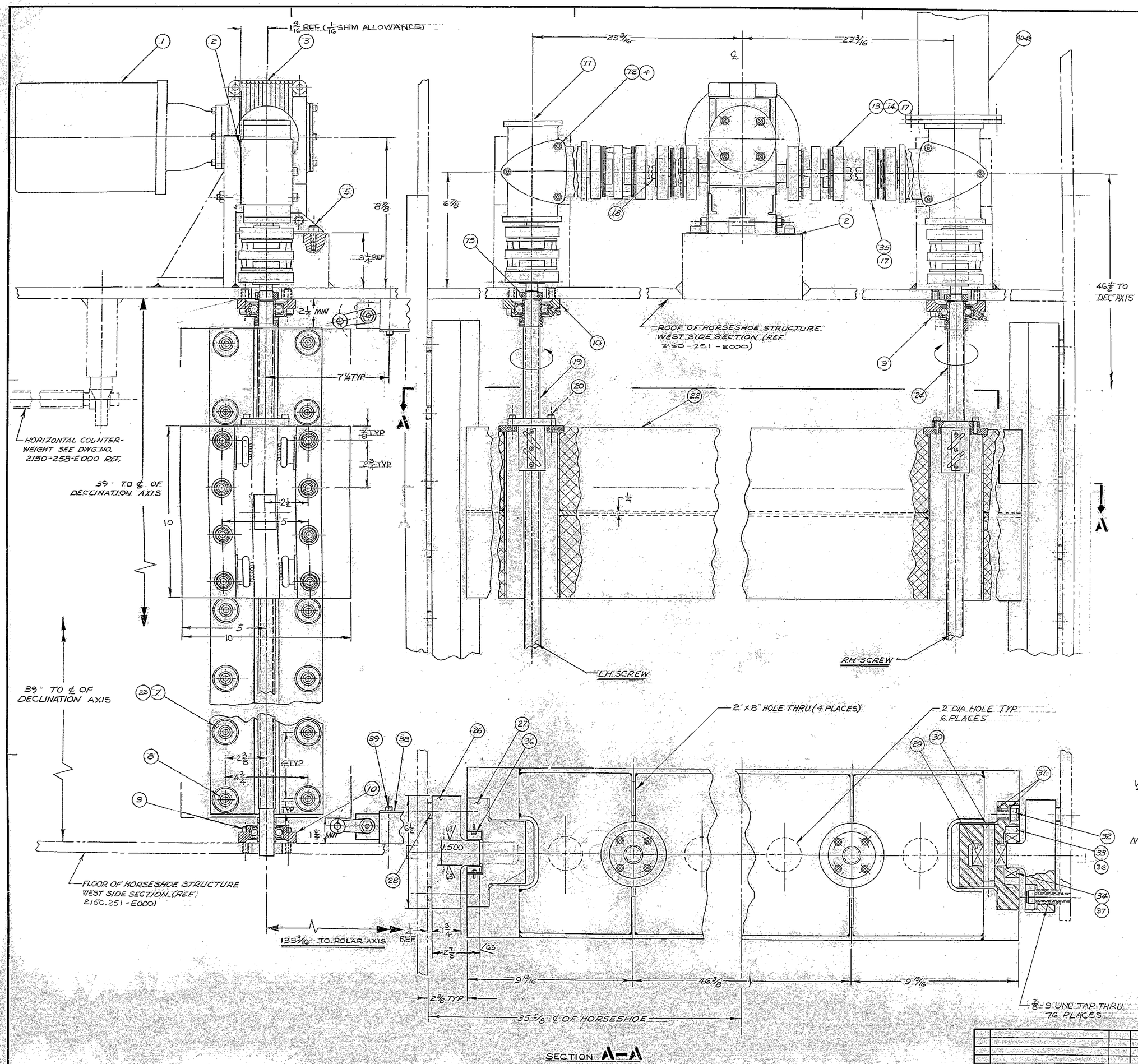

BILL OF MATERIAL

SIZES OF MATERIAL NOTED DO NOT INCLUDE STOCK ALLOWANCE FOR MACHINING AND CUTTING OFF EXCEPT AS NOTED. "1" SIZE SPECIFIES THE MATERIAL REQUIRED FOR ONE PIECE ONLY. QUANTITIES NOTED ARE THE TOTAL NUMBER REQUIRED.

ITEM	DWG. NO.	QTY.	MATERIAL	DESCRIPTION	WEIGHT
1		1	COMM'L	MOTOR: BOSTON EUB, 1/4 HP, 1780 RPM	
				230/460 V. AC, 3-PHASE,	30
				60~-56 C FRAME W/BRAKE	
2		A/2	ST'L FABRICATION	ALIGNMENT SHIM	
3		1	COMM'L SEE NOTE 2.	SPEED REDUCER, CONE DR.	
				7200 C, MODEL SV, RATIO 39/1	2"1-
				COUPLING #M200-140-4	
4		6	COMM'L	HEX. NUT NYLOK 5/16-18UNC	
				-2B	
5		4	COMM'L CAD. PL. STL.	SCR, SOC HD CAP 5/8-16UNC-2A x 1 1/2 LG	NYLOK
7		76	COMM'L CAD. PL. HT. STL.	1/2 PLAIN FLAT WASHER	
8		76	COMM'L CAD. PL. STL.	SCR, SOC HD CAP 1/2-13UNC-2A x 2LG	NYLOK
9		32	COMM'L CAD. PL. STL.	SCR, SOC HD CAP 5/16-18UNC-2A x 1 1/4 LG	NYLOK
10		4	COMM'L	SKF FLANGE #FY-014, BEARING	
				#A79205-014	
11		2	COMM'L	RIGHT ANGLE DRIVE	16
				BOSTON #R1521 RATIO 1:1	
12		6	COMM'L CAD. PL. STL.	SCR, SOC HD CAP 3/8-18UNC-2A x 1 1/4 LG	NYLOK
13		2	COMM'L	DOUBLE FLEX COUPLING, THOMAS	
				#101 DBE 1 1/8 ONE END, 3/4	
				ONE END PRESS FIT	
14		2	KEY STOCK	1/4 x 1/4 x 1 3/8 LG	
15		2	COMM'L SKF	LOCK NUT #N04, WASHER #W04	
16		4	COMM'L	DOUBLE FLEX COUPLING, THOMAS	
				#101 DBZ 3/4 DIA (PRESS FIT)	
17		10	KEY STOCK	3/16 x 3/16 x 1 3/8 LG	
18		2	H.T. STL.	COUPLING SHAFT .750 +.002 -.000	
19		1	COMM'L	SCR DRIVE, SAGINAW STD 5/8	
				SCR 1000-0250-C2 LH, NUT 570 9295	
20		8	COMM'L CAD. PL. STL	SCR, SOC HD CAP 1/4-20UNC-2A x 3/4 LG	NYLOK
22		1	SEE NOTE #1	COUNTER WEIGHT	2420
23		76	COMM'L	THREADED BUSHING, 7/8-9UNC	
				WITH INT. HEX. 300 BHN	
24		1	COMM'L H.T. STL.	SCR DRIVE, SAGINAW STD 5/8	
				SCR 1000-0250-C2 RH, NUT 570 9294	
26		2	ASTM A276 T440C H.T.	WAY	550
27		2	ASTM A148-60 CL 80-40	BRG. CARRIER	
			NORMALIZED & H.T.		
28		76		ADJUSTMENT BUSHING	
				7/8-9 UNC-2A (EXT) x 1 3/8 LG.	
29		2	COMM'L	CAM FOLLOWER, TORRINGTON	
				#YCRS-32	
30		2	STL	BEARING PIN	
31		32	COMM'L	SPRING WASHER, ASSOC SPRING	
				CORP. BELLEVILLE SPRING	
				# 7/16 B1000-035	
32		16	COMM'L CAD. PL. STL.	SCR, SOC HD CAP, 1/2-13UNC-2A x 1 1/2 LG	NYLOK
33		8	COMM'L	SPRING PAD, SULLY JONES	
				#21905	
34		8	COMM'L	TYCHOWAY, SULLY JONES	
				ANTI-FRICTION #21050	
35		2	COMM'L	DOUBLE-FLEX COUPLING,	
				THOMAS #101 DBZ 3/4 DIA	
				PRESS FIT	
36		16	COMM'L CAD. PL. STL.	SCR, SOC. HD CAP - NYLOK	
				#8-32UNC-2A x 3/8 LG	
37		16	COMM'L CAD. PL. STL.	SCR, SOC. HD CAP - NYLOK	
				#4-40 UNC-2A x 5/8 LG	
38		2	COMM'L	LIM. SW., MICRO SW #101ML1	
39		8	COMM'L CAD. PL. STL	SCR, SOC. HD CAP - NYLOK	
				1/4-20UNC-2A x 1 1/8 LG	
				ESTIMATED WEIGHT 3100 LBS.	
40 to 49			SEE SHEET 2 FOR CONTINUATION		

WARNING - THIS DRAWING IS NOT APPROVED AS REVISED

NOTES:

1. ANTIMONY 6%, LEAD 94%. DENSITY = 0.393"/IN³ TOTAL WEIGHT INCLUDING ST'L REINFORCEMENT PLATE TO BE 2420#
2. GEAR BOX TO BE SUPPLIED WITH LEAKPROOF BELLOW TYPE BREATHER & DOUBLE EXTENDED LOW SPEED SHAFT
3. ALL FINISHED SURFACES 63 OR ROUGHER AND ALL UNFINISHED SURFACES TO BE PAINTED PER SPECIFICATION
4. ALL WELDING, STRESS RELIEVING AND INSPECTION TO BE PER SPECIFICATION
5. ASSEMBLE PER SPECIFICATION.

FOR ASSEMBLY SEE 2150-250-E000

W. R. LYDSTER ENGINEERS DESIGNERS SAN JOSE CALIF.

NO.	REVISION	DATE	BY
B	SEE SHEET 2	6/26/68	
A	REVISED PER LIST	1-21-68	WJT

QUANT. | PRINT RECORD | DATE

TOLERANCES UNLESS OTHERWISE NOTED: DECIMAL DIMENSIONS 00.00 ±.010, 00.000 ±.003; FRACTIONAL DIMENSIONS UP TO 10" ± 1/64, 10" TO 50" ± 1/32, 50" & OVER ± 1/16; BREAK SHARP EDGES; ALL SURFACES TO HAVE 125 FINISH UNLESS OTHERWISE NOTED.

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: POLAR AXIS, VERTICAL ADJUSTABLE COUNTERWEIGHT

SCALE 1/2 = 1" IN. PRINT ISSUED

DESIGNED BY: DR. R. M. SCOTT | DATE | APPROVED BY: MR. RU MONTAL | DATE
DRAWN BY: J. BROWN | DATE 3/16/66 | APPROVED BY: | DATE 2-26-67
CHECKED BY: MR. GEORGE BRIMHALL | DATE 1-19-67 | APPROVED BY: WM. GAUSTAD | DATE 1-21-67

DRAWING NUMBER 2150-252-E000 REV. B.

SHT 1 OF 2