21 December 1990

Re: ST-8000A Parts Type "RJR/M" MIL-trimming Potentiometers

To: Rex Debolt Linda Scott

We are having difficulties obtaining timely delivery of the Bourns Type RJR50/M Trimming Potentiometers I specified for the ST-8000A. I have suggested that Linda obtain delivery and pricing for the following alternate Bourns part numbers.

1. PREFERRED:

Bourns RJR50FxxxM, MIL-R-39035, 1% FR, \pm 100 ppm/C xxx = resistance code (102 = 1K, 254 = 250K, etc) Quality Factor = .6; Tot. MTBF = 56,322 hrs. HAL P/N: 562-xxxx

2. 1st ALTERNATES: (5x Reliability penalty over RJR50/M)

Bourns RJ50Fxxx, MIL-R-22097, NR, \pm 100 ppm/C Bourns RJ50Cxxx, MIL-R-22097, NR, \pm 250 ppm/C Quality Factor = 3.0; Tot. MTBF = 53,154 hrs. HAL P/N: 562-xxxx

3. 2nd ALTERNATES: (16.67x Reliability penalty over RJR50/M)

Bourns 3329P-1-xxx, non-MIL, NR, <u>+</u>100 ppm/C Bourns 3386F-1-xxx, non-MIL, NR, <u>+</u>100 ppm/C (Standard HAL 3/8" Square Horiz. T-Pot) Quality Factor = 10.0; Tot. MTBF = 45,663 hrs. HAL P/N: 563-xxxxx (Standard Horiz. Series)

There are a total of 20 trimming potentiometers used in the ST-8000A. Changing the quality factory obviously has a strong affect on the total predicted MTBF.

Other recent changes will also contribute to lower numbers than these. We need to obtain as high a quality trim potentiometer as possible. Buy option (1) or (2) if at all possible!

G. W. Henry Configuration Manager