AMATEUR SERVICE AGENCY BULLETIN  NO. 1012  DATE: 10-10-63

EQUIPMENT TYPE: 30S-1

SUBJECT: INTERMITTENT DROPOUT OF PLATE OVERLOAD RELAY

Some linear amplifier owners have experienced trouble with the plate overload relay, K204, occasionally dropping out during SSB operation. Sharp, fast rising voice characteristics that are passed before the exciter alc can respond, cause peak instantaneous plate currents in excess of one ampere in the amplifier tube, 4CX1000A. These peaks do not harm the tube but do occasionally cause the plate overload relay to energize which cuts off the plate high voltage.

If this phenomenon is encountered, we suggest installing a capacitor, 2000 uf, 6 volt electrolytic, across the coil of relay K204. This capacitor may be installed on the under side of the relay shelf and mounted between an unused terminal of socket for relay K202 and an insulated terminal post. The added wires are approximately 10 inches long.

The addition of this capacitor makes the overload circuit a very low impedance to audio frequency changes in plate current while still providing the desired overload protection for the PA tube. The change has been made in current production of 30S-1's.
Units may be modified as follows:

1. Remove and turn relay shelf so as to gain access to lower side of shelf.

2. Remove and replace mounting nut for relay, K204, with terminal post, 306-0978-00.

3. Install capacitor and add wires per diagram.

PARTS REQUIRED:

<table>
<thead>
<tr>
<th>Qty</th>
<th>Description</th>
<th>Collins Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capacitor, electrolytic, 2000 uf, 6 vdc, C260, Sprague type DEE</td>
<td>183-1311-00</td>
</tr>
<tr>
<td>1</td>
<td>Terminal post, 5/8 long, 6-32 threads, Armel Electro, Inc. RTMT-12-6M</td>
<td>306-0978-00</td>
</tr>
</tbody>
</table>

CONTENTS OF AND INFORMATION IN THIS AMATEUR SERVICE AGENCY BULLETIN ARE CONFIDENTIAL AND SHOULD BE RECOGNIZED AS A SERVICE TO THE AMATEUR THROUGH THE SERVICE AGENCY.