TECHNICAL BULLETIN 124-7

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HIGH CONTRAST LEGEND DISPLAYS

FOR SERIES 40 PUSH BUTTON

In addition to the eight display types described in the Series 40 catalog, 2 high contrast legends have recently been produced. The type descriptions: High contrast translucent white legend on black background non-illuminated. Legend visible in color when illuminated.—Black legend on high contrast translucent white background non-illuminated. Background visible in color when illuminated. These display types meet the contrast requirements of integrally lighted panels per MIL-P-7788D, and aircrew station markings per MIL-M-18012B.

The high contrast types have greater readability under both low ambient light and bright sunlight conditions. Contrast is determined by taking reflected light readings of the message and background with non-illuminated display and using the formula from MIL-P7788D.

$$C = \frac{B_2 - B_1}{B_1}$$

Where B_1 = average brightness of the black area of the display.

 B_2 = average brightness of the white area of the display.

The contrast of displays exceeds 9.0 using this formula with standard clear faceplate. The use of non-glare clear or shaded (neutral gray) faceplates will result in reduced contrast readings.

Nominal luminance values for above displays using standard color filters are shown in the table below when illuminated by MS25237-327 lamps of 0.34 ± 0.02 mean spherical candlepower at 28VDC.

COLOR	NOMINAL BRIGHTNESS IN FOOT LAMBERTS
BLUE	7
GREEN	50
RED	50
WHITE	120
AMBER	60
YELLOW	150

Displays described above are available on special request only. Consult STACOSWITCH for application details.