PCB 627 / 628 P.A. FILTERS

The filter bank contains 6 lowpass filters covering the maritime bands in the frequency range 1.6-27.5 MHz, as shown in the table below.

| Filter no. | Passband MHz | Stopband MHz | Relays<br>A B C |         |
|------------|--------------|--------------|-----------------|---------|
| 1          | 1.60- 2.31   | 3.19         | 0 1 0           |         |
| 2          | 2.31- 3.33   | 4.61         | 1 1 1           | 0 = off |
| 3          | 3.33- 4.80   | 6.64         | 100             | 1 = on  |
| 5          | 6.20- 8.95   | 12.40        | 1 1 0           |         |
| 6          | 12.23-17.65  | 24.40        | 0 1 1           |         |
| 8          | 18.78-27.10  | 37.45        | 0 0 0           |         |

All filters are 5th order elliptic LP-filters (cauer-filters) with a series coil giving an inductive input impedance on the harmonics. When loaded with 50 ohms the input SWR is less than 1:1.1 and the insertion loss less than 0.2 dB in the passbands. In the stopbands the attenuation is better than 25 dB. The filters are inserted by a system of dual-pole dual-throw Relays controlled from the Transceiver Control Board 624 as shown in the table. Other types of filter banks are available, and the microprocessor selects the corresponding switch pattern by sensing the type code information on 4 lines of the connector cable. If the cable is disconnected filter no. 8 is chosen, so that transmission is possible on all frequencies in case of fault in the switching system. The DC voltage from the output peak-detector, which monitors voltage and current in the load, is connected to the ALC-circuit on the Transceiver Control Board 624. This voltage is used for automatic adjustment of output power and should be 9.0 V for an output