CIRCUIT DESCRIPTION

- **Key up**

When the key is up, pin 10 and pin 2 of the BK-IN module go low. TXB goes low, and RXB goes high. This differs from manual standby non-CW operation, since the signal passes from CWB in the CW mode through D62, R318, and pin 7 of the BK-IN module to turn on Q1. C6 is connected in parallel with C1, and the TXB delay time when the key is up is 12.5ms.

There is a switch circuit consisting of C230 and Q74 between D61 and R316 for the CKY output for Q50. In CW mode, Q74 is turned on, and C230 enters the output side of R317 to produce the necessary delay on key up. The time constant generated by the RC circuit is used to provide a correction of about 8.5ms when the key is up by raising the CKY waveform 10ms after the key is depressed to prevent deterioration of the waveform.

- **RXB and RBC generation**

TXB changes from high to low, and RXB goes high 12.5ms after the key is up.

RBC operates the receive signal line with a delay of 12.5ms in the same way as for manual standby.

3) Timing for semi break-in operation

- **TXB generation by key down**

When the key is down, Q34 is turned on, and a high signal enters pin 2 of the BK-SW module via D54 in a similar manner as previously described for full break-in.

When the SEMI/FULL switch is set to semi break-in, pin 8 of the BK-SW module goes high, pin 5 of IC1 in the module goes high, and the switch for pins 3 and 4 of IC1 is turned on.

A high signal from D54 is output from pin 3 of the module via pins 4 and 3 of IC1, and enters pin 3 of the DLY module. This high signal makes pin 4 of IC1 in the module, terminal A of the one-shot multi, high. A constant high signal is output from the Q output from pin 6. The pulse width of the one-shot multi-vibrator can be varied with the VOX delay VR, and the time is the same as the delay time for VOX operation. The Q output of IC1 passes through D3, is output from pin 2, and enters pin 7 of the BK-SW module.

When VOX is on, pins 10 and 11 of IC1 in the module are turned on, the base of Q3 goes high, and Q49 is turned on in the samemanners as previously described for full break-in to produce the basis for TXB. The CKY signal rises after a delay of 10ms in the same manner as for full break-in. The CKY signal rises after a delay of 8.5ms when the key is raised.

4) Standby from the data communication terminal

When the PKS terminal is grounded, Q52 and Q53 are turned on, and the SS line is grounded. Subsequent operations are the same as for manual standby in modes other than the CW mode.

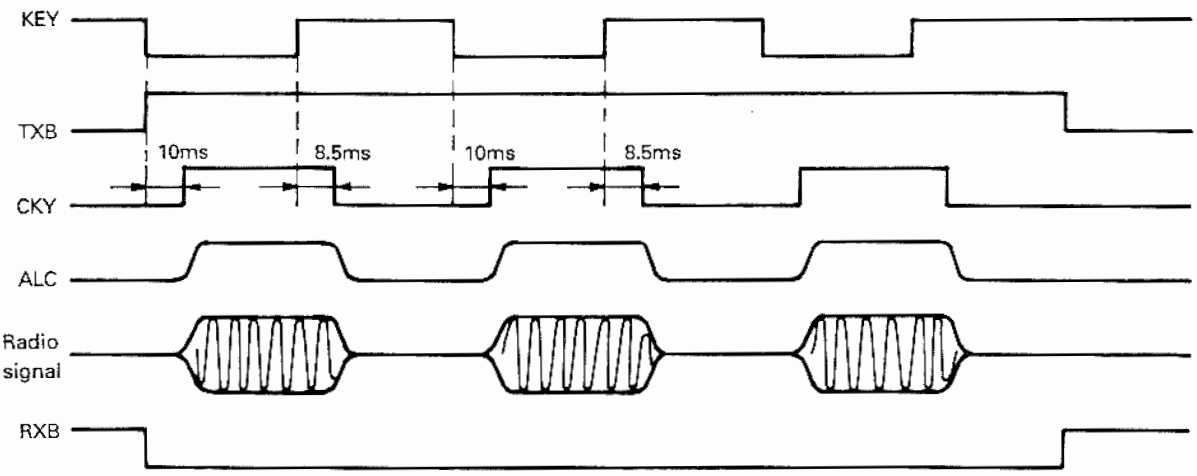


Fig. 18