTILE IRON	AL/BRONZE DISC STAINLESS STEEL SHAFT		LUG TYPE
STERNTUBE COOLING SEA WATER	GLOBE AND GATE	ALL	BRONZE	BRONZE	BOLTED	FLANGED
FIRE SYSTEM	ALL	40/15"AND ABOVE BELOW 40/15"	BRONZE	BRONZE	BOLTED UNION	FLANGED SCREWED
FOAM SYSTEM						

PUMP TABLE

QTY	DESCRIPTION	CAPACITY	REMARKS
2	MAIN SEA WATER CIRCULATING.	260 M3/HR AT 2·7 BAR	VERTICAL CENTRIFUGAL
1	MAIN SEA WATER CIRCULATING.DUAL SPEED.FULL SPEED. HALF SPEED.	260 M3/HR AT 2·7 BAR 160 M3/HR AT 2·7 BAR	VERTICAL CENTRIFUGAL
2	ELECTRICAL MACHINERY CENTRAL COOLING WATER CIRCULATING.	105 M3/HR AT 1·5 BAR	VERTICAL CENTRIFUGAL
2	AUXILIARY MACHINERY CENTRAL COOLING WATER CIRCULATING.	50·1 M3/HR AT 2·8 BAR	VERTICAL CENTRIFUGAL
1	ACCOMMODATION AIR CONDITIONING CIRCULATING WATER.	48·9 M3/HR AT 2·9 BAR	VERTICAL CENTRIFUGAL
1	RADIO ROOM AIR CONDITIONING CIRCULATING WATER.	4. M3/HR AT 1·4 BAR	VERTICAL CENTRIFUGAL
1	FRESH WATER GENERATOR SEA WATER SUPPLY.	36 M3/HR AT 3·7 BAR	VERTICAL CENTRIFUGAL
1	FOAM SYSTEM SEA WATER SUPPLY.	216 M3/HR AT 11·7 BAR	VERTICAL CENTRIFUGAL
1	FIRE AND GENERAL SERVICE.	71 M3/HR AT 6·5 BAR	VERTICAL CENTRIFUGAL
2	STERNTUBE COOLING WATER PUMP	10 M3/HR AT 3·5 BAR	HORIZONTAL TURBINE
3	MAIN GENERATOR DIESEL ENGINE CIRCULATING WATER.	125 M3/HR AT 2·5 BAR	ENGINE DRIVEN CENTRIFUGAL
1	AUXILIARY GENERATOR DIESEL ENGINE CIRCULATING WATER.	30·7 M3/HR AT	ENGINE DRIVEN CENTRIFUGAL
1	AIR COMPRESSOR CIRCULATING WATER.	3·24 M3/HR AT	COMPRESSOR DRIVEN CENTRIFUGAL

GENERAL NOTES

1. OPERATING PARAMETERS.
2. MINIMUM PERMISSIBLE CENTRAL COOLING WATER TEMPERATURE AFTER F.W GENERATORS IS 32°C UNDER LIGHT ENGINE LOADS IF THIS TEMP IS ATTAINED, CENTRAL COOLING WILL BYPASS THE F.W GENERATORS, MAINTAINING THIS MINIMUM TEMPERATURE.
3. ALL GATE VALVES TO BE LOCKED AFTER COOLING SYSTEM BALANCING.
4. SEA SUCTION TAIL PIPES IN SEA BAY TO END MID WAY BETWEEN TANK TOP AND SHELL.
5. FIRE MAIN TO BE PRESSURIZED AT ALL TIMES FROM STERNTUBE COOLING WATER PUMPS.
6. STEAM INJECTION CONNECTIONS TO BE FITTED TO ALL SHIPSIDE VALVES INBOARD OF SEATING,OR TO PIPE INBOARD OF VALVE.
7. BRASS PLUGS TO BE FITTED TO ALL HIGH AND LOW POINTS IN PIPING FOR VENTING AND DRAINING
8. ALL THREE WAY TEMPERATURE CONTROL VALVES TO BE FITTED WITH A MANUAL OVERRIDE AND TO BE ARRANGED TO FAIL IN A FAILSAFE' OPERATING POSITION
9. WHERE FERROUS FITTINGS ETC ARE JOINED TO NON FERROUS PIPE, A WASTER PIECE 300MM IN LENGTH OF SCH 160 PIPE,IS TO BE FITTED IN A POSITION GIVING EASE OF ACCESS FOR REPLACEMENT.
10. SEA BAY AND SEA CHEST VENTS TO TERMINATE OUTBOARD OF BULWARK.
12. MAIN GENERATOR COOLING WATER VENTS TO BE INDIVIDUALLY LED TO A MANIFOLD SITUATED ABOVE AND LOCAL TO CENTRAL COOLING EXPANSION TANK.
13. STAND BY COOLING WATER TO DOMESTIC REFRIGERATION UNIT FROM BOILER FEED TRANSFER PUMPS, AND RETURN TO BOILER FEED WATER TANK.

C.C.G.S. "ANN HARVEY"
APRIL 1987
AS FITTED

#27

Halifax-Dartmouth Industries Limited

Canadian Coast Guard / Garde côtière canadienne

PROJECT HULL No. 72
TYPE 1100 NAVAIDS TENDER/LIGHT ICEBREAKER

TITLE
CENTRAL COOLING DIAGRAM

APPR.	SENT	APPR.	SENT	APPR.	
OWNER		JUNE 5/84			DRAWN by: W. Norton.
LLOYDS		JUNE 14/85			CHECKED by:
A.B.S.					DATE: 10 DEC 1984
S.S.B.		JUNE 5/84			REVISION N°.
Scale.		Account no.			
DRG. N°. 72-755					Sheet 1 of 1