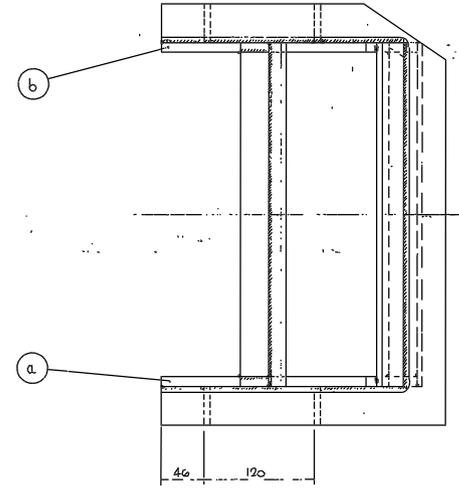
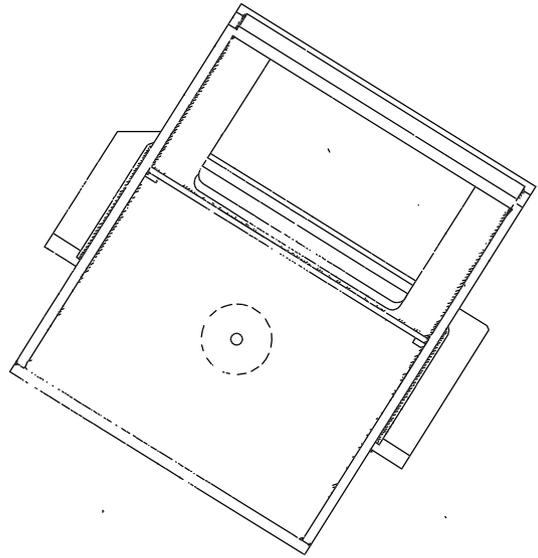


DRAWING NUMBER	No. of Sheets	G.A. Item No.	DRAWING TITLE OR COMPONENT NAME	QTY	MATERIAL STOCK OR ORDER No. AND DATE	REMARKS	ISSUE DATE	ISSUED TO	FINISH DATE
W/GD/073		073	REAR PLATE	1					
W/GD/074	1	074	FRAME	1					
/ 1075		075	BLADE	1					
/ 1076		076	BLADE	1					
W/GD/077	1	077	BLADE	1					
/ 1078		078	LEVER	1					
/ 1079		079	LATCH	1					
/ 1080		080	PUSH ROD	1					
/ 1081		081	POST	1					
/ 1082		082	SPACER	1		? IF REQ'D			
/ 1083		083	"	1					
/ 1084		084	"	1					
/ /									
/ 1086		086	"	1					
/ 1087		087	BEARING	1					
W/GD/088	1	088	CAP	1					
/ 1089		089	BEARING	2					
/ 1090		090	CAP	2					
/ 1091		091	SPACER	6					
/ 1092		092	SPACER	2					
/ 1093		093	PIVOT	2					
/ 1094		094	PAD	4					
/ 1095		095	"	2					
/ /									
/ /									
/ /									
W/GD/099	1	099	SPRING POST	2					
/ 1100		100	" "	2					
/ 1101		101	SPRING	2					
/ /									
/ 1103		103	COLLAR	1		? IF REQ'D			
/ 1104		104	SWITCH FLAG	1					
/ 1105		105	KNOB	2					
/ 1106		106	STOP BLOCK	1					
W/GD/107	1	107	COVER	1		WELDED ASSY			
/ 1108		108	SOLENOID BRKT	1					
JOB TITLE 'ISIS' SPECTROGRAPH - BLUE CAMERA SYSTEM						ASSY DRG. No. V/GD/000	SHEET No. 3 of 6	DRAWN BY P. D. H. E. C. DATE APRIL 1986	
ROYAL GREENWICH OBSERVATORY,						HERSTMONCEUX CASTLE,	HAILSHAM,	SUSSEX	

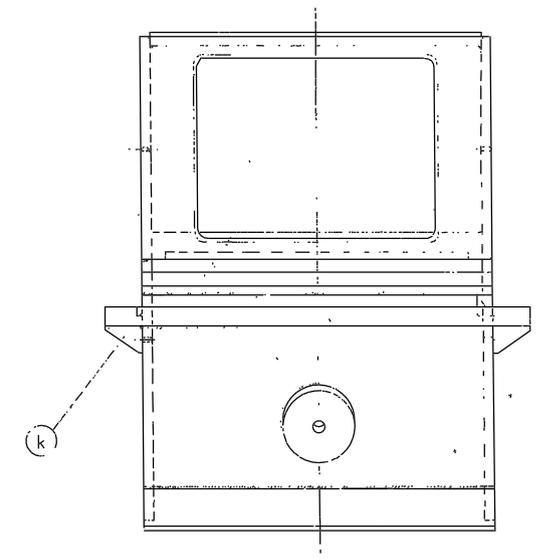
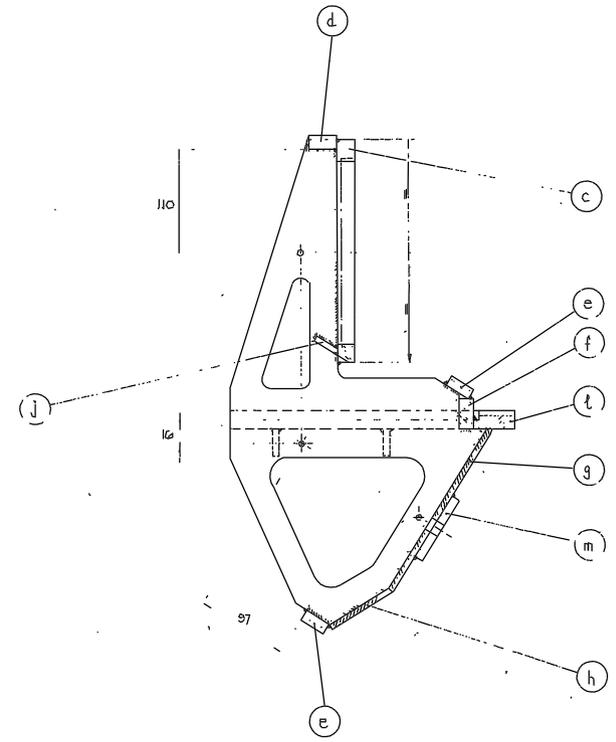








PT	OFF	SIZE	MAT
a		530 x 280 x 10	MS
b	1	530 x 280 x 10	"
c	1	385 x 280 x 20	"
d	1	365 x 30 x 20	"
e	2	385 x 30 x 12	"
f	1	385 x 32 x 10	"
g		385 x 210 x 6	"
h		385 x 76 x 6	"
i		360 x 30 x 6	"
j		40 x 30 x 6	"
k	4	40 x 30 x 6	"
l		400 x 310 x 20	"
m		376 x 14	"



WELDED ASSY  
CONTINUOUS WELD JOINTS  
STRESS RELIEVE BEFORE M.C.

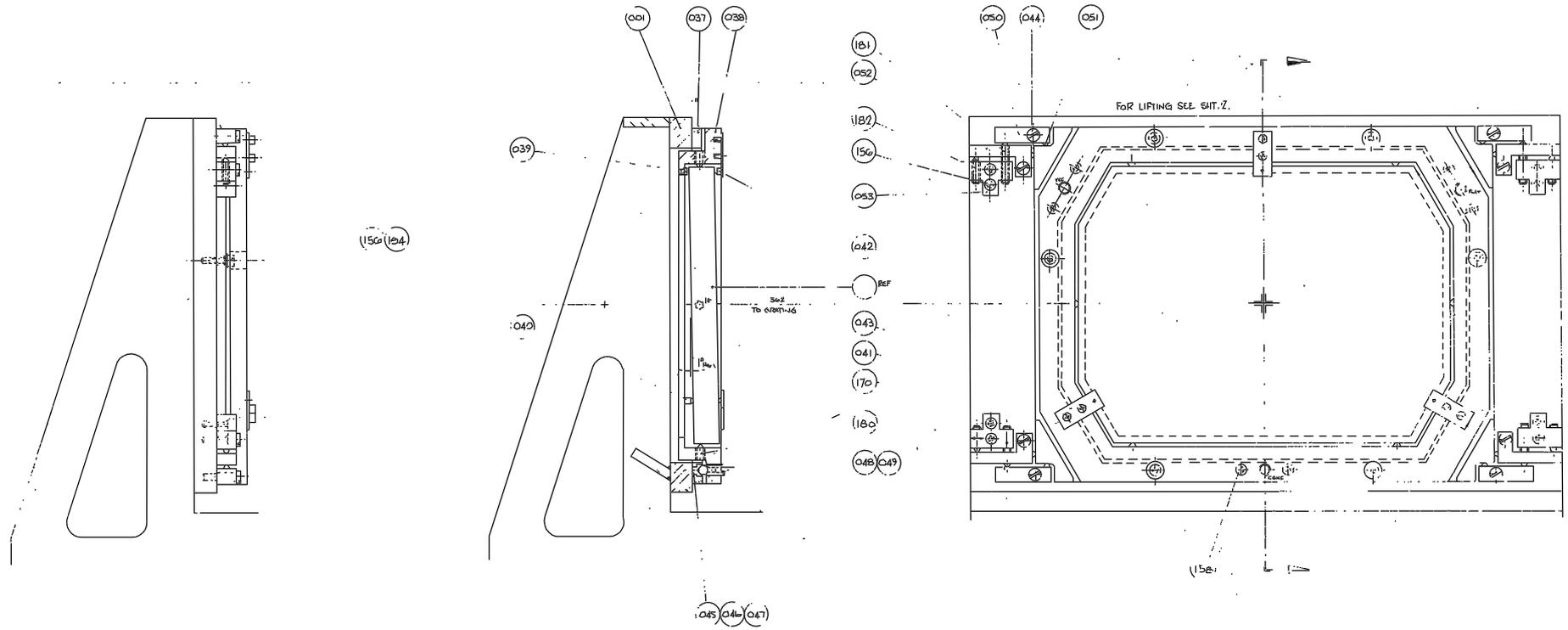
FOR M.C'ING SEE SHT. 1  
FOR DETAILS SEE SHT. 3

Tolerances (Limits otherwise stated)							Material		Dimms. in m.m.		Scale	THIRD ANGLE PROJECTION		D.A. No. SHT. 2 OF 3	
							SEE SHT. 3.				1/2			Drawing No.	
							SEE SHT. 1.		Drw. No. No. Rec.			DETAIL		V/GD/001	
Issue	Mod. No.	Date	Drawn By	Issd	Mod. No.	Date	Drawn By	Used on							
						APR 86	PRIMEC								

ROYAL GREENWICH OBSERVATORY,  
HERSTMONCEUX CASTLE,  
HAILSHAM SUSSEX.

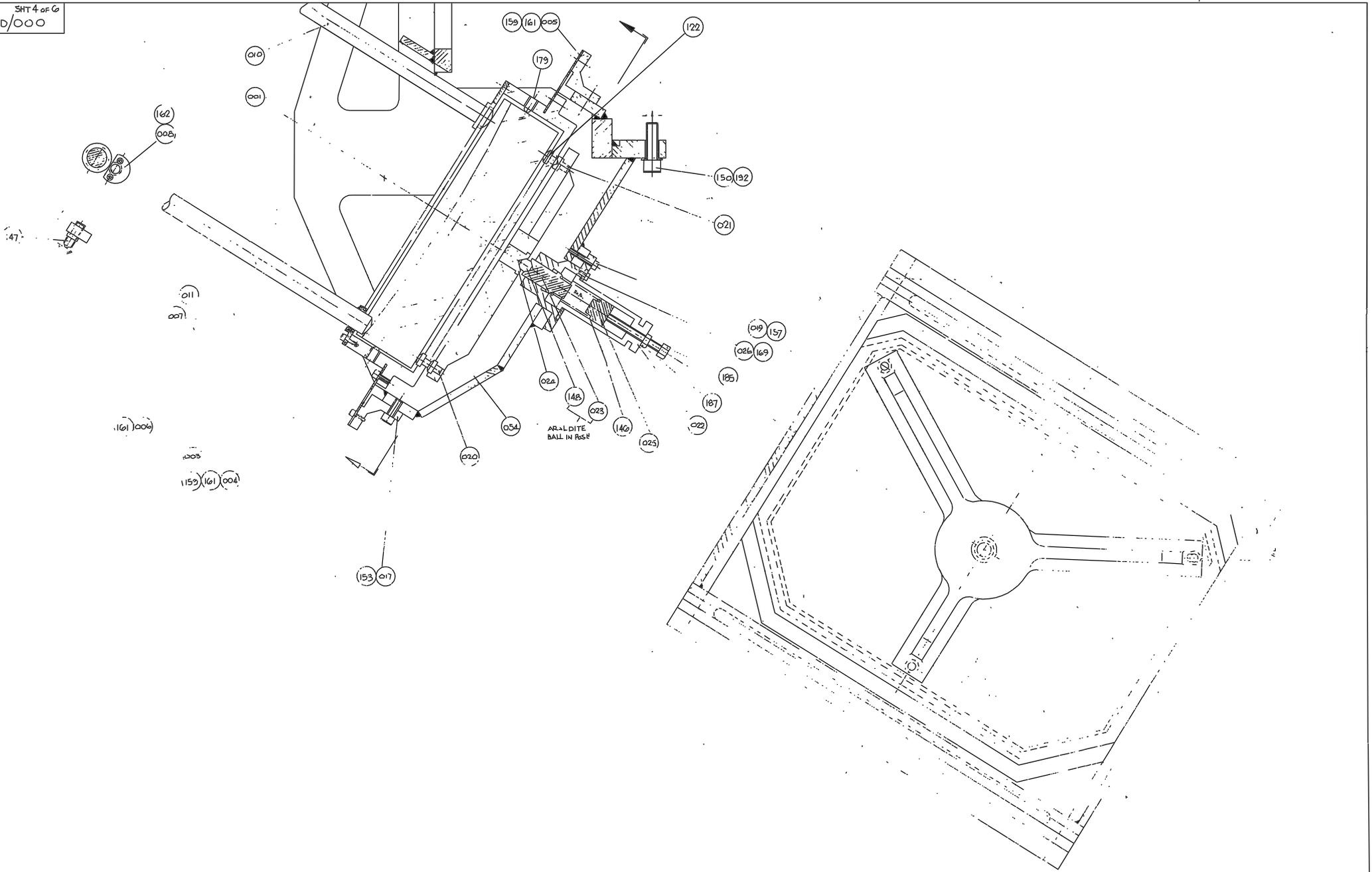






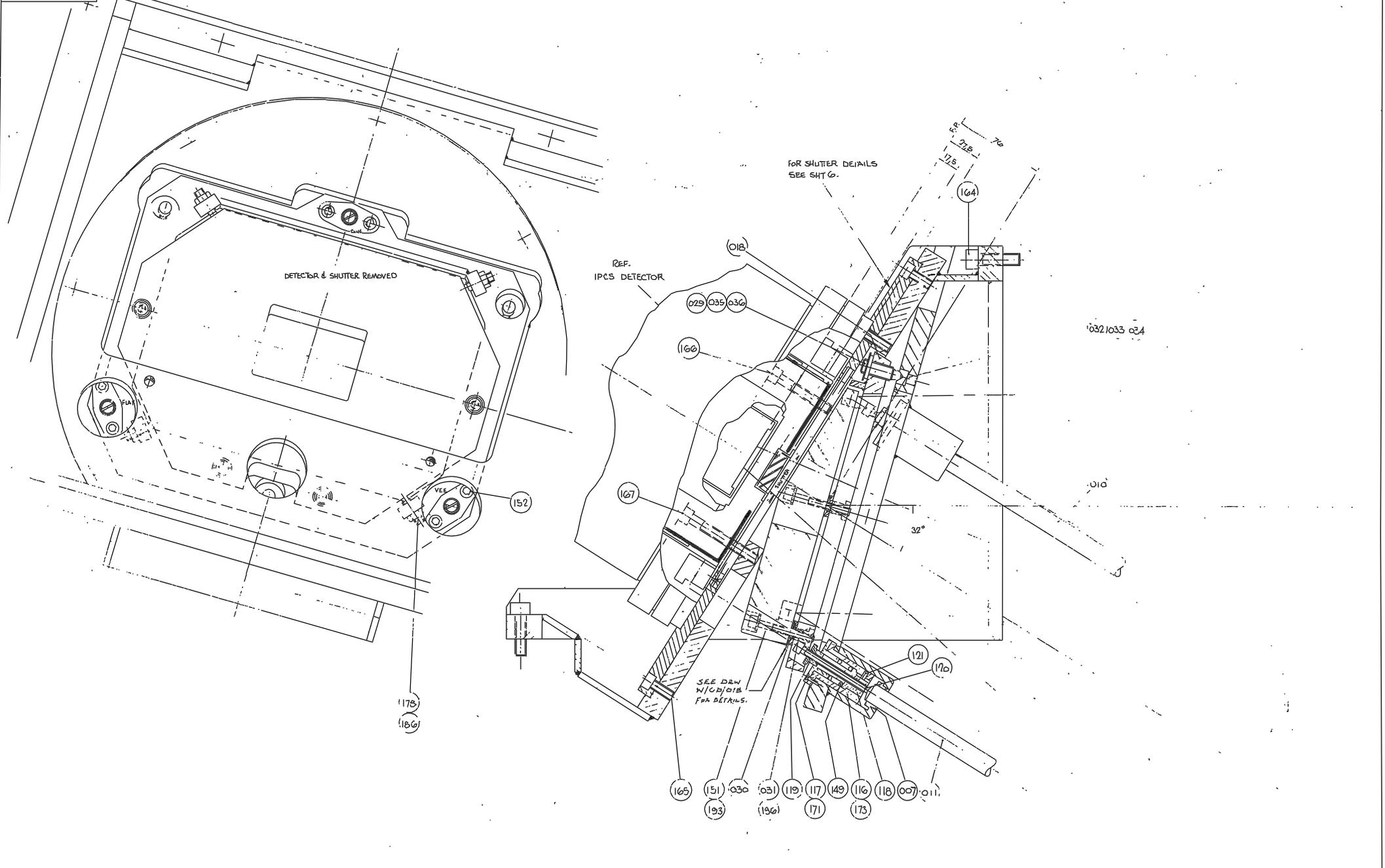
ASPHERIC LENS N° 5 of 6

Tolerances (unless otherwise stated)								Material		Dimms. in m.m.		Scale 1/1		THIRD ANGLE PROJECTION		G.A. No. SHT. 5 of 6	
Issue	Mod. No.	Date	Drawn By	Issue	Mod. No.	Date	Drawn By	Finish	Used on	Dwg. No.	No. Rev.	ROYAL GREENWICH OBSERVATORY, HERSTMONCEUX CASTLE, HAILSHAM SUSSEX.	Title	4.2m 1s1s SPECTROGRAPH - BLUE CAMERA SYSTEM	Drawing No.	V/GD/000	
				I		JULY 25	PROMEC										



SPHERICAL CAMERA SYSTEM

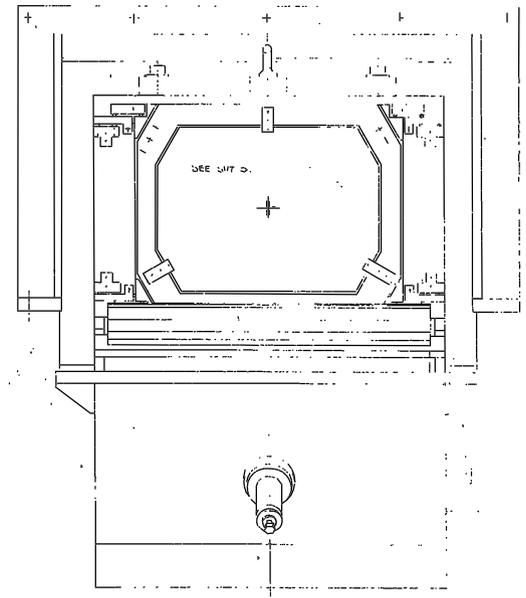
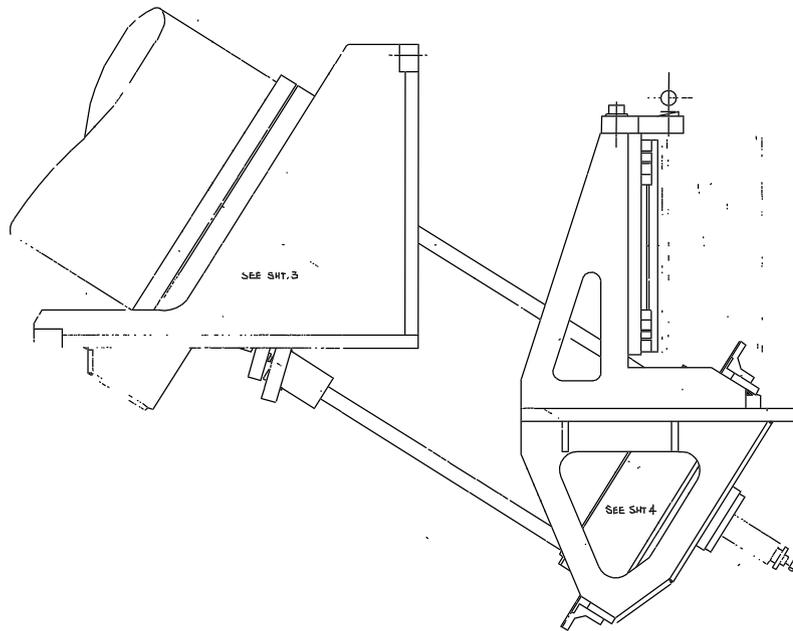
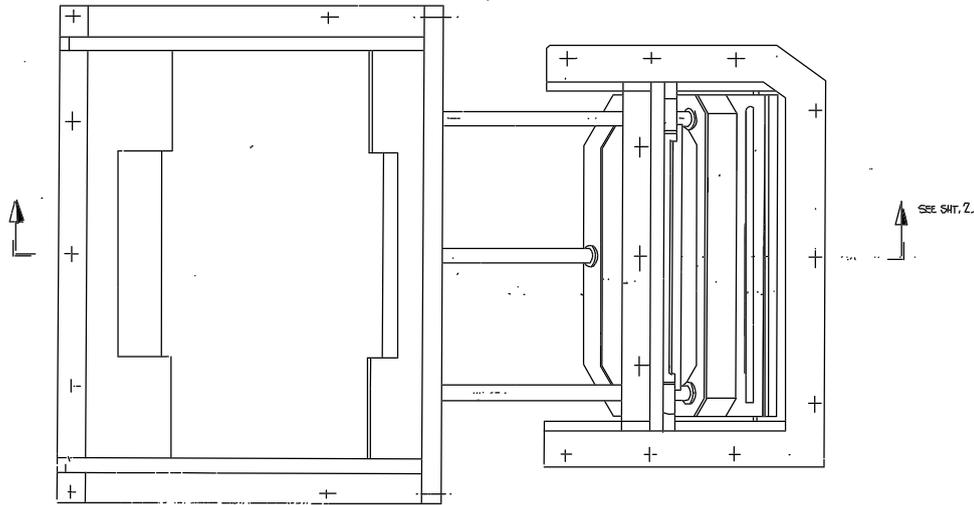
								Dimns. in m.m.		Scale 1/1		THIRD ANGLE PROJECTION		G.A. No. SHT 4 OF 6	
								ROYAL GREENWICH OBSERVATORY, HERSTMONCEUX CASTLE, HAILSHAM		Title		4.2M 'ISIS' SPECTROGRAPH - BLUE CAMERA SYSTEM		Drawing No. V/GD/000	
Issue	Mind. No.	Date	Drawn By	Issued	Mod. No.	Date	Drawn By	Material	Finish	Dr. No.	No. Req.	Used on			
				1		APR 86	PRAMEC	Tolerances (Unless otherwise stated)							
						JULY 85	PRAMEC	X ±							
								XX ±							
								XXX ±							



FOLDING MIRROR MECHANISM

				3	APR 85	DWC.	Tolerances (Unless otherwise stated) X ± XX ± XXX ±	Material  Finish	Dimts. in m.m. Scale 1/1	THIRD ANGLE PROJECTION ROYAL GREENWICH OBSERVATORY, HERSTMONCEUX CASTLE, HAILSHAM SUSSEX.	Title 4.2M 'ISIS' SPECTROGRAPH - BLUE CAMERA SYSTEM	G.A. No. SHT. 3 OF 6 Drawing No. V/GD/000
				7	APR 86							
				1	JULY 85							
Issue	Mod. No.	Date	Drawn By	Issue	Mod. No.	Date	Drawn By	Used on	Dwg. No.	No. Rec.		





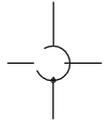
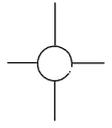
- SHT. 2 SECTION THRO' SYSTEM
- SHT. 3 FOLDING M REAR MOUNTING
- SHT. 4 SPHERICAL MIRROR MOUNTING
- SHT. 5 ASPHERIC LENS MOUNTING
- SHT. 6 SHUTTER & FIELD LENS MOUNTING

Issue				Revision				Material	Finish	Dimns. in m.m.	Scale 1/2	Title	Drawing No.
Issue	Mod. No.	Date	Drawn By	Issue	Mod. No.	Date	Drawn By						
			1								THIRD ANGLE PROJECTION	GA. No. SHT. 1 of 6	
				1							500 ± 1		
											ROYAL GREENWICH OBSERVATORY, HERSTMONCEUX CASTLE, HAILSHAM SUSSEX	V/GD/000	
											4.2 M ISIS SPECTROGRAPH - BLUE CAMERA SYSTEM		

Tolerances (unless otherwise stated)  
 X ±  
 XX ±  
 XXX ±

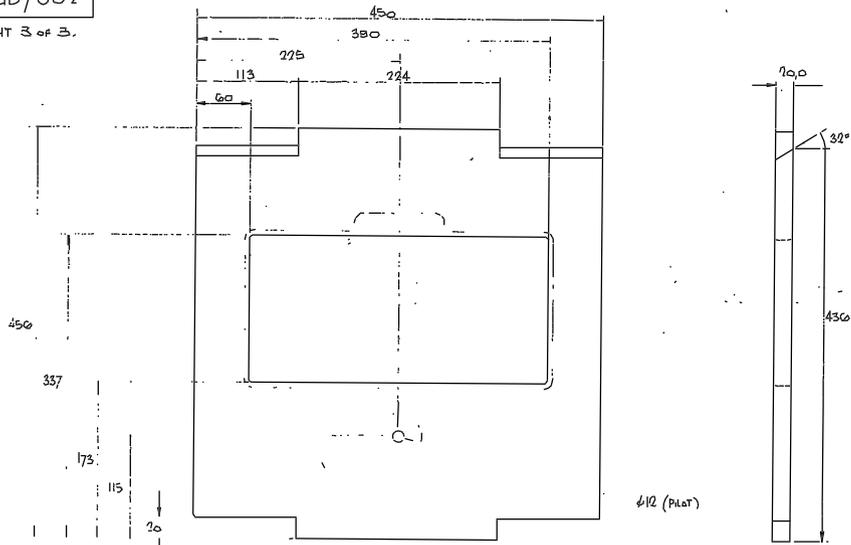
Drwg. No. No. Rev.  
 Used on

DRAWING NUMBER	No. of Sheets	G.A. Item No.	DRAWING TITLE OR COMPONENT NAME	QTY	MATERIAL STOCK OR ORDER No. AND DATE	REMARKS	ISSUE DATE	ISSUED TO	FINISH DATE	
/ /		181	GRD SCREWS	M5x25	4	STAINLESS STL				
/ /		182	" "	M5x16	4	"				
/ /		183	" "	M3x8	2	"				
/ /		184	MUSHROOM HD SCR	M3x6	3	"				
/ /		185	HEX HEAD SCREW	M6x50	1	"				
/ /		186	HEX LOCK NUTS	M8	4	"				
/ /		187	" "	M6	1	"				
/ /		189	" "	M3	2	"				
/ /										
/ /		192	WASHERS	φ10	12	"				
/ /		193	"	φ6	4	"				
/ /		194	"	φ4	9	"				
/ /										
/ /		196	DOWEL	φ2x10	4					
/ /		197	"	φ3x12	2					
/ /		198	ROLL PIN	φ3x18	1					
/ /										
/ /										
/ /										
/ /		204	SHOULDER SCREW	φ6x10	1			'LUBRACO'		
/ /		205	" "	φ6x20	1			"		
/ /										
/ /		208	HELI-COIL INSERT	M8x8	4	STAINLESS STL				
/ /										
/ /		210	CSK SCREW	M2.5x4	4	"				
/ /										
/ /		212	PAN HD SCREW	M3x3	2	"				
/ /										
/ /										
/ /										
/ /										
JOB TITLE 'ISIS'- SPECTROGRAPH - BLUE CAMERA SYSTEM						ASSY DRG. No. V/60/000	SHEET No. 6 of 6	DRAWN BY PROMEC DATE APRIL 1986		
ROYAL GREENWICH OBSERVATORY,						HERSTMONCEUX CASTLE,	HAILSHAM,	SUSSEX		

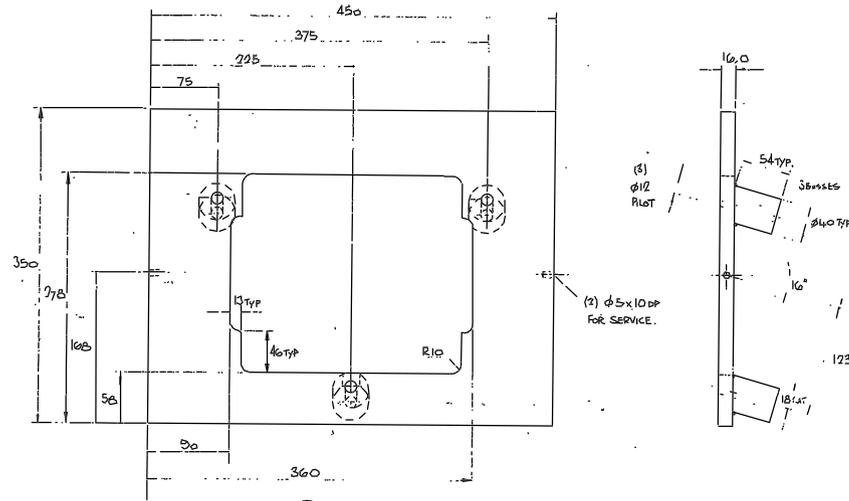


DRAWING NUMBER	No. of Sheets	G.A. Item No.	DRAWING TITLE OR COMPONENT NAME	QTY	MATERIAL STOCK OR ORDER No. AND DATE	REMARKS	ISSUE DATE	ISSUED TO	FINISH DATE
/ /									
/ /		146	SPRING - LEE - LC-080J-10.	1		LEE			
/ /		147	SPRING PLUNGER - D118.HWJ2066	3		WIX 2 R670			
/ /		148	BALL - $\phi 10$	1	STAINLESS STL				
/ /		149	SPRING - LEE - LC-080 J-10	3		LEE			
/ /		150	COIL HEAD C.P. 2 R111-M10x30	9	STAINLESS STL				
/ /		151	" "	4	"				
/ /		152	" "	6	"				
/ /		153	" "	10	"				
/ /		154	" "	3	"				
/ /		155	" "	2	"				
/ /		156	" "	14	"				
/ /		157	" "	3	"				
/ /		158	" "	6	"				
/ /		159	" "	22	"				
/ /									
/ /		161	" "	32	"				
/ /		162	" "	6	"				
/ /									
/ /		164	" "	11	"				
/ /		165	" "	8	"				
/ /		166	" "	4	"				
/ /		167	" "	8	"				
/ /		168	" "	2	"				
/ /		169	" "	8	"				
/ /		170	CSK SCREW	6	"				
/ /		171	" "	13	"				
/ /		172	" "	1	"				
/ /		173	" "	8	"				
/ /		174	" "	2	"				
/ /		175	" "	8	"				
/ /		176	" "	2	"				
/ /		177	" "	2	"				
/ /		178	GRUB SCREWS	4	NYLON				
/ /		179	" "	6	NYLON				
/ /		180	" "	6	NYLON				
JOB TITLE ISIS - SPECTROGRAPH - BLUE CAMERA SYSTEM						ASSY DRG. No. V160/000	SHEET No. 5 of 6	DRAWN BY PROMEC DATE APRIL 1986	
ROYAL GREENWICH OBSERVATORY,			HERSTMONCEUX CASTLE,			HAILSHAM,		SUSSEX	

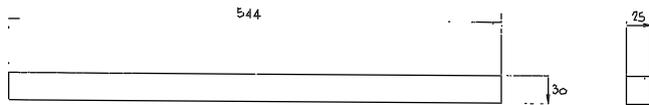
DRAWING NUMBER	No. of Sheets	G.A. Item No.	DRAWING TITLE OR COMPONENT NAME	No. of	MATERIAL STOCK OR ORDER No. AND DATE	REMARKS	ISSUE DATE	ISSUED TO	FINISH DATE
/ / 109		109	SWITCH BRKT	1					
/ /									
W/GD/111	1	111	PIVOT ARM	1					
/ / 112		112	BUSH	1					
/ /									
/ /									
/ /									
W/GD/116	1	116	HOUSING	3					
/ / 117		117	SPRING RETAINER	3					
/ / 118		118	SPRING INSERT	3					
/ / 119		119	LOCKWUT	3					
/ / 120		120	ADJUSTING SCREW	3					
/ / 121		121	PEG	3					
/ / 122		122	LOCK TR	1					
/ /									
/ /									
/ /									
/ /									
/ /									
/ /									
/ /		130	CYLINDER - S/A. - KUHNKE-25.19.00	1					
/ /		131	MICRO - SOL VALVE " 65.111-24V =	1					
/ /		132	SILENCER " 50.030	1					
/ /		133	COUPLING MASTER " 50.061.01	1					
/ /		134	SOCKET " 50.065	1					
/ /		135	1. BANJO " 50.130	2					
/ /		136	TUBE COUPLING " 50.007	2					
/ /		137	RESTRICTOR " 47.270	1					
/ /		138	CLEVIS " 26.304	1					
/ /									
/ /		140	PROXIMITY SWITCH - HETTICH - S03S/	2	D.G. COM. 11/5/63				
/ /		141	ELECTRICAL SOCKET 8PIN (MIN)	1		To SUIT			
/ /									
/ /		143	LIFTING CYCLOLT - M.12	1		PS 4278 - 1963			
/ /		144	BALL PLUNGER - JERGENS 11108	1		WIX # ROYD-EQUIV.			
JOB TITLE						ASSY DRC. No.	SHEET No.	DRAWN BY	
'ISIS' SPECTROGRAPH - BLUE CAMERA SYSTEM						V/GD/000	1 of 6	PROMEC	
								DATE	
ROYAL GREENWICH OBSERVATORY, HERSTMONCEUX CASTLE, HAILSHAM, SUSSEX								APRIL 1966	



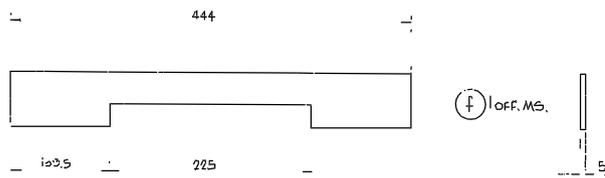
(a) 1 OFF. M.S.



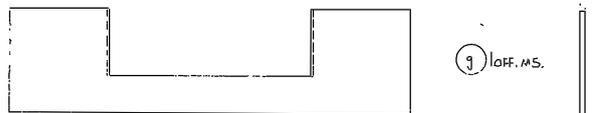
(b) 1 OFF. M.S. (WELODED ASSY)



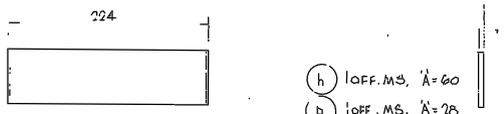
(c) 2 OFF. M.S.



(f) 1 OFF. M.S.

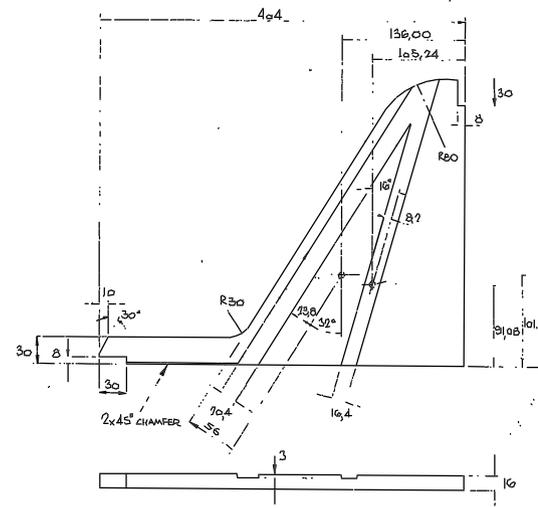


(g) 1 OFF. M.S.



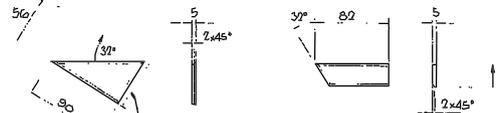
(h) 1 OFF. M.S. A = 60

(p) 1 OFF. M.S. A = 78



(e) 1 OFF. AS DRN. M.S.

(d) 1 OFF. OPP. HD. M.S.

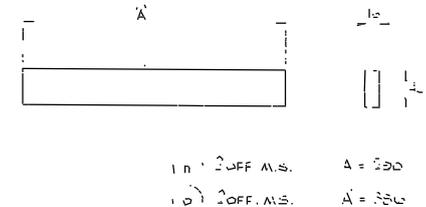


(j) 1 OFF. AS DRN. M.S.

(k) 1 OFF. OPP. HD. M.S.

(l) 1 OFF. AS DRN. M.S.

(m) 1 OFF. OPP. HD. M.S.



1 n 2 OFF. M.S. A = 500

1 o 2 OFF. M.S. A = 350

Issue	Mod. No.	Date	Drawn By	Issue	Mod. No.	Date	Drawn By
				1			
				2			

Tolerances (Unless otherwise stated)
X ±
XY ±
XXX ±

Material	Finish	Dimts. in m.m.	Scale
			1/2

DRG. No.	No. Req.	Used on

ROYAL GREENWICH OBSERVATORY, HERSTMONCEUX CASTLE, HALSHAM, SUSSEX.	THIRD ANGLE PROJECTION
	DETAILS

G.A. No.	W.T.	SHT OF 3.



DRAWING NUMBER	No. of Sheets	G.A. Item No.	DRAWING TITLE OR COMPONENT NAME	No. of	MATERIAL STOCK OR ORDER No. AND DATE	REMARKS	ISSUE DATE	ISSUED TO	FINISH DATE
W/GD/037	1	037	ASPHERIC CELL MTG. PLT.	1					
W/GD/038	1	038	ASPHERIC CELL	1					
W/GD/039	1	039	BUTTON	1					
/ / 040		040	"	2					
/ / 041		041	STRIP	3					
/ / 042		042	BUTTON	1					
/ / 043		043	"	2					
/ / 044		044	SHOULDER SCREW	8					
/ / 045		045	KINEMATIC SEATS	1					
/ / 046		046	" "	1					
/ / 047		047	" "	1					
/ / 048		048	KINEMATIC BALL ADJUSTER	3					
/ / 049		049	" " "	3					
/ / 050		050	LEVER	4					
/ / 051		051	BUTTON	8					
W/GD/052	1	052	CRANKED LEVER	4					
/ / 053		053	ADJUSTING BLOCK	4					
/ / 054		054	SPIDER	1		ALUM <sup>m</sup> CAST 5			
/ /									
/ /									
/ /									
/ /									
/ /									
W/GD/060	1	060	LIFTING PLATE	1					
/ /									
/ /									
/ /									
/ /									
/ /									
W/GD/066	1	066	FIELD LENS CELL	1					
/ / 067		067	CUP	2					
/ /									
/ /									
/ / 070									
W/GD/071	1	071	MOUNTING PLT	1					
W/GD/072	1	072	FRONT PLATE	1					

JOB TITLE **ISIS - SPECTROGRAPH - BLUE CAMERA SYSTEM** # 500  
 ROYAL GREENWICH OBSERVATORY, HERSTMONCEUX CASTLE, HAILSHAM, SUSSEX  
 ASSY DRG. No. **V/GD/000**  
 SHEET No. **2 of 6**  
 DRAWN BY **PRAMEC**  
 DATE **APRIL 1986**

DRAWING NUMBER	No. of Sheets	G.A. Item No.	DRAWING TITLE OR COMPONENT NAME	No. of	MATERIAL STOCK OR ORDER No. AND DATE	REMARKS	ISSUE DATE	ISSUED TO	FINISH DATE
V/GD/001		001	BRKT - ASPHERIC & SPH. MIRROR MOUNT	1		M.S. FAB <sup>H</sup>			
V/GU/002		002	BRKT. BLUE FOLD	1		" "			
W/GD/003	1	003	CELL FOR SPH MIRROR	1		ALUM <sup>H</sup> CAST <sup>E</sup>			
W/GD/004	1	004	SUPPORT DIAPHRAGM	1					
/ / 005		005	SUPPORT DIAPHRAGM	1					
W/GD/006	1	006	PLATE	1					
/ / 007		007	BUSH	6					
/ / 008		008	INSERT	3					
/ /									
W/GD/010	1	010	ROD	2	INVAR	MANUF. FAWCETT AL. KNOWL FURST			
/ / 011		011	ROD	1	INVAR	" " " " "			
/ /									
/ /									
/ /									
/ /									
/ /									
/ / 017		017	ANGLE	2					
/ / 018		018	FOLD MOUNTING PLT	1					
W/GD/019	1	019	SPRING ISOLATING	1					
/ / 020		020	BUTTON	6					
/ / 021		021	VER LOCATOR	1					
/ / 022		022	HOUSING	1					
/ / 023		023	CONE SEAT	1					
/ / 024		024	INSERT	1					
/ / 025		025	SPRING SEAT	1					
W/GD/026	1	026	COVER	1					
/ /									
/ /									
/ / 029		029	THIN NUT	3					
/ / 030		030	SPACER	4					
/ / 031		031	INSERT	4					
/ / 032		032	KINEMATIC SEAT	1					
/ / 033		033	" "	1					
/ / 034		034	" "	1					
/ / 035		035	KINEMATIC BAL. ADJUSTER	3					
/ / 036		036	" " "	3					
JOB TITLE					ASSY ORG. No.	SHEET No.	DRAWN BY		
TSIS - SPECTROGRAPH - BLUE CAMERA SYSTEM					V/GO/000	1 of 10	PRAMEC		
							DATE APRIL 1980		
ROYAL GREENWICH OBSERVATORY,					HERSTMONGEUX CASTLE,	HAILSHAM,	SUSSEX		