From the Field

Associate Editor Robert J. Barber, after attending the Signal Section convention in October, headed West to secure information and pictures for articles in Railway Signaling and Communications. Here are his comments from the field.

Texas & Pacific has had two Servo Corp. hotbox detectors in service for about a year. These detectors have a special indicator located about three miles beyond the detector location. The indicator is a two unit GRS style D signal with two red lenses vertically placed, which flash alternately when controlled by the operator. One detector is in CTC territory, and the special indicator is mounted atop the 5-in. ventilating pipe of a relay bungalow. The indicator is controlled by the CTC operator via the code line. There is no connection with the signal system for this detector or the second one located in Absolute Permissive Block signal territory. Here the indicator is mounted on an automatic signal belo and to the right of the main sign head. The indicator is controlled by telegraph operator. The hotbox dete tor scanner in CTC territory is miles from the recorder (CTC offic and indications are sent via Harm carrier. The second detector install tion in APB territory is nine mil from the message operator's locatio and indications are sent via Servo ca rier. In both cases a pen graph r corder tape is read by the respecti operators. When they note a hotb indication on the tape they control t special indicators to display the alte nately flashing-red aspects.

Western Pacific uses a Varityper letter signal drawings. They claim it faster than hand lettering and is bett than a typewriter, the type bein clearer and sharper; this because th use several different sizes of type. Th Varityper has a 30-in. carriage.

Western Pacific is testing stat power inverters. They have six 12-vo dc to 100-volt dc, 600 ma in servi for TCS code line (less battery), 10-volt dc to 250-volt dc, 60 ma fo TCS carrier, and a 1-kw, 12-volt dc t 117-volt ac for traffic signals at a grad crossing. These devices employ silico controlled rectifiers which feature con trol of large amounts of power by sma voltages. WP also anticipates testin the use of silicon controlled rectifie for direct switch heater control.

WP is eliminating pole top filte and bringing the line wire down a close to the phone box as possible. Lin wire spacing is maintained to tw brackets suitably mounted. A knif switch is inserted on the line side o the filter. The elimination of pole to filters is a result of the use of an ana lyzer on their lines. WP now has continuous 600-mile dispatcher's lin (carrier and physical).

The Santa Fe's 44-mile line chang from Williams to Crookton, Ariz., i proceeding at a rapid rate. It is ex pected to be in service by the end o the year, saving three-fourths to on hour on passenger schedules and 2-5 hours on freight schedules. The lin change will have reversible running double track, with high speed cross overs at about 8-mile intervals. Norma train speeds of 90 mph for passenge trains and 60 mph for freight trains will be allowable.

Fills and cuts are most impressive especially those fills made with patio grade flagstone. Almost entire line re location is through flagstone or malpais (lava). The holes for all but about 10% of the 1,540 or so line poles had to be blasted. Only one crossarm with four pairs of wires is being provided through the line change. Existing pole line in this general area has three full

crossarms. A microwave link from Barstow, Calif., to Winslow, Ariz., now under construction, will handle all but the local communication services.

The Santa Fe's philosophy is to keep signal aspects as simple as possible. Newest aspect is flashing green for "Approach Limited" used in approach to high speed crossovers. Usually flashing an aspect upgrades the indication, but in this case the indication is downgraded. Proper safeguards are employed by checking the flasher relay operation with two slow-release relays. Should the flasher fail, the aspect is changed to a steady yellow "Approach," a medium speed indication.

Experiments continue in attempts to provide radio coverage through tunnels. The latest one reported to be successful is a coaxial cable strung on each side of the tunnel, with directional stub antennas and inexpensive wide band (video) amplifiers inserted into the cable at intervals. One cable propagates to and receives from the West, the other cable from the East.

A yard track indicator at one yard is referred to by trainmen as the "tote board." Illuminated track numbers tell enginemen to pull out of the indicated track. It was built for the railroad by a local sign company. The indicator has speeded yard operations by eliminating interference and misinterpretation of hand signals by enginemen. It also makes it difficult for them to "hide" down a yard track.

Automation of CTC is actively pursued by one railroad and should have an installation in operation soon. This automated CTC will make meets without a dispatcher's intervention, which is in contrast to the N&W automated CTC installation between Portsmouth and Cincinnati, Ohio (RS&C, Feb. 1960, p. 15).

One cannot make a transcontinental trip by rail without becoming aware of the "rail curtain" at Chicago and St. Louis. So many ticket agents and passenger trainmen east of these points are officious and surly that it must certainly be a factor in the passenger losses of eastern railroads. West of the "rail curtain" the courtesy and helpfulness of these same people overwhelms this Easterner.