



Cedar Rapids, Iowa 52406

telephone : area code 319, 365-8411

cable : COLINRAD

AMATEUR SERVICE AGENCY BULLETIN ASAB NO. 1017

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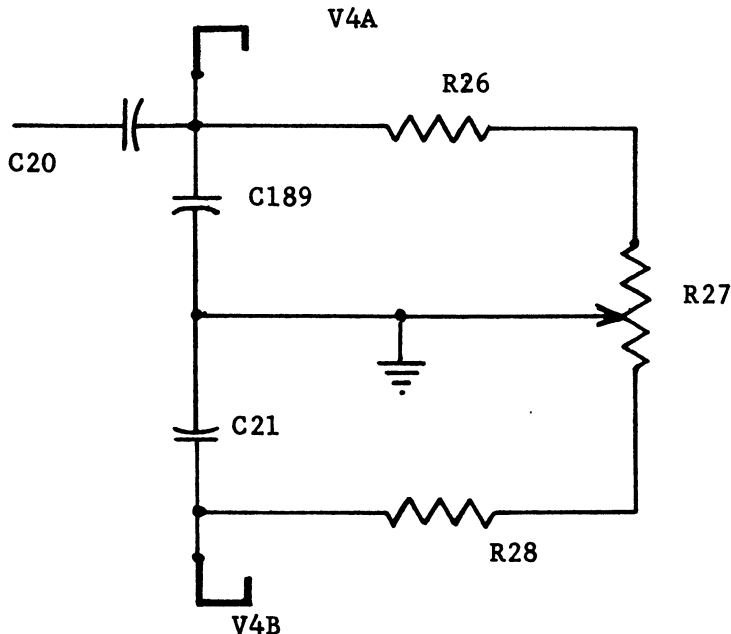
EQUIPMENT TYPE: 32S-3 TRANSMITTER

SUBJECT: 1. 80 METER SPURIOUS REDUCTION  
2. UPDATED BALANCED MODULATOR

This bulletin concerns information necessary to reduce a spurious signal reported to have occurred on the low end of 80 meters in some units, and also information regarding the updating of the balanced modulator to obtain and maintain good carrier balance.

1. 80 METER SPURIOUS REDUCTION

A change to the first mixer, V4, was made to reduce a spurious signal occurring on the low end of 80 meters. The spurious was generated by rf feedback and the bfo second harmonic beating with the vfo. Schematically, the change is as follows:



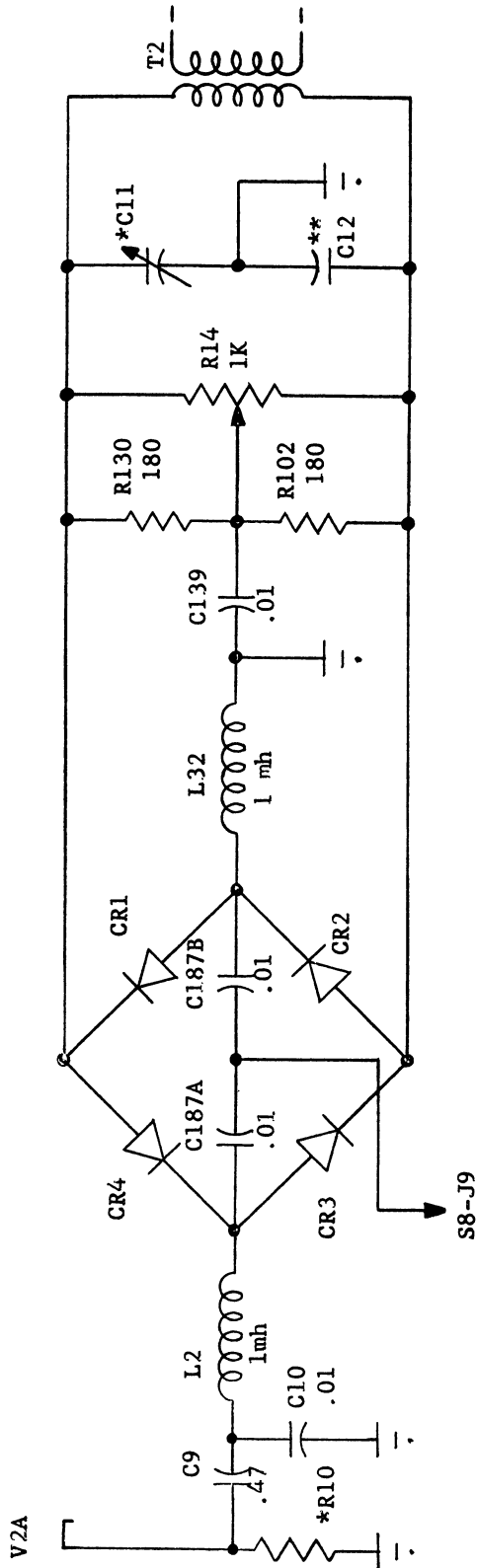
NOTE: C21 Value Changed Capacitor, Fixed, Silvered Mica 2200 pf (912-3025-000)

C189 Added Capacitor Same as C21

2. UPDATED BALANCE MODULATOR

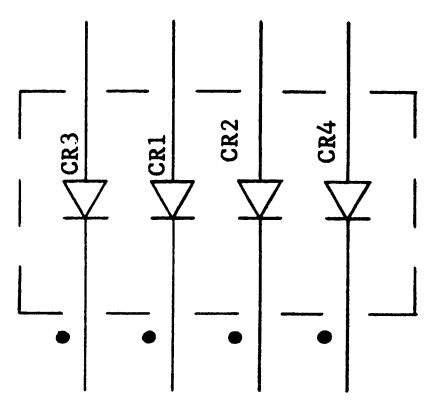
As a product improvement, the balanced modulator diodes were changed from germanium to silicon. The change to silicon diodes, has, in some cases, activated a dormant carrier balance problem due to the physical make up of the components and circuitry causing electrical dissymetry.

The circuitry change, along with the new matched diodes, is a very definite improvement in obtaining and maintaining good carrier balance. Older units may be modified to the current circuitry by compliance to the updated balanced modulator schematic as shown on page 3.



- C187A Capacitor, Fixed, Ceramic: 0.01 uf
- C187B Capacitor, Same as C187A
- L32 Coil, Radio Frequency: 1 mh
- R14 Resistor, Variable: 1000 ohms
- R102 Resistor, Fixed Composition, 1/4 w, 180 ohm
- R130 Resistor, Same as R102
- CR1-CR4 Diode, Quad Assembly, FA 4000

\* Original value  
\*\* Selected in test



FA 4000

Updated Balanced Modulator