

CONFIDENTIAL

SATISFACTORY TO	
COMMANDING OFFICER	DATE
<i>Joseph W. Tard</i>	6-14-57
<i>L. H. Anderson</i> L. O. R.	5-10-60
<i>H. N. Carson</i> Jr., Cdr, U.S.N.	5-27-63
<i>J. E. O'Connor</i>	6-6-66
<i>J. M. Conner</i>	10-10-69

U.S. SUBMARINE

SS 350

BOOKLET OF GENERAL PLANS

NSA thanks Jim Christley for his generous loan of the original document used to create this online version.

We also appreciate the help of Oce North America for their assistance in scanning this document.

THIS MATERIAL CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE LAWS, TITLE 18 U.S.C., SECTIONS 793 AND 794, THE TRANSMISSION OR REVELATION OF WHICH IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.

CONFIDENTIAL

CORRECTED TO SUIT SHIP		
PLACE	DATE	FOR SUPV'R OF SHIP BLDG
GROTON, CONN.	APR. 29-1946	<i>H. O. Helmer</i>
PHILADELPHIA - PA.	APR. 1, 1948	<i>W. H. McClain</i>
NAVSHIPYD PTSMH	SEPT. 22, 1952	<i>H. O. Jackson</i>
NAVSHIPYD PTSMH	SEPT. 1, 1954	<i>C. R. Bryan</i>
PHILADELPHIA NAVAL SHIPYARD	JUNE 14, 1957	<i>Christiano Ho. Eng.</i>
PHILADELPHIA NAVAL SHIPYARD	MAY 11, 1960	
NAVSHIPYD. PTSMH.	JUNE 17, 1960	
NAVSHIPYD. PTSMH.	JUNE 7, 1966	<i>R. E. Ramsey</i>
PHILA NAVAL SHIPYARD	OCT 19, 1969	<i>J. M. Conner</i>

ORDER OF PLANS

SHEET NO 1 COVER
SHEET NO 2 GENERAL DIMENSIONS & DATA
SHEET NO 3 MAIN DECK
SHEET NO 4 OUTBOARD PROFILE
SHEET NO 5 PLATFORM DECK
SHEET NO 6 HOLD
SHEET NO 7 INBOARD PROFILE
SHEET NO 8 MIDSHIP & CROSS TYPE SECTIONS

ELECTRIC BOAT COMPANY, GROTON, CONN.

DATE MAY 2-1946
DRAWN N.S.L.
TRACED LOK
CHECKED R.L.D.
EXAMINED *J. L. Helmer*
APPROVED *R. E. Ramsey*

APPROVED

FOR SS 350
ASSIGNED BU NO 55.35050103-234477
DATE 12/28/45
H. O. Helmer
LT. COMMANDER, USNR
FOR SUPERVISOR OF SHIPBUILDING

2421-190

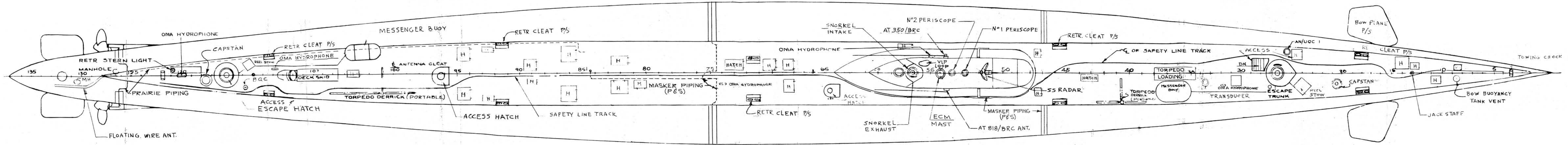
BU OF SHIPS NO 55350-50103-234477

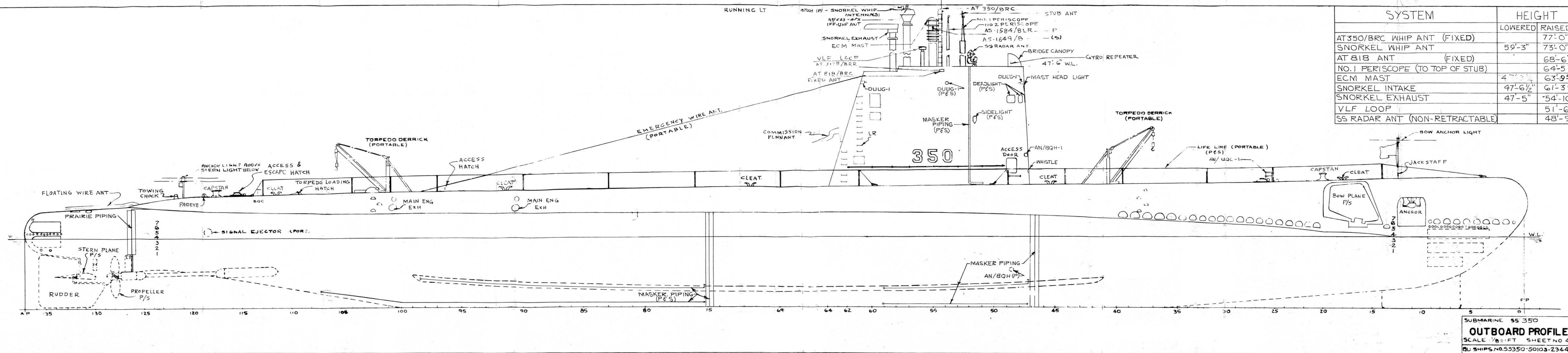
PRINCIPAL DIMENSIONS		HEIGHTS		CAPACITIES & VOLUMES OF TANKS											
				MAIN BALLAST TANKS			FUEL OIL TANKS			SANITARY TANKS					
				GALLONS	TONS S.W.	TONS OIL	GALLONS	TONS S.W.	TONS OIL	GALLONS	TONS S.W.	TONS OIL	GALLONS	TONS S.W.	TONS OIL
LENGTH OVERALL	307'-6 1/2"	LOWEST POINT OF KEEL TO TOP OF STRENGTH HULL AMIDSHIPS ON $\frac{1}{4}$ OF SHIP	19'-10 3/4"	NO 1 MAIN BALLAST	12875	49.17	NO 1 NORMAL FUEL OIL	11401	43.54	35.41	NO 1		434	1.66	
LENGTH BETWEEN PERPENDICULARS	307'-0"	LOWEST POINT OF KEEL TO TOP OF BRIDGE DECK	42'-8"	NO 2A & 2B MAIN BALLAST	15108	57.71	NO 2 NORMAL FUEL OIL	13122	50.11	40.75	NO 2		610	2.33	
PROJECTION FORWARD OF F.P.	6 1/2"	LOWEST POINT OF KEEL TO TOP OF CONNING TOWER PLATING	28'-4 1/2"	NO 2C & 2D MAIN BALLAST	17234	65.83	NO 3A & 3B FUEL BALLAST	19196	73.32	59.61	TOTAL		1044	3.99	
LENGTH OF STRAIGHT KEEL	154'-10"	LOWEST POINT OF KEEL TO TOP OF HIGHEST EXTENDED POSITION OF PERISCOPES	66'-9 1/4"	NO 3A & 3B FUEL BALLAST	19705	75.26	NO 4A & 4B FUEL BALLAST	24089	92.01	74.81					
BREADTH MOULDED	27'-2 3/8"	LOWEST POINT OF KEEL TO TOP OF		NO 4A & 4B FUEL BALLAST	24672	94.23	NO 5A & 5B FUEL BALLAST	19403	74.11	60.26					
BREADTH EXTREME	27'-4 1/8"	LOWEST POINT OF KEEL TO TOP OF		NO 5A & 5B FUEL BALLAST	19905	76.03	NO 6 NORMAL FUEL OIL	15201	58.06	47.21					
DRAFT SURFACE CONDITION TO UNDERSIDE OF KEEL PLATE (MEAN)	15'-2 1/4"	LOWEST POINT OF KEEL TO BOW ANCHOR LIGHT	32'-2"	NO 6A & 6B MAIN BALLAST	17459	66.69	NO 7 NORMAL FUEL OIL	10907	41.66	33.87					
RATIO-LENGTH TO BEAM	11.29	LOWEST POINT OF KEEL TO MASTHEAD LIGHT	43'-2"	NO 6C & 6D MAIN BALLAST	18729	71.54	COLLECTING	2993	11.43	9.30					
SHAFTS DIVERGE AT ANGLE WITH $\frac{1}{4}$ OF SHIP	1°-32'-48"	LOWEST POINT OF KEEL TO STERN LIGHT	27'-11"	SAFETY TANK	6082	23.23	EXPANSION	2993	11.43	9.30					
SHAFTS $\frac{1}{4}$ AT FR #100-ABOVE BASE LINE	7'-7 3/4"	LOWEST POINT OF KEEL TO SIDE LIGHT	36'-8 1/2"	TOTAL			CLEAN FUEL OIL NO. 1	611	2.34	1.90					
SHAFTS $\frac{1}{4}$ AT FR #128-ABOVE BASE LINE	6'-9"	LOWEST POINT OF KEEL TO					CLEAN FUEL OIL NO. 2	618	2.37	1.92					
SHAFTS RAKE OUTBOARD AND AFT 0.0492" PER INCH FROM $\frac{1}{4}$		LOWEST POINT OF KEEL TO					TOTAL			120534	460.38	374.34			
SHAFTS RAKE FROM BASE LINE AND FORD 0.0147" PER INCH FROM B.L.		LOWEST POINT OF KEEL TO													
SHAFTS $\frac{1}{4}$ FROM $\frac{1}{4}$ OF SHIP AT FR 128	5'-8"	LOWEST POINT OF KEEL TO													
SHAFTS $\frac{1}{4}$ AT FR #100-FROM $\frac{1}{4}$ OF SHIP	2'-9 5/8"	LOWEST POINT OF KEEL TO													
RUDDER AXIS FORWARD OF A.P.	10'-6"	LOWEST POINT OF KEEL TO													
NUMBER OF FRAMES	138	LOWEST POINT OF KEEL TO													
SCREWS CENTER FORWARD OF A.P.	18'-4 7/8"	LOWEST POINT OF KEEL TO													
FRAME SPACING-BOW TO FR #35-24", FR 35 TO FR 62-30", FR 62 TO FR 69-24", FR 69 TO FR 105-30", FR 105 TO FR 136-24"		LOWEST POINT OF KEEL TO													
CONFIDENTIAL		HIGHEST EXTENDED POSITION OF ECLIPSE	63'-8 5/8"												

NOTES:

1. NO REDUCTIONS HAVE BEEN MADE FOR LEAD BALLAST IN THE MAIN BALLAST TANKS.
2. FUEL BALLAST TANK CAPACITIES ARE WITH VENT PIPING INCLUDED. WATER SEAL BELOW LOWEST POINT OF COMPENSATING WATER PIPE IS DEDUCTED.
3. WATER SEAL IS CALCULATED WITH RESIDUAL WATER BELOW HIGHEST POINT OF FLOOD VALVE DEDUCTED.

ACCOMMODATIONS				
	OFFICERS	CPO	CREW	TOTAL
FORWARD TORPEDO ROOM			14	14
OFFICERS QUARTERS	10	6		16
CREWS QUARTERS			28	28
AFTER TORPEDO ROOM			21	21
TOTAL	10	6	63	79
TOTAL ACCOMMODATIONS 79				

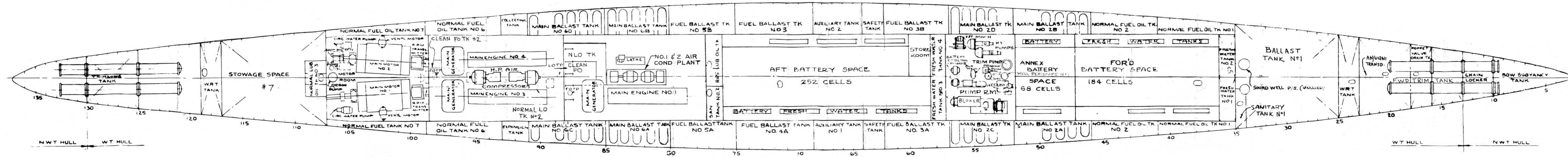




SYSTEM	HEIGHT	
	LOWERED	RAISED
AT350/BRC WHIP ANT (FIXED)		77'-0"
SNORKEL WHIP ANT	59'-3"	73'-0"
AT 818 ANT (FIXED)		68'-6"
NO. 1 PERISCOPE (TO TOP OF STUB)		64'-5 9/16"
ECM MAST	47'-3"	63'-9 5/8"
SNORKEL INTAKE	47'-6 1/2"	61'-3 1/2"
SNORKEL EXHAUST	47'-5"	54'-10"
VLF LOOP		51'-6"
SS RADAR ANT (NON-RETRACTABLE)		48'-9"

SUBMARINE SS 350
OUTBOARD PROFILE
 SCALE 1/8"=1 FT SHEET NO 4
 QU SHIPS NO. 55350-50103-234-477



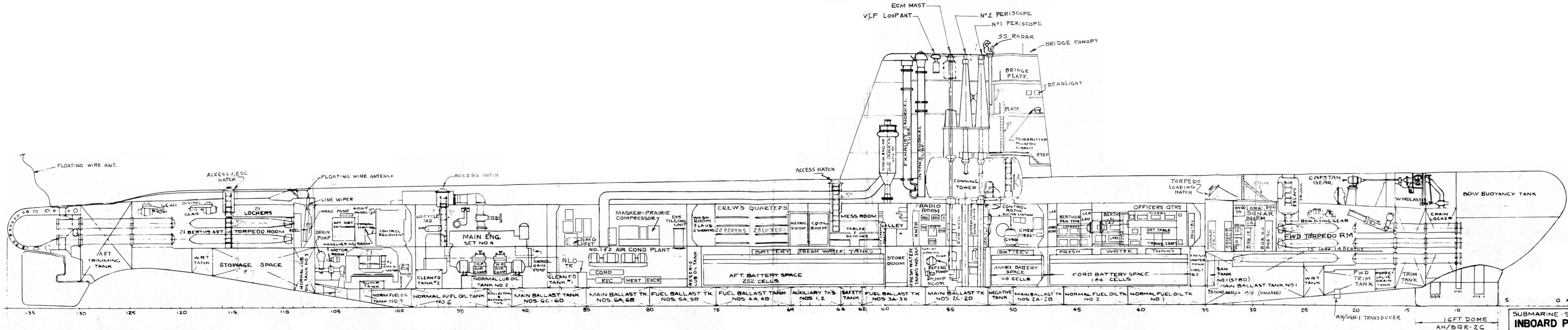


SUBMARINE - S5350

HOLD

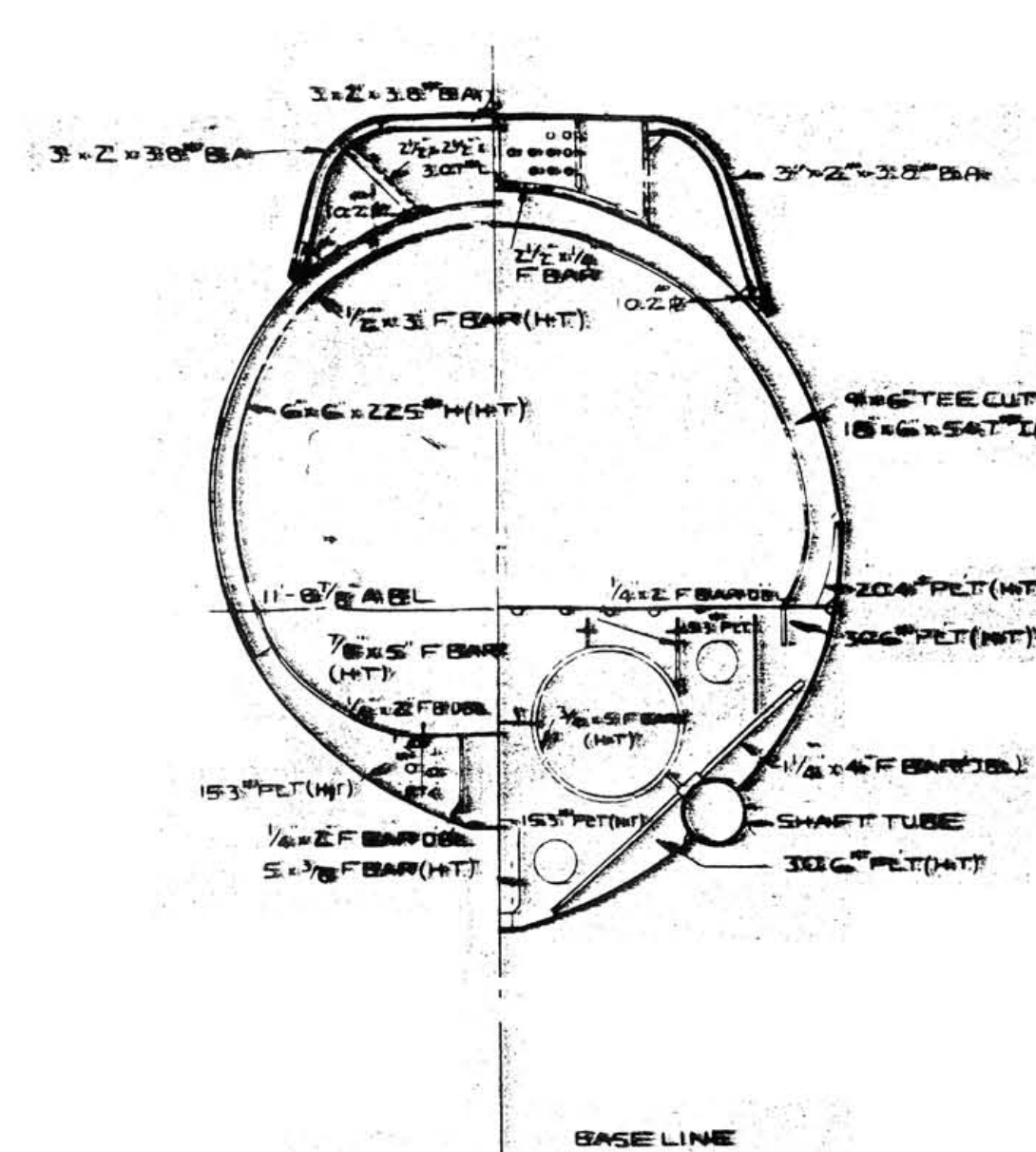
SCALE - 1/8" = 1 FT SHEET NO 6

BU SHIPS NO S5350-S0103 234477

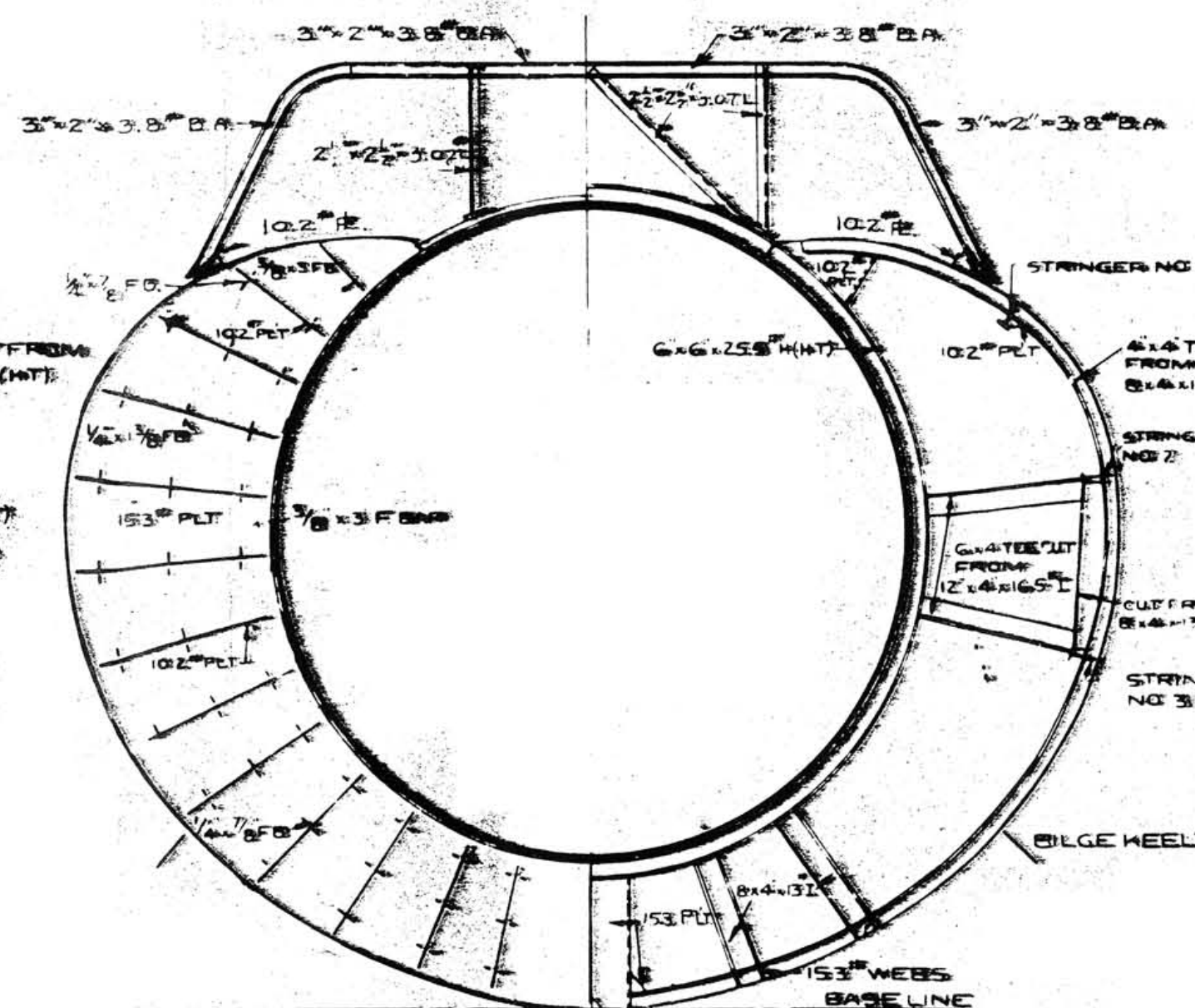


SUBMARINE SS 350
INBOARD PROFILE
 SCALE 1/8"=1' SHEET NO. 7
 BU SHIPS NO. 55350-50103-234477

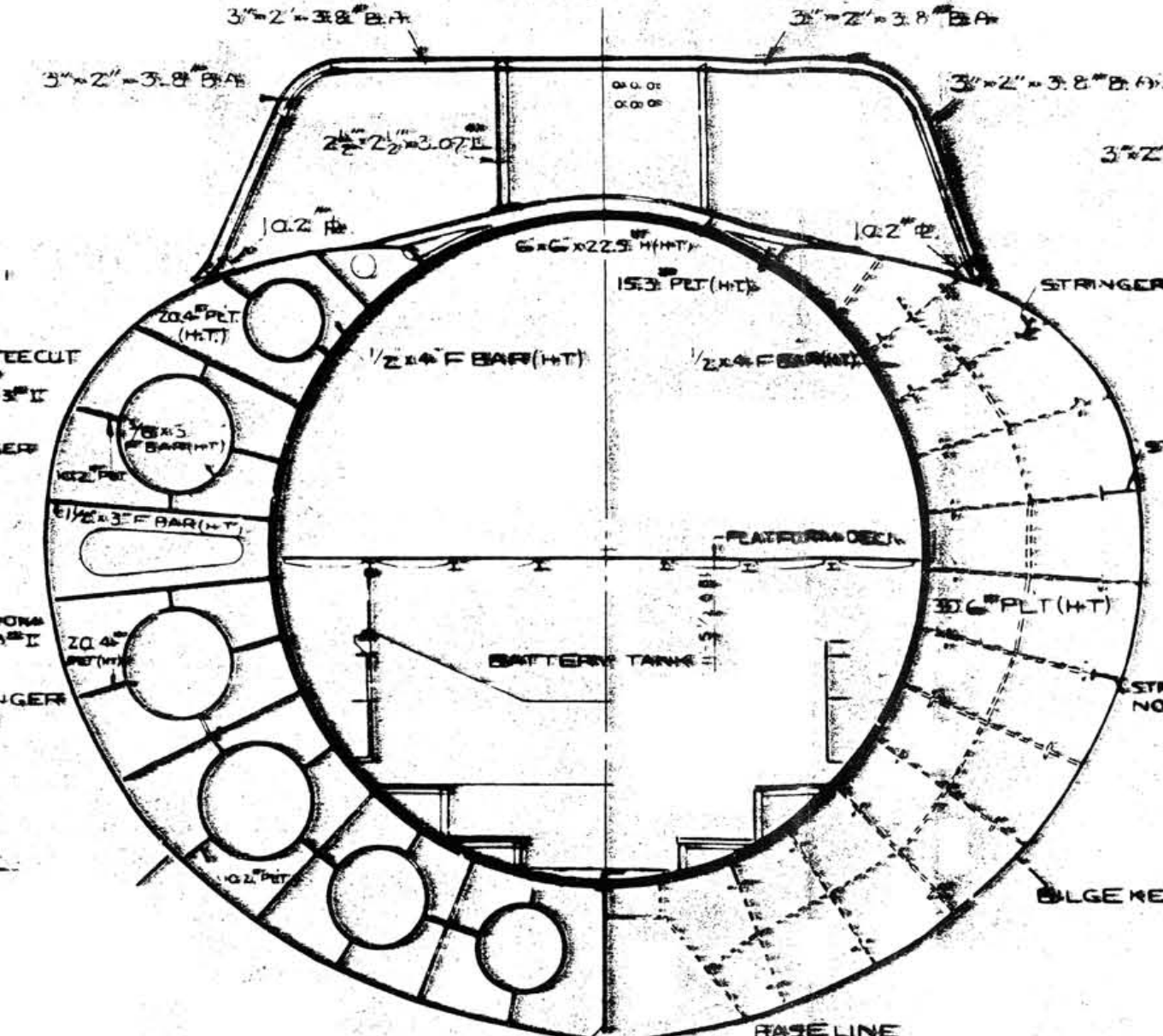
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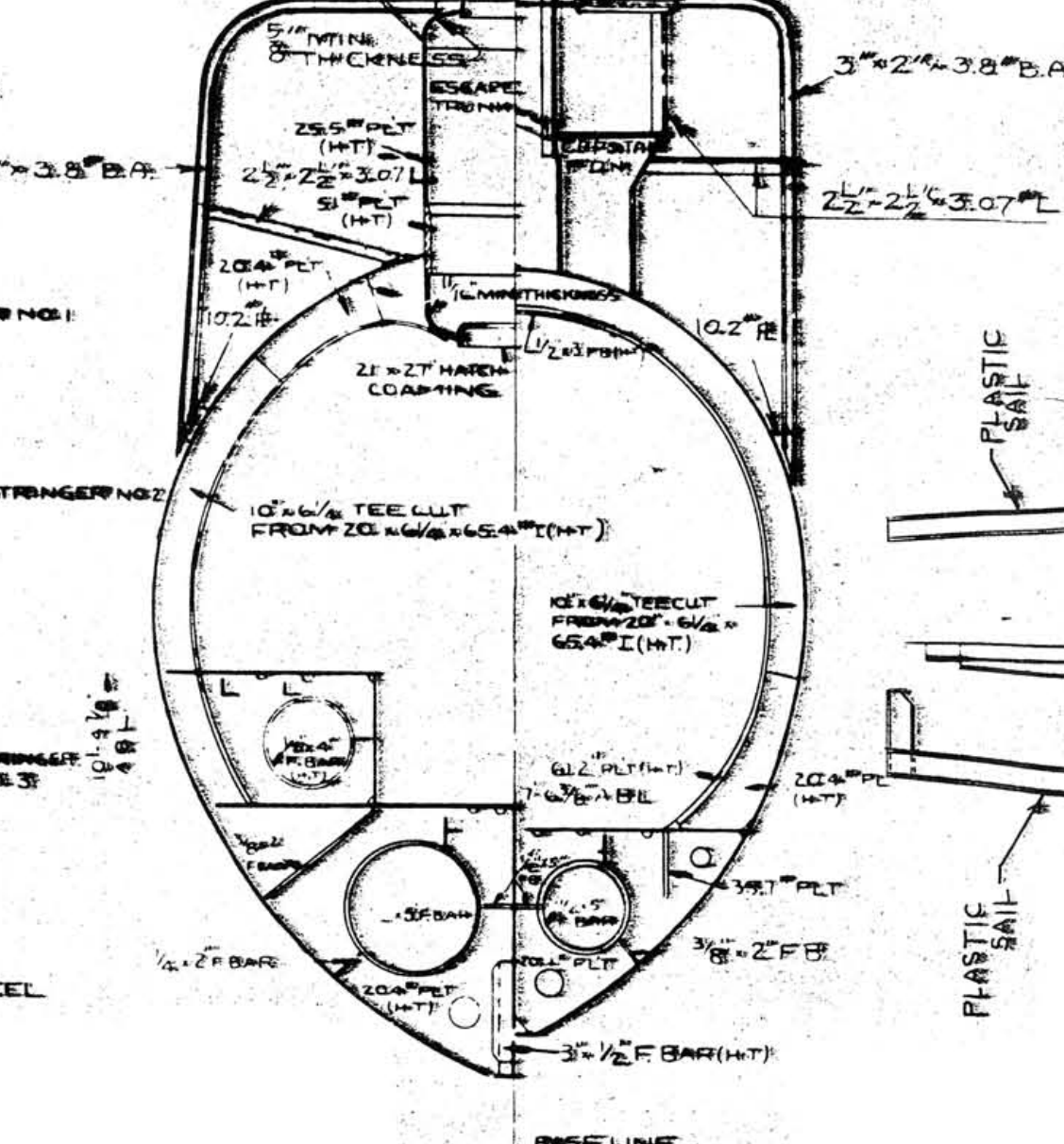
FRAME 120 FRAME 113
SECTION LOOKING EAST



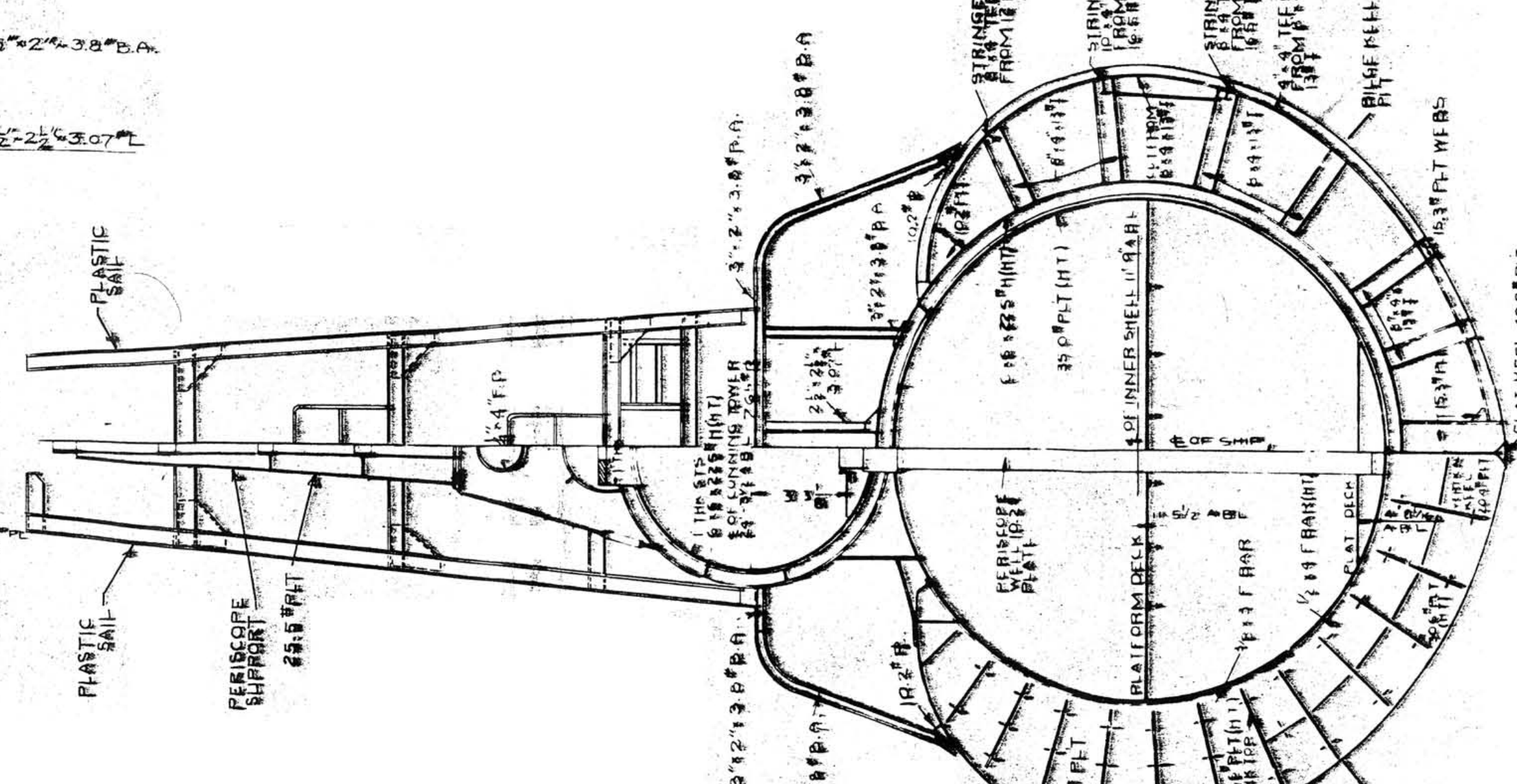
TYPICAL WING BULKHEAD TYPICAL INNER & OUTER
HULL FRAMES
SECTION LOOKING AFT



TYPICAL SAFETY & AUXILIARY TANK FRAME & BULKHEAD
SECTION LOOKING AFT



FRAME 26 FRAME 20
SECTION LOOKING FORD



FRAME 53 FRAME 49
MIDSHIP SECTION
F88NIN F88D

COMPARTMENT	FRAMES	CU. FT	TONS	GALLONS	C.G. ABOVE BOTTOM OF KEEL	C.G. FORD. FR. 69	C.G. AFT FR. 69
FORD. TORP. RM.	16-35	4481	128.03	33518	13.78'	99.50'	
FORD. BATT. RM.	36-47	4244	121.26	31734	13.68'	65.25'	
CONT. & PUMP RM.	47½-58½	4496	128.46	33618	12.08'	35.25'	
CONNING TOWER	49½-56	827	23.63	6184	24.38'	38.25'	
AFT. BATT. RM.	58½-77½	5543	158.37	41445	13.68'		2.00'
FORD ENG. RM.	77½-88	4535	129.57	33921	12.82'		35.00'
AFT. ENG. RM.	88-98½	4277	122.20	31992	12.82'		60.00'
MOTOR & MAN. RM.	98½-107	3410	97.43	25507	13.68'		83.75'
AFT. TORP. RM.	107-125	3455	98.71	25842	15.00'		116.00'

SUBMARINE - SS 350
COMPARTMENT VOLUMES &
CAPACITIES SHT NO 9
BU SHIPS NO. SS 350-S0103-234471