AMATEUR SERVICE AGENCY BULLETIN 1015

DATE: July 30, 1965

Page 1 of 2

EQUIPMENT TYPE: 30S-1 LINEAR AMPLIFIER

SUBJECT: 1. CABINET VIBRATION ELIMINATION
2. EXCESSIVE ALC CONTROL

The purpose of this bulletin is to provide information necessary to correct or eliminate the possibility of two problems experienced with some 30S-1 Linear Amplifiers; one problem being cabinet vibration and the other concerns excessive ALC control.

1. A mechanical vibration of the sides of the amplifier cabinet when operated from 220V has been found to be a noisy problem in some units. The cause has been found to be the external field of the plate transformer exciting the side of the cabinet.

To remedy this situation, tie the common terminals of the series connected transformer primaries to the power line neutral.

terminal board TB201 connections for 220 V operation should be as follows:

```
115 VAC  --  \   /  \\
    |    \ /   \\
  1   2
  |    |
115 VAC  --  \ | /  \\
      |      |  \\
  3   4
  |    |
  NEUTRAL
      |
  5
```

TB201
2. Some trouble has been experienced in the past with too much ALC over-ride from the 30S-1 to the exciter. This is caused by excessive standoff voltage in the 12AL5 ALC rectifier, V203. To reduce this tendency, V203 was selected during test for minimum optimum operation. The problem may be completely eliminated if the 12AL5 dual diode is replaced with two 1N457 silicon diodes (353-0204-000).

![Diode Replacement For V203](#)