NOTES

1. **VANE POTentiOMETER SPECIFICATIONS** (MEASURE ANGLE OF ATTACK (AOA (ALPHA)))
   AND ANGLE OF SIDE SLIP (AOS (BETAS))
   1.1. **TYPE:** DUAL CONDUCTIVE PLASTIC
   1.2. **RESISTANCE:** 5K OHMS
   1.3. **RESISTANCE TOLERANCE:** ±10%
   1.4. **LINEARITY:** ±5%
   1.5. **RESOLUTION:** INFINITE SIGNAL OUTPUT
   1.6. **ELECTRICAL TRAVEL:** ±170° (±5°) FROM CENTER TAP
   1.7. **POWER RATING (70° C):** 1.0 WATT
   1.8. **MECHANICAL TRAVEL:** 360° CONTINUOUS
   1.9. **MECHANICAL LIFE:** 20+ MILLION SHAFT REVOLUTIONS
   1.10. **OPERATING TEMPERATURE RANGE:** -55° TO +125° C
   1.11. **OTHER SPECIFICATIONS:** PER MIL-R-39023

2. **HEATED PROBE SPECIFICATIONS** (MEASURES TOTAL AND STATIC PRESSURE)
   2.1. **INPUT POWER:** 28 VDC
   2.2. **145 WATTS,** SELF-REGULATING
   2.3. **WIND TUNNEL CALIBRATED UP TO MACH .95
   2.4. **SPECIFICATIONS:** PER MIL-F-5420B, SAE AS 393

3. **MAINTENANCE REQUIREMENTS**
   3.1. **PROTECTIVE ACCESSORIES SUCH AS TOTAL HEAD PROBE COVER AND VANE COVER SHOULD**
   **BE INSTALLED WHENEVER THE AIR DATA BOOM IS NOT IN USE. THESE ACCESSORIES WILL**
   **PROTECT THE PRODUCT FROM DAMAGE AS WELL AS KEEP IT CLEAN.**
   3.2. **PRESSURE OR LEAK TESTING OF THE PRESSURE SYSTEM SHOULD BE CONDUCTED ANNUALLY.**
   3.3. **BEFORE EACH FLIGHT, CHECK THE NOSE TIP FOR DAMAGE THAT MAY CAUSE MEASUREMENT**
   **ERRORS.**
   3.4. **BEFORE EACH FLIGHT, CHECK VANES FOR DAMAGE SUCH AS SCRAPED FIN EDGES, BENT FINS**
   **OR VANES, AND NOISY VANE BUSHINGS.**
   3.5. **BEFORE EACH FLIGHT, VERIFY ALL SCREWS ARE TIGHT AND THAT THE AIRCRAFT MOUNTING**
   **POINT IS SECURE.**
   3.6. **VERIFY CALIBRATION OF VANE ASSEMBLIES ANNUALLY.**

4. **WEIGHT CHARACTERISTICS**
   4.1. **100700-02 WITHOUT BOOM ADAPTER OR ELECTRICAL WIRING**
   4.1.1. **BOOM ADAPTER**
   4.1.2. **ELECTRICAL WIRING**

   **4.1 lbs. (1.86 kg)**
   **0.64 lbs. (0.29 kg)**
   **0.95 lbs. (0.43 kg)**

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**SpaceAge Control, Inc.**

**STRAIGHT-NOSE AIR DATA BOOM, HEATED**

**CAGE CODE:** 34851

**Dwg No.:** 100700-02

**Sheet:** 2 of 2