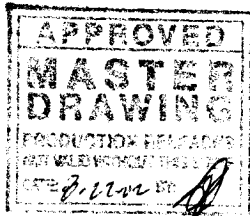
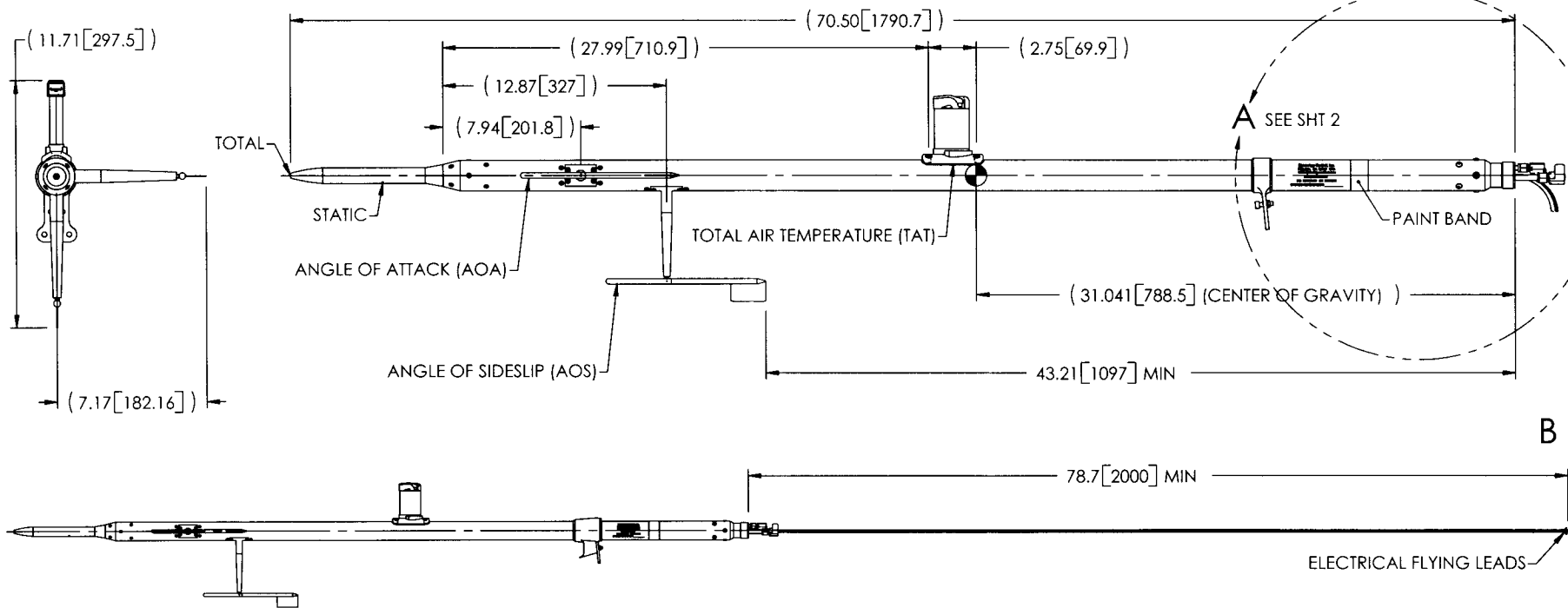


This drawing contains design and other information which is the property of SpaceAge Control, Inc. Except for rights expressly granted by contract to the United States Government, this drawing and data disclosed herein or herewith is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of SpaceAge Control, Inc.

REV	DESCRIPTION	DATE	APPROVED
A	PER ECO #0822	9-5-01	S/J. GATES
B	PER ECO #0837	10-8-01	S/J. GATES
C	PER ECO #0872	12-3-01	S/SIMPSON
D	PER ECO #0926	5-13-02	S/SIMPSON
E	PER ECO #0944	7-11-02	<i>[Signature]</i>

NOTES: UNLESS OTHERWISE SPECIFIED

1. MASS = 15.66 LBS (7.1 KG) MAX
2. DIMENSIONS ARE IN INCHES [MILLIMETER]



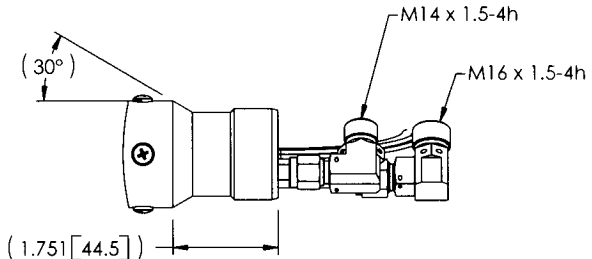
QTY REQD	CAGE CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ITEM NO.
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:			PROJECT 7		
DECIMALS			APPROVALS		
X.X ± 0.03			DATE		
X.XX ± 0.01			DRAWN		
X.XXX ± 0.005			S/O'MAHONEY 7-5-01		
DO NOT SCALE DRAWING			CHECKED		
MATERIAL			S/McDANIEL 7-5-01		
FINISH			ENG		
NEXT ASSY			S/JOHN GATES 7-5-01		
USED ON			DRG		
APPLICATION			MFG		
CAD GENERATED DRAWING DO NOT MANUALLY UPDATE					
SHEET 1 OF 4		DWG NO. 100700-05		REV. E	
SCALE 1:8		CAGE CODE 34851		CAD FILE	

**SpaceAge Control, Inc.**  
**STRAIGHT-NOSE  
AIR DATA BOOM, HEATED**

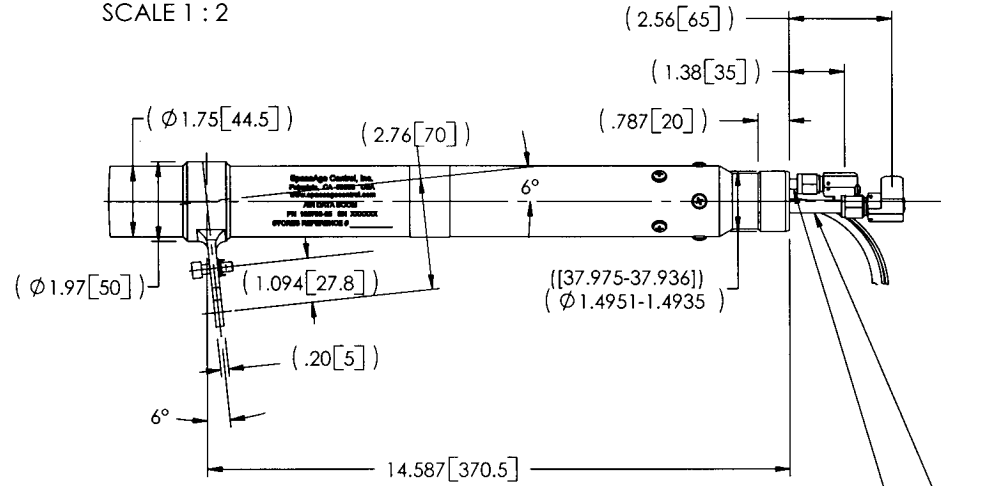
This drawing contains design and other information which is the property of SpaceAge Control, Inc. Except for rights expressly granted by contract to the United States Government, this drawing and data disclosed herein or hereinafter is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of SpaceAge Control, Inc.

NOTES: UNLESS OTHERWISE SPECIFIED  
 1. DIMENSIONS ARE IN INCHES [MILLIMETER]

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

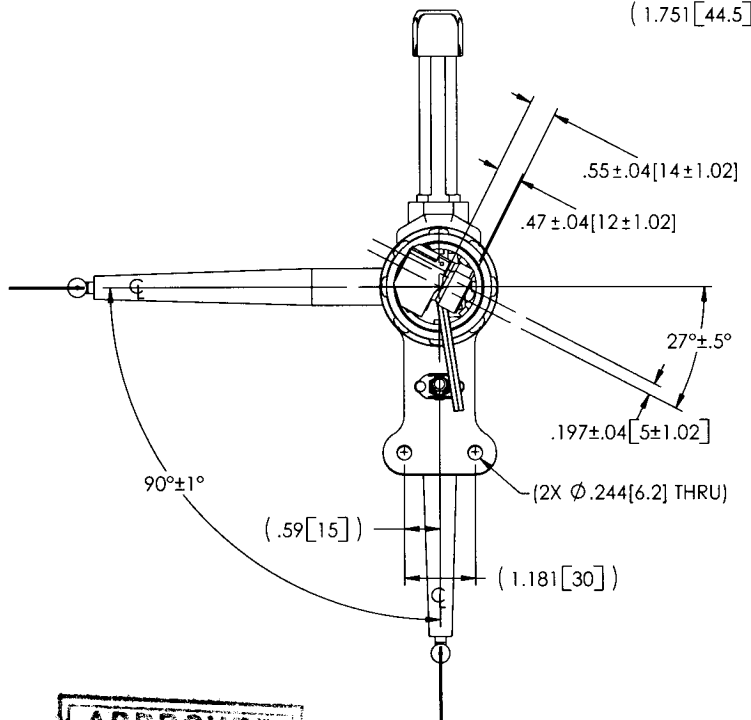


VIEW C-C  
 SCALE 1 : 2



(TOTAL PRESSURE  
 $\phi .250 [6.35] \times .020 [508]$ ), 321 SST  
 (STATIC PRESSURE  
 $\phi .3125 [7.938] \times .028 [711]$ ), 321 SST

DETAIL A  
 SCALE 1 : 3



VIEW B-B  
 SCALE 1 : 2

**APPROVED**  
**MASTER DRAWING**  
 PRODUCTION RELEASES  
 NOT VALID WITHOUT THIS STAMP  
 DATE 8-27-02 BY: [Signature]

QTY REQD	CAGE CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ITEM NO.
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:			<b>PROJECT 7</b> <b>SpaceAge Control, Inc.</b>		
DIMENALS ANGLES X.X ± 0.03 X* ± 30° X.XX ± 0.01 X* ± 30° X.XXX ± 0.005 X* ± 30°					
MATERIAL ---			APPROVALS	DATE	
FINISH ---			DRAWN S/O MAHONEY	7-5-01	
NEXT ASSY			CHECKED S/JMG DANIEL	7-5-01	
USED ON			ENG S/JOHN GATES	7-5-01	
APPLICATION			MFG		
CAD GENERATED DRAWING DO NOT MANUALLY UPDATE			SIE B	CAGE CODE 34851	DWG. NO. 100700-05
			SCALE 1:2	CAD FILE:	REV. E
				SHEET 2	OF 4

This drawing contains design and other information which is the property of SpaceAge Control, Inc. Except for rights expressly granted by contract to the United States Government, the drawing and data disclosed herein or hereafter is not to be reproduced, used, or disclosed in whole or in part to anyone without the written permission of SpaceAge Control, Inc.

REV.	DESCRIPTION	DATE	APPROVED

NOTES: UNLESS OTHERWISE SPECIFIED

1. POWER MUST BE REGULATED FOR P/N D1221-5

2. CURRENT LEVELS ARE AT 70°C FOR D1221-5 AND 20°C FOR 300643

3. Mass properties of 100700-05 (REFERENCE ONLY)

Principal axes of inertia and principal moments of inertia: ( kilograms \* square meters ) Taken at the center of mass.

$$\begin{aligned} I_x &= (0.005, -0.002, 1.000) & P_x &= 0.009 \\ I_y &= (0.004, -1.000, -0.003) & P_y &= 2.025 \\ I_z &= (1.000, 0.004, -0.005) & P_z &= 2.028 \end{aligned}$$

Moments of inertia: ( kilograms \* square meters ) Taken at the center of mass and aligned with the output coordinate system.

$$\begin{aligned} L_{xx} &= 2.028 & L_{xy} &= -0.000 & L_{xz} &= 0.010 \\ L_{yx} &= -0.000 & L_{yy} &= 2.025 & L_{yz} &= -0.005 \\ L_{zx} &= 0.010 & L_{zy} &= -0.005 & L_{zz} &= 0.009 \end{aligned}$$

4. REFERENCE DOCUMENTS

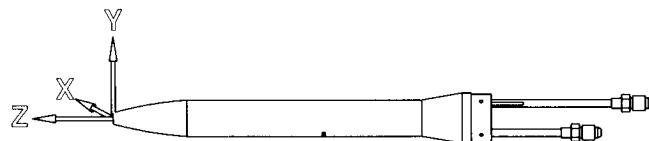
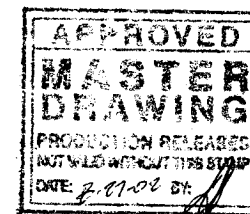
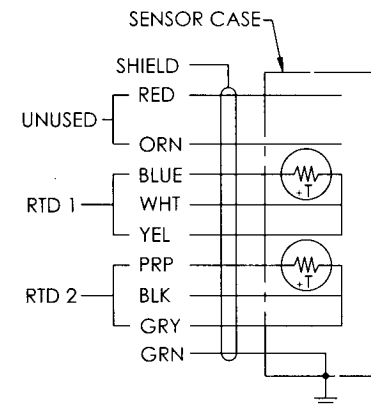
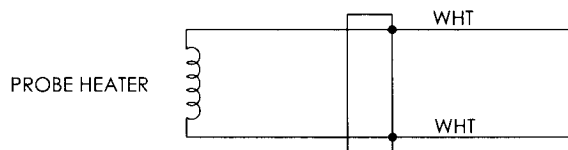
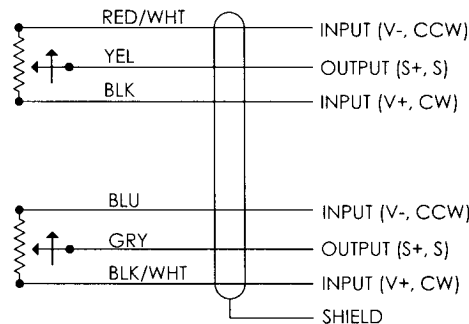
TAT SENSOR 100286  
HEATED PROBE MIL-T-5420B  
POTENTIOMETER SPEC SHEET (1221)

5. ELECTRICAL CABLE SPECIFICATIONS:

AOA/AOS VANES: M27500A24RC6S09  
TAT SENSOR: M27500-24ML9T23  
PROBE HEATER: M16878/4-BHE-9

6. WHEN VIEWED FROM THE POTENTIOMETER SHAFT END, VOLTAGE INCREASES WHEN THE POTENTIOMETER SHAFT IS ROTATED CLOCKWISE (TYP)

ELECTRICAL POWER REQUIREMENTS						
P/N	DESCRIPTION	INPUT	POWER RATING	CURRENT (18 V)	CURRENT (28 V)	CURRENT (32 V)
D1221-5	POTENTIOMETER (AOA)	28 VDC	0.5 W	27.8 mA	17.9 mA	15.6 mA
D1221-5	POTENTIOMETER (AOS)	28 VDC	0.5 W	27.8 mA	17.9 mA	15.6 mA
300364	PROBE HEATER	28 VDC	145 W (±10 W)	8.1 A	5.2 A	4.5 A



QTY REQD	CAGE CODE	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	ITEM NO.
PARTS LIST					
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:			PROJECT 7		
DECIMALS ANGLES			SpaceAge Control, Inc.		
X.X ± 0.03 X° ± 30'			APPROVALS DATE		
X.XX ± 0.01 X.XXX ± 0.005			DRAWN S/O MAHONEY 7-5-01		
DO NOT SCALE DRAWING			CHECKED S/McDANIEL 7-5-01		
MATERIAL ---			ENG S/JOHN GATES 7-5-01		
FINISH ---			MFG		
NEXT ASSY			SIB CAGE CODE DWG NO 100700-05 REV. E		
USED ON			SCALE B 34851 N/A CAD FILE SHEET 4 OF 4		
APPLICATION			CAD GENERATED DRAWING DO NOT MANUALLY UPDATE		