REQUIREMENTS:

1. GENERAL:
   A. INTERPRET DRAWING IN ACCORDANCE WITH THE STANDARDS PRE-
      SCRIBED BY MIL-STD-7037.
   B. SUPPLIER SHALL CONFORM TO THE QUALITY ASSURANCE PROVISIONS
      CONTAINED IN ND 101540A, CLASS 2.
   C. UNITS SHALL BE CAPABLE OF MEETING ALL QUALIFICATION
      REQUIREMENTS OF ND 102064.
   D. PART MARKING: PARTS SHALL BE PERMANENTLY AND LEGIBLY
      MARKED, IN ACCORDANCE WITH ND 102064, WITH THE MANU-
      FACTURER'S NAME AND/OR SYMBOL, LOT CODE OR NUMBER,
      TERMINAL IDENTIFICATION AND NASA PART NUMBER (DRAWING
      NUMBER) AND REVISION LETTER.
   E. PREPARATION FOR DELIVERY SHALL BE IN ACCORDANCE WITH
      ND 100215, CLASS 1, CODE 1.
   (1) MARKING OF SHIPPING CONTAINERS SHALL CONFORM TO THE
       MARKING OF UNIT AND INTERMEDIATE PACKAGES AND THE
       METHODS OF MARKING AS SPECIFIED IN ND 100215.

2. ACCEPTANCE AND INSPECTION: (100%)
   A. MECHANICAL AND PHYSICAL PROPERTIES:
      (1) DIMENSIONS: AS DELINEATED HERIN.
      (2) SURFACE ROUGHNESS: 125 UNLESS OTHERWISE SPECIFIED.
      (3) MARKING: AS SPECIFIED IN NOTES 1.D. AND 1.E. NO
          MARKING APPARENT ON THE VOLUME.
   B. PANEL COLOR AND MARKING:
      (1) COLOR, ENERGIZED: CROSS HATCHED LEGEND AREAS TO
          BE YELLOW, ALL OTHER LEGEND AREAS TO BE WHITE.
      (2) COLOR, UNENERGIZED: LEGEND BACKGROUND TO BE
          LOW REFLECTIVE, DIFFUSE, NEUTRAL GREY WHEN NOT
          ENERGIZED. CONTRAST BETWEEN BLACK CHARACTERS
          AND UNEQUIPPED BACKGROUND SHALL BE BETWEEN 2 TO 4
          UNITS IN ACCORDANCE WITH MIL-P-7748.
      (3) SURFACE GLOSS: THE DISPLAY AREAS SHALL HAVE A
          SURFACE GLOSS OF 5 UNITS OR LESS AS MEASURED PER
          MIL-P-7748 WHEN IN THE UNEQUIPPED CONDITION.
      (4) DRAWING LEGENDS SHALL BE AS SHOWN ON
          DRAWINGS. CHARACTERS SHALL BE GIANT CONDENSED
          WITH PROPORTIONS 10 X 10 X 10: ND 100212, TYPE II,
          CLASS 1. THE OVERALL HEIGHT OF CHARACTERS SHALL
          BE 1%, THE SPIKE STROKE WIDTH SHALL BE
          0.05/0.10. LEGEND SHALL BE CENTERED ON DISPLAY
          FACE PLATE. ALL SHALL BE BLACK COLOR NO. 37538
          PER FED-STB-999 AND SHALL BE OPAQUE WHEN LEGEND
          IS ENERGIZED.

PROCURE ONLY FROM APPROVED SOURCES LISTED IN ND 100204 FOR THIS
DRAWING.
REQUIREMENTS CONT.

B. BULBS SHALL BE CONFORMALLY COATED WITH A SELF-SETTING PLASTIC BEFORE EMBODIMENT TO RELIEVE POTENTIAL STRESS ON BULBS. THE PLASTIC AND OR SOLVENTS SHALL BE APPROVED BY RAYTHEON RELIABILITY.

C. VENDOR SUPPLIED DOCUMENTATION:
   - THE VENDOR SHALL RECORD AND DISPLAY CERTIFICATES OF COMPLIANCE ON THE FOLLOWING READINGS ON EACH DISPLAY:
     A. BRIGHTNESS PER PARA 2.A.4.C
     B. POWER DISSIPATION PER PARA 2.B.6


E. PANEL COLORS: [REFER NOTE 2.A.4(C)] YELLOWS TO BE AVIATION YELLOW AND WHITE COLOR TO BE AVIATION WHITE PER MIL-C-25050. COLOR COORDINATES SHALL REMAIN WITHIN THE LIMITS OF THE SPECIFIED AVIATION COLORS WHEN ENERGIZED FROM 0.8 TO 1.2 VDC. THE X - COORDINATE FOR THE AVIATION WHITE DISPLAYS SHALL NOT EXCEED 0.359 WHEN ENERGIZED FROM 0.6 TO 1.2 VDC.

F. LAMPS: EACH OF THE 10 LEGEND AREAS SHALL BE ILLUMINATED BY 3 LAMPS, PARALLEL WIRED AS SHOWN IN THE SCHEMATIC. YELLOWS DISPLAY LAMPS TO BE NO 2436-T-600. WHITE DISPLAY LAMPS TO BE NO 2436-713.

G. WHEN MOUNTED ON A SUITABLE FIXTURE, THE UNIT SHALL BE CAPABLE OF WITHSTANDING A PRESSURE OF 15 PSIG OF TITANIUM APPLIED AGAINST THE 32 AREA, WHEN THE EXTERNAL PRESSURE IS REDUCED TO 10 PSIG EQUIVALENT PRESSURE. WHEN SUBJECTED TO THIS DIFFERENTIAL PRESSURE, THE UNIT SHALL EXHIBIT A LEAK RATE NOT MORE THAN 0.1 CFM PER SQUARE INCH OVER THE TEMPERATURE RANGE OF -10°F TO 85°F.

H. NOTE: THIS UNIT IS TO BE MOUNTED ON A HAT-SHAPE WHEN LEGENDS ARE ENERGIZED FOR PERIODS LONGER THAN TWO (2) MINUTES. A SATISFACTORY CLEARANCE CAN BE AN ALUMINUM OR MESH PLATE 1/8" X 1 1/2" X 1/8" WITH A CENTERED RECTANGULAR OPENING FOR MOUNTING THE UNIT.

5. CONSTRUCTION [1001 ONLY]
   A. BULBS TO BE USED SHALL MEET THE REQUIREMENTS OF MS 29417 AND SHALL BE SCREENED FOR THE FOLLOWING DEFECTS:
      1. SURFACE CRACKS.
      2. SCRATCHES OR TOOL MARKS.
      3. RAW UNPOLISHED GLASS EDGES IN FINAL SEAL AREA.

BULBS WHICH EXHIBIT THESE DEFECTS SHALL NOT BE USED IN DISPLAYS SUPPLIED TO THIS SPECIFICATION.