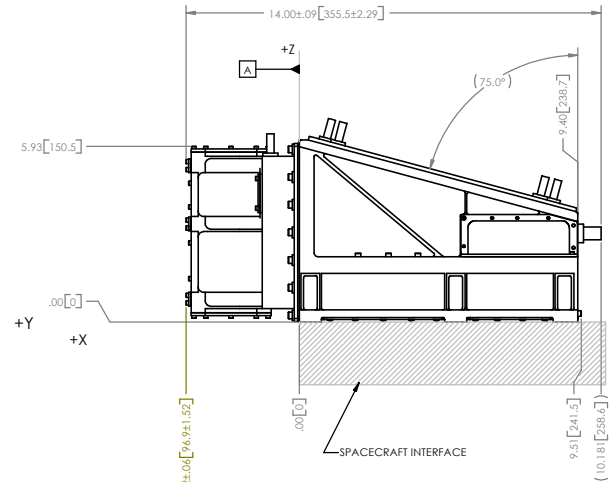
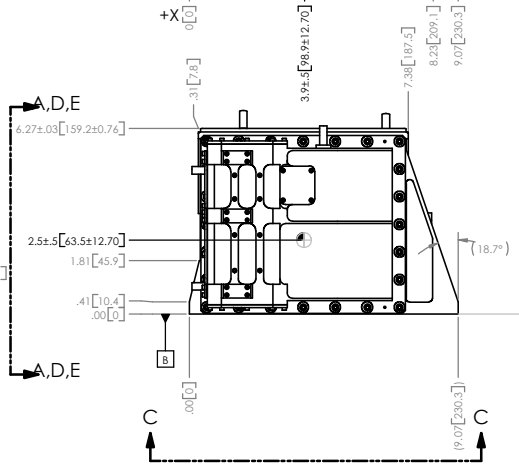
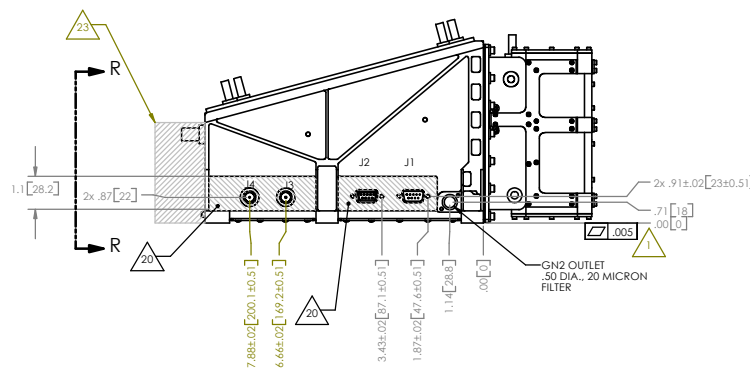
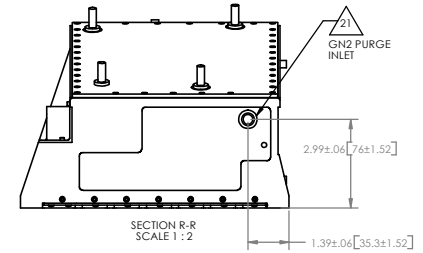
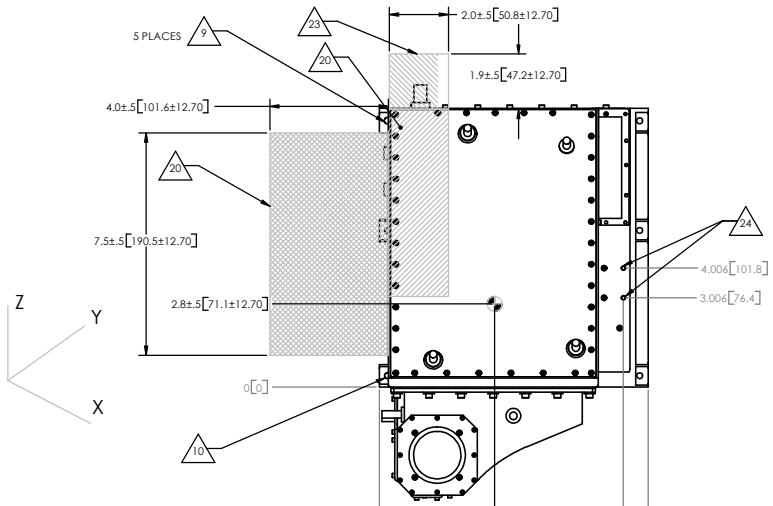


CONNECTOR IDENTIFICATION TABLE			
REF. DES.	DESCRIPTION	CONNECTOR TYPE	PART NUMBER
J1	POWER	9 PIN D-SUB MALE	311409-1P-B-12
J2	TEMP	9 PIN D-SUB FEMALE	311409-1S-B-12
J3, J4	DATA	1553	BJ3150

REVISIONS				
ECO	REV.	DESCRIPTION	DATE	APPROVED
32-025	A	INITIAL RELEASE	6/3/05	M. SMITH
32-70	B	ADD FIELDS OF REGARD AND THERMAL BLANKET DIMENSIONS	12/21/05	M. SMITH
32-103	C	CHANGE F.O.R. ADD NOTES 20-23. ADD MATING POINTS FOR CONNECTORS AND GN2 PURGE CONNECTIONS. TIE DOWN LOCATION CHANGE. PURGE LOCATION CHANGE. SPACECRAFT MOUNTING HARDWARE AT ONE LOCATION. SERVICE DIMENSION	4/26/06	M. SMITH
32-250	D	ADD THERMAL BLANKET DIMENSIONS. TIE DOWN LOCATION CHANGE. PURGE LOCATION CHANGE. SPACECRAFT MOUNTING HARDWARE AT ONE LOCATION. SERVICE DIMENSION	11/9/07	
32-263	E	UPDATE LOCATION OF F.O.R. CHG-NOTE 10. UPDATE MOMENT OF INERTIA TABLE.		



- 1. MOUNTING SURFACE ON SPACECRAFT TO BE 32 MICROINCHES OR BETTER. FLATNESS TO BE AS SHOWN.
- 2. COMPONENT IDENTIFICATION.
- 3. MINIMUM WALL THICKNESS IS .040".
- 4. MOUNTING FLANGE THICKNESS IS .410 +/- .005.
- 5. THERE ARE NO MOVING PARTS.
- 6. CONTACT AREA TO SPACECRAFT.
- 7. MATERIAL OF MECHANICAL INTERFACE TO THE SPACECRAFT IS ALUMINUM 6061-T6, PLATED PER MIL-C-5541, CLASS 3.
- 8. DRILL TEMPLATE IS NOT REQUIRED.
- 9. MOUNTING HARDWARE TO THE SPACECRAFT SHALL BE #10-32 UNF, 3A X 1.00 LONG SHCS (EXCEPT AS NOTED), PER NAS 1351.
- 10. MOUNTING HARDWARE TO THE SPACECRAFT SHALL BE #10-32 UNF, 3A X 0.75 LONG SHCS. THIS LOCATION ONLY. PER NAS 1351, SUPPLIED BY GSFC. TORQUE TO 35-38 IN-LBS OVER RUNNING TORQUE. FLAT WASHER TO BE NAS 1587-3 SUPPLIED BY GSFC.
- 11. SEE SHEET 2 FOR FIELDS OF REGARD.
- 12. CONNECTOR BACKSHELL AND HARNESS INFORMATION TO BE SUPPLIED BY LRO ELECTRICAL SYSTEMS GROUP.
- 13. COMPONENT GROUNDING INTERFACE INFORMATION TO BE SUPPLIED BY LRO ELECTRICAL SYSTEMS GROUP.
- 14. THERE IS NO PLACEMENT ACCURACY REQUIRED FOR CRATER.
- 15. DRY NITROGEN PURGE REQUIRED WEEKLY FOR 10 MINUTE MINIMUM.
- 16. MASS ALLOCATION PER GSFC 431-SPEC-000112. MASS ALLOCATION INCLUDES THERMAL BLANKETS AND MOUNTING HARDWARE.

- 17. ● DENOTES CENTER OF GRAVITY.
- 18. CHASSIS GROUND CONNECTIONS IS THROUGH THE 6 MOUNTING FEET.
- 19. THERE SHALL BE NO THERMAL BLANKET MATERIAL IN THIS AREA. ONLY OUTER LAYER OF 3 MILL BLACK KAPTON TO COVER THIS AREA (TWO PLACES). AREA CAN BE EITHER 2.50" DIAMETER OR A SQUARE 2.50" X 2.50".
- 20. SPACE RECOMMENDED FOR CONNECTOR MATING AND ROUTING.
- 21. PURGE CONNECTION PART IS SWAGELOK P/N SS-400-61.
- 22. THERE ARE NO OPTICAL REFERENCES ON OR FOR CRATER.
- 23. SPACE RECOMMENDED FOR GN2 PURGE CONNECTION.

**MOMENTS OF INERTIA (LB-IN<sup>2</sup>) (DOES NOT INCLUDE THE THERMAL BLANKET SYSTEM)**

Lxx = 105.0	[30.7 g-m <sup>2</sup> ]	Lxy = -29.9	[-8.7 g-m <sup>2</sup> ]	Lxz = 17.3	[5.1 g-m <sup>2</sup> ]
Lyx = -29.9	[-8.7 g-m <sup>2</sup> ]	Lyy = 211.2	[61.8 g-m <sup>2</sup> ]	Lyz = -5.8	[-1.7 g-m <sup>2</sup> ]
Lzx = 17.3	[5.1 g-m <sup>2</sup> ]	Lzy = -5.8	[-1.7 g-m <sup>2</sup> ]	Lzz = 253.5	[74.2 g-m <sup>2</sup> ]

- 24. BLANKET GROUND LOCATIONS. #4-40 X .224L LONG, NON-LOCKING HELI COIL INSERT.
- 25. BLANKET TIE DOWN LOCATION. FLOATING, LOCKING INSERT FOR #6-32 SCREW, MAX LENGTH OF 1.00".
- 26. BLANKET BUTTON LOCATIONS.

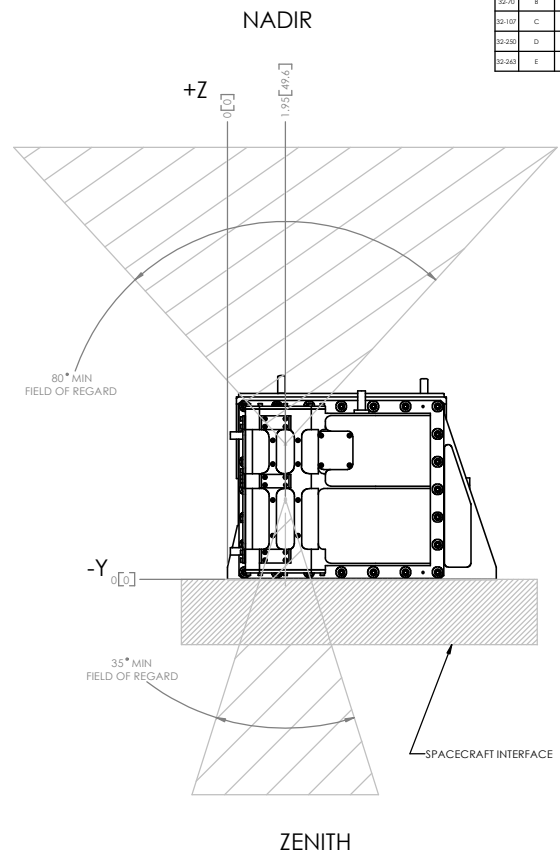
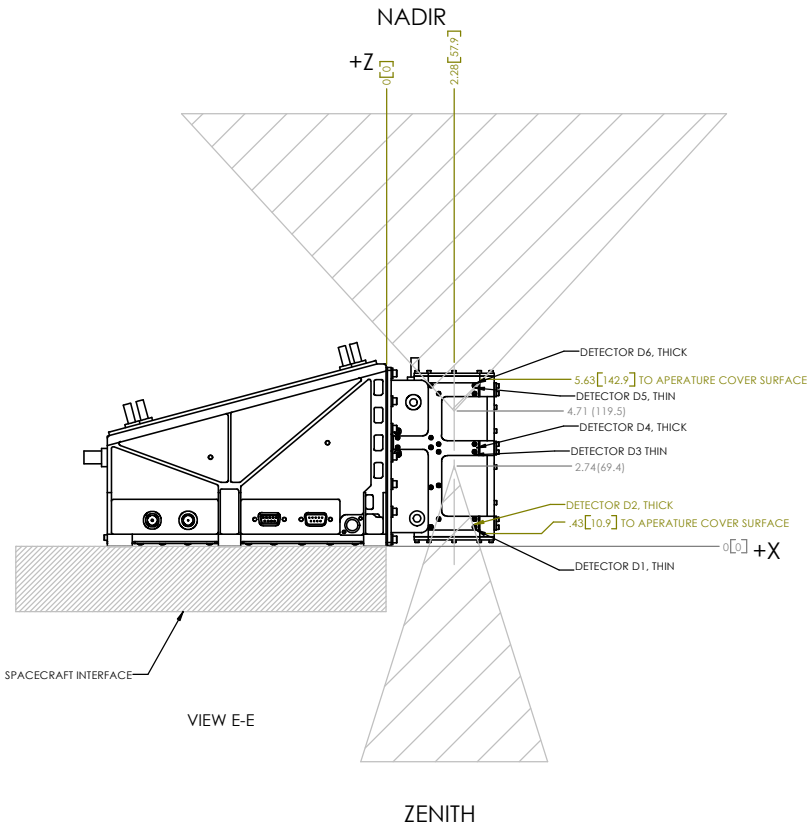
DATE CHANGE PROPOSED		BY		FOR	
32-02003.02	12/22/05	M. SMITH	12/22/05		

CRATER MECHANICAL INTERFACE DRAWING(MD)

32-02003.02

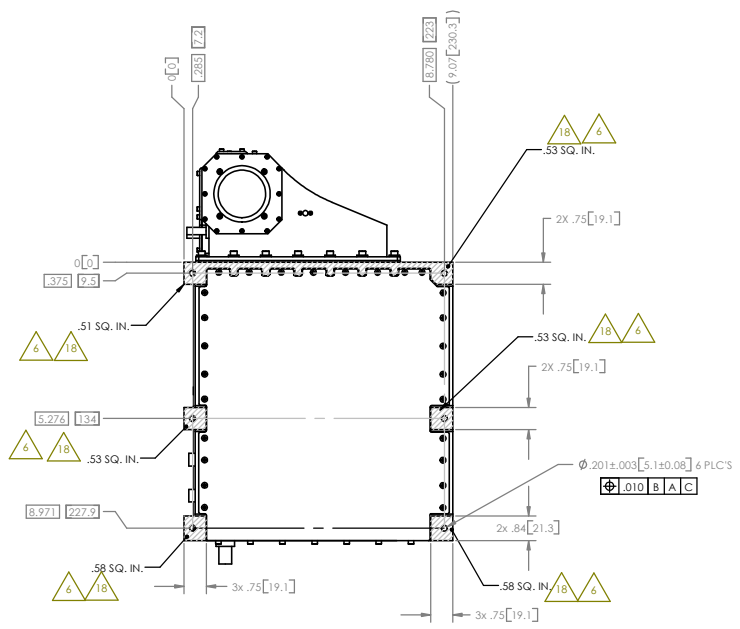
CRATER

REVISONS				
ECID	REV.	DESCRIPTION	DATE	APPROVED
32-025	A	See Sheet 1	-	-
32-30	B	See Sheet 1	-	-
32-107	C	See Sheet 1	-	-
32-290	D	See Sheet 1	-	-
32-243	E	SEE SHEET 1	-	-

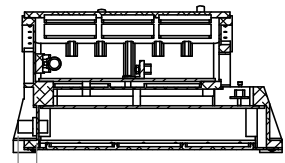


FIELDS OF REGARD

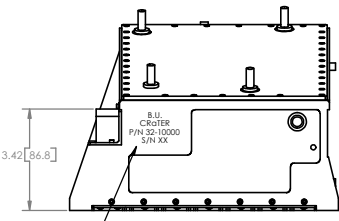
REVISIONS				
ECID	REV.	DESCRIPTION	DATE	APPROVED
32-023	A	See Sheet 1		M. Smith
32-015	B	See Sheet 1		M. Smith
32-107	C	See Sheet 1		M. Smith
32-230	D	See Sheet 1		M. Smith
32-243	E	See Sheet 1		M. Smith



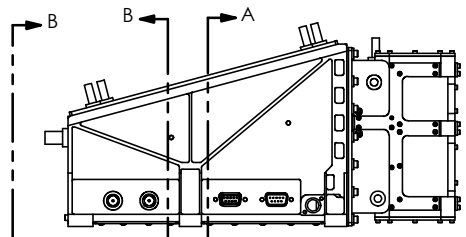
VIEW C-C



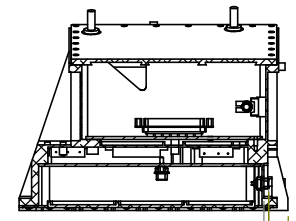
SECTION B-B  
SCALE 1 : 2



VIEW B-B

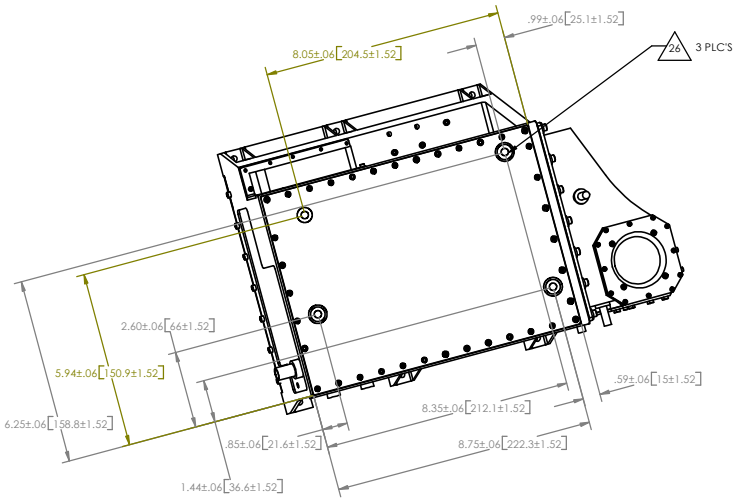


VIEW A-A

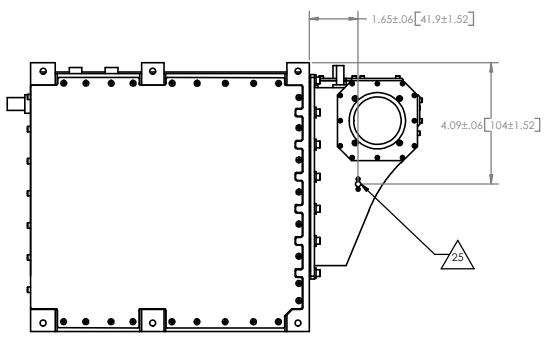
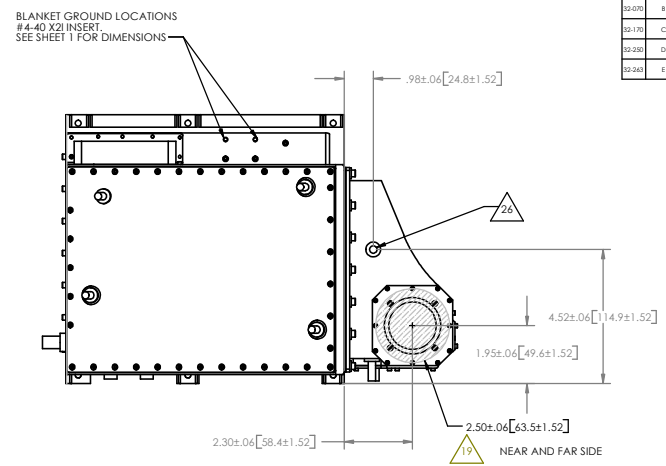


SECTION A-A  
SCALE 1 : 2

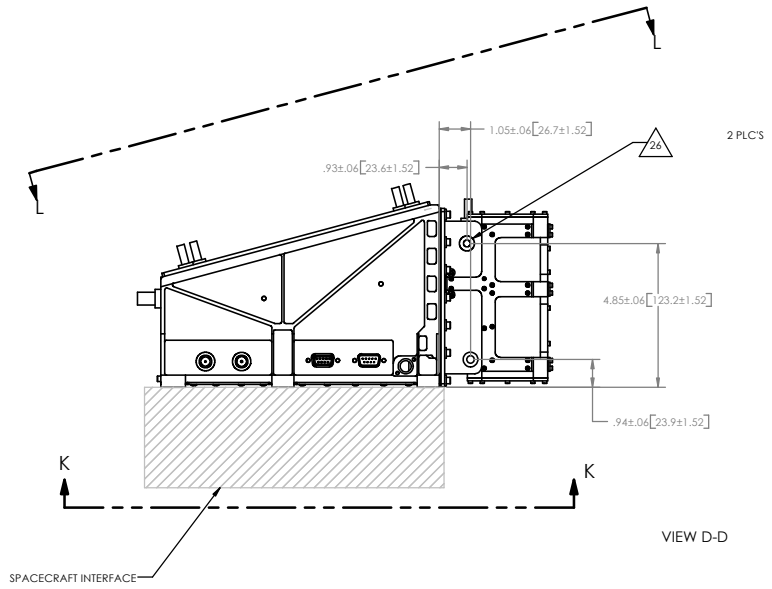
BOSTON UNIVERSITY M.I.T. AEROSPACE CORP.			
TITLE: CRATER MECHANICAL INTERFACE DRAWING (MID)			
SIZE	DWG. NO.	REV	
D	32-02003.02	E	
SCALE: 1:4			SHEET 3 OF 4



VIEW L-L  
SCALE 1 : 2



VIEW K-K



VIEW D-D

THERMAL BLANKET BUTTON LOCATIONS

REVISIONS				
ECID	REV.	DESCRIPTION	DATE	APPROVED
32-025	A	See Sheet 1	-	-
32-015	B	SEE SHEET 1		
32-130	C	SEE SHEET 1		
32-230	D	SEE SHEET 1		
32-243	E	SEE SHEET 1		

BOSTON UNIVERSITY MILITARY/AEROSPACE CORP.

CRATER  
MECHANICAL INTERFACE  
DRAWING (MID)

SIZE	DWG. NO.	REV.
D	32-02003.02	E
SCALE: 1:4		SHEET 4 OF 4