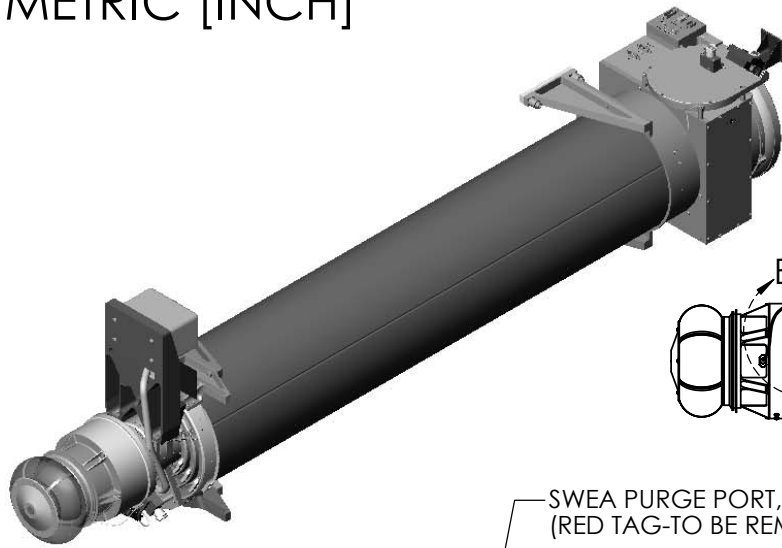
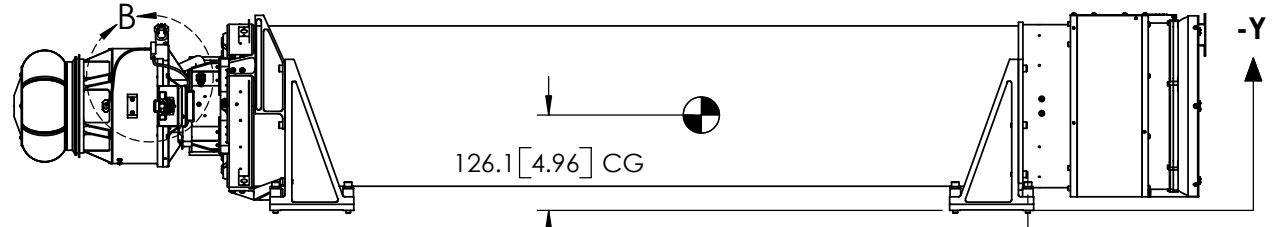


METRIC [INCH]

REVISION				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	F	MASS AND CONFIG UPDATE	02/20/04	KM



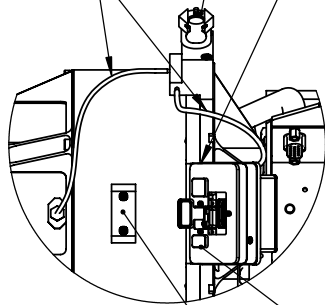
SIDE VIEW
(AHEAD-STOWED)



SWEA PURGE PORT, STE-D LINE AND ADAPTER
(RED TAG-TO BE REMOVED PRIOR TO FLIGHT)

PURGE LINES
(RED TAG-TO BE REMOVED
PRIOR TO FLIGHT)

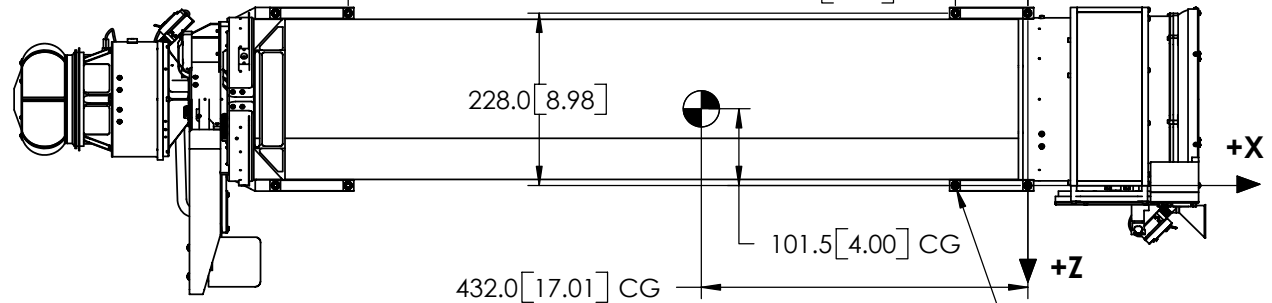
STE-D PURGE ADAPTER



SWEA HIGH VOLTAGE
ENABLE PLUG
(GREEN TAG - INSTALL BEFORE FLIGHT)

STE-D

DETAIL B
SCALE 1 : 4



BOTTOM VIEW
(AHEAD-STOWED)

Ø 6.8 [Ø0.27] THRU (8X)
USE 1/4-28UNF HARDWARE
TORQUE TO 58IN-LBS (+2/-0)
(SUPPLIED BY APL)

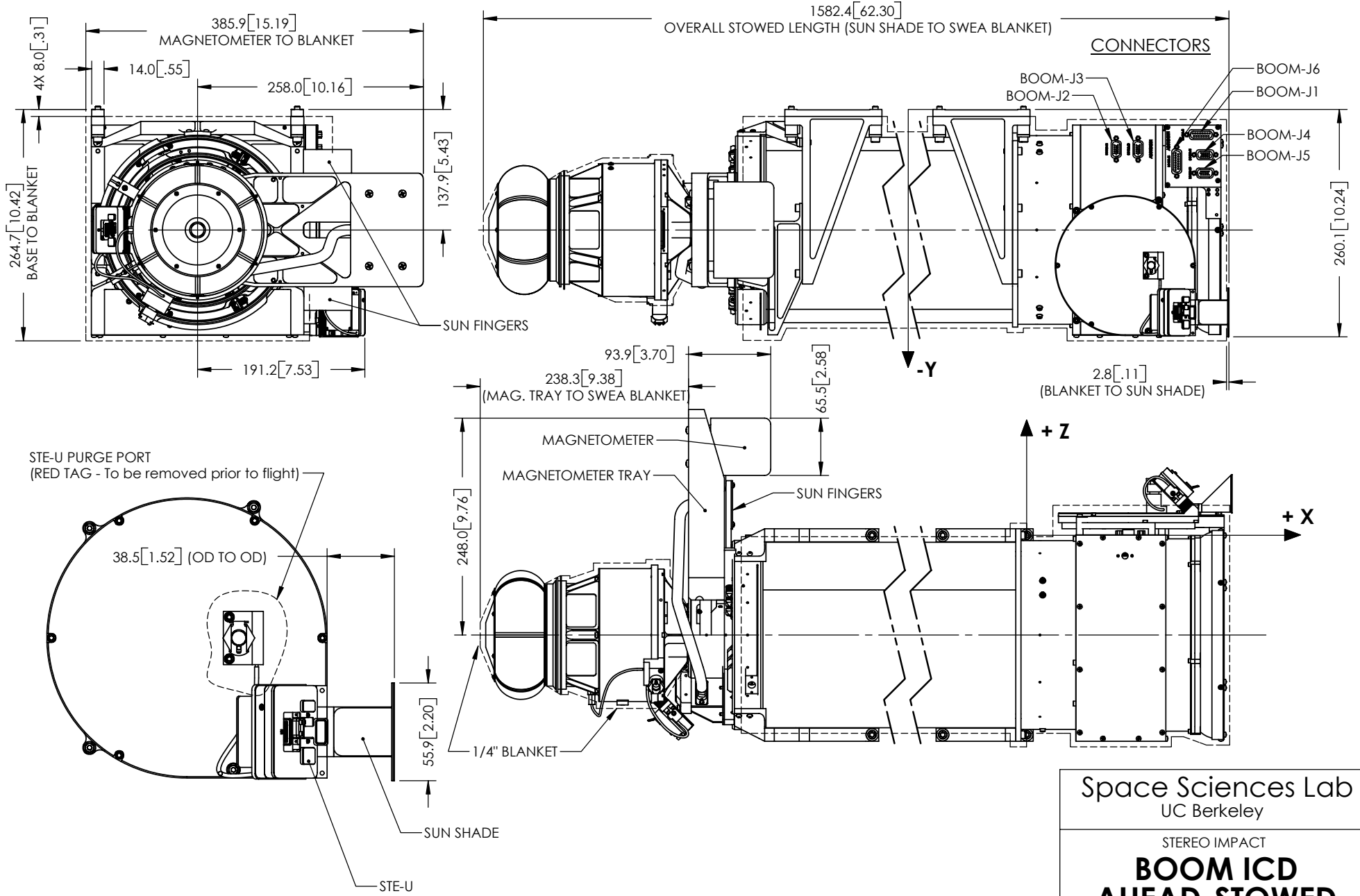
CG : CENTER OF GRAVITY

<p>THIRD ANGLE PROJECTION</p>	<p>INTERPRET PER ANSI Y14.5-1994</p>	<p>UNLESS SPECIFIED OTHERWISE DIMENSIONS ARE IN MILLIMETERS TOLERANCES: LINEAR ANGLES SURFACE X = ±0.25 X = ±0.5 0.8 [32] .X = ±0.1 .X = ±0.1 .XX = ±0.02</p>	NAME	DATE	<p>Space Sciences Lab UC Berkeley</p>	
			<p>DRAWN KMCKEE</p>	<p>10/21/2003</p>		
<p>PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SPACE SCIENCES LAB, UCB. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SPACE SCIENCES LAB, UCB IS PROHIBITED.</p>	NEXT ASSY	USED ON	CHECKED		<p>STEREO IMPACT BOOM ICD AHEAD STOWED</p>	
			ENG APPR.			
			MFG APPR.			
			CONTRACT			
	APPLICATION	DO NOT SCALE DRAWING	COMMENTS:		<p>SIZE DWG. NO. A IMP-001-1-Boom Assy</p>	
					<p>SCALE:1:1 WEIGHT: SEE SHEET 8 SHEET 1 OF 8</p>	

REV.
G

METRIC [INCH]

SEE SHEET 1 FOR REVISIONS



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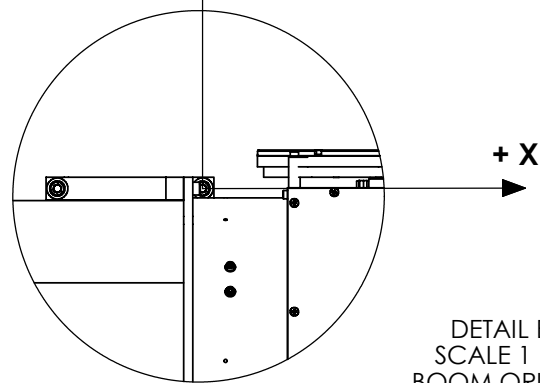
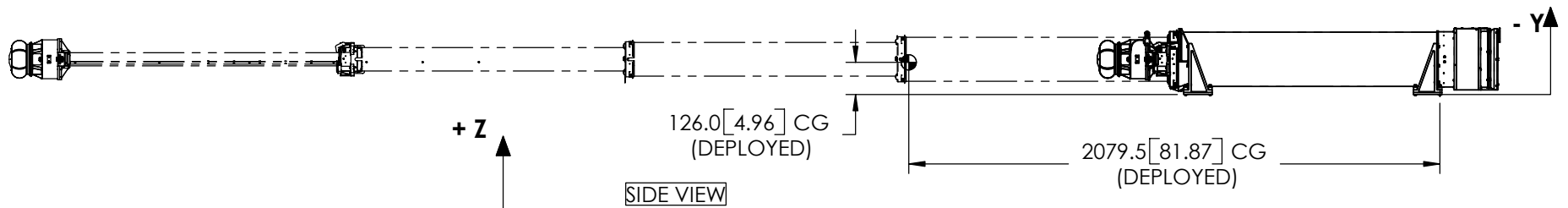
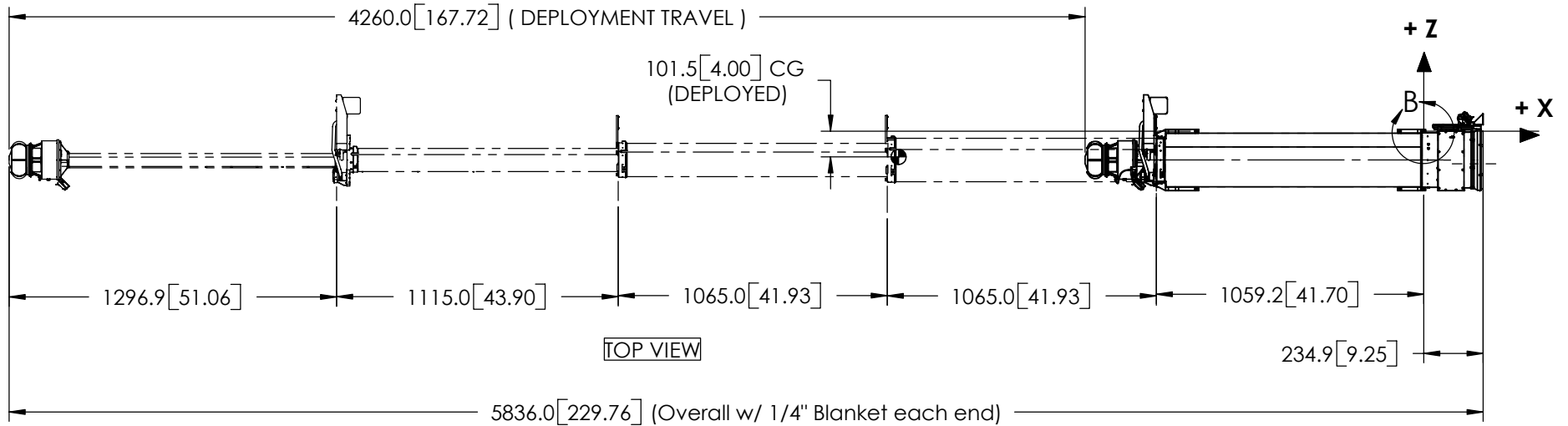
STEREO IMPACT

BOOM ICD AHEAD-STOWED

SIZE A	DWG. NO. IMP-001-1-Boom Assy	REV. G
SCALE: 1:6	WEIGHT: SEE SHEET 8	SHEET 2 OF 8

METRIC [INCH]

SEE SHEET 1 FOR REVISIONS



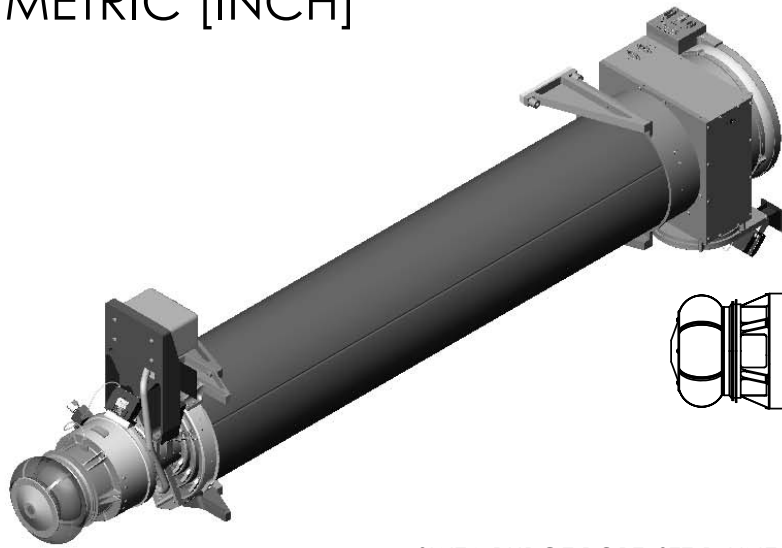
DETAIL B
SCALE 1 : 5
BOOM ORIGIN
(BOTTOM OF INSULATOR PAD)

CG : CENTER OF GRAVITY

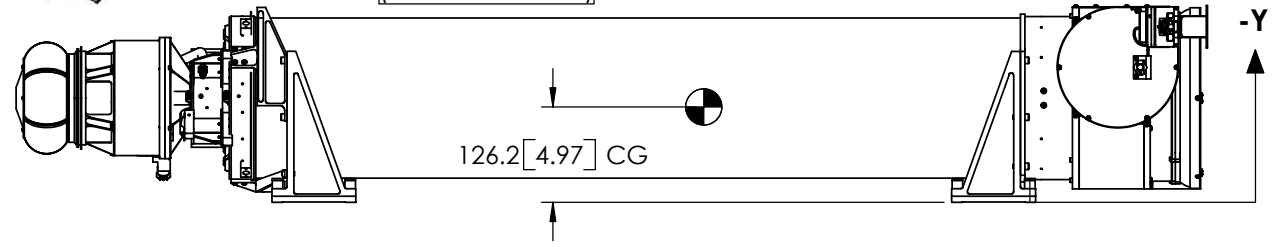
Space Sciences Lab UC Berkeley		
STEREO IMPACT BOOM ICD AHEAD BOOM Stowed & Deployed		
SIZE A	DWG. NO. IMP-001-1-Boom Assy	REV. G
SCALE:1:25	WEIGHT: SEE SHEET 8	SHEET 3 OF 8

METRIC [INCH]

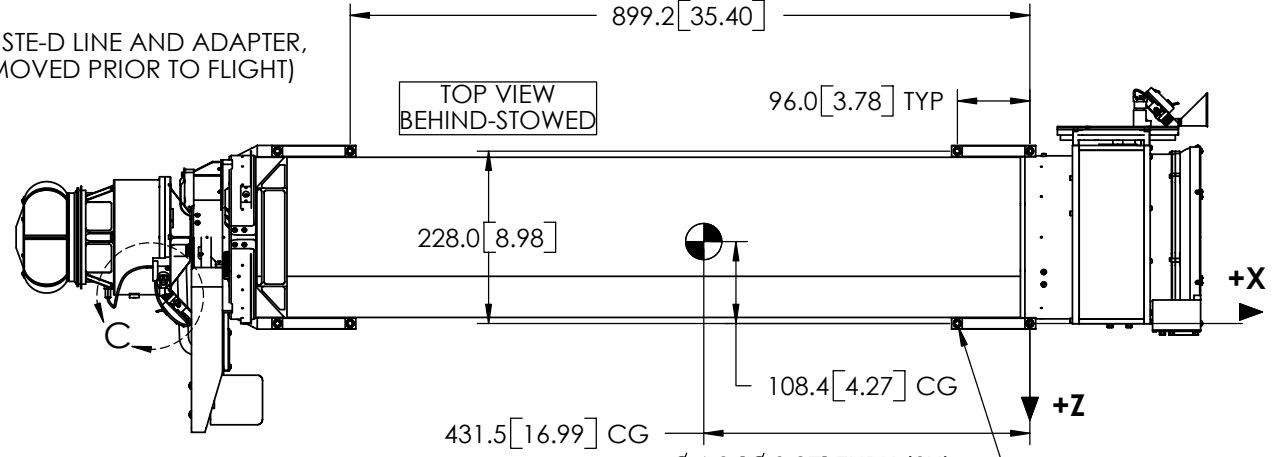
SEE SHEET 1 FOR REVISIONS



SIDE VIEW
(BEHIND-STOWED)

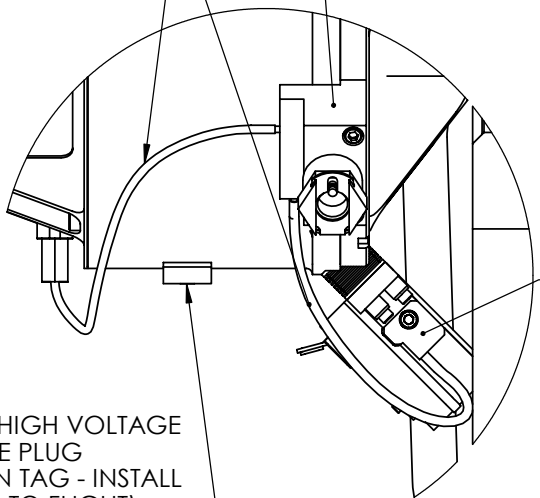


TOP VIEW
(BEHIND-STOWED)



PURGE LINES
(RED TAG-TO
BE REMOVED
PRIOR TO FLIGHT)

SWEA PURGE PORT, STE-D LINE AND ADAPTER,
(RED TAG-TO BE REMOVED PRIOR TO FLIGHT)



STE-D PURGE ADAPTER
(RED TAG-TO BE REMOVED PRIOR TO FLIGHT)

SWEA HIGH VOLTAGE
ENABLE PLUG
(GREEN TAG - INSTALL
PRIOR TO FLIGHT)

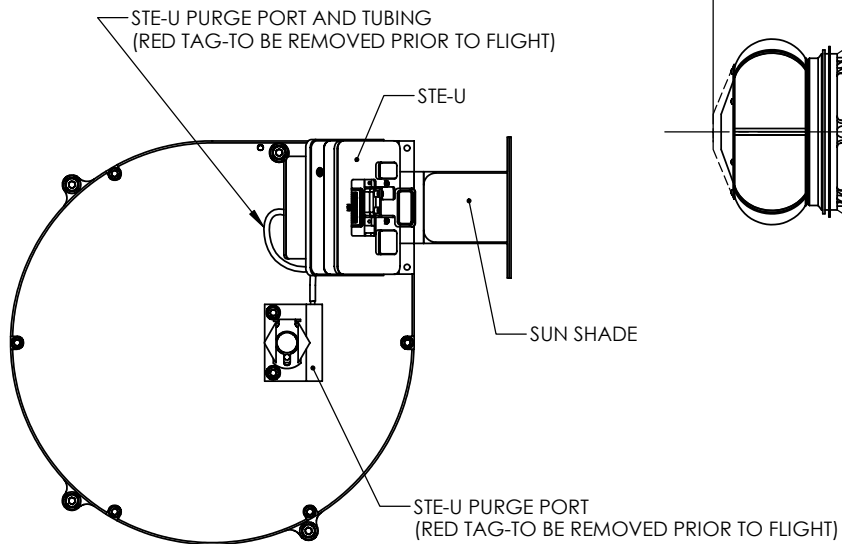
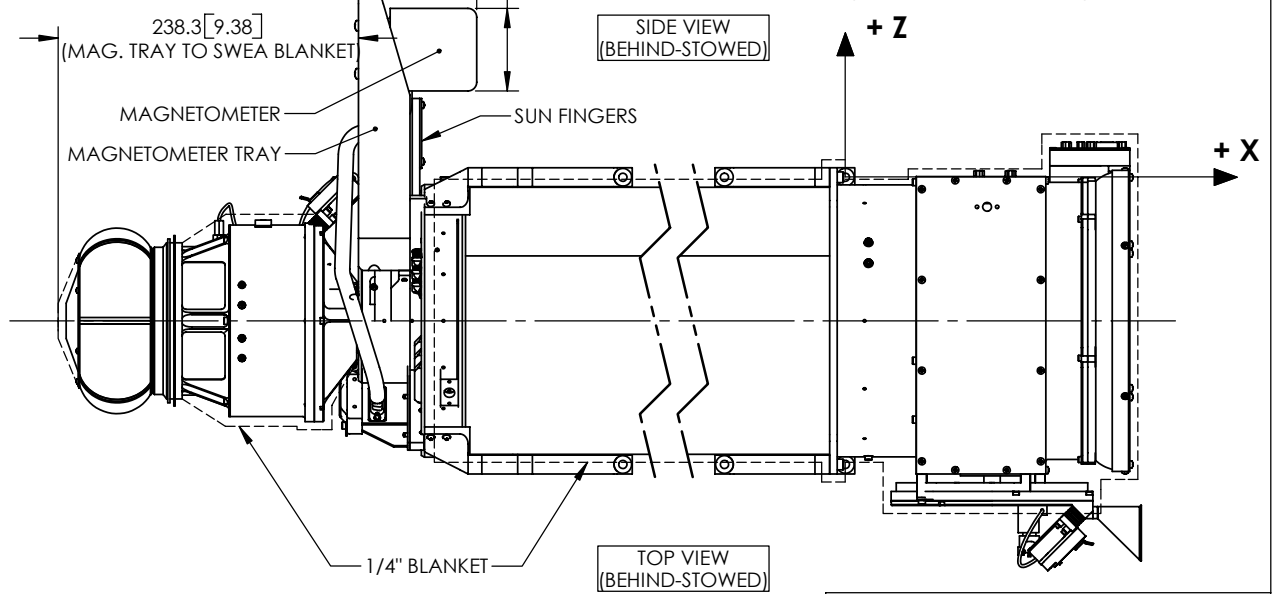
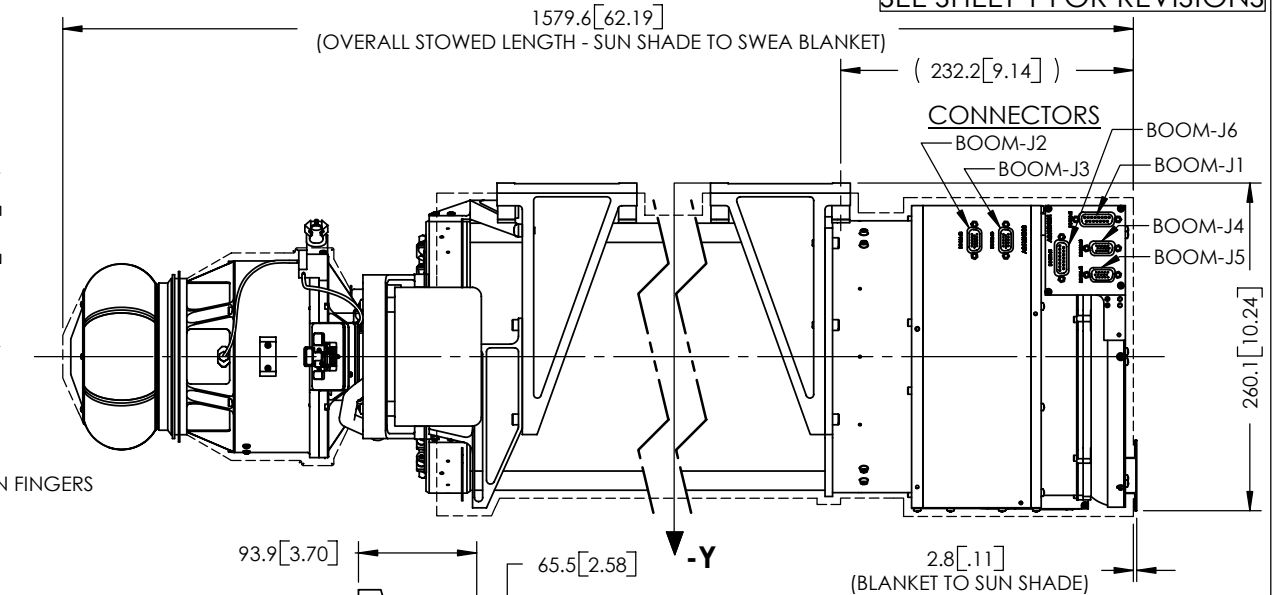
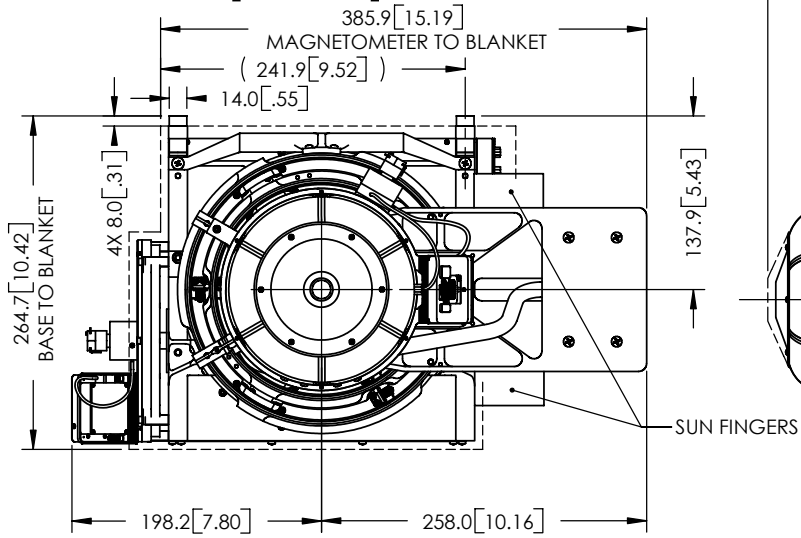
$\phi 6.8$ [$\phi 0.27$] THRU (8X)
USE 1/4-28UNF HARDWARE
TORQUE TO 58IN-LBS (+2/-0)
(SUPPLIED BY APL)

CG : CENTER OF GRAVITY

DETAIL C
SCALE 1 : 2

Space Sciences Lab UC Berkeley		
STEREO IMPACT BOOM ICD BEHIND STOWED		
SIZE A	DWG. NO. IMP-001-1-Boom Assy	REV. G
SCALE:1:12	WEIGHT: SEE SHEET 8	SHEET 4 OF 8

METRIC [INCH]



STE-U DETAIL
SCALE: 1:4

SEE SHEET 1 FOR REVISIONS

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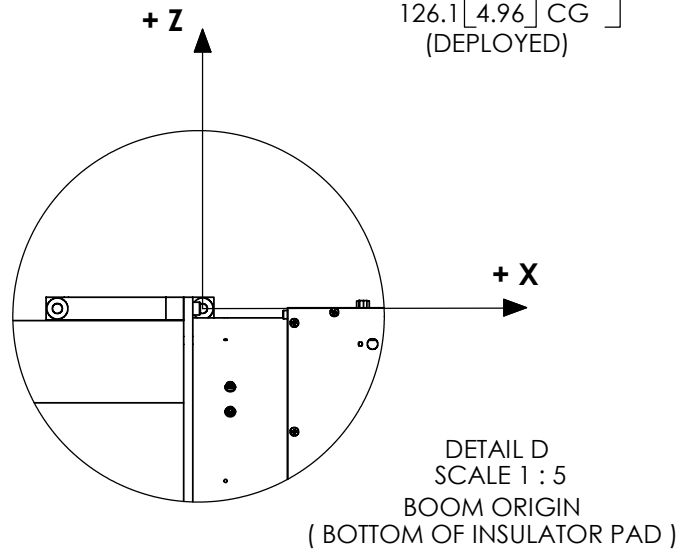
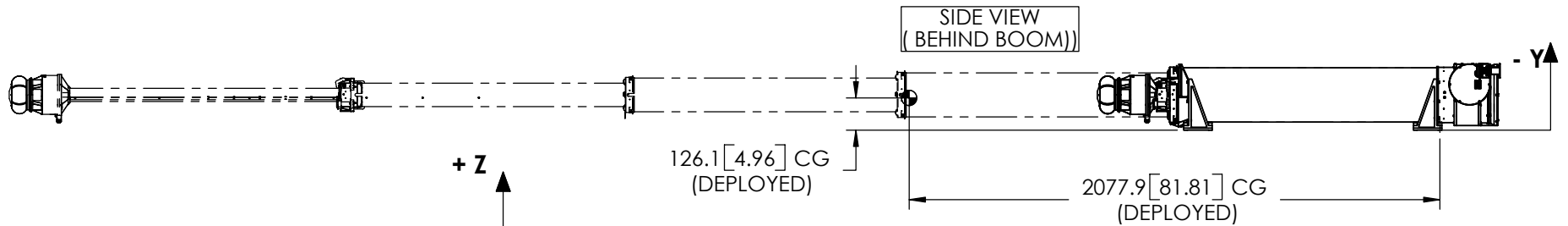
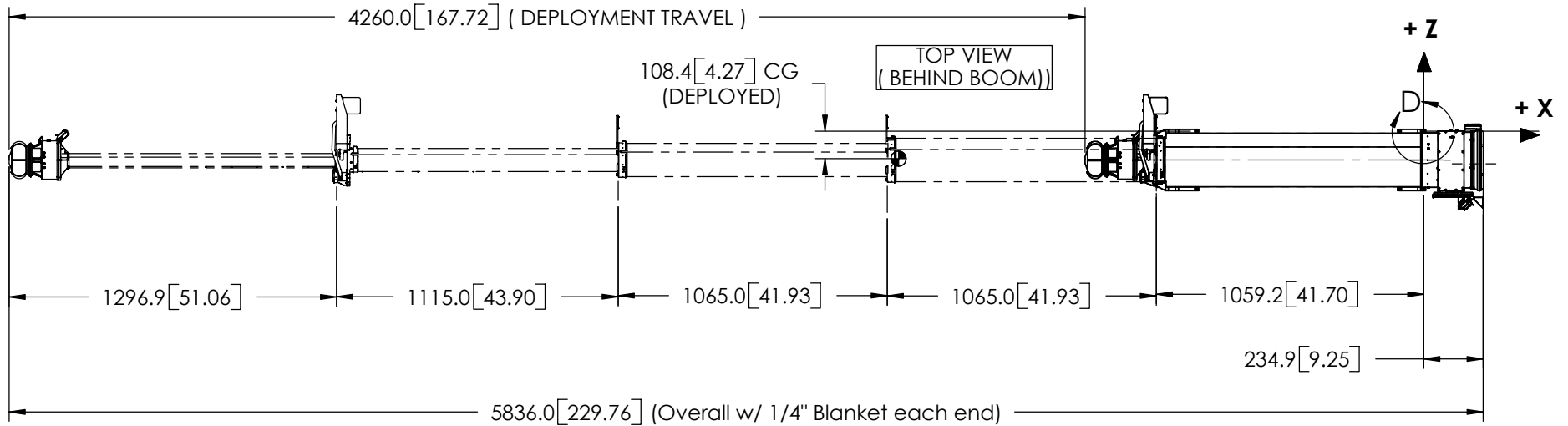
STEREO IMPACT

BOOM ICD BEHIND-STOWED

SIZE A	DWG. NO. IMP-001-1-Boom Assy	REV. G
SCALE: 1:6	WEIGHT: SEE SHEET 8	SHEET 5 OF 8

METRIC [INCH]

SEE SHEET 1 FOR REVISIONS

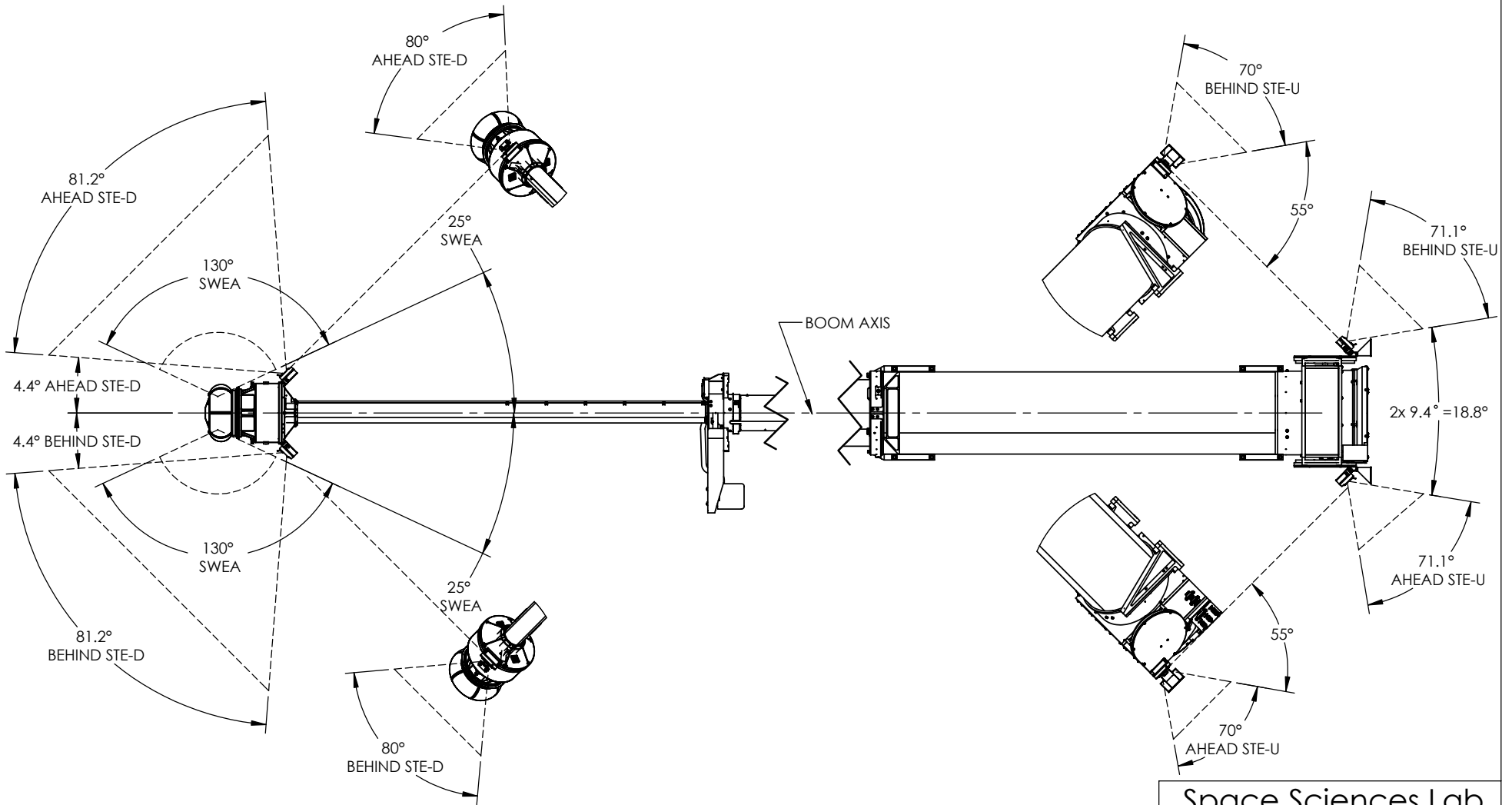


CG : CENTER OF GRAVITY

Space Sciences Lab UC Berkeley		
STEREO IMPACT BOOM ICD BEHIND BOOM Stowed & Deployed		
SIZE A	DWG. NO. IMP-001-1-Boom Assy	REV. G
SCALE:1:25	WEIGHT: SEE SHEET 8	SHEET 6 OF 8

METRIC [INCH]

SEE SHEET 1 FOR REVISIONS



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UC Berkeley

STEREO IMPACT
Fields of View
Ahead & Behind Booms

SIZE	DWG. NO.	REV.
A	IMP-001-1-Boom Assy	G
SCALE:1:15	WEIGHT: SEE SHEET 8	SHEET 7 OF 8

METRIC [INCH]

SEE SHEET 1 FOR REVISION

BOOM AND CONFIGURATION: AHEAD-Stowed

Output coordinate System: AS SHOWN

Mass = 12695.5 grams

Center of mass: (millimeters)
 X = -432.0
 Y = -126.1
 Z = -101.5

Principal axes of inertia and principal moments of inertia:
 (grams * square millimeters)
 Taken at the center of mass.
 Ix = (-1.0, 0.0, 0.0) Px = 109346181.6
 Iy = (-0.0, 0.1, -1.0) Py = 3962101413.8
 Iz = (-0.0, -1.0, -0.1) Pz = 3989606165.6

Moments of inertia:
 (grams * square millimeters)
 Taken at the center of mass and aligned with the output coordinate system.
 Lxx = 109492323.5 Lxy = -14783882.4 Lxz = -18606778.0
 Lyx = -14783882.4 Lyy = 3989480150.1 Lyz = -1311816.9
 Lzx = -18606778.0 Lzy = -1311816.9 Lzz = 3962081287.4

Moments of inertia:
 (grams * square millimeters)
 Taken at the output coordinate system.
 Ixx = 442255268.2 Ixy = 676900143.4 Ixz = 538032996.3
 Iyx = 676900143.4 Iyy = 6489157020.0 Iyz = 161220374.4
 Izx = 538032996.3 Izy = 161220374.4 Izz = 6532922224.7

BOOM AND CONFIGURATION: BEHIND-Stowed

Output coordinate System: AS SHOWN

Mass = 12707.7 grams

Center of mass: (millimeters)
 X = -431.5
 Y = -126.2
 Z = -108.4

Principal axes of inertia and principal moments of inertia:
 (grams * square millimeters)
 Taken at the center of mass.
 Ix = (-1.0, 0.0, 0.0) Px = 110545874.2
 Iy = (-0.0, -0.1, -1.0) Py = 3967753377.5
 Iz = (-0.0, -1.0, 0.1) Pz = 3997257082.5

Moments of inertia:
 (grams * square millimeters)
 Taken at the center of mass and aligned with the output coordinate system.
 Lxx = 112249631.9 Lxy = -15384206.7 Lxz = -79575749.6
 Lyx = -15384206.7 Lyy = 3996621273.2 Lyz = 4394117.5
 Lzx = -79575749.6 Lzy = 4394117.5 Lzz = 3966685429.0

Moments of inertia:
 (grams * square millimeters)
 Taken at the output coordinate system.
 Ixx = 464003581.4 Ixy = 676797580.4 Ixz = 514767031.0
 Iyx = 676797580.4 Iyy = 6512211730.5 Iyz = 178248434.5
 Izx = 514767031.0 Izy = 178248434.5 Izz = 6535469370.6

BOOM AND CONFIGURATION: AHEAD-Deployed

Output coordinate System: AS SHOWN

Mass = 12695.5 grams

Center of mass: (millimeters)
 X = -2079.5
 Y = -126.0
 Z = -101.5

Principal axes of inertia and principal moments of inertia:
 (grams * square millimeters)
 Taken at the center of mass.
 Ix = (-1.0, -0.0, 0.0) Px = 107092356.8
 Iy = (-0.0, 0.0, -1.0) Py = 54795759390.3
 Iz = (0.0, -1.0, -0.0) Pz = 54823344504.9

Moments of inertia:
 (grams * square millimeters)
 Taken at the center of mass and aligned with the output coordinate system.
 Lxx = 107153670.1 Lxy = 53242158.1 Lxz = -22798748.6
 Lyx = 53242158.1 Lyy = 54823232369.1 Lyz = -1310794.2
 Lzx = -22798748.6 Lzy = -1310794.2 Lzz = 54795810212.7

Moments of inertia:
 (grams * square millimeters)
 Taken at the output coordinate system.
 Ixx = 439663540.3 Ixy = 3380973446.7 Ixz = 2656911257.6
 Iyx = 3380973446.7 Iyy = 109853579092.5 Iyz = 161119595.9
 Izx = 2656911257.6 Izy = 161119595.9 Izz = 109897067353.9

BOOM AND CONFIGURATION: BEHIND-Deployed

Output coordinate System: AS SHOWN

Mass = 12707.7 grams

Center of mass: (millimeters)
 X = -2077.9
 Y = -126.1
 Z = -108.4

Principal axes of inertia and principal moments of inertia:
 (grams * square millimeters)
 Taken at the center of mass.
 Ix = (-1.0, -0.0, 0.0) Px = 108562774.2
 Iy = (-0.0, -0.2, -1.0) Py = 54865063582.2
 Iz = (0.0, -1.0, 0.2) Pz = 54895238584.0

Moments of inertia:
 (grams * square millimeters)
 Taken at the center of mass and aligned with the output coordinate system.
 Lxx = 109911579.8 Lxy = 51054175.9 Lxz = -266931075.9
 Lyx = 51054175.9 Lyy = 54894456260.8 Lyz = 4402225.9
 Lzx = -266931075.9 Lzy = 4402225.9 Lzz = 54864497099.7

Moments of inertia:
 (grams * square millimeters)
 Taken at the output coordinate system.
 Ixx = 461413983.4 Ixy = 3382032133.8 Ixz = 2595016376.3
 Iyx = 3382032133.8 Iyy = 109911520078.8 Iyz = 178148702.8
 Izx = 2595016376.3 Izy = 178148702.8 Izz = 109934500380.8

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STEREO IMPACT
BOOM ICD
Mass Properties

SIZE A	DWG. NO. IMP-001-1-Boom Assy	REV. G
SCALE: n/a	SHEET 8 OF 8	