(*Continued from page 32*)

circuit and without the addition or substitution of sub-modules. The receiver embodies a carrier monitor circuit that may be used to provide loss of signal alarm, or to inhibit false output of the receiver due to interruptions in the communications circuit. *Radio Corp. of America, Dept. RSC, 30 Rockefeller Plaza, New York 20, N. Y.*

Solderless Terminals

New solderless terminals are made of 0.040–.045" thick copper and are electroplated with a heavy coating of tin. The terminals are designated Heavy Duty Signal Specials. The insulation is of vinyl, or nylon if specified, 1/32" thick, and extends over the wire insulation to reduce vibration at the contact area. The 628–1, –2, –3, and –4 insulated test terminals incorporate an insulating bushing such that, when used in conjunction with the special counterbored nut, they become a single post test break. All terminals are designed to fit tools now in service. *Railroad Accessories Corp., Dept. RSC, Tenakill Park, Cresskill, N. J.*

Alarm, Control and Supervision

The type 51C alarm, control, and supervision systems may be operated separately or together to provide a flexible, compact system. The alarm system is a simple alarm reporting system. The control system provides remote control over several hundred remote equipment functions. The supervision system is a high capacity alarm reporting system. Although the alarm and control functions of the 51C systems are basically separate, circuits may be arranged so that a controlled equipment operation at remote locations is shown at the terminal as a change in state monitored by either the alarm or supervision system.

Line signals for both alarm and control equipments may consist of DC open or ground; or alternatively, tone signals may be employed. The equipment utilizes building block techniques, employing plug-in equipment units. It can be used with any multi-station wire or radio communication system requiring remote alarm reporting facilities at a terminal or fault control center. It is equally versatile for use over DC circuits in industrial control applications. There is an optional facility for periodic scan, and a built-in self-checking feature. *Lenkurt Electric Co., Dept. RSC, San Carlos, Calif.*

Light-Route Radio

Type 71 light-route radio is a family of low cost FM radio and associated equipment that will provide an economical installation for a variety of light-route applications. It has been designed specifically to provide toll grade service for up to 24 multiplex voice channels in the 150, 300 and 450 mc frequency bands and up to 48 channels in the 900 mc band over distances of up to 10 hops. Greater channel capacity may be provided over shorter distances, however; the exact number of channels used in any frequency allocation will depend on the equipment arrangement and local licensing restrictions. The associated equipment includes an order wire panel and a combining and transfer panel. *Lenkurt Electric Co., Dept. RSC, San Carlos, Calif.*

Type SA-1 Searchlight Signal

The type SA searchlight signal has been redesigned to incorporate a number of improvements. This new signal will be known as the type SA-1. The moving element—spectacle shaft—of the new signal contains the permanent magnet. The coil which energizes the electromagnetic circuit is now assembled on the magnetic structure in the space formerly occupied by the permanent magnets. This arrangement provides increased mechanical clearances between the moving vanes of the spectacle shaft.

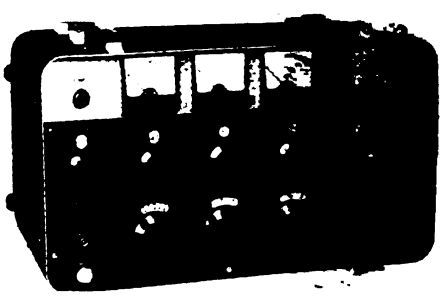
The spectacle shaft assembly is equipped with knife-edge bearings, and since the moving assembly is isolated from the control winding, there is no possibility of surge currents entering and causing damage to the bearings. The assembly is also equipped with new stops made of laminated phenolic. The spectacle into which the color discs are assembled is inclined. This moves the color disc away from the focal point of the light beam, thus preventing thermal shock to the disc. Also, any outside light entering the signal from the front is reflected upward and dispersed, thus preventing dilution of the color beam because of mirror effect. The type SA-1 signal is equipped with new contacts of the type service proven in the type B safety relay. Back contact pressure has been more than doubled; adjustment has been facilitated.

The signal will be furnished with a plug coupler as standard equipment. The coupler is fitted with a new surge arrester which provides a discharge gap between each control wire and the signal case. Operating voltage and coil resistance remain identical with the type SA, and the new signal is interchangeable with the type SA. *General Railway Signal Co., Dept. RSC, Rochester 2, N. Y.*

Two-Frequency Radio

A new transistorized two-way radio provides dual frequency listening through a common receiver, minimizing extra battery drain. The RF amplifier and oscillator output of the second receiver is connected to the first receiver's IF amplifier input.

Added to the GE's transistorized Progress Line, the equipment is designed to operate on the 130–174 mc, or 25–50 mc bands. It can monitor two frequencies regardless of spacing in low band or high band, or can monitor "cross-band," listening to a high band channel and a low band channel. Both dash-mount and trunk units are available. *General Electric Communication Products Dept., Section P-RSC, P. O. Box 4197, Lynchburg, Va.*



Standard Frequency Meter

The model 760 standard frequency meter is designed for measuring and aligning the frequency of two-way mobile radio equipment. The meter has direct read-out and is a rugged, portable, and self-contained instrument. No accessory instruments, headphones, compensation charts or computations are required for measurement of frequencies in the three mobile radio bands. Its sensitivity permits the measurement of even the smallest hand carried transceiver.

It is operated by peaking four meters and reading the frequency directly in the five read-out ports. System accuracy is ± 100 cps and sensitivity is 5 mw on all ranges. It weighs 41 lb. Bulletin 760 provides detailed specifications. *Measurements, Dept. RSC, Boonton, N. J.*