Data Entry Display Subsystem (DEDS)

Type I Display FA-8320 (Vertical)
Type II Display FA-8321 (Horizontal)

- Provides aircraft surveillance information for air traffic control by displaying radar and beacon video information for the range and azimuth of all aircraft within 55 nautical miles.
- DEDS is fully compatible with ASR-3, ASR-4, ASR-5, ARS-6, ASR-7 and ASR-8 radar systems.
- Has the capability of displaying an alphanumeric presentation of constantly updated target identification and status information on the CRT.
- The Type I console is designed so that the CRT face is inclined 65 degrees from horizontal, and the control of the functions is intended for one operator. The Type II console is designed so that the face is horizontal, and control of the functions is intended for up to three operators.
- Video Time Compression. (OPTIONAL)
Features

General Specification
- Indicator
  - 22-inch CRT (20 inch usable area)
- Accuracy
  - ±1 percent of display diameter
- Registration
  - 1/8 nautical mile or 0.2 percent diameter (whichever is larger) between radar and computer generated data
- Gray Levels
  - 8
- Deflection
  - Electromagnetic
- Focus
  - Electrostatic
- Sweep Range
  - 6 to 60 nautical miles continuous
- Range Marks
  - 2, 5, or 10 nautical miles selectable with every fifth mark intensified
- Character Brightness
  - 4 footlamberts
- CRT Blanking
  - Radius Computer
- CRT Protection
  - Loss of sweep blanks CRT during PPI sweep time
- Video Input Levels
  - 0 to 4V peak
- Video Bandwidth
  - 2 MHz
- Alphanumeric Contrast Ratio
  - 10:1 (signal + background: background)
- Alphanumeric Repetition Frequency
  - 24 to 30 times per second
- Character Size
  - 0.084, 0.136, 0.188, 0.36 in.
- Alphanumeric Brightness Variation
  - 30 percent intracharacter
- Character Generator Type
  - Asynchronous stroke
- Character Aspect Ratio
  - 3:2
- Horizontal Character Spacing
  - 1/6 to 1/4 character height
- Vertical Character Spacing
  - 1/6 to 1/2 character height
- Radar PRF
  - 675 to 1200 PPS
- Beacon PRF
  - 150 to 450 PPS
- Character Write Time
  - 2 microseconds (average)
- Character Step Time
  - 0.5 microsecond
- Repertoire
  - 42 characters
- Repertoire Expansion
  - To 62 characters
- Leader Directions
  - North, northeast, east, southeast, south, southwest, west, northwest
- Leader Length
  - 0.1 to 1.5 inch
- Data Fields
  - Field P target symbol
  - Field L leader
  - Field 1 first line (7 characters)
  - Field 2 first 3 characters of second line
  - Field 3 fourth character of second line
  - Field 4 last 3 characters of second line
- Data Entry Keyboard
  - Numeric entry: 0 to 9
  - Alphabetic entry: A to Z
  - Special symbol entry: 6
  - Functions: 16
- Environmental Condition Service Conditions
  - Ambient Temperature
    - +10°C to +40°C
  - Ambient Relative Humidity
    - 10 to 80 percent
  - Elevation
    - Sea level to 10,000 feet
  - Salt Atmosphere
    - As encountered in coastal regions
  - Power Requirements
    - Primary Input Power
      - 1.7 kVA maximum
    - Primary Input
      - 120 Vac single phase
    - Frequency
      - 57 to 63 Hz
    - Duty
      - Continuous, unattended, except for maintenance
- Weight
  - Type I Console
    - 750 pounds
  - Type II Console
    - 755 pounds
- Electron Tubes
  - The Data Entry Display Subsystem contains one electron tube: R6576-P7-2L CRT.
- Overall Dimensions:
  - Console
    - Height
      - 48" Width
      - 30" Depth
      - 40"
  - With writing shelf
    - Depth
      - 56"

For additional information, write to
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