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DATA FOR R.E.T.M.A. REGISTRATION

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CATHODE RAY TUBE TYPE 7AHP1

The 7AHP1 is a electrostatically focused and deflected cathode ray tube for radar or oscilloscope applications. It has a rectangular screen having an area of  $5\frac{1}{2}$  in. by  $1\frac{1}{2}$  in.

PHYSICAL SPECIFICATIONS

|                        |                             |
|------------------------|-----------------------------|
| Base                   | Diheptal (B14A)             |
| Bulb                   | Glass                       |
| Maximum overall length | $16\frac{15}{16}$ " (430mm) |
| Maximum bulb width     | $6\frac{7}{32}$ " (158mm)   |
| Maximum bulb height    | $2\frac{11}{16}$ " (67.5mm) |
| Screen width           | 6" (152mm)                  |
| Screen height          | $2\frac{1}{2}$ " (62mm)     |

BASING CONNECTIONS Basing 14AC

|       |                     |                  |                     |
|-------|---------------------|------------------|---------------------|
| Pin 1 | Heater              | 8                | Deflecting plate y" |
| 2     | Cathode             | 9                | Anode No.3          |
| 3     | Grid No.1           | 10               | Deflecting plate x" |
| 4     | Anode No.2          | 11               | Deflecting plate x' |
| 5     | No connection       | 13 <del>12</del> | Anode No.1          |
| 6     | Fluorescent screen  | 12 <del>13</del> | No connection       |
| 7     | Deflecting plate y' | 14               | Heater              |

GENERAL ELECTRICAL DATA

|                                                                                |                      |
|--------------------------------------------------------------------------------|----------------------|
| Heater voltage                                                                 | 6.3 volts            |
| Heater current                                                                 | 300 mamps            |
| Focus                                                                          | Electrostatic        |
| * Deflection                                                                   | Double electrostatic |
| Fluorescence                                                                   | Green                |
| Persistence                                                                    | Medium, P1           |
| * Both x and y plates are suitable for symmetrical or asymmetrical deflection. |                      |

ELECTRODE CAPACITANCES

|                                             |             |
|---------------------------------------------|-------------|
| Grid No.1 to all other electrodes           | 10 max. uuf |
| Deflecting plate x' to all other electrodes | 20 max. uuf |
| Deflecting plate x" to all other electrodes | 20 max. uuf |
| Deflecting plate y' to all other electrodes | 16 max. uuf |
| Deflecting plate y" to all other electrodes | 16 max. uuf |

|                            |     |     |
|----------------------------|-----|-----|
| Deflecting plates x' to y' | 3.0 | uuf |
| Deflecting plates x' to y" | 3.0 | uuf |
| Deflecting plates x" to y' | 3.0 | uuf |
| Deflecting plates x" to y" | 3.0 | uuf |

MAXIMUM RATINGS (Absolute values)

|                           |      |         |
|---------------------------|------|---------|
| Anode No.3 voltage        | 6000 | volts   |
| Anode No.2 voltage        | 1100 | volts   |
| Anode No.1 voltage        | 2500 | volts   |
| Grid No.1 voltage         |      |         |
| Negative                  | 150  | volts   |
| Positive                  | 0    | volts   |
| Cathode current           | 300  | μamp    |
| Heater to cathode voltage | ±150 | volts   |
| Grid No.1 resistor        | 1.5  | megohms |

CHARACTERISTICS

|                    |            |         |
|--------------------|------------|---------|
| Anode No.3 voltage | 5000       | volts   |
| Anode No.2 voltage | 600 to 700 | volts   |
| Anode No.1 voltage | 1800       | volts   |
| Grid No.1 voltage  | -25 to -70 | volts   |
| Sensitivity        |            |         |
| x plates           | 0.19       | mm/volt |
| y plates           | 0.21       | mm/volt |

DEFLECTION SENSITIVITY LIMITS

|          |                                       |         |
|----------|---------------------------------------|---------|
| X plates | $\frac{850 \text{ to } 1000}{V_{a3}}$ | mm/volt |
| Y plates | $\frac{900 \text{ to } 1100}{V_{a3}}$ | mm/volt |