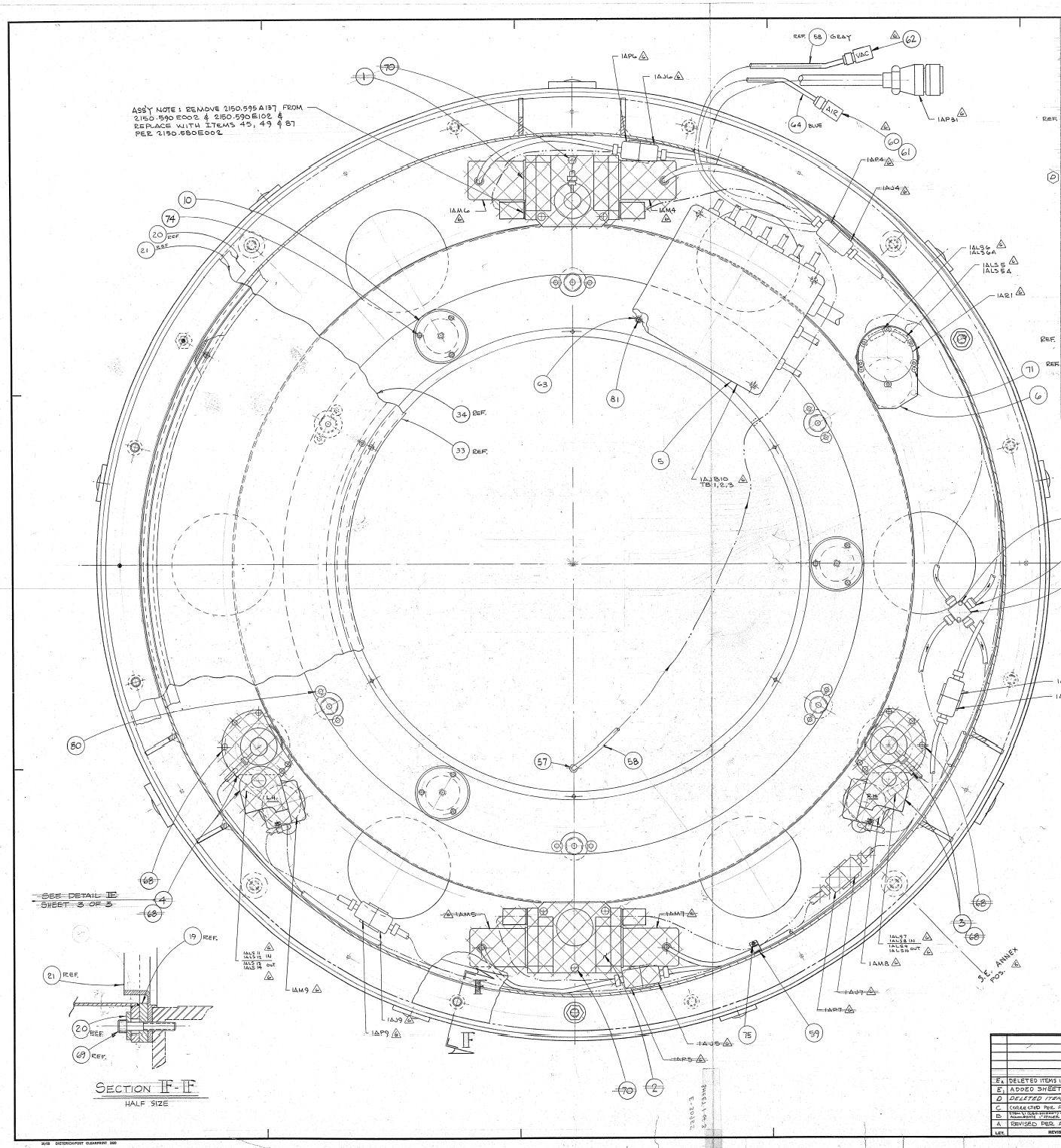

BILL OF MATERIAL

D&C NO.	AURA NO.	ITEM	QTY	MATERIAL	DESCRIPTION	WEIGHT
E-30956-3	2150.550 E002	1	1		1/8 MIRROR FOCUS DRIVE ASS'Y	11.25
E-30956-2	2150.550 E102	2	1		1/8 MIRROR FOCUS AUX. DRIVE ASS'Y	5.65
E-30960-3	2150.551 E002	3	1		1/8 MIRROR COLLIMATING R.H. DRIVE ASS'Y	8.00
E-30960-3	2150.551 E002	4	1		1/8 MIRROR COLLIMATING L.H. DRIVE ASS'Y	8.00
D-30957-2	2150.557 E002	5	1		1/8 MIRROR CONTROL TERMINAL BOX ASS'Y	2.80
D-30773	2150.560 E101	6	1		MIRROR FOCUS READOUT & L.S. ASS'Y	1.31
D-31461	2150.560 E104	7	1		1/8 DUMMY MIRROR	8.14
B-31587	2150.505 A101	8	1		PIPING MANIFOLD	.97
REF. D-30478	2106-01	9		INSTALLED BY AURA	1/8 CASSEGRAIN MIRROR	
A-31409	2150.585 A101	10	3		MIRROR REMOVAL CELL PLUG	.61
E-31577	2150.580 E008	11	1		1/8 MIRROR CELL	326
E-31380	2150.580 E002	12	1		MIRROR CELL SUPPORT	496
A-31896	2150.585 A006	13	3		SAFETY STUD	.66
		14	AS REQ		COMMERCIAL GRADE Hg. (FURN. BY AURA)	16.3
D-31438	2150.580 E001	15	1		WEBER EDGE SUPPORT TUBE	8.15
D C-31440	2150.580 E201	16	1		MIRROR EDGE SEAL TUBE	.40
		17				
D-31441	2150.580 E005	18	1		MIRROR RETAINER	21.5
D-33556-1	2150.580 E018	19	1		FOCUS POSITION SPACER (STD)	0.1 16.6
D-31442	2150.580 E007	20	4		SUPPORT KEEPER QUADRANT	6.0
D-31445	2150.580 E007	21	1		SUPPORT POSITION SPACER	.41
C-31444	2150.580 C011	22	3		CELL EDGE ROLLER MOUNT	.66
A-31496	2150.580 A010	23	3		RADIAL ROLLER SHAFT	.18
A-31402	2150.585 A006	24	3		CELL EDGE ROLLER PAD	.42
		25	24	4-40 x 1/4	SOC. FLAT HD. SCREW	
B-33532	2150.580 B016	26	2		MIRROR EDGE INDICATOR MOUNT	.12
A-31411	2150.585 A005	27	2		MIRROR EDGE INDICATOR BAR	—
A-31410	2150.585 A005	28	4		MIRROR EDGE INDICATOR RETAINER	—
B-31291	2150.585 B015	29	6		FOCUS GEAR BEARING STUD	.90
B-31390	2150.585 B016	30	2	FABRICATED INTO A150.580 E006	EDGE SUPPORT TUBE FITTING	—
A-31013	D&C PART	31	2		FILLER PLUG	—
D-31445	2150.580 E017	32	1		FOCUS DRIVE RING GEAR	38.5
D-33532	2150.580 B010	33	1		1/8 COVER EXTENSION	6.1
C-33537	2150.580 C011	34	1	OBSOLETED	1/8 BACK COVER	8
REF. B-31432	2150.587 B013	35	4		SUPPORT ALIGNMENT BEARING SCREW	1.16
B-34724	2150.590 B013	36	3		COVER PLATE	—
B-31433	2150.580 B014	37	4		RADIAL JACK SCREW	.12
REF. A-31435	2150.601 A105	38	4		ALIGNMENT BEARING CENTER WASHER	—
A-31397	2150.505 A105	39	3		SAFETY BUMPER	.03
A-31398	2150.505 A113	40	6		ROLLER SHAFT	
A-31399	2150.505 A112	41	6		GUIDE ROLLER	
B-31389	2150.580 B013	42	6		CELL EDGE ROLLER MOUNT	
A-31400	2150.505 A112	43	6		BEARING PRELOAD NUT	
B-34725	2150.590 B013	44	3		GASKET	
		45	4	118-1-1	VIBRAC CORP. CHELMSFORD, MASS. - SIZE 11 BRAKE	
		46	3	D7RG-3	FAFNIR TRACK ROLLER	
		47	2	T-11	FEDERAL DIAL TESTMASTER	
		48	4	P-101-2 MALE CONN	COMPRESSED AIR SERVICE FITTING	
		49	4	6W-85 (EST)	PIC - SPUR GEAR ABSP. 8DP 85 PD. .312 BD. 1/2 FACE	
		50	2	ADB-77145	AMERICAN DRILL BUSHING CO. - BULLET NOSE DOWEL	
		51	12	F53KDD	FAFNIR BEARING	
		52	6	5101-37	TRU-ARC RETAINING RING	
		53	2	MS9021-111	O-RING	
		54	2	2-010	O-RING	
		55	3	MS28775-133	O-RING	
		56	4	1007	BOSTON THRUST BEARING	
		57	1	269 P 1/2 TUBE	1/2 PIPE IMPERIAL MALE ELBOW POLY FLO	
		58	AR	44-P YELLOW	IMPERIAL EASTMAN POLY-FLO TUBE	
		59	A/R	NYLON CABLE CLAMP	MFG., OPTIONAL	
		60	2	405-2	SWEDGELOCK INSERT	
		61	1	400 SSC-200 PESO	SWEDGELOCK QUICK-DISCONNECT	
		62	1	294 - PVC	KWIK-CONNECT CPLG. (IMPERIAL EASTMAN)	
		63	6	E6-12	PIC - STAND-OFF	
		64	AR	44-P BLUE	IMPERIAL EASTMAN POLY-FLO TUBE	
		65	3	1/2 x 3 x 3/16	COREPRENE	
		66	3	1 SQ. x 3/16	MICARTA	
		67	16	B7-B	PIC - SPACER	
		68	12	0-32 x 7/8	SOC HD CAP SCR	
REF		69	12	1/2-13 x 2 3/4	" " " "	
		70	6	5/16-24 x 2 1/4	" " " "	
		71	4	10-32 x 1 1/2	" " " "	
		72	2	10-32 x 1	" " " "	
		73	24	10-32 x 3/8	" " " "	
		74	9	10-32 x 1/2	" " " "	
		75	A/R	8-32 x 3/8	BUTTON HD. SCR.	
		76	12	1/4-28 x 3/4	SOC. HD. CAP SCR.	
		77	2	6-32 x 1	" " " "	
		78	12	1/4 - 1 1/8	" " SHOULDER SCR. FOR STOP PLACE	
		79	12	1/4 - 1 5/8	" " " " " - THICK "	
		80	12	3/8-16 x 1/2	BUTTON HD SCR	
		81	14	8-32 x 1/2	SOC. HD. CAP SCREW	
		82	12	8-32 x 1/4	BUTT. HD. SCREW	
		83	6	1/2-20	HEX JAM NUTS	
		84	2	10-32 x 1/2	SOC SET SCR	
		85	6	10-32 x 3/8	" " "	
		86	6	10-32 x 3/16	" " "	
		87	4	8/0 x 5/16	TAPER PIN	
		88	12	WRF5DD	FAFNIR BEARING	
		89	6	8-32 x 3/4	SOC. HD CAP SCREW	
		90	24	10-32 x 1/2	" " " "	
		91	6	5/32	RIVET RD. HD ALUM.	

NOTES: BM CONT ON SH 3 1850

1. ALL BOLTS INSTALLED IN MIRROR CAVITY TO BE PUT IN WITH NON-HARDENING PERMATEX (OR EQUAL)
2. USE FILLING SYSTEM & PROCEDURE DWG. 2150.8508003 WITH DUMMY MIRROR TO CHECK MERCURY-EDGE SUPPORT TUBE APPROXIMATELY 16*.
3. ASSEMBLE COMPLETELY & CHECK FUNCTION THRU FULL FOCUS ±.75 & COLL. ±.13 RANGES BEFORE FINAL FINISHES ARE APPLIED.
4. △ PRELOAD CELL GUIDE ROLLERS TO ~ 1200* (NO SLACK ROLLERS WITH CELL ON EDGE)
5. DRESS WIRES & CONNECTORS FOR BEST CLEARANCE & ACCESSABILITY TO SUB-ASS'S & LOCATE & TAP #8-32 HOLES FOR NYLON CABLE CLAMPS, QTY, & SIZE AS REQ'D.
6. △ WHITE INK STAMP THE DESIGNATED NUMBER OR NAME ON OR NEAR THE RESPECTIVE ELECTRICAL, AIR OR VAC. PART
7. △ ADJ. GUIDE ROLLER FOR ABSOLUTE MIN. GEAR LASH AT FOCUS & COLL. POSITION, ADJUST INTERMEDIATE ROLLER FOR ZERO CLEARANCE. USE FOCUS RING GEAR SPANNER 2150.850A002

REF. FILE 1198

FOR ASSEMBLY SEE

LET.	REVISION	ECR	DATE	BY
E	DELETED ITEMS 1,2,3,4,8,9,10/80	1504	6-20-00	JH
E	ADDED SHEET 4 OF 4	1504	1-23-00	JH
D	DELETED ITEM 16	1225	7-26-79	[illegible]
C	CORRECTED PER. AURA REQ.		11-5-73	E.L.
B	ITEMS 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91 ADDED PER AURA REQ.		4-18-70	E.L.
A	REVISED PER AURA REQ.		3-10-70	E.L.

TOLERANCES UNLESS OTHERWISE NOTED
DECIMAL DIMENSIONS ±0.005 & ±0.010 ±0.005 & ±0.005
FRACTIONAL DIMENSIONS UP TO 60" ± 1/64 60" & OVER ± 1/32 60" & OVER ± 1/16
BREAK SHARP EDGES
ALL SURFACES 125√ TO HAVE ▼ FINISH UNLESS OTHERWISE NOTED
WT 1850 lb. CAL.

KITT PEAK NATIONAL OBSERVATORY
OPERATED BY THE ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY, INC. UNDER CONTRACT WITH NATIONAL SCIENCE FOUNDATION

150" STELLAR TELESCOPE

NAME: 1/8 MIRROR CELL & SUPPORT ASS'Y SEC. MIRROR & PRIME FOCUS ASS'Y

SCALE HALF

PRINT ISSUED

DRAWN BY: [illegible] DATE 1-20-70 APPROVED BY [illegible] DATE 1-20-70 CHECKED BY [illegible] DATE 1-20-70 APPROVED BY [illegible] DATE 1-20-70 APPROVED BY [illegible] DATE [illegible]

DRAWING NUMBER 2150.580 -E002 REV. E

BOILER & CHIVENS DATA: JOB 58070 N/A E30228 E-30955 SHEET 1 OF 4