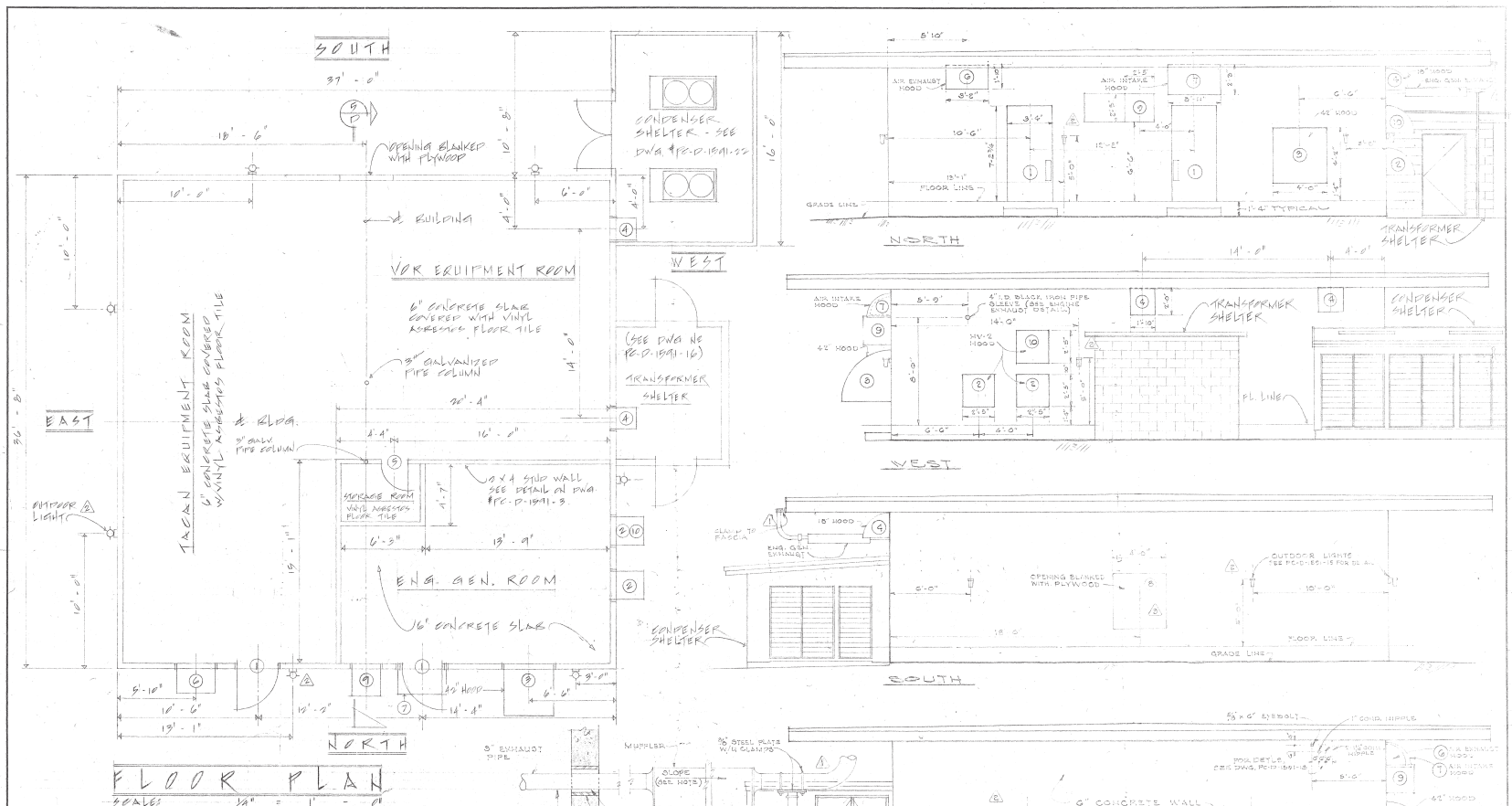
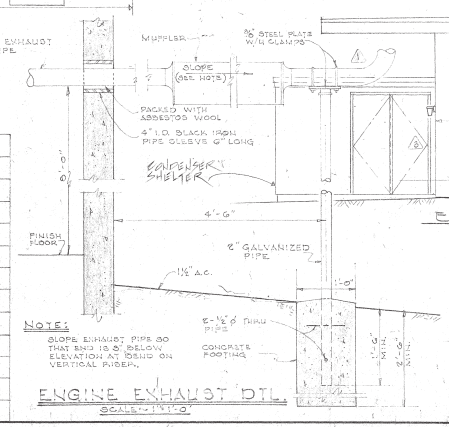
ATTACHMENT H

TUT VOR AS-BUILTS

8 pages





OPENING SCHEDULE

MARK	REQ.	SIZE W H	ROUGH OPENING W H	DESCRIPTION
1	2	3'-0" x 7'-0"	3'-4 x 7'-2¾"	DOOR, 3'-0" x 7'-0" x 1¾" PYRO-DOOR CLASS D TYPE 30 WITH FRAME
2	2	2'-1" x 2'-1"	2'-5" x 2'-5"	HV-2 HOOD & 25" AUTOMATIC LOUVER.
3	1	3'-8" x 3'-10"	4'-0" x 4'-2"	42" HOOD & 42" AUTOMATIC LOUVER.
4	2	1'-0" x 1'-6"	1'-10" x 2'-0"	18" HOOD & 18" AUTOMATIC LOUVER.
5	1	2'-0" x 6'-8"		DOOR FLUSH VENEER, 2'-0" x 6'-8" x 1⅜" SLANT BLADE LOUVER AT BOTTOM.
6	1	2'-10" x 1'-8½"	3'-2" x 1'-10	AIR EXHAUST WITH 33½" x 15½" AUTOMATIC LOUVER & HEAD.
7	1	3'-7" x 1'-9"	3'-11" x 2'-3"	AIR INTAKE
8	1	3'-8" x 3'-9"	4'-0" x 4'-1"	3
9	1	2'x1" x 2'-1"	2'-5" x 2'x5"	25" DUCT HOOD & 24" AUTOMATIC LOUVER.
10	1	2'-1" x 2'-1"	2'-5" x 2'x5"	HV-2 HOOD, 25" AUTOMATIC LOUVER & 20" FAN.

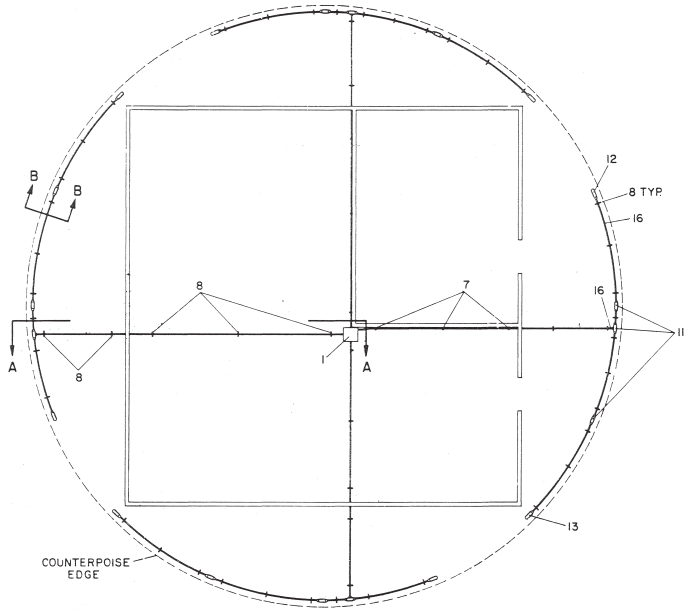
NO.	REVISION	DATE	CHECKED
A	AS BUILT/SMP PC-C82 REPLACED AS SYSTEM	3-15-78	LO
3	AS BUILT-FAN/FILTER & LOUVER REMOVED	1-19-71	BY
2	OUTDOOR LIGHTS ADDED	11-15-68	RPL
1	MODIFIED EXH. PIPE - AS BUILT	[illegible]	[illegible]
	AS BUILT	4-22-68	[illegible]

FEDERAL AVIATION AGENCY
PACIFIC REGION HONOLULU, HAWAII

TUT VOR
STANDARD VORTAC FACILITY
FLOOR PLAN & EXTERIOR ELEVATIONS

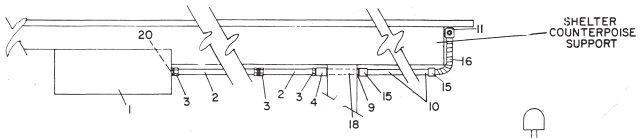
APPROVED BY: M. Edwards
SUBMITTED BY:
CHECKED BY: [illegible]
DRAWN BY: [illegible]
ENGRD. BY: [illegible]
DATE: 1-26-68
PC-D-1591-2A

SSUNING 540M

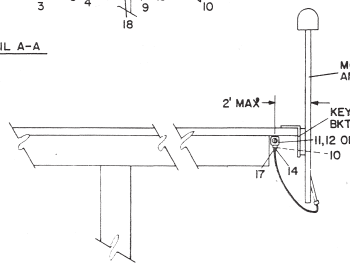


GROUND CHECK SYSTEM CONDUIT LAYOUT
PLAN A

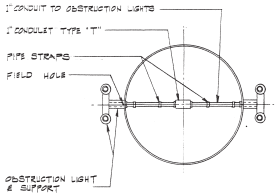
SCALE: 3/16" = 1'



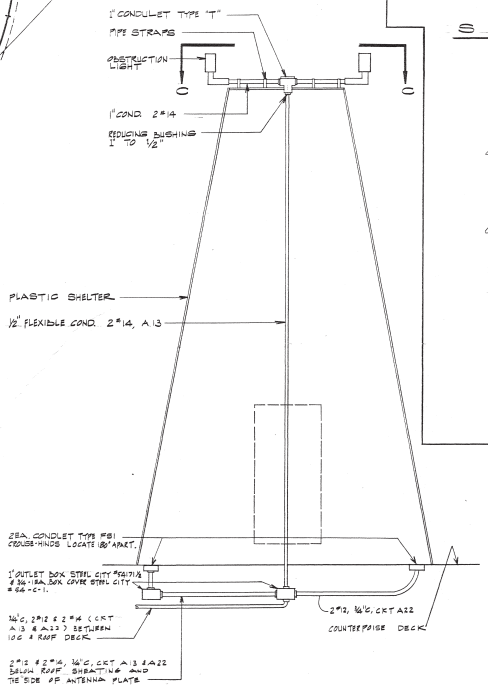
DETAIL A-A



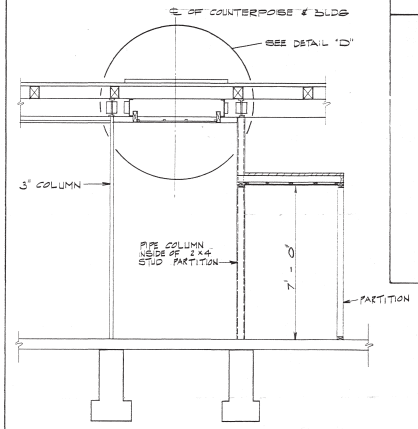
DETAIL B-B



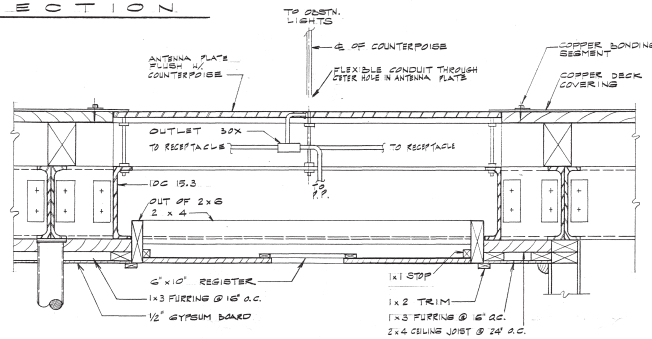
DETAIL C-C



ANTENNA SHELTER OBSTRUCT LIGHTS
CONDUIT AND WIRING
N. T. S.



SECTION



DETAIL - "D"
SECTION THRU COUNTERPOISE TRAP DOOR
SCALE = 1 1/2" = 1' - 0"

ITEM NO.	DESCRIPTION	W. P. N.
1	ENCLOSURE, ELECT. (15"X15"X6")	083878-0001
2	CND 1" EMT	033619-0001
3	CONN. COMP 1" EMT	033648-0001
4	CPLG, RIGID GALV. 1"	033735-0003
5	LOCKNUT, CND 1"	033502-0001
6	HANGER, SUPPORT (CEILING)	282001-0001
7	CLAMP, CND 1" EMT	033605-0011
8	HANGER, CND 1"	033698-0003
9	WASHER, NEOPRENE 1" PVC	265148-0003
10	CND, RIGID 1" PVC	033748-0003
11	UNILET "T" 1" PVC	033865-0003
12	UNILET "LL", 1" PVC	033863-0003
13	UNILET "LR", 1" PVC	033866-0003
14	ADAPTOR. FEMALE 1" PVC	033747-0003
15	CPLG, 1" PVC	033742-0003
16	CND, FLEXABLE 1" PVC	033857-0003
17	CONN, STRAIN RELIEF (SPECIAL)	033860-0001
18	NIPPLE, THREADED 1" PVC RIGID	
19	ADAPTER, MALE 1" PVC	033746-0003
20	BUSHING, INSULATED 1"	033777-0003

REV. LTR	DATE	DESCRIPTION	CHECKED	APPROVED

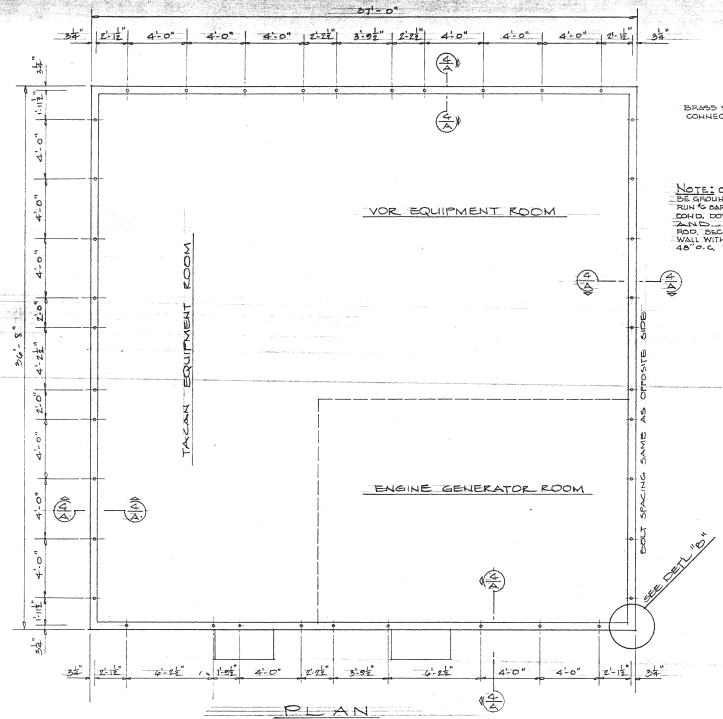
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WESTERN/PACIFIC REGION-LOS ANGELES, CALIF.

TUTUILA ISLAND AMERICAN SAMOA
PAGO PAGO INTERNATIONAL AIRPORT
VORTAC

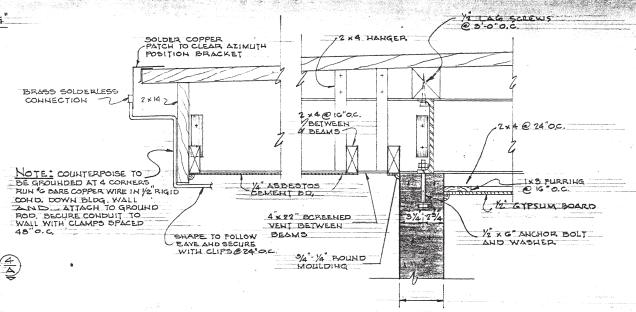
GROUND CHECK SYSTEM TYPICAL LAYOUT AND MISC. DETAILS

REVIEWED BY
SUBMITTED BY: for William E. Carter, SUPV. ELECTRONICS ENGR. UNIT-AWP 452.1
APPROVED BY: for Robert A. Kunzig, MGR. NAV/LANDING PROGRAM SECTION
DESIGNED BY
DRAWN BY: W.H.
CHECKED BY: A. E.
DATE: 10-21-85
RECORD OR AS OF

DR.WP-D-112-41980-8

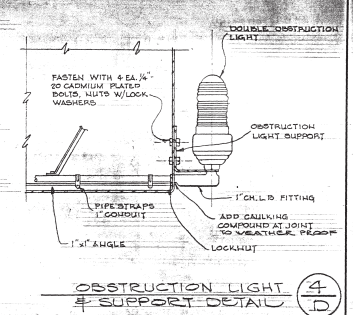


PLAN
COUNTERPOISE ANCHOR BOLT SPACING
SCALE: 1/4" = 1'-0"

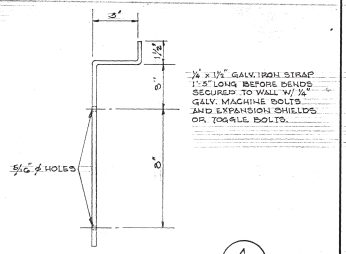


SECTION 4/A
SCALE ~ 1 1/2" = 1'-0"

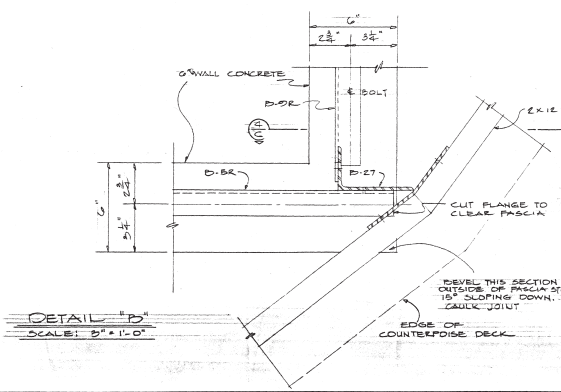
NOTE: THIS SECTION REPLACES DETAIL "B" AND SECTION X-X OF WASHINGTON DWG. D-5161-9



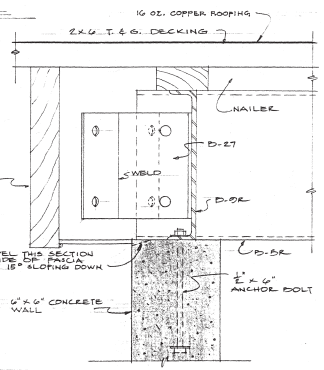
OBSTRUCTION LIGHT & SUPPORT DETAIL 4/D



LADDER BRACKET 4/E
(4 REQUIRED)



DETAIL "D"
SCALE: 3" = 1'-0"



SECTION 4/C
SCALE: 3" = 1'-0"

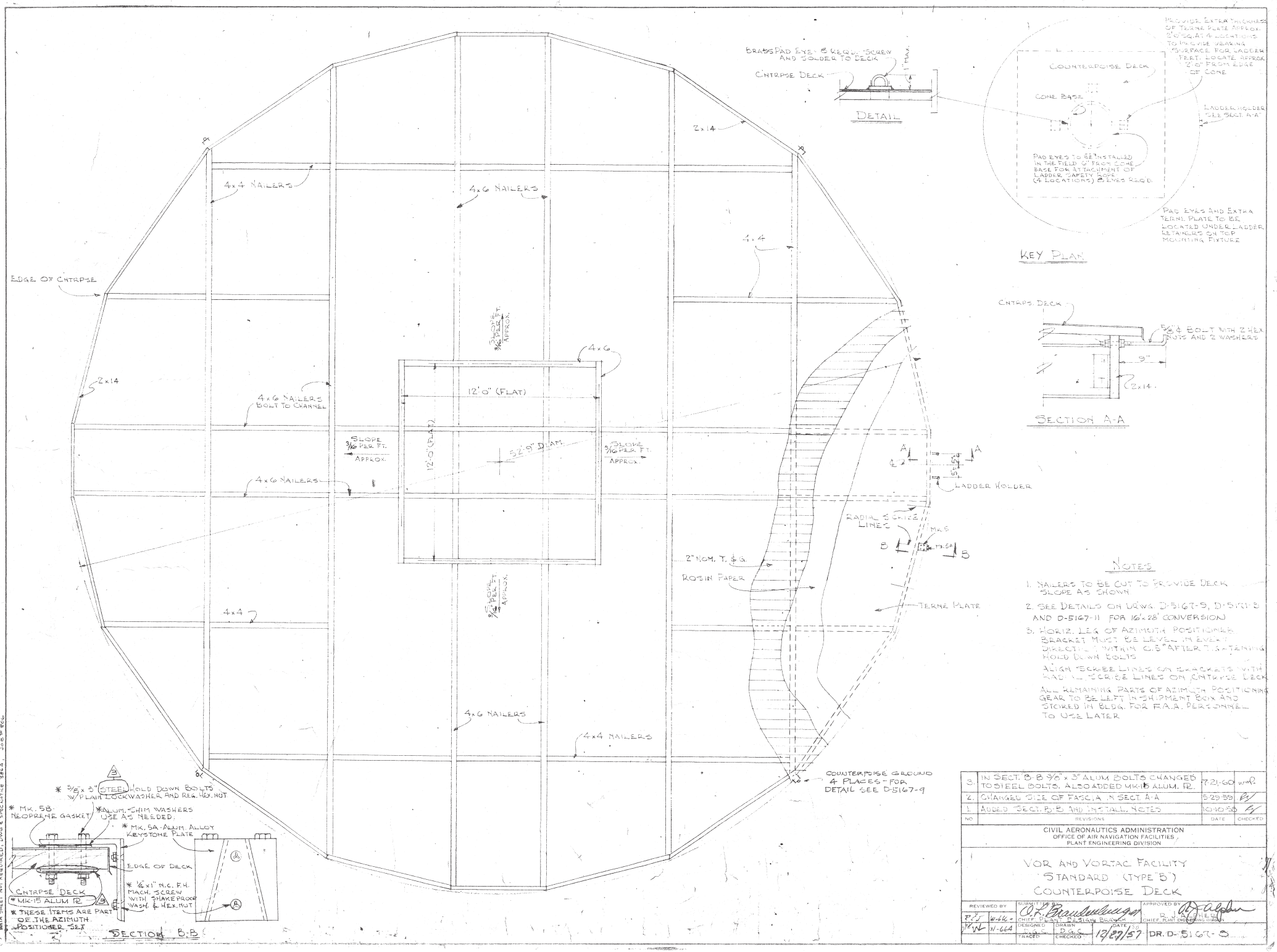
NO.	REVISION	DATE	CHECKED
	AS BUILT	4-22-63	

FEDERAL AVIATION AGENCY
PACIFIC REGION: HONOLULU, HAWAII

PAGO PAGO INTERNATIONAL AIRPORT, TAFUNA, SAMOA
VORTAC FACILITY
COUNTERPOISE ANCHOR BOLT SPACING/DETAILS

APPROVED BY: M.R. Edwards
SUBMITTED BY: John Sullivan
CHECKED BY: LCV USCG
DRAWN BY: E.A.
ENGRD. BY: E.A.
DATE: 1-24-62
WE-D-11Z-41980-4E

SUPERSEDES DWG. NO. PC-D-1591-4 DTD 4-22-63



NOTES

1. NAILERS TO BE CUT TO PROVIDE DECK SLOPE AS SHOWN.
2. SEE DETAILS ON DRWG. D-5167-9, D-5171-3 AND D-5167-11 FOR 16'x28' CONVERSION
3. HORIZ. LEG OF AZIMUTH POSITIONER BRACKET MUST BE LEVEL IN EVERY DIRECTION WITHIN 0.5° AFTER TIGHTENING HOLD DOWN BOLTS

   ALIGN SCRIBE LINES ON BRACKETS WITH RADIAL SCRIBE LINES ON CNTRPSE DECK

   ALL REMAINING PARTS OF AZIMUTH POSITIONING GEAR TO BE LEFT IN SHIPMENT BOX AND STORED IN BLDG. FOR F.A.A. PERSONNEL TO USE LATER

NO	REVISIONS	DATE	CHECKED
3.	IN SECT. B-B 3/8" x 3" ALUM BOLTS CHANGED TO STEEL BOLTS. ALSO ADDED MK-15 ALUM. PL.	7-21-60	
2.	CHANGED SIZE OF FASCIA IN SECT. A-A	5-29-59	
1.	ADDED SECT. B-B AND INSTALL. NOTES	10-10-58	

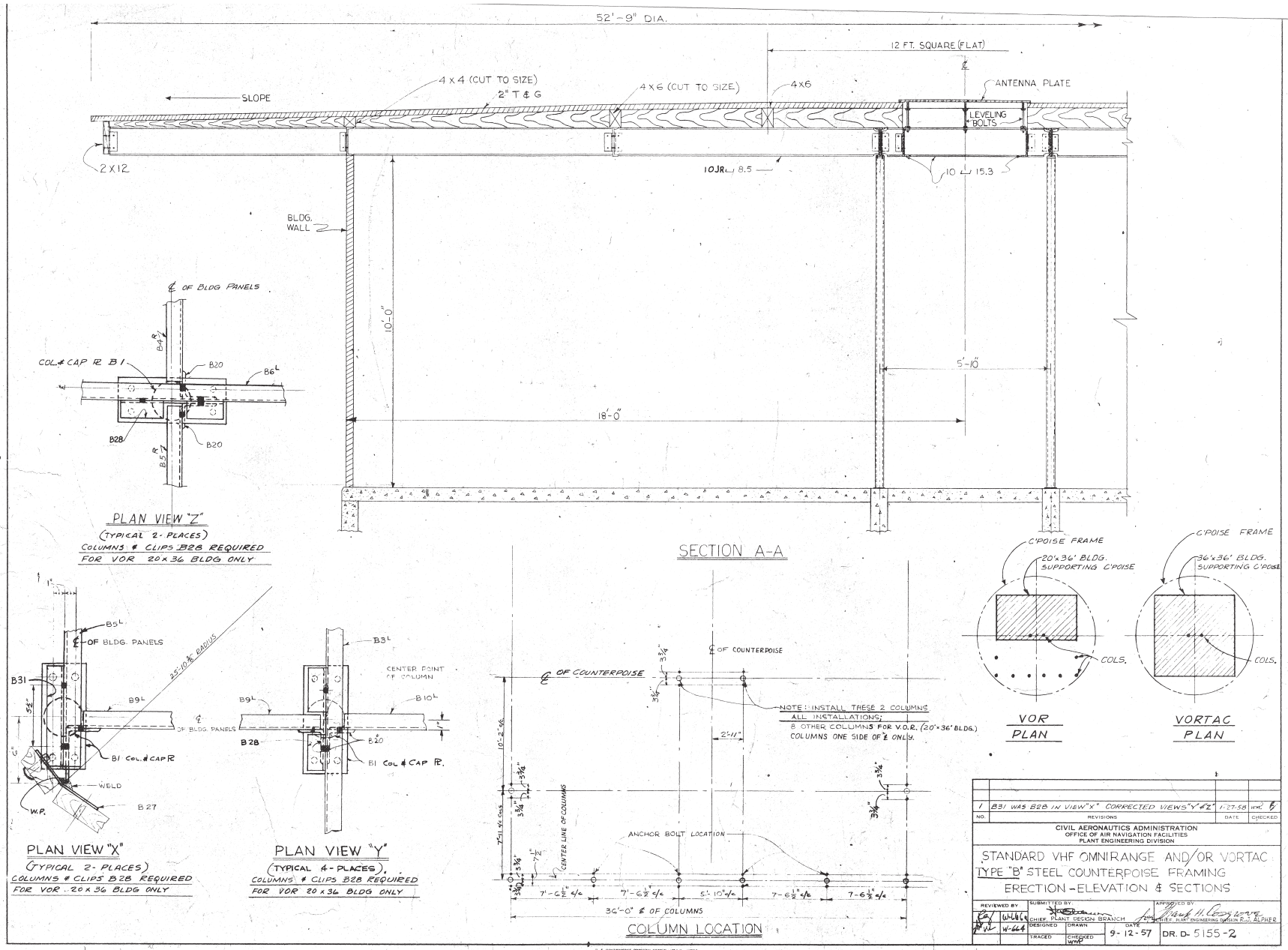
CIVIL AERONAUTICS ADMINISTRATION
OFFICE OF AIR NAVIGATION FACILITIES
PLANT ENGINEERING DIVISION

VOR AND VORTAC FACILITY
STANDARD (TYPE "B")
COUNTERPOISE DECK

REVIEWED BY		SUBMITTED BY	APPROVED BY
RJ	W-66	O.L. Brandenburg	R. J. Alpher
JWL	W-66A	CHIEF, PLANT DESIGN BRANCH	CHIEF, PLANT ENGINEERING DIVISION

DESIGNED	DRAWN	DATE	
D.G.C.	D.G.C.	12/27/57	DR. D-5167-8
TRACED	CHECKED		

DATA SHEET NOT REQUIRED, DWG & SPECNOTICE 386A, JOB # 806



NO.	REVISIONS	DATE	CHECKED
1	B31 WAS B28 IN VIEW "X" CORRECTED VIEWS "Y" & "Z"	1-27-58	WMC

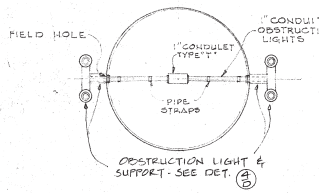
CIVIL AERONAUTICS ADMINISTRATION
OFFICE OF AIR NAVIGATION FACILITIES
PLANT ENGINEERING DIVISION

STANDARD VHF OMNIRANGE AND/OR VORTAC TYPE "B" STEEL COUNTERPOISE FRAMING ERECTION - ELEVATION & SECTIONS

REVIEWED BY:	SUBMITTED BY:	APPROVED BY:
W-666 / W-664	CHIEF, PLANT DESIGN BRANCH	CHIEF, PLANT ENGINEERING DIVISION R. J. ALPHER

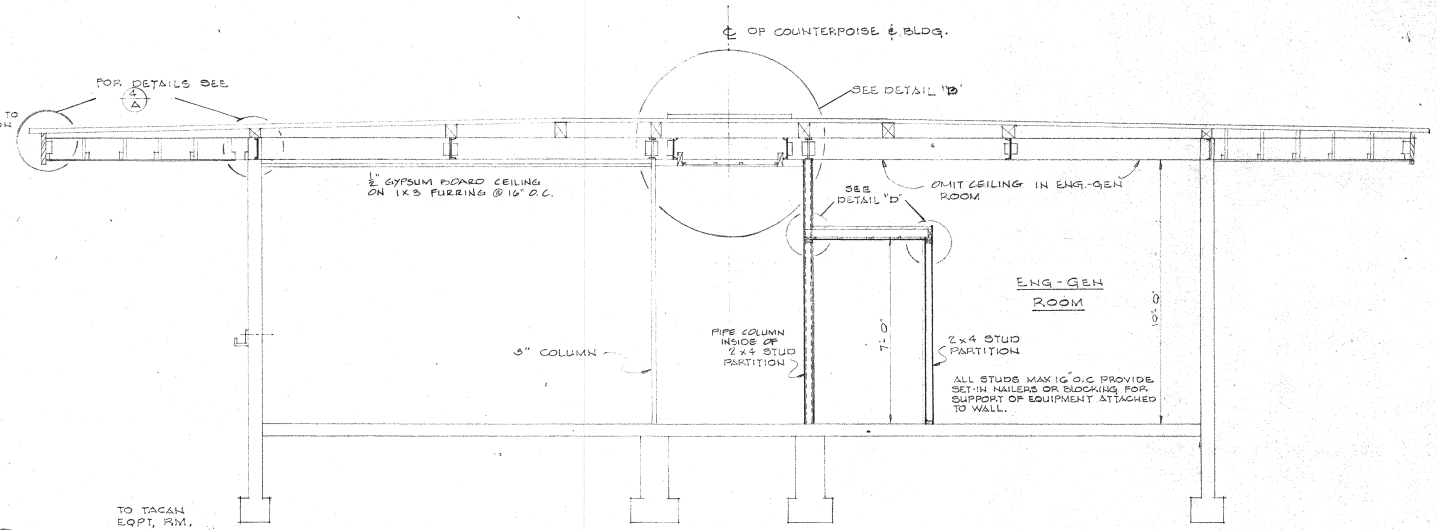
DESIGNED / DRAWN / TRACED / CHECKED WMC / DATE 9-12-57 / DR. D- 5155-2

U. S. GOVERNMENT PRINTING OFFICE : 1957 O - 487114

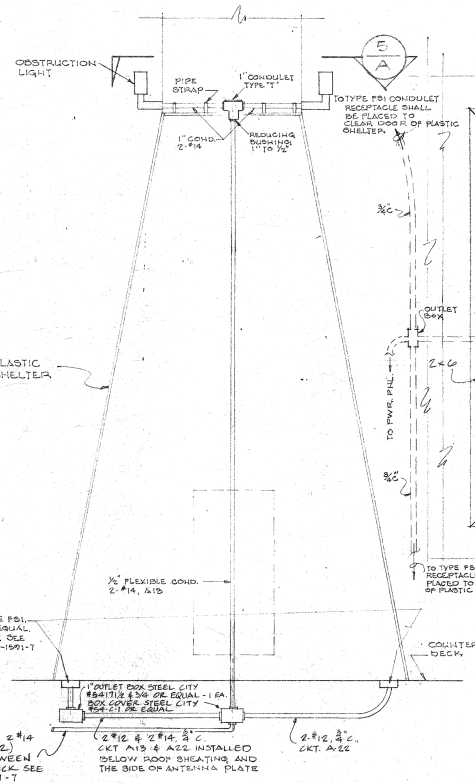


SECTION 5/A

N. T. S.



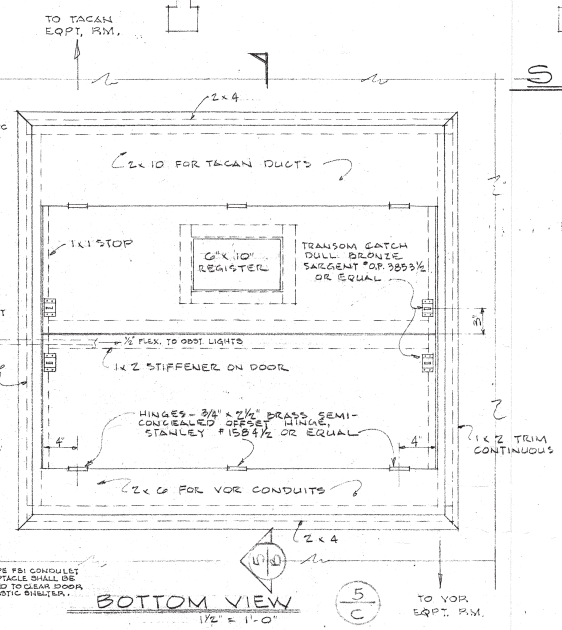
SECTION 5/D



ANTENNA SHELTER, OBSTRUCTION LIGHTS

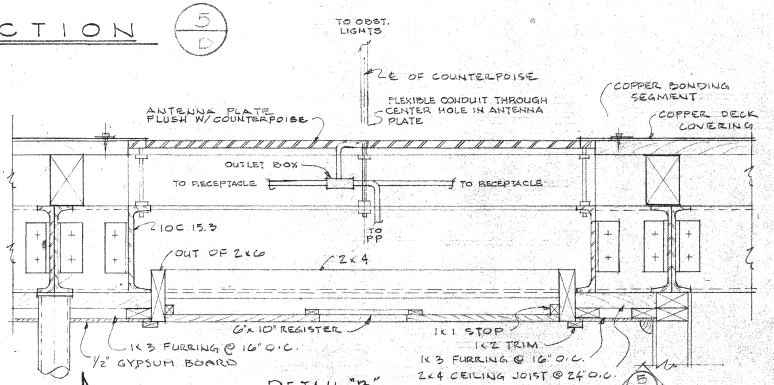
CONDUIT & WIRING

N. T. S.



BOTTOM VIEW 5/C

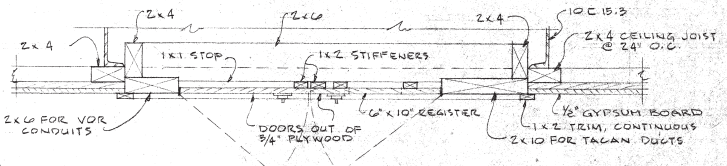
1½" = 1'-0"



DETAIL "B"

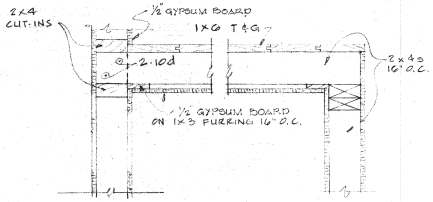
SECTION THRU COUNTERPOISE TRAP DOOR

1½" = 1'-0"



SECTION 5/B

1½" = 1'-0"



DETAIL "D"

SCALE - 1½" = 1'-0"

NO.	REVISION	DATE	CHECKED
	AS BUILT	4-22-68	

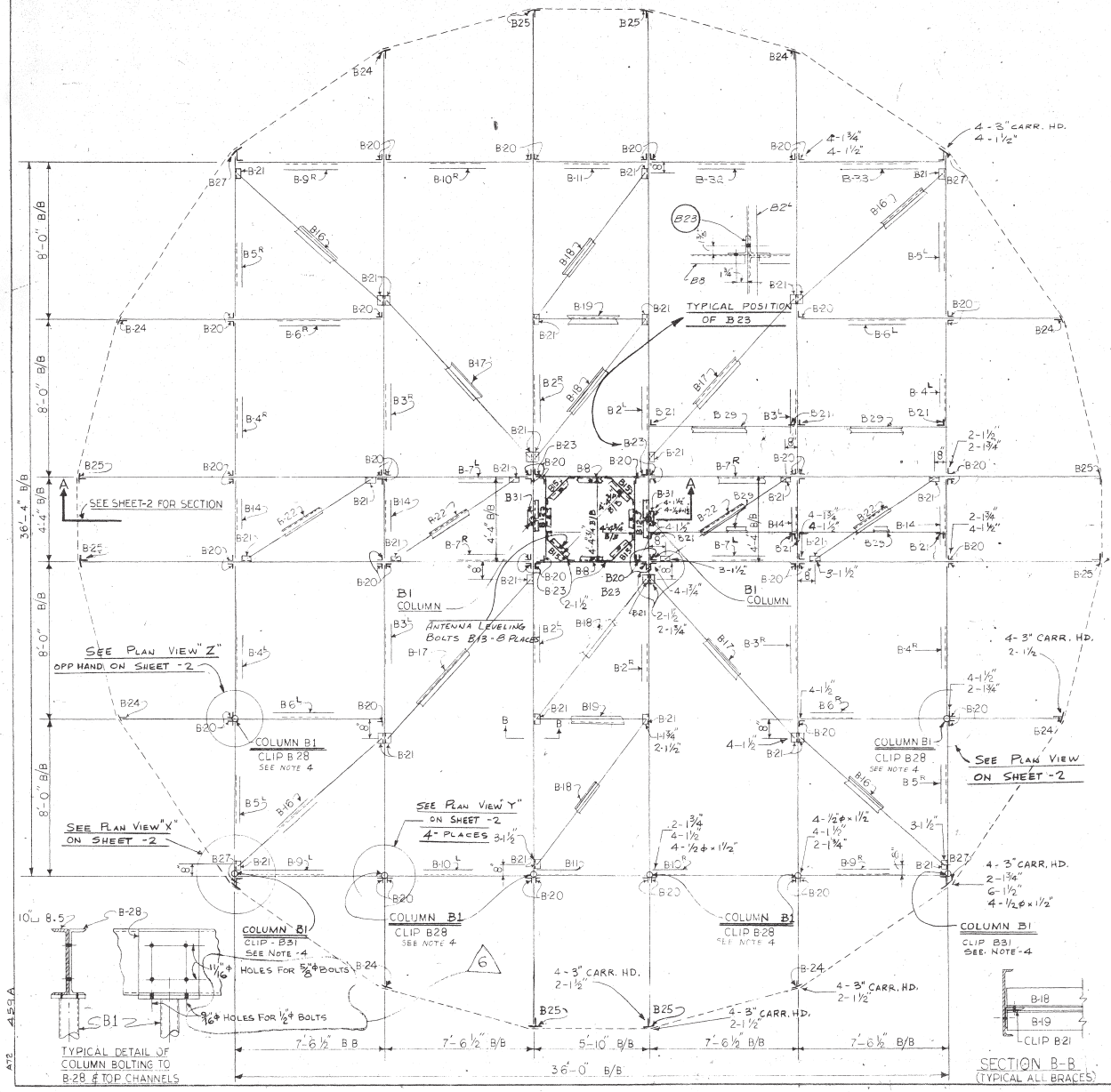
FEDERAL AVIATION AGENCY
PACIFIC REGION HONOLULU, HAWAII

PAGO PAGO INTERNATIONAL AIRPORT, TAFUNA, SAMOA
STANDARD VORTAC FACILITY
ANTENNA SHELTER OBSTRUCTION LIGHTS, AND COUNTERPOISE TRAP DOOR DETAILS

APPROVED BY: M. R. Edwards
SUBMITTED BY: John Trudeau
CHECKED BY: DEA
DRAWN BY: MH
ENGRD. BY:
DATE: 1-26-62

PC-D-1571-5

BRUNING 340M



PARTS LIST

MARK NO.	NO. REQ'D	SIZE	REMARKS
B-1	2 - FOR VORTAC 12 - FOR VOR	3" STD. PIPE COL 10'-0"	PIPE WITH WELDED PLS
B 2 LER	2-EACH	10" JR. ⊔ 8.4 × 25'-6"	
B 3 LER	2-EACH	10" JR. ⊔ 8.4 × 21'-3 5/8"	
B 4 LER	2-EACH	10" JR. ⊔ 8.4 × 7'-10 7/16"	
B 5 LER	2-EACH	10" JR. ⊔ 8.4 × 8'-3 1/4"	
B 6 LER	2-EACH	10" JR. ⊔ 8.4 × 13'-1 1/2"	
B 7 LER	2-EACH	10" JR. ⊔ 8.4 × 22'-7 11/16"	
B 8	2	10" ⊔ 15.3 × 5'-8 3/8"	
B 9 LER	1-B9L 2-B9R	10" JR. ⊔ 8.4 × 7'-5 3/16"	
B 10 LER	1-B10L 2-B10R	10" JR. ⊔ 8.4 × 7'-5 3/16"	
B 11	2	10" JR. ⊔ 8.4 × 5'-8 3/8"	
B 12	2	10" ⊔ 15.3 × 4'-3 1/8"	
B 13	8	3/4" × 8" BOLT ϕ PLATE	WELDED ASSEMBLY
B 14	4	10" JR. ⊔ 8.4 × 4'-2 7/8"	
B 15	4	10" ⊔ 15.3 × 2'-3 1/8"	
B 16	4	3" × 3" × 3/16" L × 10'-0 5/16"	
B 17	4	3" × 3" × 3/16" L × 10'-11 11/16"	
B 18	4	3" × 3" × 3/16" L × 9'-4 5/16"	
B 19	2	3" × 3" × 3/16" L × 5'-8 3/16"	
B 20	60	3" × 3" × 3/16" L × 0'-7 1/4"	
B 21	40	3" × 3" × 3/16" L × 0'-4 1/4"	
B 22	4	3" × 3" × 3/16" L × 7'-6 13/16"	
B 23	4	3" × 3" × 3/16" L × 0'-7 1/4"	
B 24	8	PL 7 3/4" × 1/4" × 0'-7 1/4"	3 FACE CLIPS
B 25	8	DO.	3 FACE CLIPS
B 27	4	PL 7 3/4" × 1/4" × 0'-7 1/4"	3 FACE CLIPS
B 28	6 - FOR VORTAC 8 - FOR VOR	10" JR. 8.4 × 0'-9 1/2" ⊔	
	300	5/8" × 1 1/2" SQ HD BOLT	FURNISH WITH REG. HEX. NUT & STD PLAIN WASHER
	105	5/8" × 1 3/4" SQ HD BOLT	
	88	5/8" × 3" CARR. HD. BOLT	
	110	1/2" × 1 1/4" SQ HD BOLT	
	72	1/2" × 3" SQ. HD. BOLT	
	178	1/2" × 2 1/2" LAG SCREWS	
	110	STD. BEVELED WASHERS. (FOR 1/2ϕ BOLTS)	
B 29	+	3" × 3" × 3/16" L × 7'-5 13/16"	
B 31	2 FOR VORTAC 2 FOR VOR	10" JR ⊔ 8.4 × 0'-3 1/2"	
B 32	ONE	10" JR ⊔ 8.4 × 7'-5 3/16"	
B 33	ONE	10" JR ⊔ 8.4 × 7'-5 3/16"	

AMOUNT OF BOLTS INDICATED INCLUDES APPROX. 10% ALLOWANCE FOR LOSS.

BOLTS, NUTS AND WASHERS TO BE GALVANIZED OR CADMIUM PLATED.

NOTES

1. SEE SHEET -2 FOR ERECTION ELEVATIONS AND MISC. DETAILS.
2. SEE SHEET -3 BOLTING LAYOUT FOR WALL PANELS, ROOF NAILERS AND CEILING NAILERS.
3. ALL WALL OPENINGS ADJACENT TO STEEL BEAMS SHALL BE SEALED.
4. AT VORTAC FACILITES (36×36 BLDG) 8 EXTERIOR COLUMNS B1 6 OF B28 CLIPS AND 2 OF B31 CLIPS ARE TO BE OMITTED.
5. 5/8"ϕ BOLTS & 11/16"ϕ HOLES IN CHANNEL WEBS UNLESS NOTED. 1/2"ϕ BOLTS & 9/16"ϕ HOLES IN CHANNEL FLANGES UNLESS NOTED.
6. HOLES FOR MOUNTING B23 MEMBERS TO BE LOCATED AND DRILLED IN THE FIELD.

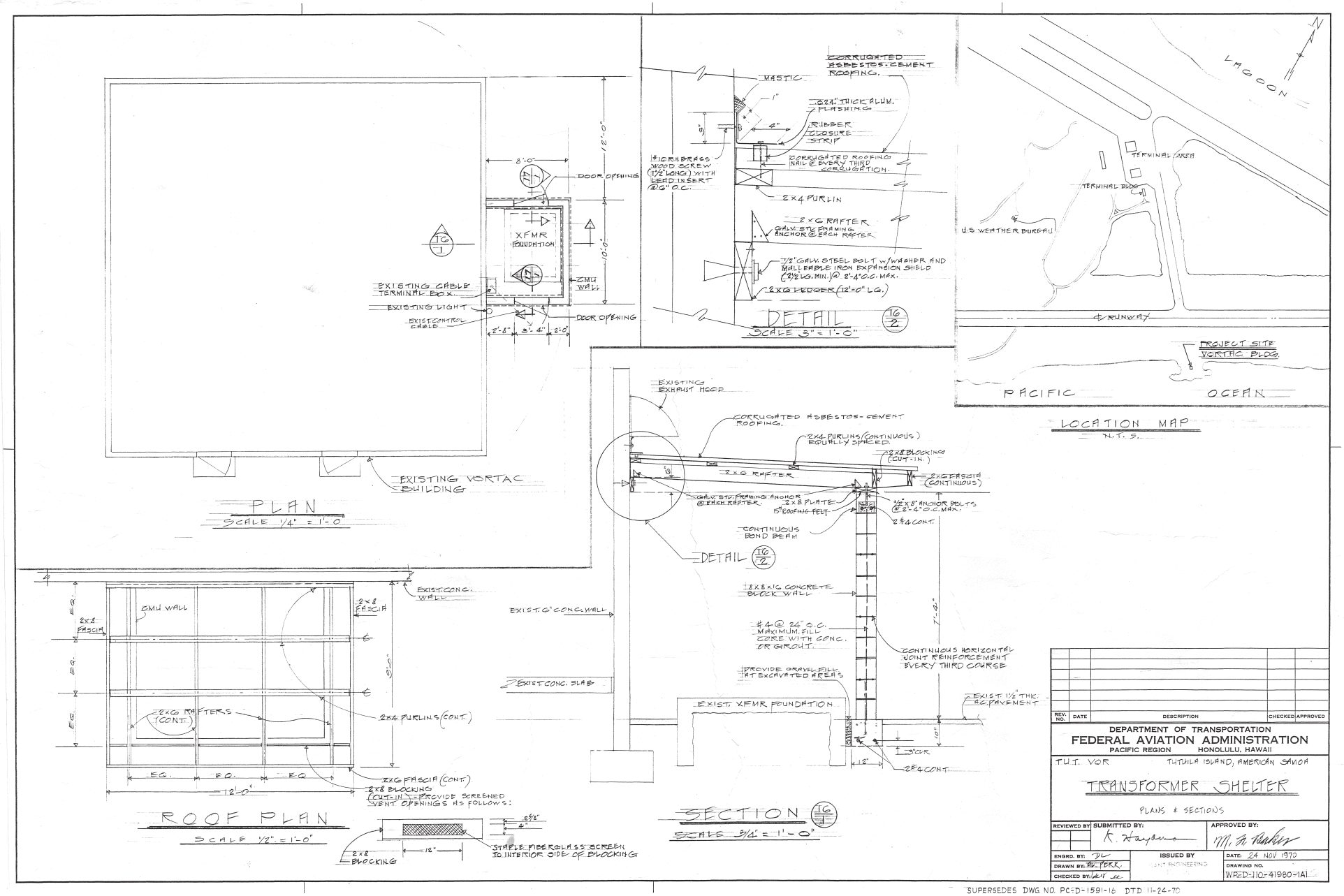
NO	REVISIONS	DATE	CHECKED
6	AT B1 & B28 CONNECTION DETAIL DELETED BOLT SIZES AND ADDED HOLE SIZES.	5-15-61	JPS
5	ADDED B32 & B33 REMOVED B10L & B9L AT GENERATOR ROOM.	10-6-59	JJC
4	B24 REPLACES B26 B25 REPLACES B30 INTERCHANGED LOCATIONS OF B6 & B8	6-12-58	WJM
3	NUTS AND WASHERS TO BE FURNISHED WITH ALL BOLTS	8-25-58	WJM
2	CHANGED AMOUNT OF B25 & B28, ADDED B30 & B31	1-27-58	WJM
1	ADDED B29, INCREASED AMT. OF B21	1-2-58	

CIVIL AERONAUTICS ADMINISTRATION
OFFICE OF AIR NAVIGATION FACILITIES
PLANT ENGINEERING DIVISION

STANDARD VHF OMNIRANGE AND/OR VORTAC TYPE "B" STEEL COUNTERPOISE FRAMING ERECTION PLAN AND PARTS LIST

REVIEWED BY	SUBMITTED BY	APPROVED BY
CHIEF PLANT DESIGN BRANCH	CHIEF PLANT ENGINEERING DIVISION	

DESIGNED | DRAWN | TRACED | CHECKED | DATE 9-12-57 | DR. D- 5155-1



REV. NO.	DATE	DESCRIPTION	CHECKED	APPROVED

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
PACIFIC REGION HONOLULU, HAWAII

T.U.T. VOR TUTUILA ISLAND, AMERICAN SAMOA

TRANSFORMER SHELTER

PLANS & SECTIONS

REVIEWED BY	SUBMITTED BY:	APPROVED BY:
	K. Hayden	M. F. Baker

ENGRD. BY: DL	ISSUED BY	DATE: 24 NOV 1970
DRAWN BY: AL PERR.	CONT ENGINEERING	DRAWING NO.
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EASI FILE CORP. COSTA MESA, CA HANGER ETHZ