



**amateur service newsletter
W6SAI**

“PULSE TUBES” IN AMATEUR SERVICE

Certain vacuum tubes designed for high voltage pulse service are now available to the radio amateur through “surplus” channels. Some of these tubes (such as the 6C21, which is a variation of an earlier transmitting tube) are suitable for amateur service. The 6C21 is roughly equivalent to the Eimac 1000T triode and the data sheet for the latter may be used to arrive at the proper operating parameters for the 6C21. Other pulse tubes, such as the 4PR60A, 715A-C, 4PR250C, X643A-F, X556D and Y-158 have no earlier r.f. prototype, as the tubes were developed solely with pulse service in mind. This family is designed to be used in high voltage service (up to 50 kilovolts) and the internal geometry is such that the tubes do not perform efficiently at plate potentials normally encountered in amateur operation. In particular, the 4PR60A type can be damaged by excessive screen dissipation when lower than normal plate voltages are used. These tubes, therefore, must be considered impractical for amateur service.