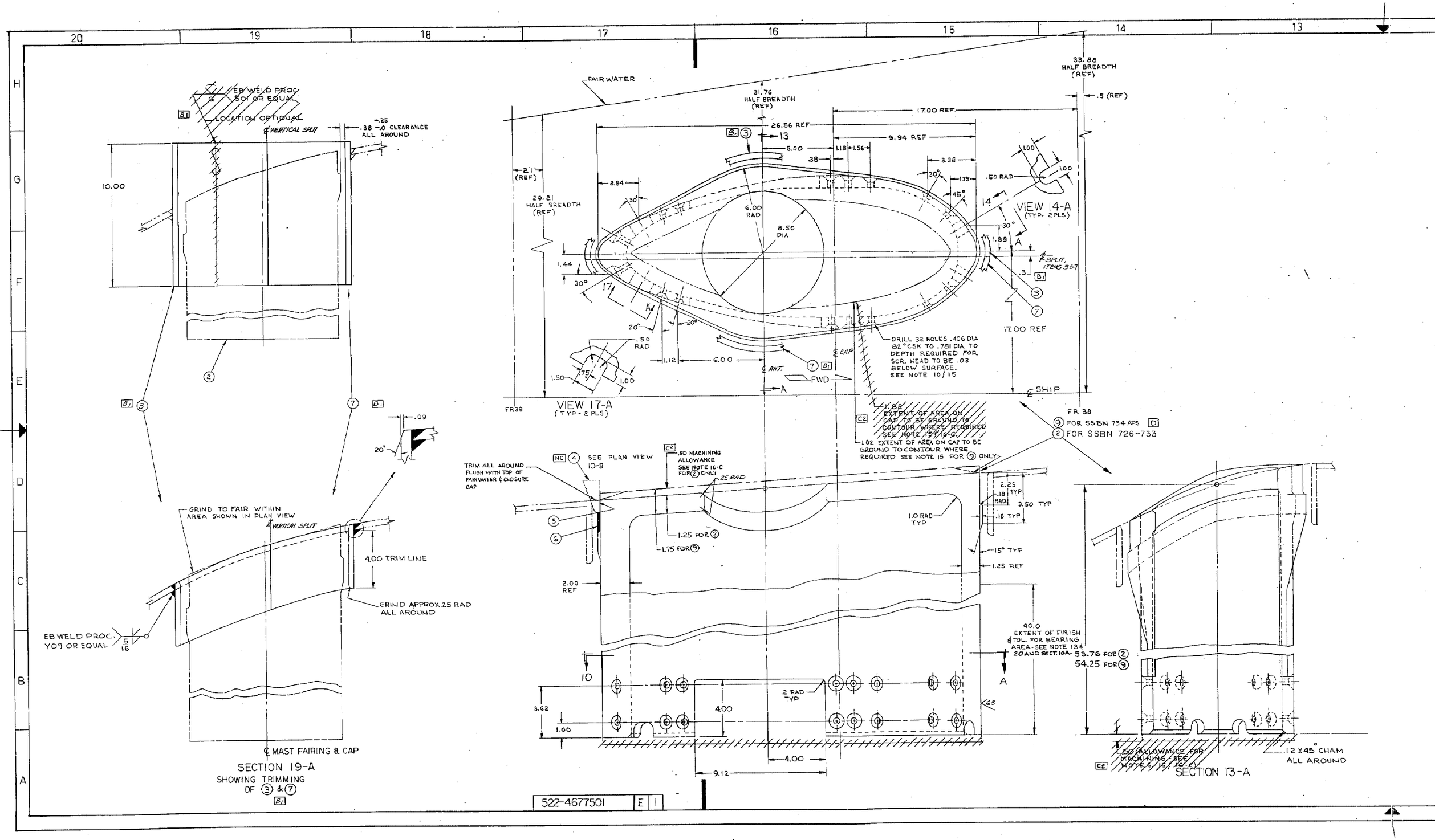
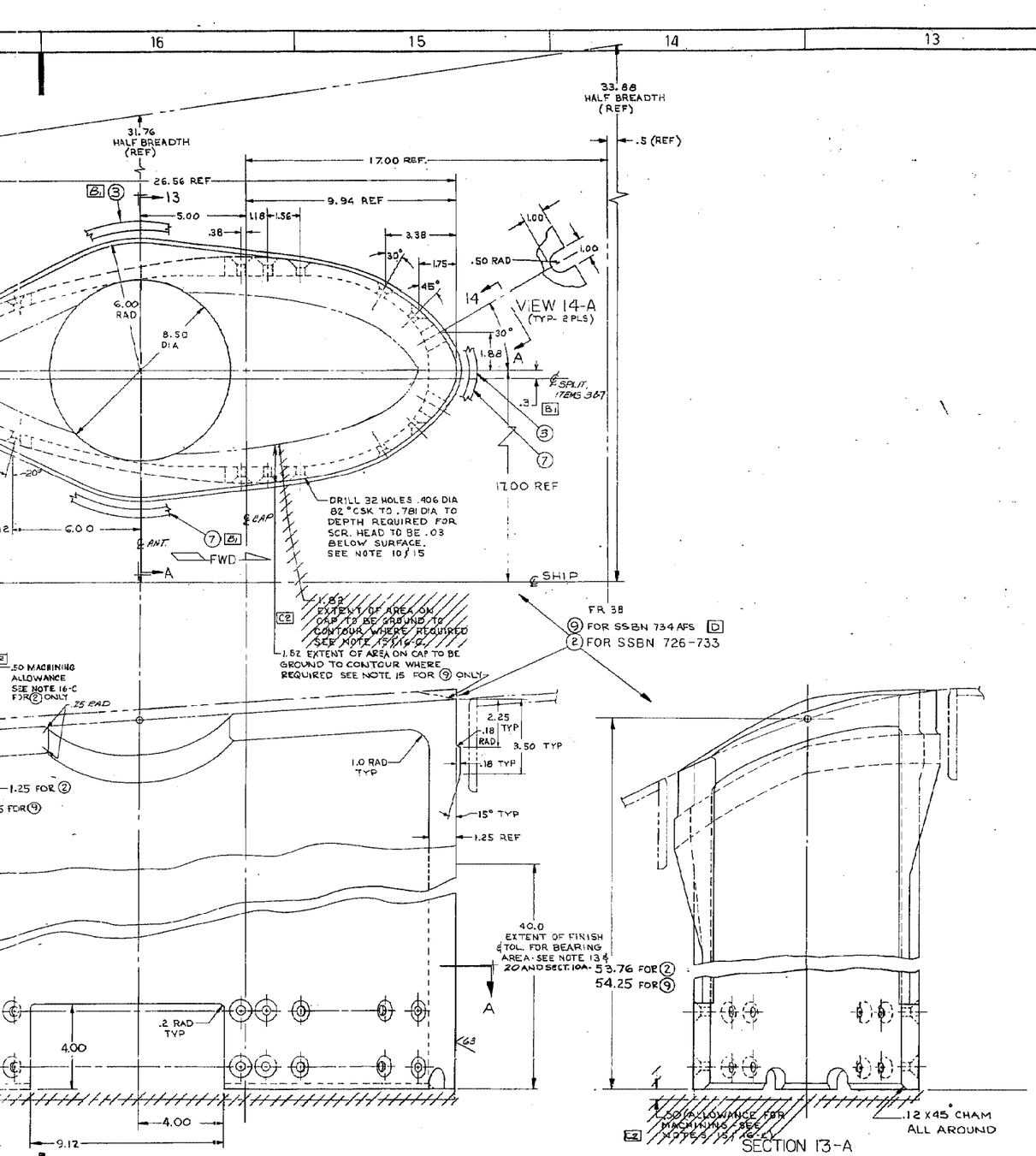
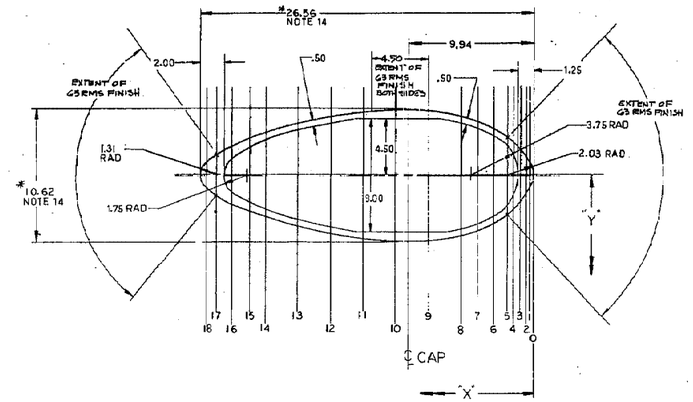

EB WELD PROC SCI OR EQUAL
LOCATION OPTIONAL
℄ VERTICAL SPLIT
+.25 -.38 -.0 CLEARANCE ALL AROUND
10.00
SECTION 19-A
SHOWING TRIMMING OF 3 & 7
GRIND TO FAIR WITHIN AREA SHOWN IN PLAN VIEW
4.00 TRIM LINE
GRIND APPROX .25 RAD ALL AROUND
EB WELD PROC. Y09 OR EQUAL
℄ MAST FAIRING & CAP
FAIR WATER
31.76 HALF BREADTH (REF)
26.56 REF
17.00 REF
9.94 REF
33.88 HALF BREADTH (REF)
.5 (REF)
29.21 HALF BREADTH (REF)
6.00 RAD
8.50 DIA
VIEW 14-A (TYP. 2 PLS)
℄ SPLIT, ITEMS 3 & 7
DRILL 32 HOLES .406 DIA 82° CSK TO .781 DIA TO DEPTH REQUIRED FOR SCR. HEAD TO BE .03 BELOW SURFACE. SEE NOTE 10/15
℄ CAP
℄ ANT.
FWD
℄ SHIP
FR 38
VIEW 17-A (TYP - 2 PLS)
1.82 EXTENT OF AREA ON CAP TO BE GROUND TO CONTOUR WHERE REQUIRED SEE NOTE 15/16-G
9 FOR SSBN 734 AFS
2 FOR SSBN 726-733
SEE PLAN VIEW 10-B
.50 MACHINING ALLOWANCE SEE NOTE 16-C FOR 2 ONLY
TRIM ALL AROUND FLUSH WITH TOP OF FAIRWATER & CLOSURE CAP
.25 RAD
1.25 FOR 2
1.75 FOR 9
1.0 RAD TYP
3.50 TYP
.18 TYP
15° TYP
1.25 REF
2.00 REF
40.0 EXTENT OF FINISH & TOL. FOR BEARING AREA - SEE NOTE 13 & 20 AND SECT. 10A
53.76 FOR 2
54.25 FOR 9
.2 RAD TYP
4.00
9.12
.50 ALLOWANCE FOR MACHINING SEE NOTES 15/16-E
.12 X 45° CHAM ALL AROUND
SECTION 13-A
522-4677501 E 1



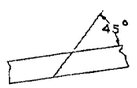
SECTION 13-A



SECTION 10-A

ITEM NO	SEQ	QTY CL#18	U/M LVL	NOUN NAME SIZE OR WEIGH
1	0001	1	PC NA	CAP ASSY
2	0002	1	PC NA	CAP
3	0003	1	PC NA	PLATE 0.375 THK
4	0004	1	PC NA	RUBBER SEAL 2.450N
5	0005	0	PC NA	ADHESIVE 3.45LB KIT
6	0006	0	PC NA	COMPOUND SIZE A
7	0007	1	PC NA	PLATE 0.375 THK
8	0008	1	PC NA	CAP ASSY
9	0009	1	PC NA	CAP

TABLE OF OFFSETS FOR ITS 2 & 9		
STATION	"X" FROM ℄ REF	"Y" HALF BREADTH
1	.33	1.17
2	.53	1.52
3	1.04	2.18
4	1.58	2.71
5	2.09	3.14
6	3.14	3.83
7	4.45	4.48
8	5.76	4.90
9	8.38	5.29
℄ CAP	9.94	5.31
10	11.01	5.30
11	13.63	5.09
12	16.23	4.64
13	18.86	4.00
14	21.48	3.18
15	22.79	2.70
16	24.10	2.16
17	25.41	1.46
18	26.11	.88
ALLOWABLE TOLERANCES OF COORDINATES SEE NOTE 13		



PLAN VIEW 10-B
VULCANIZING OF 4 LOCATION
OF JOINT OPTIONAL, EXCEPT DO
NOT LOCATE ON SHARP BEND.

522-4677501 | E | 1

UNCLASSIFIED

8 | 7 | 6 | 5 | 4 | 3 | 2 | 1

LIST OF MATERIAL

FIND NO	QTY CLASS	U/M LVL	NOUN NAME SIZE OR WEIGHT	TYPE	MODIFIER MATERIAL	DOCUMENT OR DRAWING NO	C/I U/M	PART NUMBER MF	SERVICE OR REMARKS	P R	S N
1	1	PC NA	CAP ASSY	FAIRING	NAVSAT ANT N/A	87682-7608 IT 1	96169	4677501-0001	ASSY C/O ITEMS 2-6 NOTE 18 FOR 726-733 ONLY		X
2	1	PC NA	CAP	CLOS	FBR GL	87682-7608 IT 2 MIL-P-17549GRI	96169	4677501-0002 MF	NOTE 16&21 FOR 726-733 ONLY Z14B		X
3	1	PC NA	PLATE 0.375 THK		STL	MIL-S-24113 GR N HTS	96169	20-83-0375 MF	COAMING, HALF NOTE 16 Z16E Z15F		X
4	1	PC NA	RUBBER SEAL 2.250W	SOL	EXTD NPRN	2625-C04X16 MIL-R-6855 CL 2 GR 60	96169	64-51-5751 MF	APPROX LENGTH REQ'D 70 IN. NOTE 17		X
5	0	PC NA	ADHESIVE 3.25LB KIT	TWO-PART	FLEX EPOXY	HUGHSON CHEM CO CHEMLOCK 305	96169	89-15-0064	AS REQ'D		X
6	0	PC NA	COMPOUND SIZE A	EPOXY RESIN	N/A	MINN MINING MFG SCOTCHCAST R4	96169	05-10-0012	COMPOUND EMBEDDING AS REQ'D		X
07	1	PC NA	PLATE 0.375 THK		STL	MIL-S-24113 GR N HTS	96169	20-83-0375 MF	COAMING, HALF NOTE 16 Z15F Z16E		X
08	1	PC NA	CAP ASSY	FAIRING	NAVSAT ANT N/A	87682-7608 IT8	96169	4677501-0008	ASSY C/O ITEM 3-7 & 9 NOTE 18 FOR 734 & AFS ONLY		X
09	1	PC NA	CAP	CLOS	FBR GL	87682-7608 IT9 MIL-P-17549GRI	96169	4677501-0009 MF	NOTE 16 & 21 FOR 734 & AFS ONLY Z14E		X

GENERAL NOTES

1. SECTIONS OF THE SHIP'S SPECIFICATIONS REFERRED TO HEREON ARE THOSE AS PRESENTED IN THE SPECIFICATIONS FOR BUILDING SUBMARINES SSBN TRIDENT CLASS, NAVSHIPS PUBLICATION 0902-027-7010, DATED 22 MAY 1973 AND MODIFICATIONS AND CHANGE ORDERS AS APPLICABLE.
2. SPECIFIED REVISIONS FOR PURCHASE SPECIFICATIONS, STANDARDS, NAVSHIPS STANDARD AND TYPE DRAWINGS AND NAVSHIPS PUBLICATIONS ARE AS LISTED IN THE SHIP'S SPECIFICATIONS. WHERE NO REVISION IS SPECIFIED, THOSE ISSUES IN EFFECT ON 1 JANUARY, 1973 SHALL APPLY IN ACCORDANCE WITH SECTION 5000-0-C OF THE SHIP'S SPECIFICATIONS.
3. QUANTITIES ARE GIVEN FOR ONE SHIP.
4. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN INCHES.
5. ALL FABRICATION, WELDING AND INSPECTION SHALL BE IN ACCORDANCE WITH SECTION 9090-1 AND 9110-0 OF THE SHIP'S SPECIFICATIONS.
6. THE USE OF THE "MF" DESIGNATOR IN THE "PART NUMBER" COLUMN INDICATES THE ITEM IS MADE FROM BASIC STOCK MATERIAL. END USE IDENTIFICATION IS TO BE SUPPLIED BY THE CONSTRUCTION ACTIVITY AS REQUIRED.
7. THIS DRAWING CONTAINS NOISE CONTROL FEATURES FOR LOCATION, CLEARANCES, CONFIGURATION AND MATERIAL, AS APPLICABLE, WHICH SHALL NOT BE DEVIATED FROM WITHOUT NRP APPROVAL. THESE FEATURES ARE LIMITED TO THE ITEMS AND FEATURES MARKED [NC].
8. HALF BREADTHS SHOWN ARE FOR 2:1 ELLIPSE THAT COINCIDE WITH CONSTRUCTION OF FAIRWATER TOP AT LOCATION OF CLOSURE CAP IN SHIP.
9. OUTSIDE SURFACE OF CLOSURE CAP MUST BE SMOOTH AND FREE FROM ABRASIONS.

[C1] 10. ~~AFTER ASSEMBLY, FILL COUNTERSINK FOR SCREW HEADS WITH EPOXY, ESDIV PART NUMBER 05-10-0012, ITEM 6.~~

11. METHOD OF MARKING:
    - A. CAST (RAISED)
    - B. VIBRO TOOL ETCH.
    - C. DIE STAMPING (ALLOWED WITH ROUND BOTTOM, LOW STRESS TYPE DIES): DEPTH OF IMPRESSION .010 MAXIMUM
    - D. TAGGING OR BAGGING (ONLY IF A, B OR C CANNOT BE USED).
12. FOR HI-SHOCK TESTING, SEE REFERENCE 1.

[D] [C2] 13. THE ALLOWABLE TOLERANCE FOR THE OUTSIDE CONTOUR OF ITEM 2 & 9 IN BEARING AREAS OF STATIONS 0 THRU 5, 9 THROUGH 11 AND 17 THROUGH 19 IS ±.010; ELSEWHERE ±.050.

14. DIMENSIONS MARKED THUS, *, SHALL NOT VARY FROM THE MEAN BY MORE THAN ±.025 THROUGHOUT THE ENTIRE LENGTH OF THE FAIRING CAP, EXCEPT AS SHOWN.
15. COAT ALL SCREW HOLES, MACHINED SURFACES AND GROUND AREAS WITH EPOXY PAINT FORMULA 151, PER MIL-P-24441 AS MFG BY SEAGUARD FINISHES CO, INC., PORTSMOUTH, VA. 23700 OR EQUAL.

[D] [C2] [B1] 16. INSTALLATION PROCEDURE FOR ITEMS 2,3 & 7 OR 3,7 & 9:
    - A. INSTALL COAMING(3&7) IN POSITION AND GRIND FLUSH WITH TOP OF SAIL.
    - B. TRIM UNDERSIDE OF(3&7) TO 4.00 INCHES WIDE AND GRIND INSIDE EDGES.
    - C. CAP (2) TO BE TRIMMED ON "TOP" SO THAT TOP OF CAP IS FLUSH TO .50 INCHES ABOVE TOP OF SAIL AND GRIND A MAXIMUM OF .50 INCHES TO FAIR. (FOR 726-733 ONLY)

17. PROCEDURE FOR INSTALLATION OF SEAL, ITEM 4:
    - A. WITH CLOSURE CAP INSTALLED ON FAIRING AND FAIRING IN DOWN POSITION, FAIR IN THE CLOSURE CAP WITH THE FAIRWATER TOP AS SHOWN IN VIEW (19-A).
    - B. RAISE FAIRING A SUFFICIENT AMOUNT TO EXPOSE BONDING SURFACE OF CLOSURE CAP AND PREPARE SURFACE IN ACCORDANCE WITH SSP 11.27 OR EQUAL.
    - C. SCARF SEAL, ITEM 4, AS SHOWN IN VIEW (10-B), ONE TO THREE INCHES SHORTER THAN PERIPHERY OF CLOSURE CAP BONDING SURFACE AND VULCANIZE JOINT IN ACCORDANCE WITH SSP 11.9 OR EQUAL. ROUGHEN BONDING SURFACE OF SEAL BY GRINDING OR SANDING USING 40 GRIT ABRASIVE.
    - D. APPLY CHEMLOK 305, ITEM 5, TO SEAL AND CLOSURE CAP BONDING SURFACES IN ACCORDANCE WITH SSP 11.27 OR EQUAL.
    - E. ENGAGE SEAL ONTO CLOSURE CAP A SUFFICIENT AMOUNT TO HOLD SEAL ON CAP. LOWER FAIRING TO DOWN POSITION.
    - F. PUSH DOWNWARD ON SEAL SO THAT SEAL TOUCHES 20° SEAT ON FAIRWATER COAMING. DO NOT JAM SEAL INTO SEAT TO CAUSE ANY COMPRESSION OF SEAL.
    - G. ALLOW ADHESIVE TO CURE 24 HOURS BEFORE TRIMMING SEAL FLUSH WITH CLOSURE CAP AND FAIRWATER TOP SURFACES.
    - H. FILL ANY VOIDS BETWEEN SEAL AND CLOSURE CAP SHOULDER WITH EPOXY FILLER, ITEM 6, AS SHOWN IN PANEL 17-C.

[D] [C2] 18. CLOSURE CAP ASSY, IT.1 & 8 TO BE PAINTED AT ASSY WITH FAIRING, IT.1 REF 4, IN ACCORDANCE WITH NAVSHIPS 0900-023-8070 CHG 5, OR EQUIVALENT PROCEDURE.

19. WHERE A LEVEL I PART NUMBER IS SHOWN IN THE PART NUMBER COLUMN FOR MATERIAL AND THE LEVEL COLUMN REFLECTS A LEVEL OTHER THAN LEVEL I, THEN THE INSTALLING ACTIVITIES MAY EXERCISE THE OPTION OF USING A PART NUMBER TO THE INVOKED SPECIFICATION FOR THE LEVEL SHOWN.
20. AFTER ASSEMBLY, THE CLOSURE CAP BECOMES AN INTEGRAL PART OF THE MAST AND ACTS AS A BEARING SURFACE WHEN THE MAST ASSEMBLY IS IN THE FULLY LOWERED POSITION. THEREFORE WHEN THE CAP IS INSTALLED, THE BEARING SURFACES OF THE CAP SHALL BE COPLANER WITH THE BEARING SURFACES OF THE MAST FAIRING WITHIN .005 AT THE FAYING SURFACE.

[E] 21. ALTERNATE MATERIAL FOR ITEM 2 & 9: EPOXY RESIN, MIL-R-9300, MAY BE SUBSTITUTED FOR POLYESTER RESIN, MIL-R-7575, PROVIDED THE MECHANICAL PROPERTIES OF MIL-P-17549, TABLE I, GRADE I AND E.B. DIV SPECIFICATION 1413 ARE MET. MANUFACTURING AND INSPECTION ARE TO BE IN ACCORDANCE WITH REQUIREMENTS OF TYPE I, CLASS I, OF MIL-P-25421.

REVISIONS

ZONE	LTR	DESCRIPTION	DATE	APPROVED
6F' 9G' 15F' 16E' 16G' 18E' 19A' 19H' 20E'	B	1. AUTH: ERROR CORRECTION, CM 70983 WITHOUT CHANGE. ADDED: ITEM 7; MODIFIED: ITEM 3 & NOTE 16. DELETED: FROM ITEM 3, VERTICAL BUTT WELD. REASON: TO FACILITATE REMOVAL OF FAIRWATER PORTABLE PLATES. PRIOR TO INSTALLATION. ITEMS SATISFACTORILY INSTALLED NOT AFFECTED. JUC DLC / CNK / ENGRG APPL BY EN APPL / NRP —	9/24/80	9/30/80
6F'	C	1. AUTH: ERROR CORRECTION/EN DM26612 (WITHOUT CHANGE) DELETED: NOTE 10. ACCOMPLISH PRIOR TO DELIVERY. (MINOR TECHNICAL CHANGE) MANDATORY RETROACTIVE		
6F2 6E1 6D1 17D1 14A1 16E1		2. AUTH: ADMINISTRATIVE CHANGE/P.O. B1307-803 REVISED: NOTE 13 WAS "0 TO 3", NOTE 16 WAS TRIMMED AT "BOTTOM", NOTE 18 ADDED "OR EQUIVALENT PROCEDURE." ITEM 2, DELETED TOP GRINDING NOTE & BOTTOM MACHINING NOTE. ADDED MACHINING NOTE TO TOP. LRG DLC / CWK / ENG APPVL PROVIDED BY EN APPVL / NRP — / NAVY APPVL PROVIDED BY EN APPVL	4/10/81	
9-H 9-G 6-F 6-D	D	1. AUTH: EBCC 0637.031 HMR 70281/EN DM 49700 (WITHOUT CHANGE) ADDED: ITEMS 8 & 9; IN L/M "FOR 726-733" TO ITEMS 1 & 2 AND TO NOTE 16-C; ITEM 9 TO GEN NOTES 13 & 16; ITEM 8 TO GEN NOTE 18. MANDATORY RETROACTIVE/ACCOMPLISH PRIOR TO MANUFACTURE (PRODUCT SUPPORT)		
1-A		2. AUTH: EBCC 1116.019 HMR 1093 ADDED: SWBS NUMBER TO TITLE BLOCK. GRF JHW / BEB RW / ENGRG APPVL BY EN APPVL / NRP — / NAVY APPROVAL PROVIDED BY EN APPROVAL	9/5/86	
6C 9G, 9H	E	1. AUTH: EBCC 05682.001 HMR 1296V/EN DM 100329 (WITHOUT CHANGE) ADDED: NOTE 21 TO GEN NOTES AND TO ITEMS 2 & 9 IN L/M. MANDATORY RETROACTIVE/ACCOMPLISH PRIOR TO INSTALLATION. CMA — / CWS / ENG APPVL PROVIDED BY EN APPVL / NRP — / NAVY APPROVAL PROVIDED BY EN APPROVAL	3/13/91	

STANDARD DRILLED HOLE TOLERANCES UNLESS OTHERWISE SPECIFIED

HOLE DIAMETER			TOLERANCE	
.0135	TO	.125	+.005	-.001
.126	TO	.250	+.006	-.001
.251	TO	.500	+.008	-.002
.501	TO	.750	+.009	-.002
.751	TO	1.000	+.010	-.003
1.001	TO	2.000	+.012	-.004
2.001	TO	3.000	+.015	-.005

DIMENSIONAL TOLERANCES — UNLESS OTHERWISE SPECIFIED

GENERAL DIMENSION	1 PL	2 PL	3 PL	WELDMENT DIMENSION	1 PL	2 PL	CASTINGS DIMENSION	TOLERANCE	
UNDER 6 IN.	±.1	±.02	±.005	UNDER 24 IN.	±.1	±.10	UNDER 2 IN.	+.04	-.06
6 IN. TO 24 IN.	±.1	±.04	±.010	24 IN. & OVER	±.3	±.30	2 IN. TO 6 IN.	+.10	-.06
24 IN. & OVER	±.1	±.06	±.015				6 IN. TO 8 IN.	+.12	-.10
							8 IN. TO 12 IN.	+.20	-.12
							12 IN. TO 15 IN.	+.26	-.20
							15 IN. & OVER	+.26	-.25

ANGULAR ±0°-30'

FINISH SYMBOLS — ASA B46.1 | CONTROL SYMBOLS — ANSI Y14.5

MACHINING OF THREADS — NBS H 28 AND MIL-STD 9

STATEMENT B
DISTRIBUTION LIMITED TO U.S. GOVERNMENT AGENCIES ONLY, TEST AND EVALUATION DATE 22 MAY 73. REQUESTS FOR THIS DOCUMENT MUST BE REFERRED TO THE COMMANDER NAVAL SEA SYSTEMS COMMAND.

CMBL — THIS DRAWING IS SUBJECT TO CONFIGURATION MANAGEMENT BASELINE REQUIREMENTS
CONFIGURATION ITEM NO. ______

NC — IN ACCORDANCE WITH THE SHIPS SPECIFICATIONS, THIS DRAWING CONTAINS NOISE CONTROL FEATURES. SEE NOTE 7

SEE SHIP DRAWING INDEX FOR VERIFICATION OF APPLICABILITY OF THIS DRAWING TO ANY SHIP

THIS DRAWING AND REFERENCES ___1_______ MAKE UP THE COMPLETE SET.

FOR A COMPLETE LIST OF REFERENCES, SEE REFERENCE 1.

NO	CODE IDENT NO	DWG SIZE	CONTR OR MFG DWG NO	TITLE	CODE IDENT NO	GOVT DWG NO
1	96169	H	87682-7609	NAVSAT ANT. ASSY	80064	522-4775871

REFERENCE DRAWINGS

REV	EB CONTRACT CHG	NAVSEA	SHIPALT	SHIPS CHANGE APPLICABILITY
E	05682.001	HMR 1296V	—	CLASS
D	1116.019	HMR 1093		
D	0637.031	HMR 70281	—	SSBN 734 & AFS
A	0636.001	HMR 192	—	TRI CLASS

Contract No. N00024-73-C-0232
GENERAL DYNAMICS
Electric Boat Division
Groton, Connecticut 06340
Code Ident. No. 96169
87682-7608
DR. RJV CHK
EXAM
TECH
APPD
DATE JUNE 22 1976
APPROVED
CATEGORY E I
APPD AS TYPE I
APPROVED NAVSEA LTR. PMS 396: W8/6292E: GWN 3900 SER. 765 DTD 30 NOV 1976.
APPVL CAT. 8

DEPARTMENT OF THE NAVY
NAVAL SEA SYSTEMS COMMAND
WASHINGTON D.C. 20360

SSBN TRIDENT CLASS
NAVSAT ANTENNA
CLOSURE CAP
ASSY & DET

NAVSAT ANT CLOSURE CAP A&D

SIZE	CODE IDENT NO.		NAVSEA DRAWING NO.	REV
H	80064	CIN 522 SWBS 585D	4677501	E

SCALE 1/2 | SHEET 1 OF 1

522-4677501

F&M 060976 | EB-3770 | 84-00-3330 REV. 1/74

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