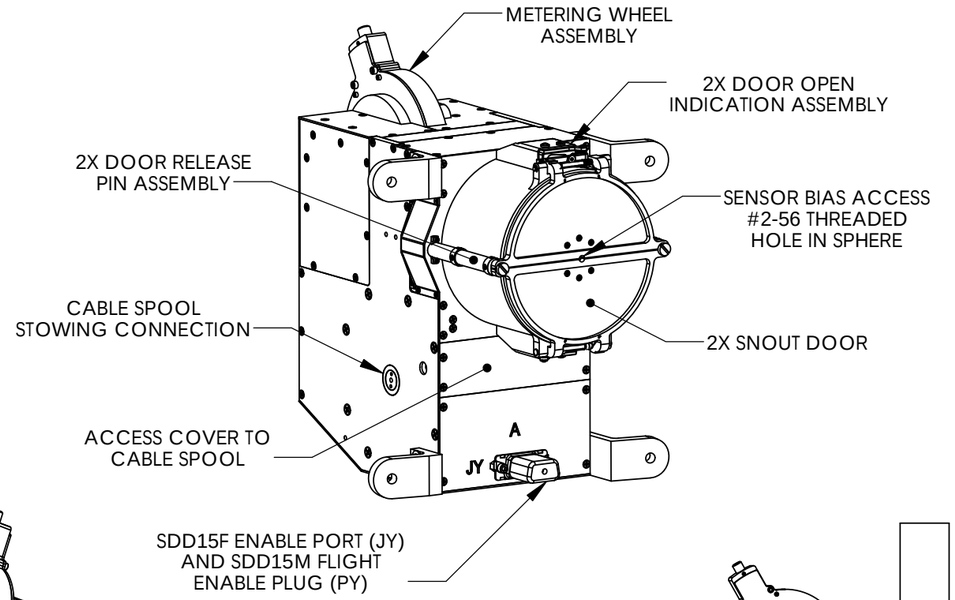
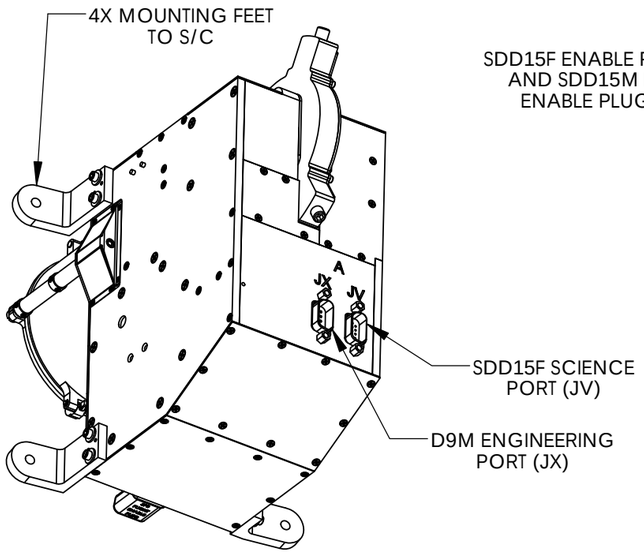
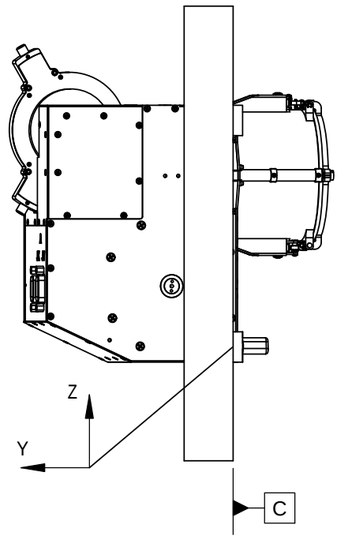
THIRD ANGLE PROJECTION

DIMS: INCHES [mm]
GEOMETRIC TOL: INCHES

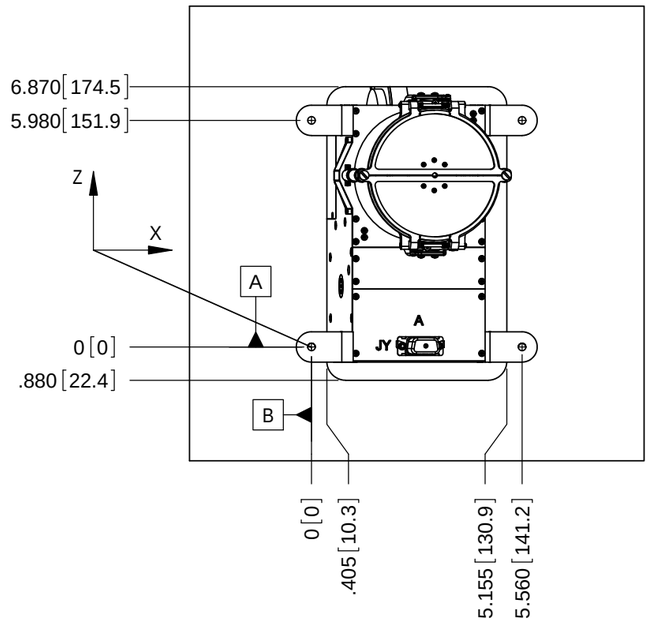
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	DRAFT	9/2/2008	GD
	A	BASELINE RELEASE	3/26/2009	GD
5B SHT 2	B	MOUNTING HOLE TOLS	4/10/2009	GD
A7 SHT1	C	ADD RBSP S/C MODEL DIMS	6/1/2009	GD
	D	MOUNTING TABLE, S/C DIMS	9/1/2009	GD
	E	MISSING DIMS, CABLE LENGTH, HARNESS AND PROTECTIVE COVER SHEET	9/24/2009	GD
	F	REORIENT SPB REAR CONNECTORS	11/10/2009	GD
B7 SHT1	G	REM OVE TIEDOWNS, S/C POSITION, MASS	6/30/2011	GD







SPB MOUNTED ON S/C PANEL VIEW INDICATING SPB COORDINATE SYSTEM, CUTOUT, AND MOUNTING INSERT LOCATIONS



GENERAL NOTES, UNLESS OTHERWISE SPECIFIED:

1. MOUNTING HARDWARE SUPPLIED BY APL: 4x #10-32 x 0.750 A286 SHCS
2. MOUNTING FEET WASHERS SUPPLIED BY SSL
3. THERMAL BLANKETING AND EXTERNAL COATINGS PER SHEET 4
4. EFW SPB ASSY DESIGNATED UCB P/N RBSP-SPB-001-XXX
5. RED/GREEN TAG ITEMS (ENABLE PLUGS AND RELEASE DOOR PROTECTIVE COVER) PER UCB REQUIREMENTS AS DEFINED IN DOCUMENT RBSP-EFW-SYS-042
6. S/C PANEL MOUNTING INTERFACE REQUIREMENT: FLATNESS 0.005"
7. CONNECTOR PINOUTS PER RBSP-EFW-SPB-002 WIRING SCHEMATIC
8. 0.25" STATIC CLEARANCE MAINTAINED BETWEEN SPB AND S/C
9. NO GROUNDING STRAPS: SPB MOUNTING FEET CONDUCTIVE TO S/C PANEL

SPACE SCIENCES LABORATORY
UNIVERSITY OF CALIFORNIA
7 GAUSS WAY
BERKELEY, CA 94720-7450
PHONE: 510.643.9240
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DIMENSIONS ARE IN INCHES

TOLERANCES (UNLESS NOTED):

FRACTIONAL ±.062
ANGULAR: X.X±.1° X ±1°
X. ±0.3
X.X ±0.1
X.XX ±0.030
X.XXX ±0.010
SURFACE 32

INTERPRET GEOMETRIC TOLERANCING PER: ANSI Y14.5M-1994

MATERIAL

FINISH

DO NOT SCALE DRAWING

	NAME	DATE
MODELED	DALTON	3/11/09
DRAWING	DALTON	3/11/09
CHECKED	DALTON	3/11/09

CHARGE NO.

COMMENTS:

SPACE SCIENCES LABORATORY

TITLE:

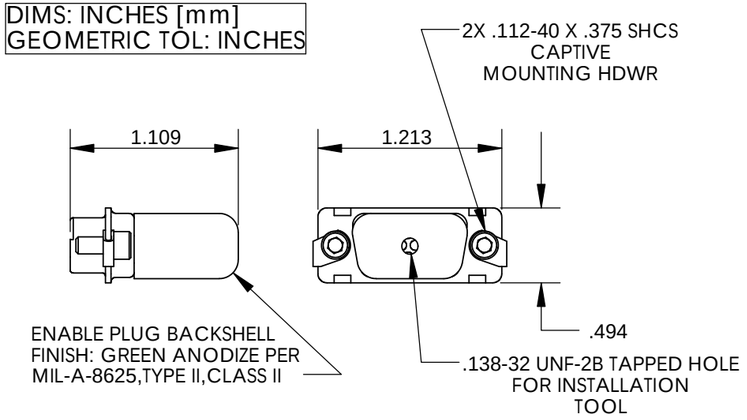
INTERFACE CONTROL DRAWING

SIZE	DWG. NO.	REV
B	RBSP-SPB-ICD-001	G

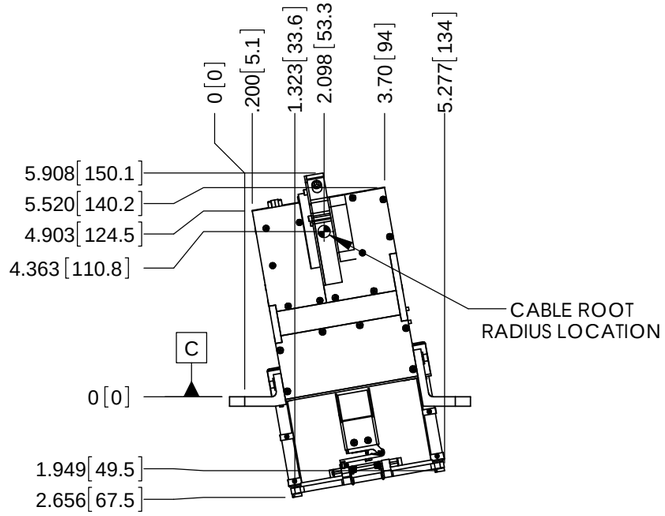
SCALE: 1:4 | WEIGHT: 4.361 G | SHEET 1 OF 5

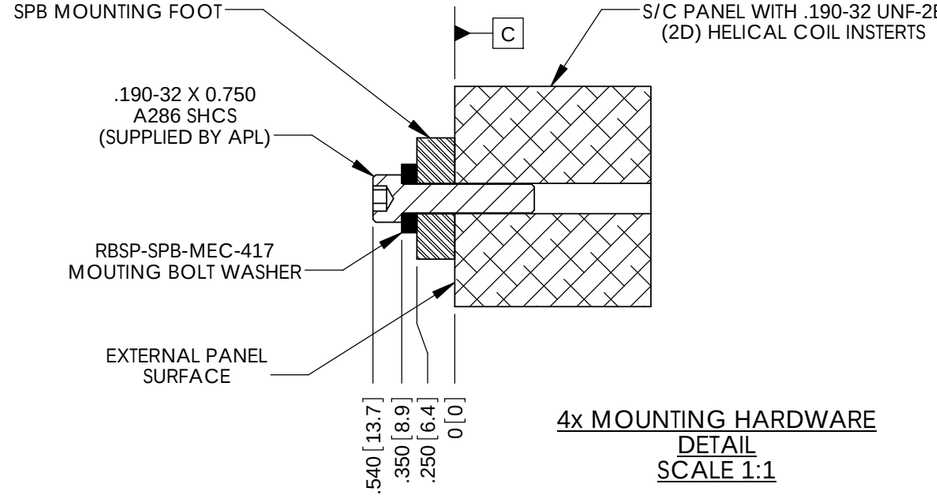
THIRD ANGLE PROJECTION

DIMS: INCHES [mm]
GEOMETRIC TOL: INCHES

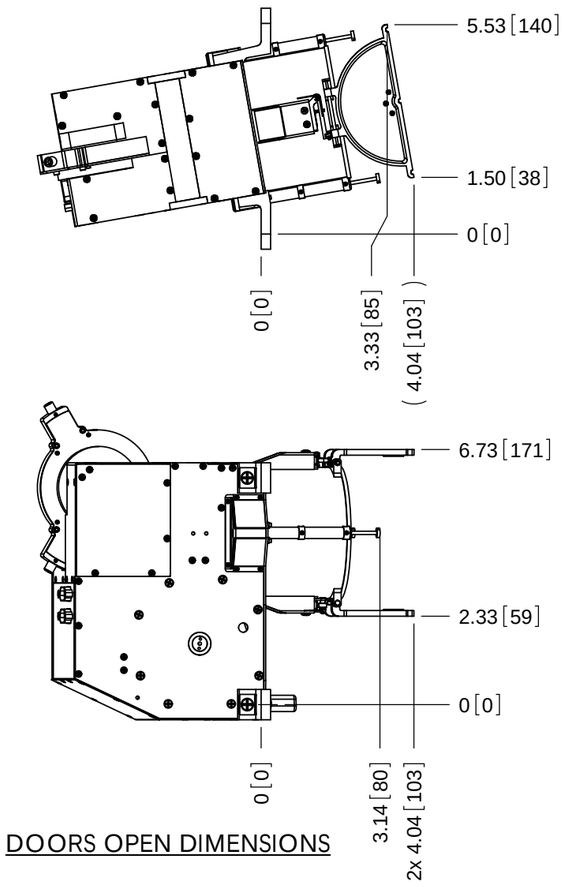


FLIGHT ENABLE PLUG DIMENSIONS
SCALE 1:1

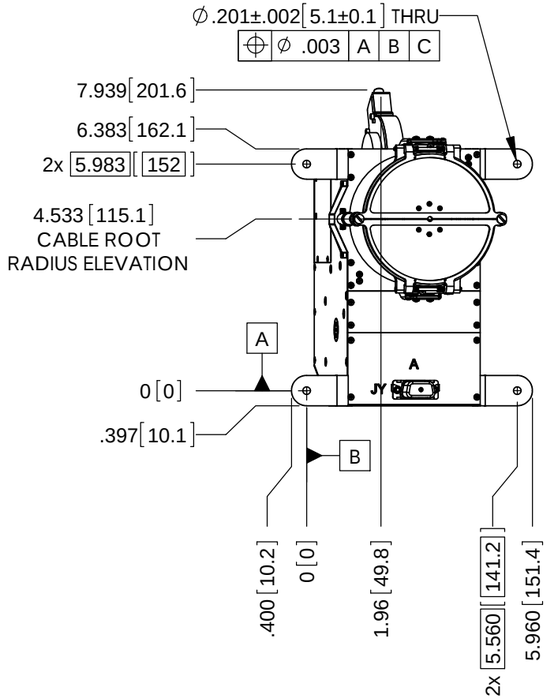


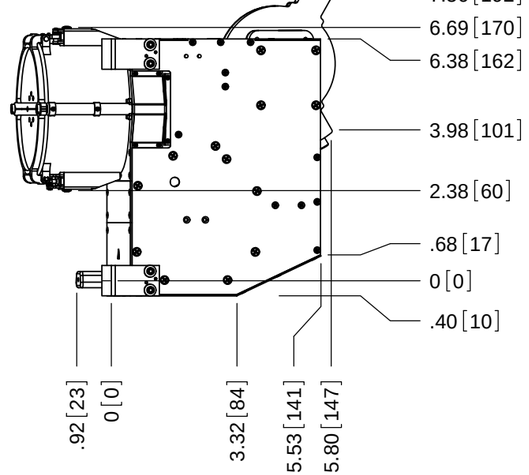


4x MOUNTING HARDWARE
DETAIL
SCALE 1:1

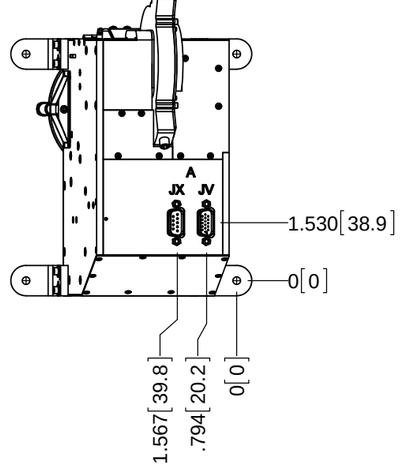


DOORS OPEN DIMENSIONS





GENERAL STOWED DIMENSIONS



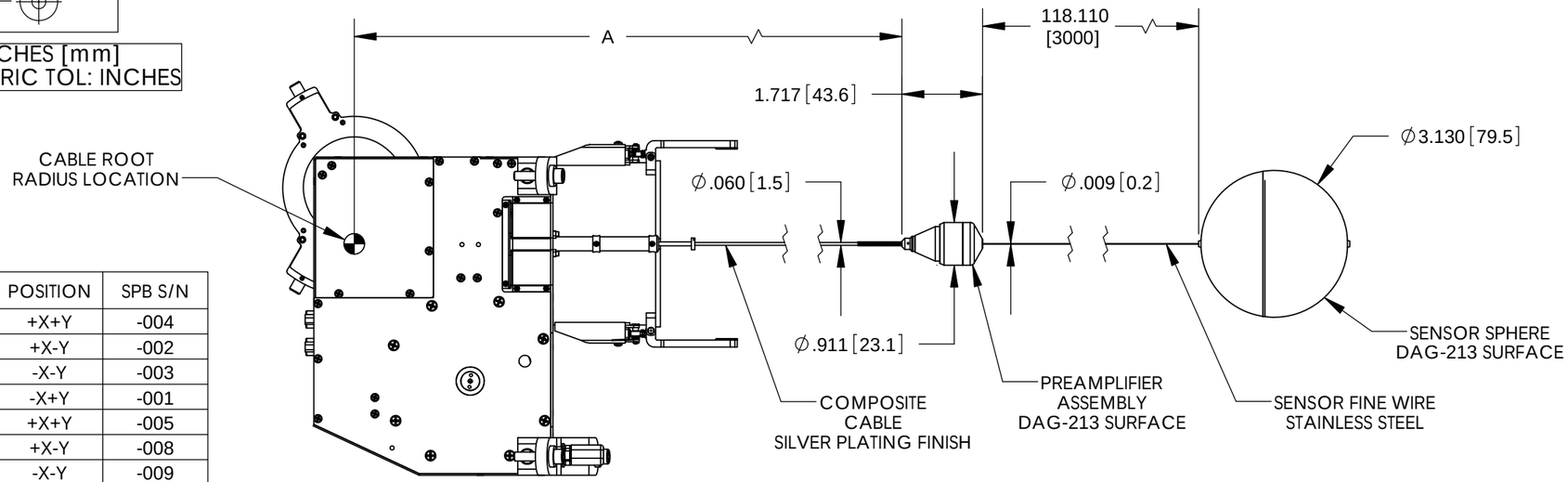
SPACE SCIENCES LABORATORY		
TITLE: INTERFACE CONTROL DRAWING		
SIZE **B**	DWG. NO. RBSP-SPB-ICD-001	REV **G**
SCALE: 1:4		SHEET 2 OF 5

THIRD ANGLE PROJECTION

DIMS: INCHES [mm]
GEOMETRIC TOL: INCHES

S/C	POSITION	SPB S/N
A	+X+Y	-004
	+X-Y	-002
	-X-Y	-003
	-X+Y	-001
B	+X+Y	-005
	+X-Y	-008
	-X-Y	-009
	-X+Y	-007

MOUNTING POSITION TABLE

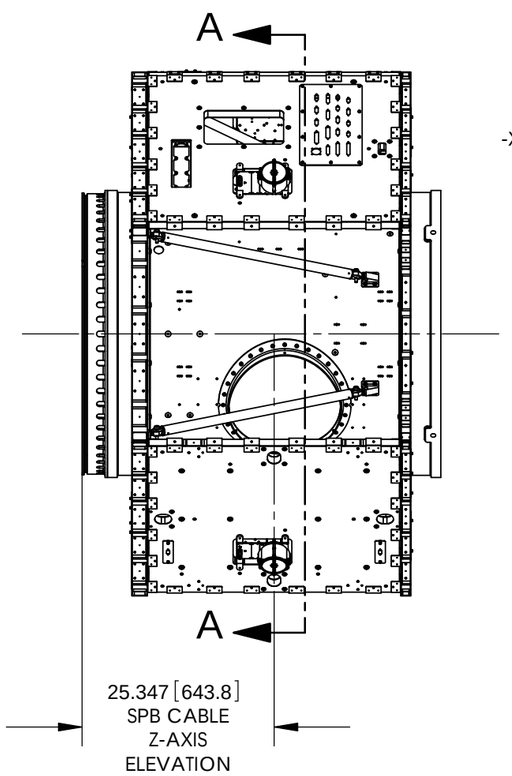


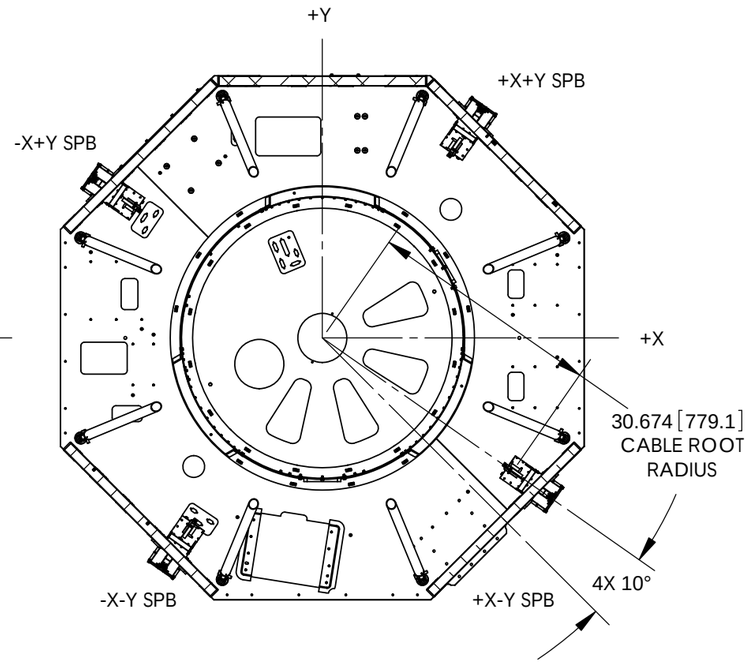
DEPLOYED DIMENSIONS DETAIL

COMPONENT	MASS(g)
SENSOR SPHERE	85
SENSOR FINE WIRE	0.6 (0.2 g/m)
PREAMP ASSY	50
COMPOSITE CABLE	173 (3.4 g/m)
ENABLE PLUG	8
SPB CHASSIS	1715
MOUNTING WASHERS	6
THERMAL CLOSEOUTS	TBD (APL)
TOTAL:	2038

SPB MOTOR CHARACTERISTICS		
BUS VOLTAGE	CURRENT	SENSOR DEPLOY RATE (cm/s)
21	90mA	0.40
27	100mA	0.53
33	100mA	0.66

SPB CONFIGURATION (TIP-TO-TIP LENGTH)	"A" DIMENSION in [m]	CENTER OF MASS W.R.T. SPB COORDINATE SYSTEM (m)			PRINCIPAL MOMENTS OF INERTIA @ CENTER OF MASS (kg*m^2)		
		X	Y	Z	X	Y	Z
STOWED	N/A	0.0660	0.0594	0.0865	0.0067	0.0070	0.0103
DOORS OPEN	N/A	0.0661	0.0590	0.0865	0.0068	0.0071	0.0106
80m	1421.65 [36.098]	0.6442	-3.2182	0.0911	0.0065	201.1063	201.1094
100m	1814.86 [46.098]	0.8671	-4.4817	0.0923	0.0064	339.7632	339.7663
110m	2011.73 [51.098]	0.9898	-5.1777	0.0929	0.0064	425.4556	425.4587

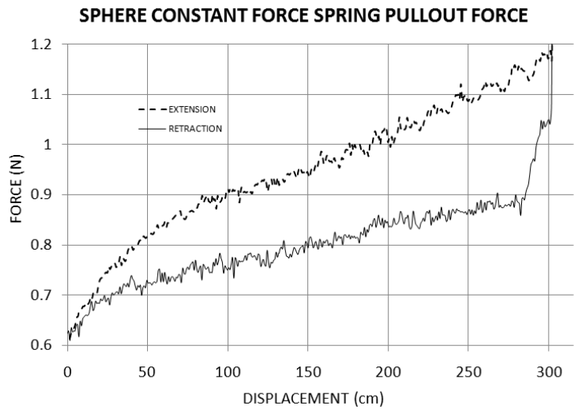




MOUNTING SPB'S IN S/C BUS
COORDINATE SYSTEM
SECTION A-A SCALE 1:20

GENERAL NOTES, UNLESS OTHERWISE SPECIFIED:

1. FINE WIRE DEPLOYS WHEN CENTRIPITAL ACCELERATION CAUSES FORCE ON FINE WIRE TO EXCEED SPRING FORCE - DEPLOY SEQUENCE SUMMARIZED IN DOCUMENT RBSP_EFW_SYS_003_MASS.XLS
2. MASS DOES NOT INCLUDE SHEET 4 THERMAL CLOSEOUTS



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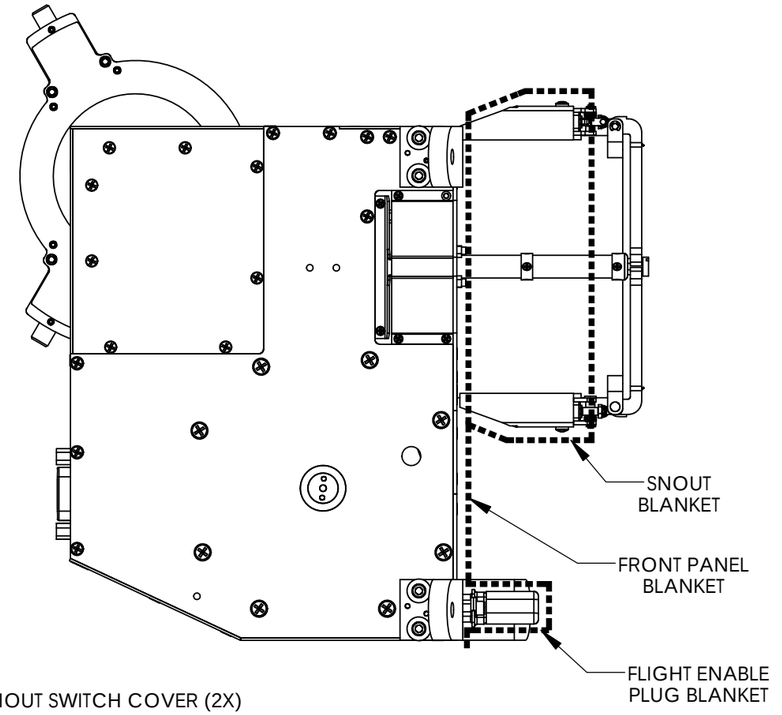
TITLE:

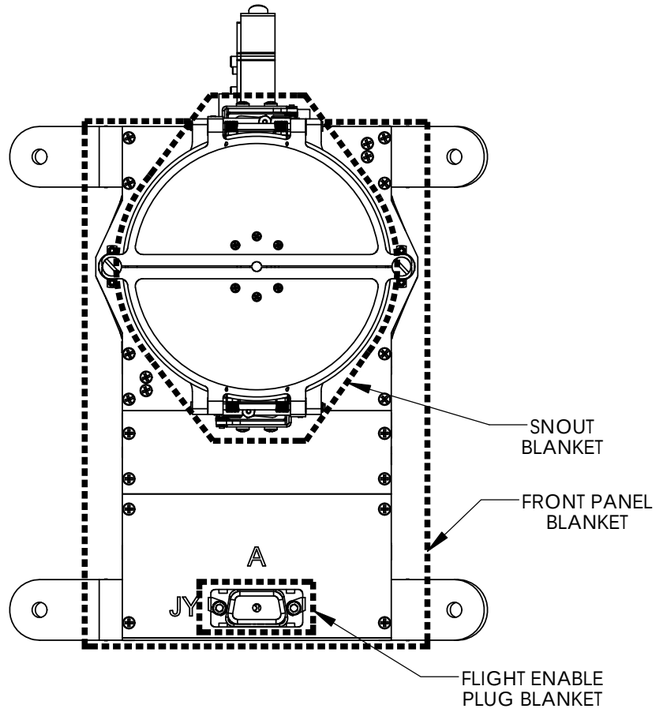
INTERFACE CONTROL DRAWING

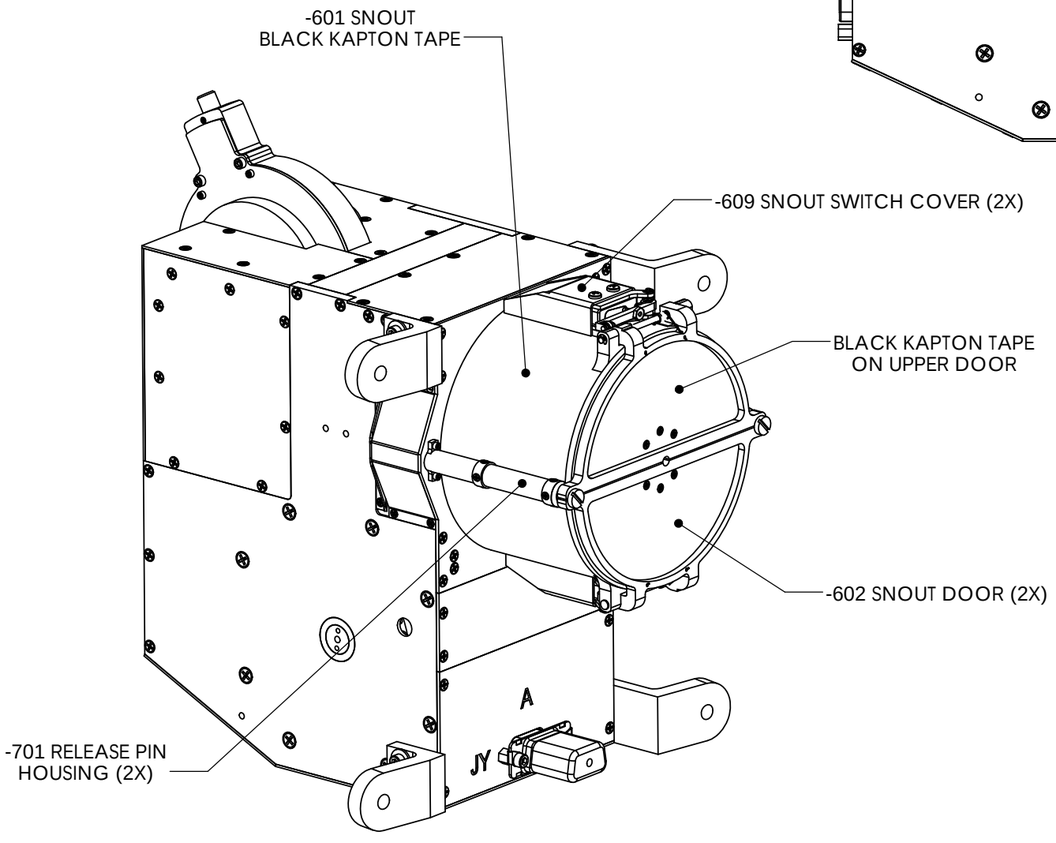
SIZE	DWG. NO.	REV
B	RBSP-SPB-ICD-001	G

SCALE: 1:3 | SHEET 3 OF 5

THERMAL TREATMENTS/CLOSEOUTS







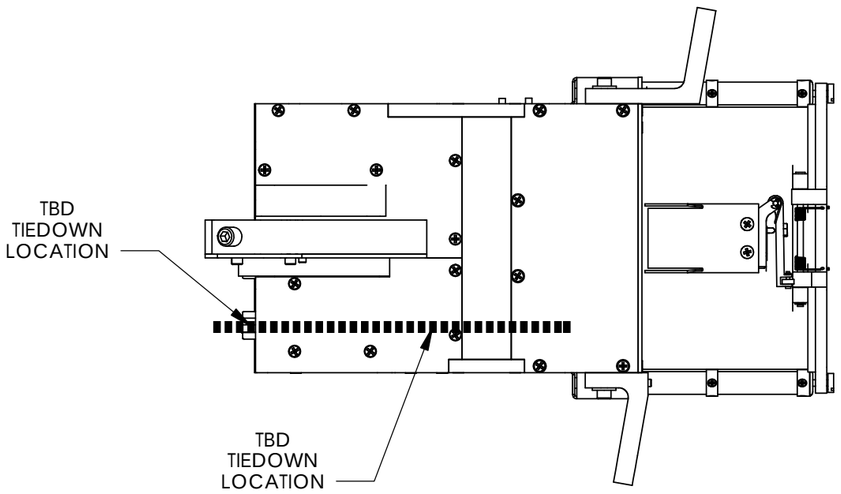
EXTERNALLY EXPOSED ALUMINUM PARTS

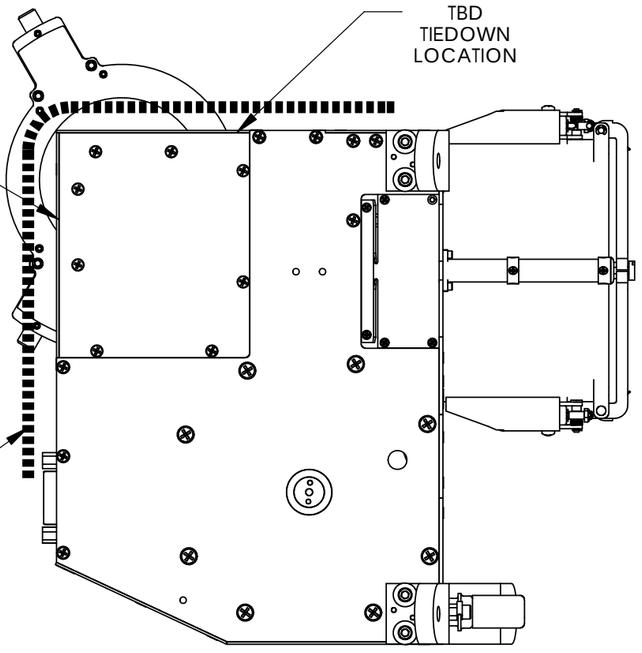
GENERAL NOTES, UNLESS OTHERWISE SPECIFIED:

1. EXTERNALLY EXPOSED ALUMINUM PARTS FINISH: CLEAR ALODINE 1500 PER MIL-C-5541 CL 3; 300 SEC IMMERSION TIME
2. ALL OTHER ALUMINUM FINISH: GOLD ALODINE 600 PER MIL-C-4451 CL 3
3. GERMANIUM BLACK KAPTON TAPE ON SNOUT AND TOP DOOR EXTERNAL SURFACES
4. TBD LAYERS THERMAL BLANKETS ON FRONT PANEL, SNOUT, AND ENABLE PLUG: SUPPLIED BY APL
5. SNOUT BLANKET NOT TO PROTRUDE OUTBOARD OF SNOUT SWITCH COVER TO ENSURE PROPER DOOR OPERATION
6. ENABLE PLUG BLANKET MUST BE ACCESSABLE WHILE INSTALLED ON S/C PRE-LAUNCH

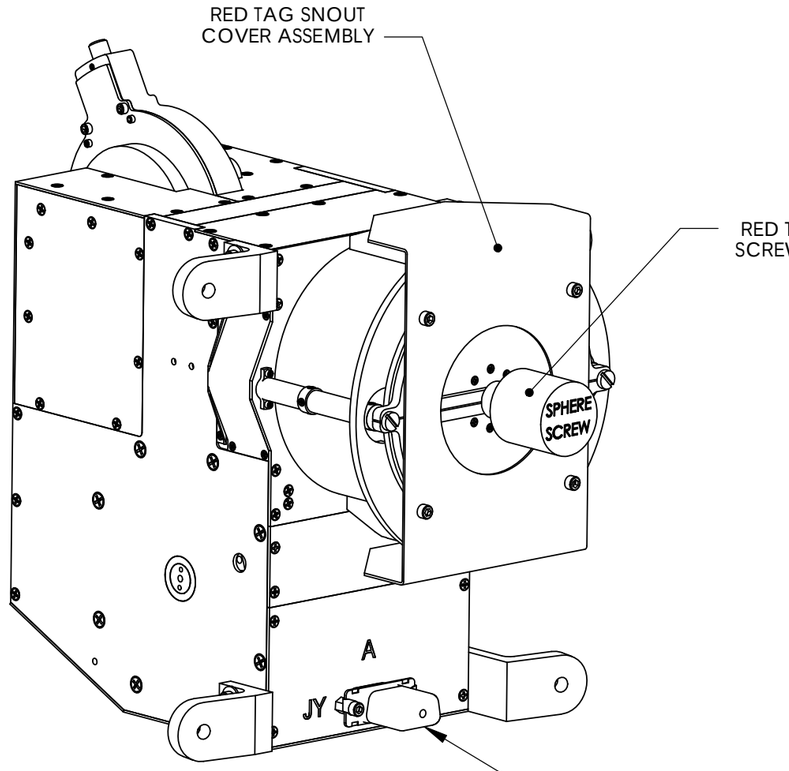
SPACE SCIENCES LABORATORY		
TITLE: INTERFACE CONTROL DRAWING		
SIZE **B**	DWG. NO. RBSP-SPB-ICD-001	REV **G**
SCALE: 1:2		SHEET 4 OF 5

HARNESS ROUTING AND RED TAG ITEMS





APPROXIMATE HARNESS ROUTING LOCATIONS



RED TAG ITEM LOCATIONS

RED TAG ITEMS:

1. SNOUT COVER ASSMEBLY TO BE ATTACHED FINGER TIGHT.
2. SNOUT COVER ASSEMBLY IS REMOVED ONLY FOR DEMPLOYMENTS AND PRIOR TO FLIGHT
3. SPHERE SCREW ASSEMBLY TO THREAD ON UNTIL PEEK COMES INTO CONTACT WITH SPB DOOR. DO NOT TIGHTEN.
4. SPHERE SCREW ASSEMBLY ONLY INSTALLED FOR ELECTRICAL TESTS.
5. SCIENCE ENABLE PLUG IN ONLY FOR ELECTRICAL TESTING.

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TITLE: INTERFACE CONTROL DRAWING		
SIZE **B**	DWG. NO. RBSP-SPB-ICD-001	REV **G**
SCALE: 1:2		SHEET 5 OF 5