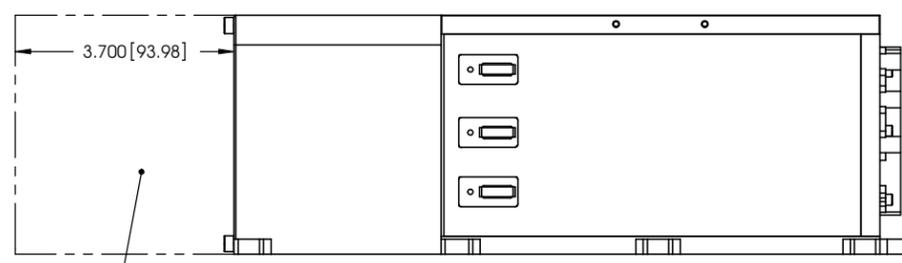
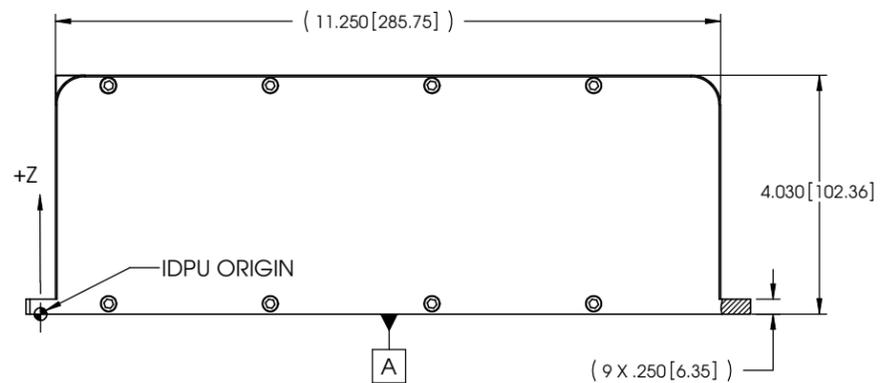
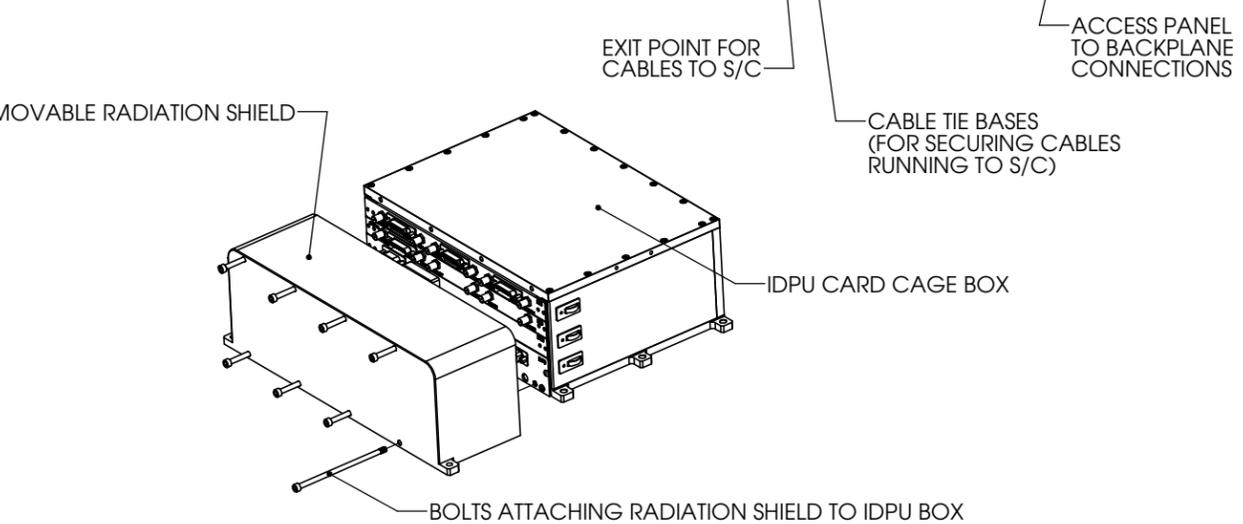
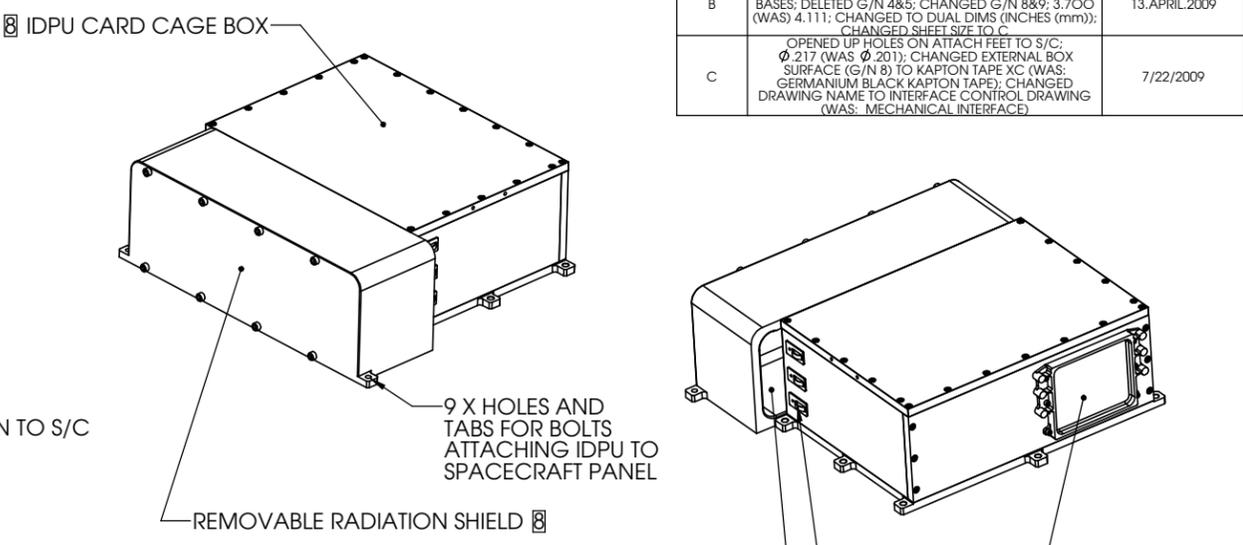
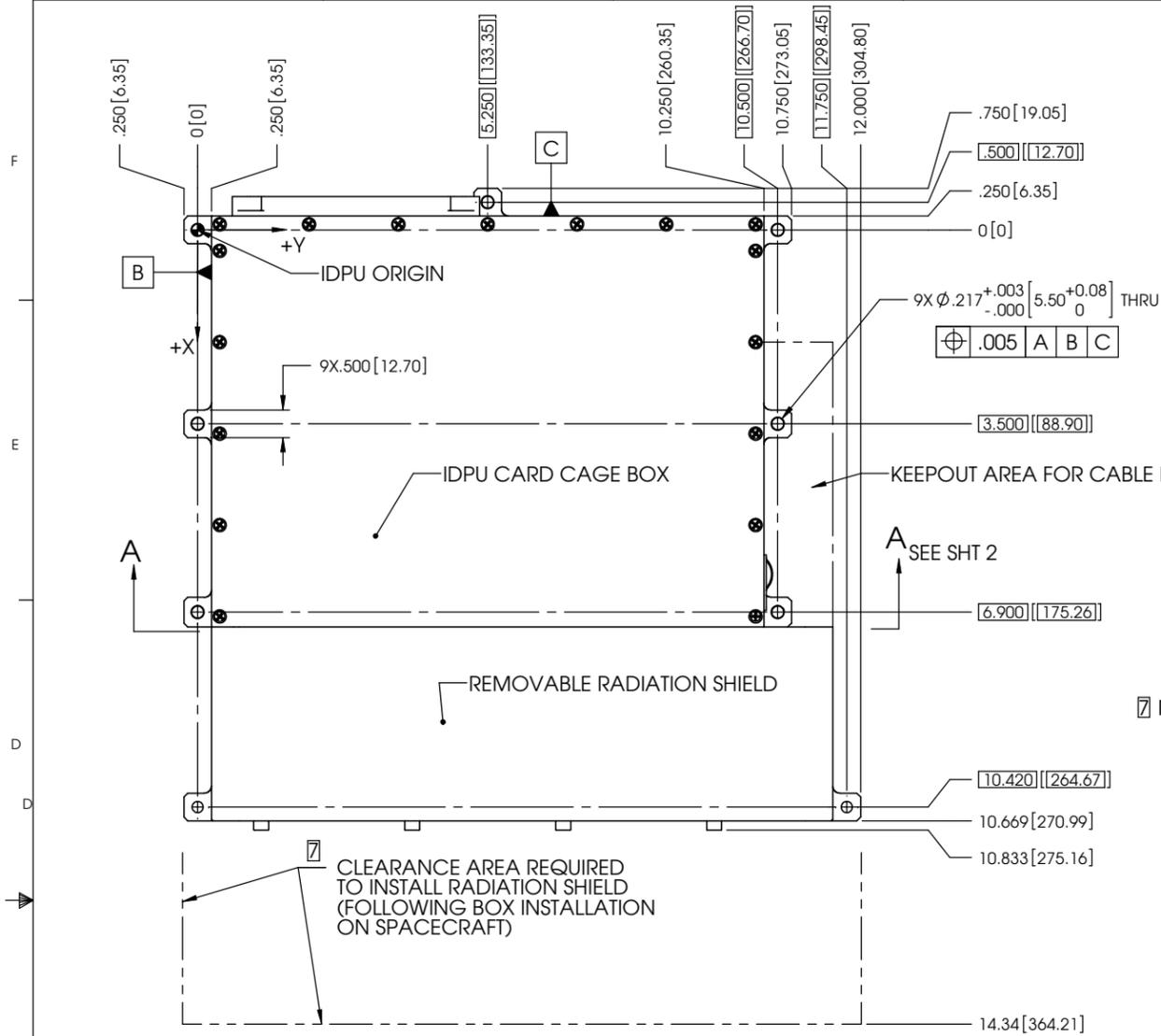


8 7 6 5 4 3 2 1

REVISIONS		
REV.	DESCRIPTION	DATE
A	BASELINE RELEASE	12 AUG 2008
B	REMOVED GAP BELOW RADIATION SHIELD; 9 X ATTACH HOLES (WAS) 7 X ATTACH HOLES; ADDED CABLE TIE BASES; DELETED G/N 4&5; CHANGED G/N 8&9; 3.700 (WAS) 4.111; CHANGED TO DUAL DIMS (INCHES (mm)); CHANGED SHEET SIZE TO C	13.APRIL.2009
C	OPENED UP HOLES ON ATTACH FEET TO S/C; Ø .217 (WAS Ø .201); CHANGED EXTERNAL BOX SURFACE (G/N 8) TO KAPTON TAPE XC (WAS: GERMANIUM BLACK KAPTON TAPE); CHANGED DRAWING NAME TO INTERFACE CONTROL DRAWING (WAS: MECHANICAL INTERFACE)	7/22/2009



GENERAL NOTES: UNLESS OTHERWISE SPECIFIED

- THIS ICD CONTROLS THE MECHANICAL INTERFACE BETWEEN THE RBSP IDPU BOX AND THE RBSP SPACECRAFT.
- UNITS: INCHES (mm)
- SEE DWG RBSP_EFW_SYS_008 FOR CABLE HARNESSING INFORMATION.
- (DELETED)
- (DELETED)
- GENERAL SPACECRAFT BUS REQUIREMENTS: S/C FLATNESS WITHIN .005"
- BOX INSTALLATION SEQUENCE AS FOLLOWS (SEE UCB PROCEDURE RBSP-IDPU-PROC-501 FOR INSTL DETAILS):
 - CHO-SEAL GASKET INSTALLED ON S/C AT IDPU BOX LOCATION
 - IDPU BOX (W/O RADIATION SHIELD) IS POSITIONED ON S/C
 - BOX IS BOLTED TO S/C AND BOLTS ARE INSTALLED, HAND TIGHT ONLY
 - ALL CABLES FROM S/C TO IDPU BOX INSTALLED AND SECURED TO CABLE BASES
 - REMOVABLE RADIATION SHIELD IS INSTALLED ONTO IDPU BOX AND BOLTED TO BOX.
 - ALL BOLTS HOLDING BOX TO S/C ARE TORQUED TO FULL VALUE.
- ALL EXTERNAL BOX SURFACES TO BE TAPED WITH BLACK KAPTON XC TAPE EXCEPT FOR SURFACE 'A'. SURFACE 'A' TO BE GOLD ALODINED.
- BOX GROUNDING SCHEME: ONE GROUNDING STRAP TO CONNECT IDPU BOX (UNDER MOUNTING BOLT HEAD) TO S/C GROUND (IF NECESSARY, GROUNDING STRAP AT DISCRETION OF APL.)

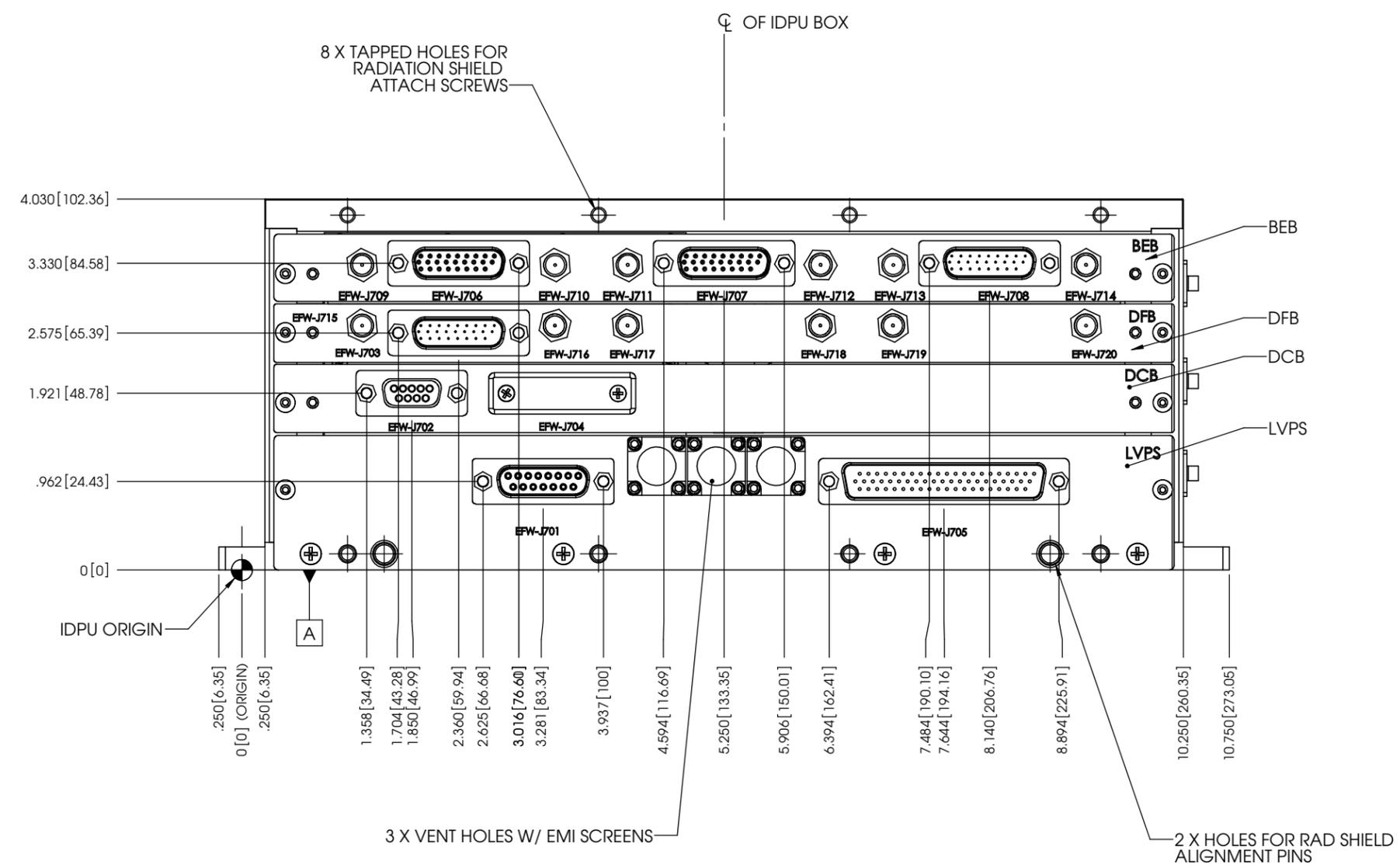
CLEARANCE AREA NEEDED TO INSTALL RADIATION SHIELD ON SPACECRAFT (SEE G/N 7)

INTERFACE CONTROL DRAWING

UNLESS OTHERWISE SPECIFIED:		NAME		TITLE: RBSP IDPU BOX INTERFACE CONTROL DRAWING
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±.010 ANGULAR MACH ±.5 BEND ±1 TWO PLACE DECIMAL ±.030 THREE PLACE DECIMAL ±.005		DRAWN	DONAKOWSKI	
INTERPRET GEOMETRIC TOLERANCING PER:		DATE	12.AUG.2008	REV C
MATERIAL N/A		COMMENTS:		
FINISH		DO NOT SCALE DRAWING		SCALE: 1:4 WEIGHT: SHEET 1 OF 4

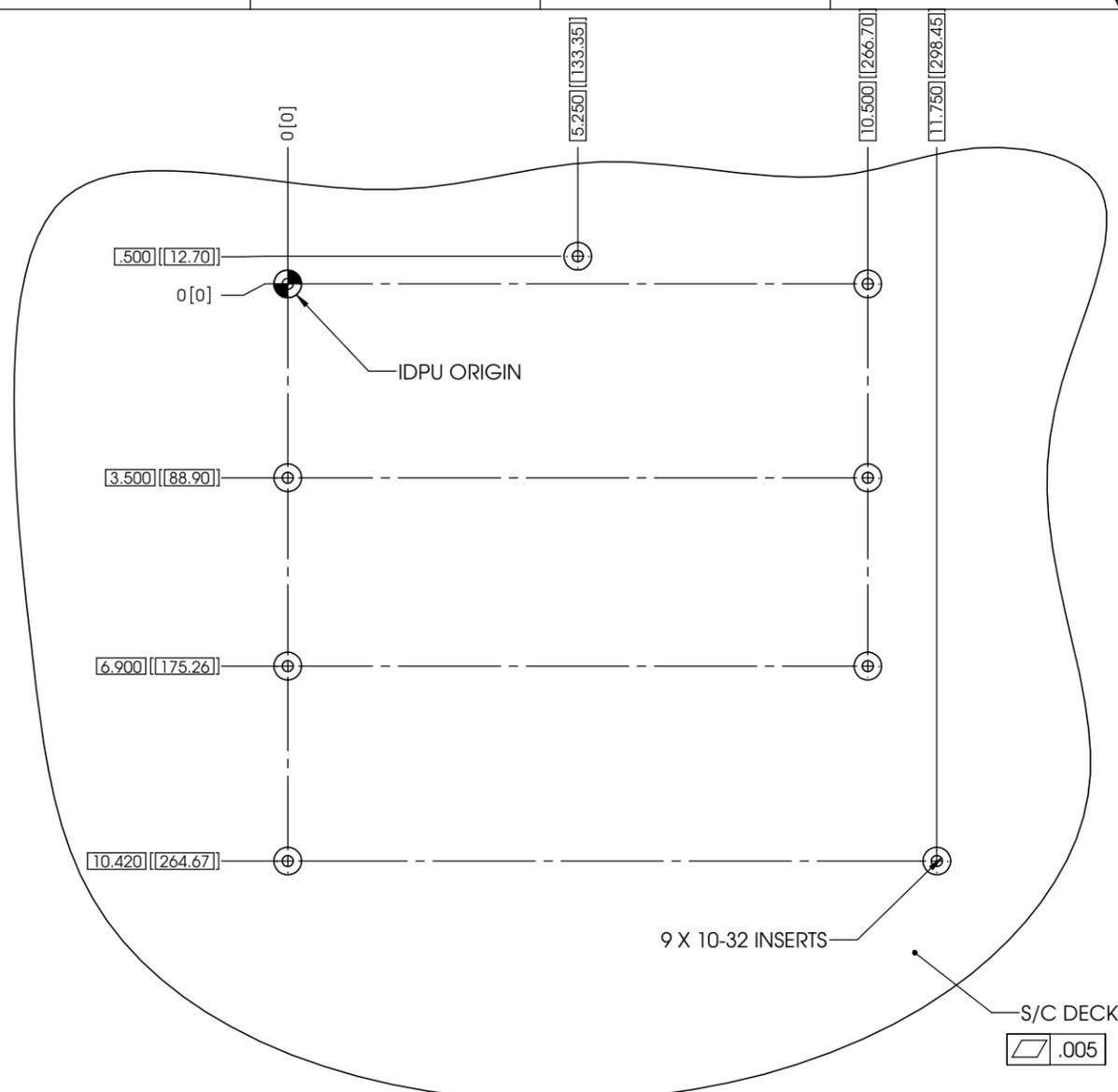
8 7 6 5 4 3 1 2 1

REVISIONS		
REV.	DESCRIPTION	DATE
A	SEE SHEET 1	12 AUG 2008
B	4.030 (WAS) 3.870; ADDED VENT HOLES; CONNECTOR LOCATIONS SHIFTED	13.APRIL.2009
C	CHANGED SMA CONNECTOR DESIGNATORS J715 - J720 (WAS) J713 - J718 (TO AGREE WITH CABLE DIAGRAM); CHANGED PICTURE OF D-CONNECTORS TO DD STYLE (TO AGREE WITH CABLE DIAGRAM); CHANGED VENTS TO 3X (WAS 2X)	22.JULY.2009

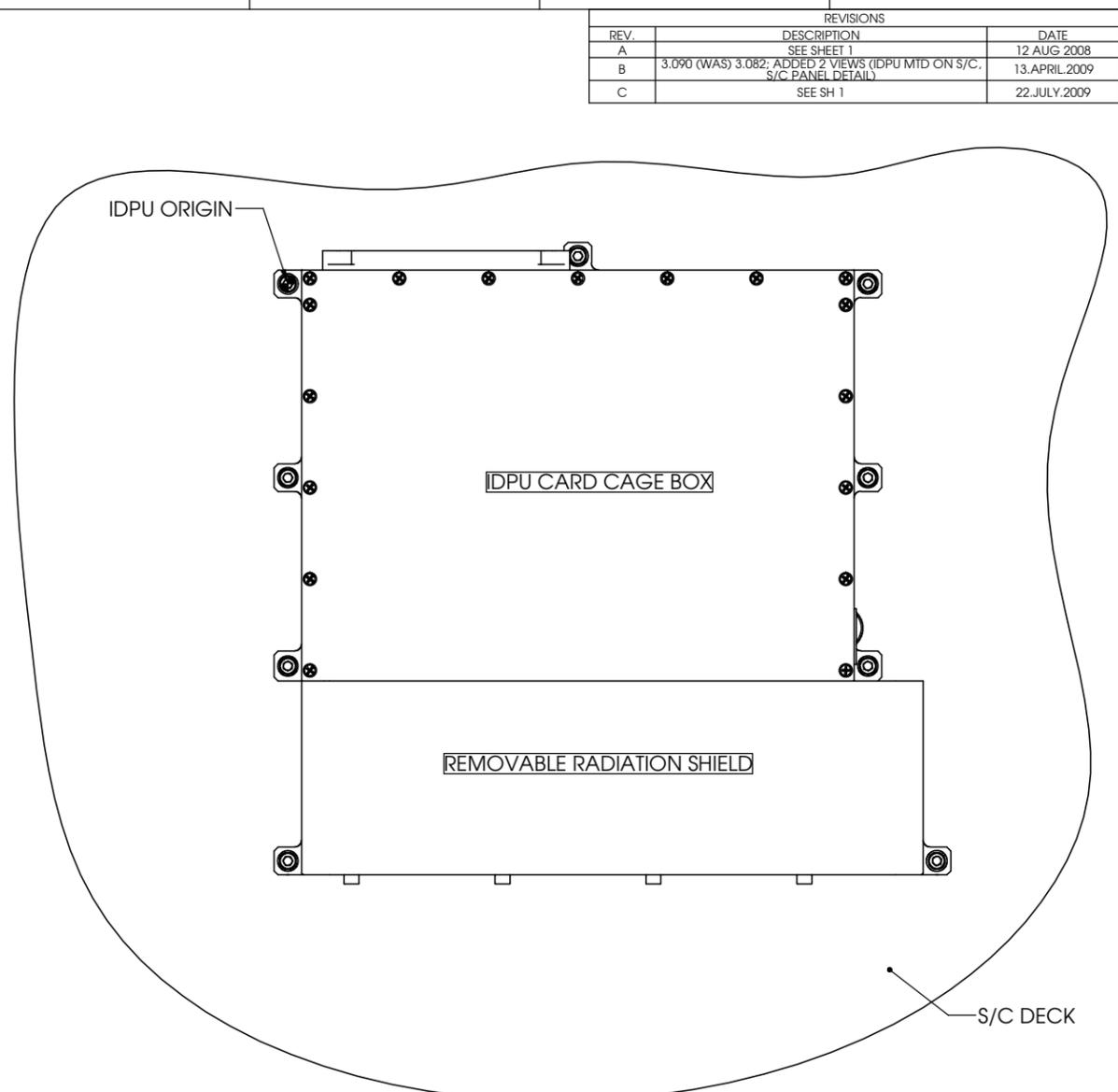


SECTION A-A SHOWING CONNECTORS ON IDPU BOX
SCALE: 1/1

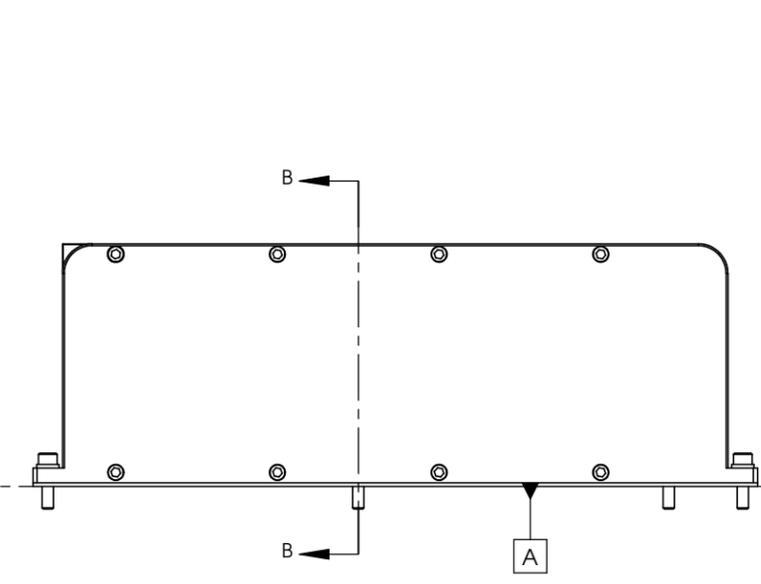
REVISIONS		
REV.	DESCRIPTION	DATE
A	SEE SHEET 1	12 AUG 2008
B	3.090 (WAS) 3.082; ADDED 2 VIEWS (IDPU MTD ON S/C, S/C PANEL DETAIL)	13 APRIL 2009
C	SEE SH 1	22 JULY 2009



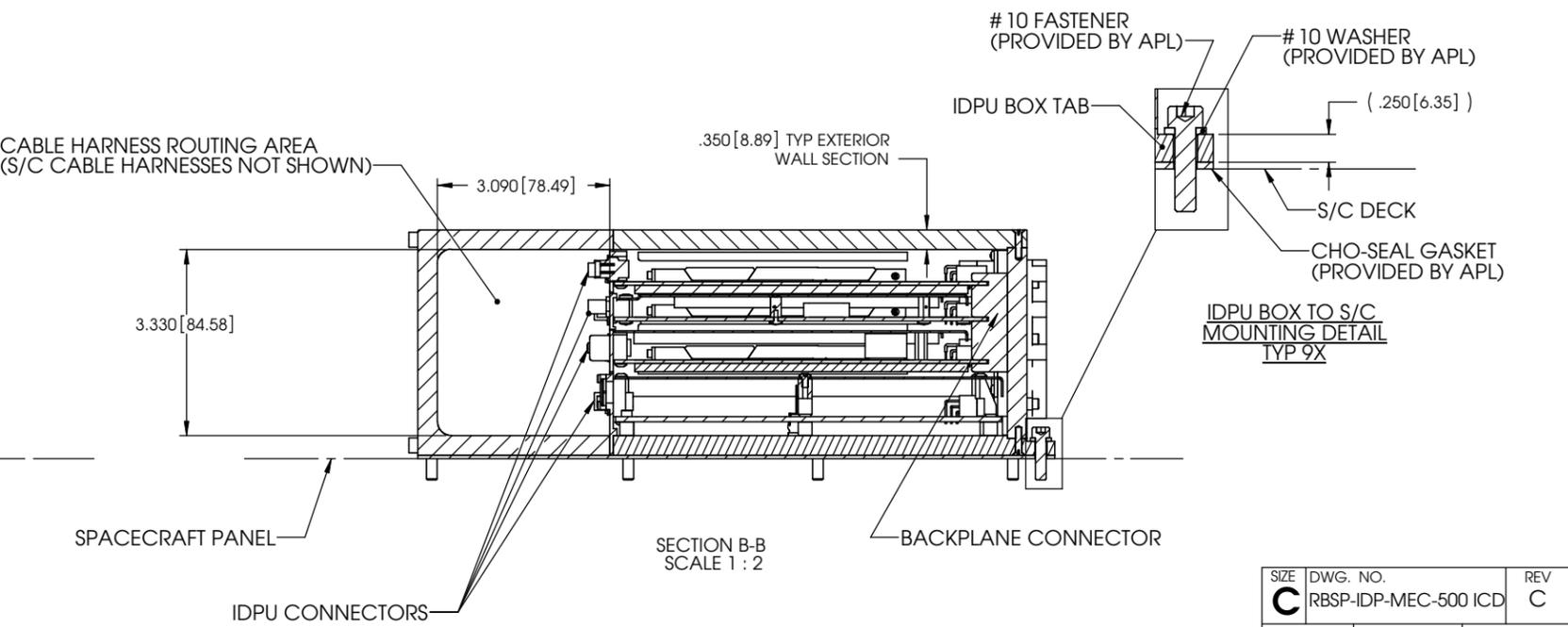
VIEW LOOKING DOWN ON IDPU LOCATION, SHOWING S/C DECK ONLY



VIEW LOOKING DOWN ON IDPU MOUNTED ON S/C



VIEW LOOKING AT RADIATION SHIELD



SECTION B-B SCALE 1:2

SIZE	DWG. NO.	REV
C	R BSP-IDP-MEC-500 ICD	C
SCALE: 1:4	WEIGHT:	SHEET 3 OF 4

MASS PROPERTIES

REVISIONS		
REV.	DESCRIPTION	DATE
A	SEE SHEET 1	12 AUG 2008
B	ADDED HARDWARE PROVIDER MATRIX	13 APRIL 2009
C	SEE SH 1	22 JULY 2009

MASS (UNITS: Kg)

MASS	ITEM	DESCRIPTION
5.72	IDPU BOX	IDPU BOX (EXCLUDING RADIATION SHIELD, BOX ATTACH HARDWARE, & CABLES TO S/C)
2.28	REMOVABLE RADIATION SHIELD	RADIATION SHIELD AND SHIELD ATTACHING BOLTS
8.0	TOTAL	IDPU BOX, INCLUDING RADIATION SHIELD (EXCLUDING BOX ATTACH HARDWARE & CABLES TO S/C)

CENTER OF MASS (INCHES FROM ORIGIN)

CM	ITEM	DESCRIPTION
TBD	IDPU BOX	IDPU BOX, INCLUDING RADIATION SHIELD (EXCLUDING BOX ATTACH HARDWARE & CABLES TO S/C)

MOMENT OF INERTIA (ABOUT BOX CG)

Moi	ITEM	DESCRIPTION
TBD	IDPU BOX	IDPU BOX, INCLUDING RADIATION SHIELD (EXCLUDING BOX ATTACH HARDWARE & CABLES TO S/C)

HARDWARE PROVIDER MATRIX

ITEM	QTY	DESCRIPTION	PROVIDER
IDPU BOX	1	IDPU BOX, RADIATION SHIELD, ATTACH BOLTS HOLDING SHIELD TO BOX, ALL BOX THERMAL COATINGS	UCB/SSL
CHO-SEAL GASKET	1	GASKET LOCATED AT INTERFACE OF IDPU BOX TO S/C. GASKET TYPE AND SIZE AT DISCRETION OF APL.	APL
ATTACH FASTENERS	9	ATTACH BOLTS AND WASHERS. THREAD ENGAGEMENT TO BE MINIMUM OF 2 BOLT DIAMETERS INTO S/C DECK. FASTENER TYPE TO BE 10-32 SHCS AND BE CONSTRUCTED OF A286 MATERIAL.	APL
GROUNDING STRAP	1	BOX ELECTRICAL GROUND STRAP; ONE END UNDER BOX ATTACHMENT BOLT HEAD, OTHER END ATTACHED TO S/C DECK. LOCATION AND DESIGN DETAILS AT DISCRETION OF APL. (STRAP MAY BE OPTIONAL, TO BE DETERMINED BY APL.)	APL
CABLE HARNESSSES	A/R	ELECTRICAL CABLE HARNESSSES FROM IDPU BOX TO S/C; SEE RBSP_EFW_SYS_008 FOR QUANTITY AND DESCRIPTION	APL