NEWS Month

Burlington Petition Denied

The Interstate Commerce Commission has issued a decision denying a petition of the Chicago, Burlington & Quincy to operate its Denver Zephyr trains between Lincoln, Neb., and Denver, Colo., 483 mi., at speeds in excess of 80 m.p.h. without installing automatic train stop, train control or cabsignaling. In its report, the commission comments that, "the record does not warrant any modification of our order of June 17, 1947. It is apparent, considering the time table schedules, that the relief sought is not necessary to maintain existing schedules but is primarily to afford an opportunity to make up about 40 min. lost time, and that if the maximum speed were reduced to less than 80 m.p.h. the schedules would have to be lengthened very little if at all."

Commissioner Miller dissented from the decision to deny the Burlington's petition.

Cincinnati Signal Club

The Cincinnati Railway Signal Club has resumed an active status for extension of educational service to the members on various railroads and terminal companies in the Greater Cincinnati Area. At a recent meeting attended by nearly 60 members, an illustrated lecture on the installation and maintenance of insulated wires and cables was presented by J. W. Hackett of the Okonite Company. Next meeting of the club is scheduled for September. An accompanying picture shows the members of the executive committee of the club and three guests. J. W. Kunk-

er, signal supervisor, Baltimore & Ohio, with headquarters at 2815 Spring Grove Avenue, Cincinnati, is secretary of the club.

The Signal Section, A.A.R., will hold its annual meeting at the Edgewater Beach Hotel, Chicago, September 12-14. The program will include reports of 12 standing committees and addresses by the chairman, L. S. Werthmuller, signal engineer of the Missouri Pacific; F. S. Schwinn, assistant chief engineer, Missouri Pacific and J. H. Aydelott, vice-president, operations and maintenance department, Association of American Railroads. Concurrent with the meeting, an exhibit will be held in the hotel by 24 manufacturers.

The Communications Section, A.A.R., will hold its annual meeting at the Wentworth - by - the - Sea Hotel, Portsmouth, N. H., September 27-29. The program will include reports of all the nine standing committees in addition to technical papers on three subjects: (1) polyethylene cable; (2) transistors and (3) microwave radio relay as applicable to railroad operations. Concurrent with the meeting several manufacturers will hold exhibits of communications equipment.

The Texas & Pacific has announced that the first phase of a program of installing electric locks on all main-line hand-throw switches in automatic block territory is almost half completed. The program, as is now functioning, entails

the work of three signal gangs, one operating out of Ft. Worth, Tex., the second out of Ranger and the third out of Longview. Thirty-four switches were equipped with electric locks as of the first of July, and approximately 60 were completed by the end of the month, which is about half of the 160 and some odd number the signal department hopes to have in service by October 1. Some, but not all, switches between Texarkana and Mineola and between Ft. Worth and Abilene will be equipped with locks by that date, according to the railroad.

F.C.C. Dismisses Petition

Following request, on June 27, of the Atchison, Topeka & Santa Fe, the Baltimore & Ohio, the Erie, the Gulf, Mobile & Ohio, the Missouri-Kansas-Texas, the Seaboard Air Line and the Association of American Railroads, in behalf of its members, the Federal Communications Commission, on June 29, dismissed without prejudice their petition of May 26 to vacate the commission's order of April 27 or reopen the proceedings, insofar as they relate to a reduction in the number of frequencies allocated to the Railroad Radio Service (See page 441, July issue, Railway Signaling and Communications). In their request of June 27, the foregoing railroads and the A.A.R., said that they did "not wish to be understood either as admitting the adequacy of the frequency allocation to the Railroad Radio Service resulting from the commission's order of April 27, or as waiving their right, at any appropriate time in the future, to seek the allocation to the Railroad Radio Service of such additional frequencies as the needs of such service and the public interest may require." No reason for withdrawal of their petition of May 26 was given by the petitioners in their request of June 27.

Santa Fe Gets Some Relief From I.C.C. Signaling Order

The Interstate Commerce Commission has issued an order granting some parts and denying other parts of a petition of the A.T.&S.F. for relief from I.C.C. order issued June 17, 1947 which, among other things, requires automatic train-stop, traincontrol or cab signaling on lines where trains are operated at speed of 80 m.p.h. or more.

The commission granted the Santa Fe relief of another year beyond December 31, 1951, within which to complete its program in compliance with the order. The commission postponed, "until further order of the commission," the requirement of the order insofar as it calls for installation of automatic train-stop, train-control or cab signal

(Continued on page 524)



Executive Board of the Cincinnati Railway Signal Club

Seated left to right—A. R. Lewis, assistant supervisor, Norfolk & Western; J. T. Rowe, signal foreman, Baltimore & Ohio; R. F. Thompson, chief clerk, Baltimore & Ohio; H. J. Burkley, superintendent motive power, Baltimore & Ohio; H. A. Hudson, superintendent signals & electrical, Southern; and C. E. Persinger, signal supervisor, Chesapeake & Ohio. Standing left to right—H. M. Dryden, signal supervisor, retired, Baltimore & Ohio; J. P. Hopton, signal supervisor, Cincinnati Union Terminal, J. W. Kunker, signal supervisor, Baltimore & Ohio; A. M. Gilbert, chief inspector, New York Central; J. W. Hackett, Okonite Company; E. A. Griffith, Okonite Company; and S. W. Pollock, Okonite Company.

devices on Santa Fe freight locomotives, and the commission exempted the Santa Fe from the use of the commission's definitions of "medium speed" and "low (restricted) speed."

The extra year to complete the required installations was granted by the commission on the basis of the Santa Fe's showing that it would be "sound economics" to complete first the centralized traffic control now under way on its 73.8 mi. between Canyon, Tex., and Texico, N. M., and that planned on 106.8 mi. between Wellington, Kan., and Wavnoka, Okla.

In postponing until further order the requirement to install train-stop, train control or cab signal devices on freight locomotives on the Santa Fe, the commission said that while installation on passenger locomotives only "will not give the maximum protection," they will "afford greater protection for all movements except where a freight train overtakes a stopped passenger train."

An automatic train-control system has been in service for years on 175.4 mi. of the Santa Fe between Pequot, Ill., and Ft. Madison, Ia. The Santa Fe requested that it be exempt from that part of the order with respect to definitions of "medium speed" and "slow (restricted) speed" so that it may continue its present speeds and not be compelled to change the medium speed setting of the governors on passenger trains from 40 m.p.h. to 30 m.p.h., and the low speed setting of governors on all trains from 20 to 15 m.p.h.

In support of this request, the Santa Fe showed that the blocks which control the cab indications and the automatic brake applying apparatus are 6,000 feet in length and there is always one block of medium speed and one block of low speed before reaching a location where it would be necessary to stop; that braking tests made on level track show that the stopping distances from the point where the cab indication changed from medium to low speed, with the train moving at a speed of 40 m.p.h. at that point, were 1,750 ft. for a lightweight passenger train and 2.185 ft. for a conventional passenger train, indicating that the block length of 6,000 ft. is sufficient in which to stop any passenger train on any grade encountered. In this train control territory a train may proceed on either track in either direction under the protection of automatic train control. In recent years No. 20 turnouts have been installed in the crossovers between main tracks in order that passenger trains could cross over from one track to the other at a speed of 40 m.p.h.

The commission further stated that consideration is now being given in another proceeding to, among other things, revised definitions of medium speed and low speed. The wording of the commission's recent order is that the "petitioners be, and they are hereby, excepted from the requirement to use the definitions of "medium speed" and "low (restricted) speed" contained in said order of June 17, 1947.

In its petition, the Santa Fe requested permission without installing train-stop, train-control or cab signaling, to operate certain passenger trains at speed of more than 80 m.p.h. on certain lines in California; 71.6 mi. between Barstow and Mojave, 233.7 mi. between Bakersfield and Stockton and 73.3 mi. between Santa Ana and Sorrento.

Commissioner Miller concurred in part with the decision as follows, "I concur in this report except that I would grant the modification sought by the petitioners as to the operation of passenger trains between Barstow and Mojave, Bakersfield and Stockton, and Santa Ana and Sorrento.

R.R. Radio Paying Off

Use of two-way radio by the railroads during 1949 has registered a 400 per cent jump over last year, and the evidence is becoming increasingly clear that only through radio communication can the railroads achieve full efficiency, according to Paul V. Galvin, president of Motorola, Inc., in Chicago. "In this day of high operating costs," Mr. Galvin stated, "twoway radio can mean the difference between a railroad running in the red, and one showing a profit. Today, two-way radio has definitely proven itself for both train and yard and terminal use." While most railroads now have excellent communication between wayside points, Mr. Galvin pointed out, experience has shown that with the advent of Diesel-electric freight engines and the consequent lengthening of trains, the 80 to 90 per cent of train messages that take place between the conductor and engineer have become more difficult to transmit. Walkie-talkies are the answer to this problem, providing added safety along with efficiency, according to him. The Gulf, Mobile & Ohio is one of the railroads that have adopted this system.

Yard and terminal work has been even more greatly aided by two-way radio, according to Mr. Galvin, immediate results and great savings having been reported. One large railroad quotes an increase of 5 per cent in the efficiency of each locomotive through an investment in radio amounting to less than 2 per cent of the locomotive's value. Another says that radio has increased the capacity of one classification yard by 20 per cent through increased efficiency in operations. The Union Pacific terminal at North Platte, Neb., has reported a 98 per cent record on delivery promises since installation of two-way radio, as against 70 per cent before. Other advantages are that eight engines are now doing the work of nine, no time is lost in picking up orders, and during severe winter conditions radio has permitted the yard to remain open constantly. "While initial cost of complete railroad radio equipment may seem high," Mr. Galvin noted, "it is significant that in the case of this Union Pacific yard alone the system amortized itself in six months."

Construction

The St. Louis-San Francisco has announced that it will begin tests on endto-end radio communication on trains following the grant of a permit by the Federal Communications Commission, which has assigned the call letters KA3650 and frequency of 161.13 mc. Five locomotives and cabooses are to be equipped with the necessary equipment, to enable crews to maintain constant communication between

This petition was denied by the commission. the two ends of freight trains. Installation of the electrical equipment is underway, and will be progressed as fast as the sending and receiving equipment is delivered to the railroad. In order to determine the most efficient equipment, the railroad will make exhaustive tests on all divisions and under all weather conditions. The tests will be under the direction of R. W. Troth, superintendent communications and signals.

> The Union Pacific has announced that it will spend \$1,568,820 for the installation of 142 miles of continuous automatic cab signal circuits and the replacement of the remaining semaphore signals with color lights, between Summit, Neb. (Omaha), and Grand Island. With the completion of this job, automatic cab signals will be in use on 755 miles of the 812 miles of double-track main line between Summit and Green River, Wyo.

The Chicago, Milwaukee, St. Paul & Pacific has placed an order with the Union Switch & Signal Company for the necessary material to install automatic permissive block signaling on approximately 41 miles of single-track line between Janesville, Wis., and Madison, involving searchlight signals, relays, switch circuit controllers, rectifiers, transformers and housings. The field work will be handled by railroad forces.

The Baldwin Locomotive Works has ordered two sets of intermittent inductive train control equipment from the General Railway Signal Company. This equipment will be installed on Diesel-electric switching locomotives for the Lehigh Val-

The American Locomotive Company has ordered three sets of intermittent inductive train control equipment from the General Railway Signal Company. This equipment will be installed on Dieselelectric switching locomotives for the New York Central.

The Ontario Northland has ordered materials from the General Railway Signal Company for the installation of absolute permissive block signaling on 26 mi. of single track between Swastika, Ont., and Englehart. This order includes Type-SA searchlight signals, Type-K relays and welded steel instrument cases.

The Missouri Pacific is planning to install 5.5 mi. of centralized traffic control between Pleasant Hill, Mo., and Strasburg, at an estimated cost of \$62,000.

The Southern Pacific is planning to spend \$2,450,000 to replace its rider-operated hump yard on the Los Angeles division at Taylor, Cal., with a car retarder yard. The project will involve the extension of tracks in the receiving yard, replacement of tracks in the classification hump yard, construction of tracks in the departure yard and the extension and revamping of various other tracks. Approximately 166,289 ft. of track and 171 switches will be installed. Among various jobs to be completed in connection with the new vard will be the installation of communications facilities, consisting of high and low-level loudspeakers and two-way radio between the hump master's office, engines and the yardmaster's office.