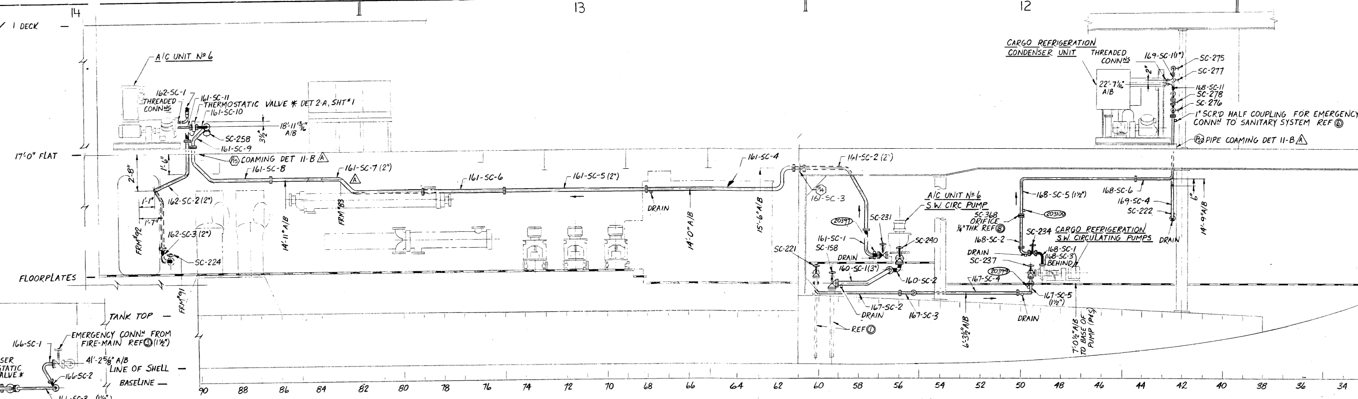
0 1 2 3 4 ℄ 6 7 8 9 10 INCHES

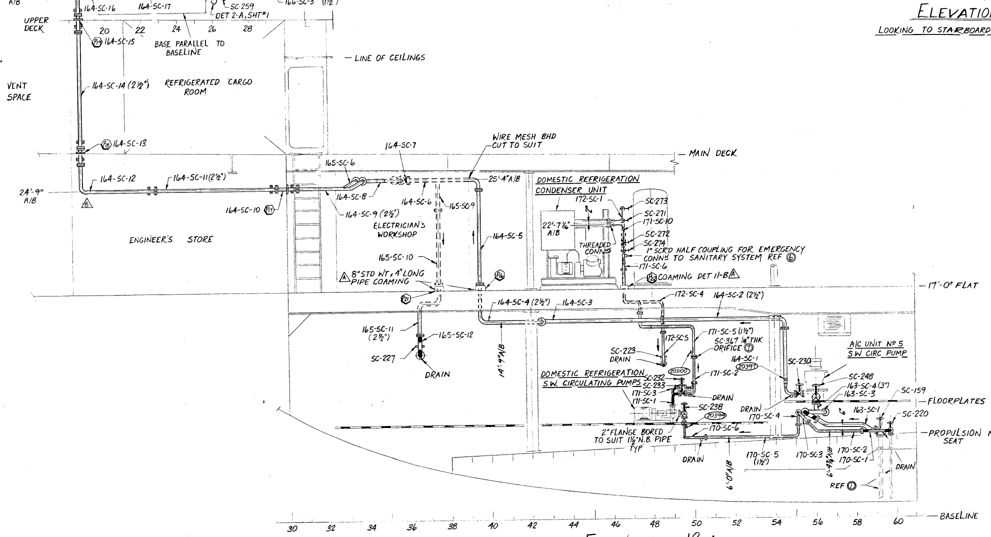
14 13 12



1 DECK
A/C UNIT Nº 6
162-SC-1
THREADED CONNNS
161-SC-11
THERMOSTATIC VALVE ✱ DET 2-A, SHT#1
161-SC-10
18'-11 13/16" A/B
3½"
SC-258
161-SC-9
17'-0" FLAT
P15 COAMING DET 11-B A
161-SC-8
161-SC-7 (2")
161-SC-6
161-SC-5 (2")
161-SC-4
161-SC-2 (2")
2'-8"
1'-6"
1'-1"
1'-7"
162-SC-2 (2")
162-SC-3 (2")
SC-224
FRM#92
FRM#93
14'-11" A/B
14'-0" A/B
15'-6" A/B
DRAIN
FLOORPLATES
TANK TOP
FRM#91
161-SC-3
20397
SC-231
161-SC-1
SC-158
SC-221
DRAIN
160-SC-1 (3")
SC-240
160-SC-2
167-SC-2
DRAIN
167-SC-3
REF ⑦
6'-3½" A/B
A/C UNIT Nº 6 S.W. CIRC PUMP
SC-368 ORIFICE ⅛" THK REF ⑧
168-SC-2
DRAIN
SC-237
20399
167-SC-4
168-SC-5 (1½")
20310
SC-234
CARGO REFRIGERATION S.W. CIRCULATING PUMPS
168-SC-1
168-SC-3 BEHIND
167-SC-5 (1½")
DRAIN
7'-0½" A/B TO BASE OF PUMP (P&S)
168-SC-6
169-SC-4
SC-222
DRAIN
14'-9⅞" A/B
6"
CARGO REFRIGERATION CONDENSER UNIT
THREADED CONNNS
22'-7 1/16" A/B
2"
169-SC-1 (1")
SC-275
SC-277
168-SC-11
SC-278
SC-276
1" SCR'D HALF COUPLING FOR EMERGENCY CONNN TO SANITARY SYSTEM REF ⑥
P13 PIPE COAMING DET 11-B A
LINE OF SHELL
BASELINE
90 88 86 84 82 80 78 76 74 72 70 68 66 64 62 60 58 56 54 52 50 48 46 44 42 40 38 36 34

ELEVATION 12-A

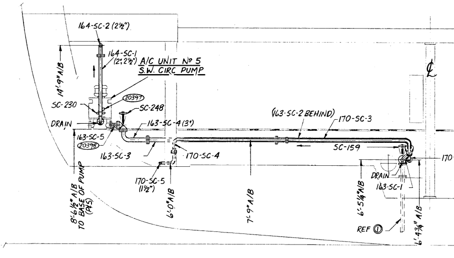
LOOKING TO STARBOARD 3/8"-1'-0"



FLIGHT AND BOAT DECK
A/C UNIT Nº 5
CONDENSER
THREADED CONNNS ON CONDENSER
THERMOSTATIC VALVE ✱
166-SC-1
EMERGENCY CONNN FROM FIRE-MAIN REF ③ (1½")
41'-2⅝" A/B
166-SC-2
166-SC-3 (1½")
SC-259
DET 2-A, SHT#1
4¾"
165-SC-2
39'-6 3/16" A/B
164-SC-16
164-SC-17
UPPER DECK
20 22 24 26 28
P14 164-SC-15
BASE PARALLEL TO BASELINE
LINE OF CEILINGS
VENT SPACE
164-SC-14 (2½")
REFRIGERATED CARGO ROOM
P18 164-SC-13
MAIN DECK
164-SC-7
WIRE MESH BHD CUT TO SUIT
165-SC-6
164-SC-12
164-SC-11 (2½")
25'-4" A/B
24'-9" A/B
164-SC-8
164-SC-10 P17
164-SC-9 (2½")
164-SC-6
165-SC-9
ELECTRICIAN'S WORKSHOP
164-SC-5
ENGINEER'S STORE
165-SC-10
A 8" STD WT, 4" LONG PIPE COAMING
P16
P21
DOMESTIC REFRIGERATION CONDENSER UNIT
172-SC-1
22'-7 1/16" A/B
THREADED CONNNS
SC-273
SC-271
171-SC-10
SC-272
SC-274
1" SCR'D HALF COUPLING FOR EMERGENCY CONNN TO SANITARY SYSTEM REF ⑥
171-SC-6
P12 COAMING DET 11-B A
17'-0" FLAT
172-SC-4
164-SC-2 (2½")
164-SC-4 (2½")
164-SC-3
165-SC-11 (2½")
165-SC-12
SC-227
DRAIN
14'-9⅞" A/B
SC-223
DRAIN
172-SC-5
171-SC-5 (1½")
SC-367 ⅛" THK ORIFICE ⑦
164-SC-1
20397
20310
171-SC-2
DOMESTIC REFRIGERATION S.W. CIRCULATING PUMPS
SC-232
SC-233
171-SC-3
171-SC-1
DRAIN
SC-238
20398
170-SC-6
DRAIN
170-SC-4
SC-230
A/C UNIT Nº 5 S.W. CIRC PUMP
SC-248
163-SC-4 (3")
163-SC-3
163-SC-1
SC-159
SC-220
FLOORPLATES
PROPULSION MOTOR SEAT
2" FLANGE BORED TO SUIT 1½" N.B. PIPE TYP
DRAIN
6'-0" A/B
170-SC-5 (1½")
170-SC-3
6'-4⅜" A/B
170-SC-2
170-SC-1
DRAIN
REF ⑦
BASELINE
30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60

ELEVATION 13-A

LOOKING TO PORT 3/8"-1'-0"



164-SC-2 (2½")
164-SC-1 (2"-2½")
A/C UNIT Nº 5 S.W. CIRC PUMP
14'-9" A/B
SC-230
20397
SC-248
DRAIN
163-SC-5
20398
163-SC-4 (3")
163-SC-3
170-SC-4
(163-SC-2 BEHIND)
170-SC-3
SC-159
170-SC-5 (1½")
8'-6½" A/B TO BASE OF PUMP (P&S)
6'-0" A/B
7'-9" A/B
6'-5⅛" A/B
DRAIN
163-SC-1
REF ⑦
6'-4⅜" A/B
℄

SECTION I

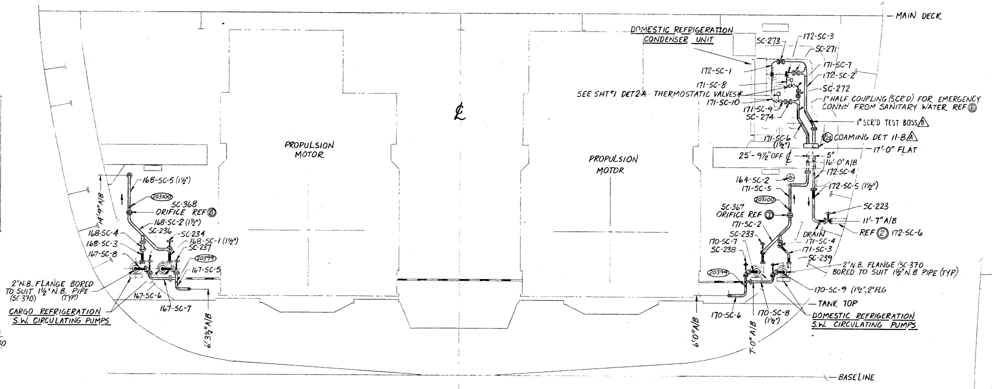
FRAME#54 LOOKING FORWARD

14 13 12

0 1 2 3 4 ℄ 6 7 8 9 10 INCHES

0 1 2 3 4 ℄ 6 7 8 9 10 INCHES

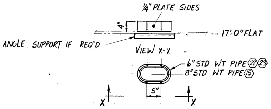
11 10 9 8



MAIN DECK
DOMESTIC REFRIGERATION CONDENSER UNIT
SC-273
172-SC-3
SC-271
171-SC-7
172-SC-2
172-SC-1
171-SC-8
SEE SHT#1 DET 2-A THERMOSTATIC VALVES*
171-SC-10
171-SC-9
SC-274
SC-272
1" HALF COUPLING (SCR'D) FOR EMERGENCY CONN'N FROM SANITARY WATER REF ⑥
1" SCR'D TEST BOSS
171-SC-6 (1½")
COAMING DET 11-B
25'-9½" OFF ℄
17'-0" FLAT
16'-0" A/B
172-SC-4
164-SC-2
171-SC-5
172-SC-5 (1½")
SC-223
11'-7" A/B
SC-367 ORIFICE REF ⑦
REF ② 172-SC-6
171-SC-2
SC-233
170-SC-7
SC-238
DRAIN
171-SC-4
171-SC-3
SC-239
2" N.B. FLANGE (SC-370) BORED TO SUIT 1½" N.B. PIPE (TYP)
170-SC-9 (1½", 2" FLG)
TANK TOP
DOMESTIC REFRIGERATION S.W. CIRCULATING PUMPS
170-SC-6
170-SC-8 (1½")
6'-0" A/B
7'-0" A/B
PROPULSION MOTOR
PROPULSION MOTOR
℄
168-SC-5 (1½")
14'-9" A/B
SC-368 ORIFICE REF ⑦
168-SC-2 (1½")
SC-236
SC-234
168-SC-1 (1½")
SC-237
168-SC-4
168-SC-3
167-SC-8
167-SC-5
2" N.B. FLANGE BORED TO SUIT 1½" N.B. PIPE (SC-370) (TYP)
167-SC-6
167-SC-7
CARGO REFRIGERATION S.W. CIRCULATING PUMPS
6'-3½" A/B
32
30
BASELINE

SECTION 10-A

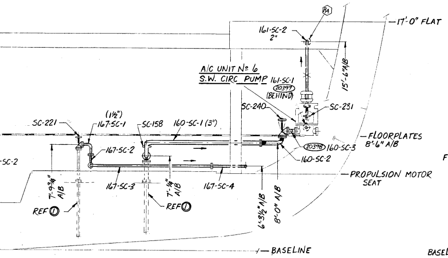
FRAME #50 LOOKING AFT 3/8"=1'-0"



¼" PLATE SIDES
17'-0" FLAT
ANGLE SUPPORT IF REQ'D
VIEW X-X
6" STD WT PIPE ㉒㉓
8" STD WT PIPE ⑮
5"
X
X

DETAIL 11-B

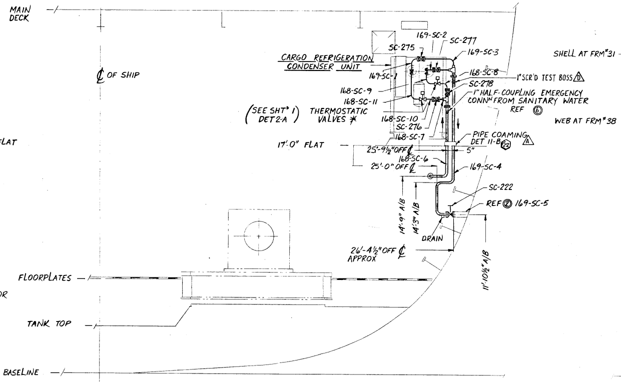
PENETRATION NOS ⑮㉒㉓ 1"=1'-0" (3-OFF)



17'-0" FLAT
161-SC-2 2"
15'-6¾"
A/C UNIT No 6 S.W. CIRC PUMP
161-SC-1 (BEHIND)
SC-240
SC-231
SC-221
(1½") 167-SC-1
SC-158
160-SC-1 (3")
FLOORPLATES 8'-6" A/B
160-SC-3
160-SC-2
167-SC-2
SC-2
7'-9¾" A/B
167-SC-3
7'-1¼" A/B
167-SC-4
PROPULSION MOTOR SEAT
REF ①
REF ①
6'-3½" A/B
8'-0" A/B
BASELINE

1-A

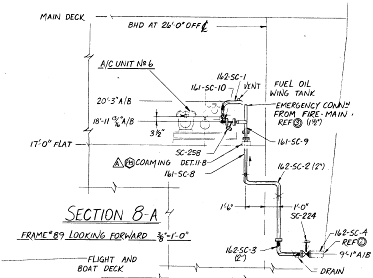
3/8"=1'-0"



MAIN DECK
℄ OF SHIP
CARGO REFRIGERATION CONDENSER UNIT
169-SC-2
SC-277
SC-275
169-SC-3
169-SC-1
168-SC-8
1" SCR'D TEST BOSS
SC-278
168-SC-9
168-SC-11
1" HALF-COUPLING EMERGENCY CONN'N FROM SANITARY WATER REF ⑥
(SEE SHT 1 DET 2-A) THERMOSTATIC VALVES *
168-SC-10
SC-276
168-SC-7
PIPE COAMING DET 11-B
17'-0" FLAT
25'-9½" OFF ℄
168-SC-6
5"
25'-0" OFF ℄
169-SC-4
SC-222
REF ② 169-SC-5
14'-9" A/B
14'-3" A/B
DRAIN
26'-4½" OFF ℄ APPROX
11'-10½" A/B
FLOORPLATES
TANK TOP
BASELINE

SECTION 10-B

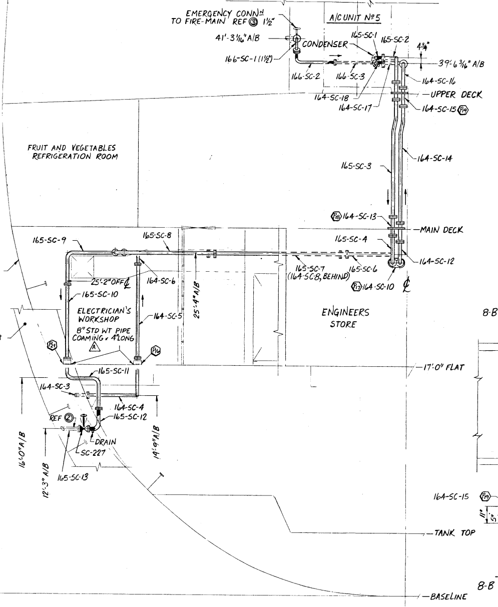
FRAME #42 LOOKING FORWARD 3/8"=1'-0"



MAIN DECK
BHD AT 26'-0" OFF ℄
A/C UNIT No 6
162-SC-1
161-SC-10
VENT
FUEL OIL WING TANK
EMERGENCY CONN'N FROM FIRE-MAIN REF ③ (1½")
20'-3" A/B
18'-11 13/16" A/B
3½"
161-SC-9
17'-0" FLAT
SC-258
COAMING DET 11-B
161-SC-8
162-SC-2 (2")
1'-6"
1'-0"
SC-224
162-SC-4
REF ②
162-SC-3 (2")
9'-1" A/B
DRAIN

SECTION 8-A

FRAME #89 LOOKING FORWARD 3/8"=1'-0"



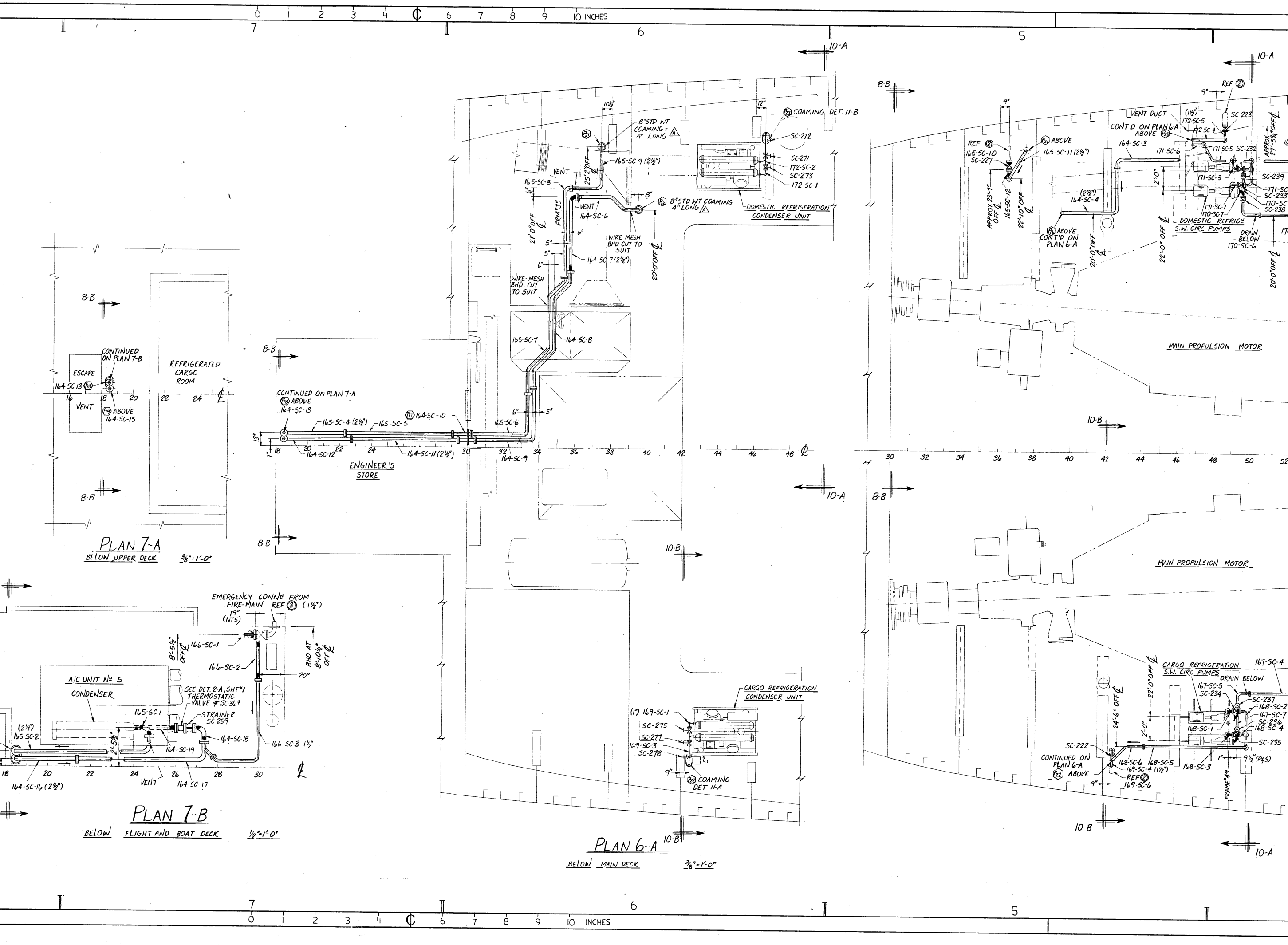
FLIGHT AND BOAT DECK
EMERGENCY CONN'N TO FIRE-MAIN REF ③ 1½"
A/C UNIT No 5
41'-3 1/16" A/B
165-SC-1
165-SC-2
4¾"
CONDENSER
39'-6 3/16" A/B
166-SC-1 (1½")
166-SC-2
166-SC-3
164-SC-16
164-SC-18
UPPER DECK
164-SC-17
164-SC-15
FRUIT AND VEGETABLES REFRIGERATION ROOM
165-SC-3
164-SC-14
164-SC-13
MAIN DECK
165-SC-9
165-SC-8
165-SC-4
164-SC-12
165-SC-7 (164-SC-8, BEHIND)
165-SC-6
164-SC-10
℄
SHELL AT FRM #31
25'-2" OFF ℄
164-SC-6
165-SC-10
25'-4" A/B
ELECTRICIAN'S WORKSHOP
8" STD WT PIPE COAMING 4" LONG
164-SC-5
ENGINEERS STORE
WEB AT FRM #38
17'-0" FLAT
165-SC-11
164-SC-3
164-SC-4
165-SC-12
REF ②
DRAIN
SC-227
165-SC-13
16'-0" A/B
12'-3" A/B
14'-9" A/B
164-SC-15
TANK TOP
BASELINE
8-B
8-B

SECTION 8-B

FRAME #18 LOOKING FORWARD 3/8"=1'-0"

11 10 9 8

0 1 2 3 4 ℄ 6 7 8 9 10 INCHES


0 1 2 3 4 6 7 8 9 10 INCHES
7
6
5
8-B
10-A
10-B
CONTINUED ON PLAN 7-B
ESCAPE
164-SC-13 P18
VENT
P19 ABOVE
164-SC-15
REFRIGERATED CARGO ROOM
16 18 20 22 24
CONTINUED ON PLAN 7-A
P18 ABOVE
164-SC-13
165-SC-4 (2½")
165-SC-5
P17 164-SC-10
165-SC-6
164-SC-12
164-SC-11 (2½")
164-SC-9
13"
7"
18 20 22 24 30 32 34 36 38 40 42 44 46 48
ENGINEER'S STORE
6"
5"
165-SC-7
164-SC-8
WIRE-MESH BHD CUT TO SUIT
5"
5"
6"
6"
164-SC-7 (2½")
21'0"OFF ℄
FRM #35
165-SC-8
VENT
6"
25'-2"OFF ℄
VENT
164-SC-6
10½"
P21
8"STD WT COAMING x 4" LONG A
165-SC-9 (2½")
8"
P16 8"STD WT COAMING 4" LONG A
WIRE MESH BHD CUT TO SUIT
20'0"OFF ℄
12"
P23 COAMING DET. 11-B
SC-272
SC-271
172-SC-2
SC-273
172-SC-1
DOMESTIC REFRIGERATION CONDENSER UNIT
CARGO REFRIGERATION CONDENSER UNIT
(1") 169-SC-1
SC-275
SC-277
169-SC-3
SC-278
5"
9"
P22 COAMING DET 11-A
EMERGENCY CONNᴺ FROM FIRE-MAIN REF ③ (1½")
19" (NTS)
8'-5½" OFF ℄
166-SC-1
166-SC-2
BHD AT 8'-10½" OFF ℄
20"
A/C UNIT Nº 5
CONDENSER
SEE DET. 2-A, SHT#1 THERMOSTATIC VALVE ✱SC-367
165-SC-1
STRAINER SC-259
(2½")
165-SC-2
2'-5½"
164-SC-19
164-SC-18
166-SC-3 1½"
18 20 22 24 26 28 30
164-SC-16 (2½")
VENT
164-SC-17
℄
9"
REF ②
165-SC-10
SC-227
P21 ABOVE
165-SC-11 (2½")
APPROX 23'-7" OFF ℄
165-SC-12
22'-10" OFF ℄
(2½")
164-SC-4
P16 ABOVE CONT'D ON PLAN 6-A
20'-0"OFF ℄
164-SC-3
VENT DUCT
CONT'D ON PLAN 6-A ABOVE P23
(1½")
172-SC-5
172-SC-4
REF ②
SC-223
171-SC-6
171-SC-5
SC-232
APPROX 27'-5¾" OFF ℄
2'-0"
171-SC-3
SC-239
171-SC
SC-233
170-SC
SC-238
171-SC-1
170-SC-7
22'-0" OFF ℄
DOMESTIC REFRIGᴺ S.W. CIRC PUMPS
DRAIN BELOW
170-SC-6
20'-0"OFF ℄
MAIN PROPULSION MOTOR
30 32 34 36 38 40 42 44 46 48 50 52
MAIN PROPULSION MOTOR
22'-0"OFF ℄
24'-6" OFF ℄
CARGO REFRIGERATION S.W. CIRC PUMPS
167-SC-4
DRAIN BELOW
167-SC-5
SC-234
SC-237
168-SC-2
167-SC-7
SC-236
168-SC-4
168-SC-1
SC-235
2'-0"
SC-222
CONTINUED ON PLAN 6-A P22 ABOVE
168-SC-6
168-SC-5
169-SC-4 (1½")
REF ②
169-SC-6
9"
168-SC-3
1"
9½"(P&S)
FRAME #49

PLAN 7~A

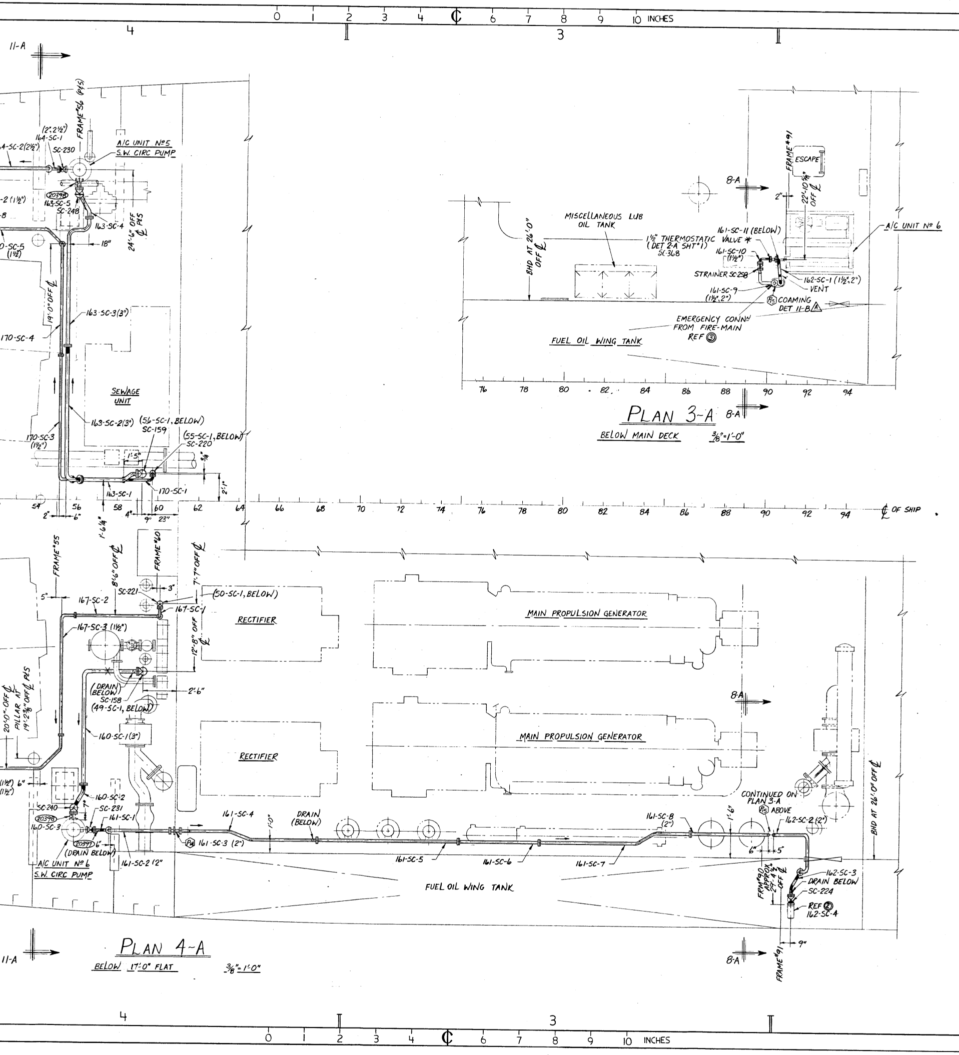
BELOW UPPER DECK 3/8"=1'-0"

PLAN 7~B

BELOW FLIGHT AND BOAT DECK ½"=1'-0"

PLAN 6~A

BELOW MAIN DECK 3/8"=1'-0"



0 1 2 3 4 ℄ 6 7 8 9 10 INCHES
4
3
2
11-A
FRAME #56 (P&S)
(2", 2½")
164-SC-1
164-SC-2 (2½")
SC-230
A/C UNIT No 5
S.W. CIRC PUMP
-2 (1½")
-8
20398
163-SC-5
SC-248
163-SC-4
24'-6" OFF ℄ P&S
18"
-SC-5 (1½")
19'-0" OFF ℄
163-SC-3 (3")
170-SC-4
SEWAGE UNIT
163-SC-2 (3")
(56-SC-1, BELOW)
SC-159
(55-SC-1, BELOW)
SC-220
170-SC-3 (1½")
1'-5"
¾"
2'-1"
163-SC-1
170-SC-1
54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94
℄ OF SHIP
2" 6" 4" 9" 23"
1'-6¼"
FRAME #55
8'-6" OFF ℄
FRAME #60
7'-7" OFF ℄
SC-221
3"
(50-SC-1, BELOW)
5"
167-SC-2
167-SC-1
167-SC-3 (1½")
12'-8" OFF ℄
RECTIFIER
(DRAIN BELOW)
SC-158
(49-SC-1, BELOW)
2'-6"
20'-0" OFF ℄
PILLAR AT 19'-2⅜" OFF ℄ P&S
160-SC-1 (3")
RECTIFIER
(1½") 6"
(1½")
160-SC-2
SC-240
7"
SC-231
20398
161-SC-1
160-SC-3
20397
6"
(DRAIN BELOW)
A/C UNIT No 6
S.W. CIRC PUMP
161-SC-2 (2")
P14 161-SC-3 (2")
161-SC-4
1'-0"
DRAIN (BELOW)
161-SC-5
161-SC-6
161-SC-7
FUEL OIL WING TANK
MAIN PROPULSION GENERATOR
MAIN PROPULSION GENERATOR
8-A
161-SC-8 (2")
1'-6"
CONTINUED ON PLAN 3-A
P15 ABOVE
162-SC-2 (2")
6" 5"
BHD AT 26'-0" OFF ℄
FRM #90 APPROX 29'-4½" OFF ℄
162-SC-3
DRAIN BELOW
SC-224
REF ②
162-SC-4
9"
FRAME #91
8-A
MISCELLANEOUS LUB OIL TANK
BHD AT 26'-0" OFF ℄
1½" THERMOSTATIC VALVE *
(DET 2-A SHT #1)
SC-368
161-SC-11 (BELOW)
161-SC-10 (1½")
STRAINER SC-258
161-SC-9 (1½", 2")
162-SC-1 (1½", 2")
VENT
P15 COAMING DET 11-B A
EMERGENCY CONNN FROM FIRE-MAIN REF ③
FUEL OIL WING TANK
FRAME #91
ESCAPE
2"
22'-10⅝" OFF ℄
A/C UNIT No 6
8-A
76 78 80 82 84 86 88 90 92 94

PLAN 3-A

BELOW MAIN DECK ⅜" = 1'-0"

PLAN 4-A

BELOW 17'-0" FLAT ⅜" = 1'-0"

NOTES

SEE SHEET No 1 OF THIS DRAWING

ALTERATIONS

REV.	ZONE	DESCRIPTION	DATE	APP.	OWNER DATE	OWNER APP.
A	14	OFFSET IN 161-SC-7 MOVED TO SUIT MODIFIED SEA WATER PIPING	24/1/82	GP		
		SEE ALSO SHT #1				
B	14	ELEVATION 13-A UPDATED TO CORRESPOND WITH OTHER VIEWS	17/2/82			
		THERMOSTATIC VALVES GIVEN FITTG Nos	17/2/82			
		MADE TO PLACE PIPES ADDED	22/2/82	GP		
C		SEE SHT #1	24/2/82			
D	9	1" TEST BOSSES ADDED TO DOMESTIC AND CARGO REFRIGERATION UNITS S.W CIRCULATING OUTLETS	25/8/82			
E		AS FITTED	27-8-82			

REFERENCES

No.	TITLE	DRG. No.
①	SEA BOX / SEA-BAY ARRGT	68-2030-3
②	OVERBOARD DISCHARGE ARRGT	68-2000-4
③	ARRGT OF FIRE AND WASHDECK	68-2020-2
⑦	DOMESTIC REFRIGERATION SEA-WATER SUPPLY ORIFICE (SC-367)	68-ESK-45
⑧	CARGO REFRIGERATION SEA-WATER SUPPLY ORIFICE (SC-368)	68-ESK-46
⑥	SANITARY SALT WATER SYSTEM	68-2060-3
⑨	REFRIGERATION AND AIR CONDITIONING S.W. CIRC SYSTEM DIAGRAMMATIC	68-2030-7

RESERVATIONS

1) FINAL CONNECTIONS TO CARGO AND DOMESTIC REFRIGERATION SEA WATER CIRC PUMPS IN ABEYANCE PENDING INFORMATION ON PUMP FLANGES

PRINT ISSUE

GROUP	REVISIONS 0	0	0	A	B	C
OWNERS						
LLOYDS						
A.B.S.						
C.S.I.						
DWG. OFFICE (STEEL)						
DWG. OFFICE (OUTFIT)	1P					
DWG. OFFICE (ENG.)						
PROD. MGR.						
ASST. PROD. MGR.						
STEEL SUPT.					1	
OUTFIT SUPT.					1	
ENG. SUPT.					1	
PROD. PLANNING		1(P)		1	1	
LOFT						
MACHINE SHOP						
ENG. FITTER					1	
CARPENTER						
PAINTER						
RIGGER						
PREFAB						
WELDER						
STEEL ERECTION						
PIPEFITTER				4	3	2
ELECT. SUB CONT.						
SHT. MET. SUB CONT.						
PIPE SUB CONT.						
CANAL E (P.W.D.D.)						
INSUL. SUB CONT.						
QUALITY CONTROL						
PIPE SUPT.		1(P)		1	1	
I.A. LAWRIE		1(P)		1	1	
CHIEF ENG.					1	
MR B. JOHNSON			2		1	
MR R GILBERT			1		2	
B KIRKWOOD		3	1		1	
TOTAL	1	6	4	7	15	2
DATE OF ISSUE	3/11/81	11-1-82	19-1-82	3-2-82	22-2-82	26-8-82

APPROVALS

OWNER	LLOYDS	A.B.S.	C.S.I.	
16 Feb 82				

PORT WELLER DRY DOCKS
AS FITTED DRAWING

DRG. No. 68-2030-8 ALT. E

REFRIGERATION & AIR CONDITIONING SEA-WATER CIRCULATING ARRGT

SHEET No 2 OF 3

SCALE: AS MARKED A/C#: 2030

HULL No. 68

DRAWN BY: H NEUFELD DATE: 9/10/81

APPROVED BY:

PORT WELLER DRY DOCKS
A DIVISION OF UPPER LAKES SHIPPING LTD
ST. CATHARINES ONTARIO L2R 7C1

DRG No 68-2030-8 SHEET 2