

SECTION VI (Contd)

PRECAUTIONS TO BE OBSERVED.

All meter readings should be noted occasionally. Should the readings deviate considerably from that listed in the typical readings, operation should be suspended until the cause is determined. Failure to do this may result in damage to the equipment, or, in any event, cause a poor signal to be transmitted.

CAUTION

DO NOT operate Telegraph (CW) with MODE switch of the modulator in PHONE position. The FUNCTION switch should be in the CW position.

SECTION VII

ANTENNA CONSIDERATIONS.

The Globe King 500-C uses a PI-NET final tank circuit which has the capability of matching a considerable range of non-reactive load impedances. As the reactive component increases in the antenna and feed line, the range of match possible is reduced, as the PI-NET has to compensate with an opposite reactive component, thereby, reducing its capability to match higher impedances. In some cases where the reactive load may be large enough, as compared to the resistive load, the matching range may be reduced to as little as 50-100 ohms. It is to the operator's advantage to correctly measure the impedance at the transmitter end of the feed line and to correct a large reactance at the antenna, rather than trying to tune it out with the PI-NET. Many low power transmitters have a greater capability to tune out reactance from an antenna system than is possible with the 500-C. This is due to the fact that components in the average low power transmitter can have a high capacity, etc., and still have only a very low power rating. These same components will stand a very high power loss without failure in most cases. In a 500 watt transmitter, these components are impractical as they become too large physically, so the compromise consists of not being able to handle as large a reactive load. The capability of handling a LARGE RESISTIVE LOAD is, however, still present in the 500-C transmitter. There are numerous antenna configurations that will give excellent all band results, however, in nearly all cases the impedance presented to the transmitter on one or more bands will not be within the capabilities of the PI-NET, and an antenna tuner will be required. The simple DIPOLE or FOLDED DIPOLE will most likely be easiest to match. While the free space impedance of the dipole, at the center,