SUBJECT: Citizen's Band

MODEL: 14T100/14T200

DATE: September 2, 1976

## REA

## FIELD BULLETIN #76-001

TO: ALL CB/SCANNER WARRANTY REPAIR CENTERS

SUBJECT: USE OF SK'S AS REPLACEMENT PARTS FOR 14T100/14T200

This is the first in a series of Field Bulletins that will be issued to RCA Warranty Repair Centers; they will deal with matters of interest to you in the technical, quality, and general information areas. It is intended that they will be helpful to you in performing your function as a RCA repair center.

Of considerable interest recently because of the lack of availability of replacement transistors for citizen's band models 14T100/14T200 was the feasibility of using RCA SK devices. An evaluation has been concluded concerning initial and short term life performance data. The results are favorable and shown below. The urgency of your situation required release of this information while long term life data is being gathered. There is no reason, however, to believe it will be other than satisfactory.

On a by-socket basis the following comments are pertinent:

- TR-11 The SK 3122 is satisfactory for this socket; the SK 3018 is better regarding gain. Stability and AGC action are satisfactory. If the SK 3018 is used, the case ground lead should be merely bent up and out of the way taking care with lead dress and base orientation.
- TR-23, TR-24 The SK 3041 may be used here with good results. A plastic screw (4/48 thread 1/4" long or shorter) should be used since the mounting hole is slightly smaller than the 2SC1096 (0.121" vs. 0.170"). The 2SC1096 will be added to the SK line shortly so this mounting problem is only temporary. (RCA stock #741115 may be used as a direct replacement if available).

- TR-42, TR-43 SK 3122 will <u>not</u> work in these sockets. The SK 3018 will, and results in adequate drive. Again, care should be taken with lead dress.
- TR-44 The SK 3046 may be used here. This predriver socket is rather critical and will not accept SK 3018 or SK 3122 without a degradation of drive and consequently power output. A heat sink is not necessary on the SK 3046 for this application. Be careful of base orientation.
- TR-45 The SK 3047 (TO-5 round package) may replace the TO-5 plastic package in this driver stage. Base orientation and proximity to other components are important. A heat sink should be used for best results.
- TR-46 The SK 3197 is a direct and satisfactory replacement for this socket. Retuning is not really necessary. The SK 3197 has been derated at 50°C to meet the F.C.C. Part 95.58 requirement.
- All others The SK 3122 (or SK 3018 with proper lead dress) may be used for all other small signal RF and AF circuitry.

The concept of the SK line allows that occasionally an SK device will not fill the requirements of specific circuitry. It is because of this that certain devices do and do not work in a given application. It is felt that the recommendations made here are quite feasible and will cause you no problems. Feel free, however, if any unforeseen situations develop to contact either Joe Berghaier, Manager, Warranty Administration, or myself. We are very interested in your comments.

R. J. Nelson, Manager Field Quality Assurance