REV. DATE DCN# DRAWING TREE # 5. CABLE IDENTIFICATION: IDENTIFY PER STATEMENT OF WORK. 08 FEB 2011  $\langle \overline{7} \rangle$  MATERIAL: a. J1 CONNECTOR SHELL - PEEK VICTREX 450GL30. 18 JUL 2012 E1200711-v1 b. BACKSHELL - STAINLESS STEEL WITH VENT HOLE. C. CONTACTS - BERYLLIUM COPPER ALLOY C17300, 0.000050 MIN. GOLD OVER NICKEL. d. HARDWARE: STAINLESS STEEL, PASSIVATED. e. PEEK BRAID - PEEK VICTREX GRADE TDS-450CA30 CARBON LOADED. CABLE: 2 COND. 14 AWG, (STRANDED), WITH 2 LAYERS OF KAPTON TAPE. OVERALL 40AWG COPPER BRAID 50% COVERAGE. OVERALL PEEK BRAID MIN. 50% COVERAGE. OVERALL CABLE O.D. WILL BE APPROX. 0.240 IN. (9) CONNECTORS WILL BE SUPPLIED WITH HARDWARE. LENGTH OF SCREWS SHOULD BE THE PROPER LENGTH FOR MATING.  $\langle \overline{10} \rangle$  Indicated length is from Pin Tip to Pin Tip. Use appropriate length to COMPENSATE FOR THE INTERNAL WIRING OF THE CONNECTORS AND STRIP LENGTH. G  $\langle 11 \rangle$  INDICATED LENGTH IS FROM SPACER TO PIN TIP.  $\langle 11 \rangle$ CONNECTOR  $\langle \overline{12} \rangle$  indicated dimensions shown for reference only. 60.0 +3.0 / -0.0 -2 CONDUCTOR 14 AWG PEEK OVERBRAID— COPPER BRAID **CONNECTOR CABLE DETAIL CONNECTOR** V-DB3 F/S1-40-2\_PIN-94B8812 M/X STANDARD USE FOR THIS CABLE -2X 2.5 +.5 /.0 -AIR / VAC STANDARD USE SUBSYSTEM SEI IN-VAC **QUAD SUSPENSION PUM**  $\langle \overline{7} \rangle \langle \overline{9} \rangle$ CONNECTOR 'J1' Ø 9 12 V3A-60 CABLE ASSEMBLY CIRCUIT SUMMARY V-DB3 F/S1-60-PIN-94B8812 M/X  $\emptyset$ .280 FROM TO  $\emptyset$ .240 **WIRE NAME** REMARKS PIN SHIELD END OF CABLE COPPER BRAID WIRE 1 WIRE 2 SEE NOTE 8 WIRE, 14 AWG ້1.837ີ 22.99 11 | 038-5001-0812 TICOR OR EQ. SEE NOTE 7 SIZE 08 SOCKET CONTACT, 12 CRIMP BARREL 94B8812 NEWARK CONTACT, MALE, 14AWG, CRIMP ZEUS, .016 BLK PEEK DRAWN MONOFILAMENT 6759 PEEK OVERBRAID, 50% COVERAGE MIN. CONNECTOR 'J2', 'J3' 24X3X40BC CONTINENTAL .507 1/8 DIA. COPPER BRAID, 50% COVERAGE CORDAGE ⟨7⟩ ⟨9⟩ ⟨12⟩ SPACER, 3/16 OD X .25 LG. SSTL 600-052 GLENAIR OR EQ. BRAID CLAMPING BAND, .24 WIDE 1.630 SSTL 013-2702-0000 TICOR OR EQ. SCREW, SHC, 4-40 X .305 LG., VENTED SSTL 4 013-2701-0001 TICOR OR EQ. SCREW, FILLISTER HEAD, 1-72 X .450 LG., SLOTTED 3 | 040-2724-1501 TICOR OR EQ. UHV CONNECTOR BACKSHELL SEE NOTE 7 CRIMP PIN NEWARK PART NO.: 94B8812 SEE NOTE 7 034-1002-1503 TICOR OR EQ. UHV CONTACT RETAINER, SUBD9, SHIELDED CRIM PIN MANUFACTURER PART NO.: TB09150006126 UHV CONNECTOR INTERFACE, SUBD9, SHIELDED 034-1001-1503 TICOR OR EQ. SEE NOTE 7 CRIMPING TOOL: HARTING #79K0525 (FEMALE) WIRE STRIPPING LENGTH: .236 (6mm) APPROX. QTY. **DESCRIPTION** MATERIAL PART NUMBER NO. PARTS LIST NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED) PART NAME CALIFORNIA INSTITUTE OF TECHNOLOGY 1. INTERPRET DRAWING PER ASME Y14.5-1994.
2. REMOVE ALL SHARP EDGES, .005-.015. FOR MACHINED PARTS. ROUND CUSTOM CABLE SPECIFICATION, V3A-60 LIGO MASSACHUSETTS INSTITUTE OF TECHNOLOGY DIMENSIONS ARE IN INCHES ALL EDGES APPROXIMATLEY R.02 FOR SHEET METAL PARTS. 3. DO NOT SCALE FROM DRAWING. SUB-SYSTEM TOLERANCES: **DESIGNER** 08 FEB 2011 | **SIZE** | **DWG. NO.** B.ABBOT 4. ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER .XX ± .10 **ADVANCED LIGO** DRAFTER 08 FEB 2011 E.BROWN SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE. .XXX ± .005 **NEXT ASSY** CHECKER SEE DCC SEE DCC ANGULAR ± .5° N/A N/A µinch SEE LIGO D0901301,BSC ISI SYSTEM SCHEMATIC FOR REFERENCE. SEE DCC | SCALE: NTS | PROJECTION: APPROVAL SEE DCC