

## The Conductor and Engineer Compare Watches

Time is a factor of major importance in railway operations. Every one of the thirty-five thousand passenger and freight trains operated daily on the American railroads must move and meet and pass and arrive and depart on a definite time schedule. If a train falls behind its set schedule, it must run on a delayed time schedule.

Train crews, station employees, and numerous other railroad men must report for duty and perform their assigned tasks on a definite schedule. Locomotives must be put in readiness, cars must be assembled, trains must be made up, stations, ticket offices, baggage rooms and mail and express offices must be opened and closed according to schedules. Foremen in charge of track repairs must know when each train is due to pass over his section so that the track will be in readiness.

On each railroad there are designated standard clocks which are corrected daily to conform with the time signals telegraphed throughout the country from the United States Naval Observatory in Washington, D. C. At no time are these clocks allowed to deviate more than ten seconds from Naval Observatory time. At points on the railroad where these precision clocks are not installed, railroad clocks must not deviate more than 30 seconds from standard time.

Unless otherwise provided in railroad rules, watches carried by train dispatchers, conductors, enginemen, brakemen, yardmasters and foremen of yard engines must be compared with a designated standard clock before commencing each day's work.

Conductors and enginemen always compare their watches before starting on a run or before commencing work each day, and other members of the train crew must compare their watches with the conductor's or engineman's watch at the first opportunity.

Employees who are required to carry approved standard watches and have them regularly cleaned and inspected include trainmasters, train dispatchers, station agents, telegraph operators handling train orders, yardmasters, road and yard conductors, engineers, firemen, brakemen, switchmen, road foremen of engines, train baggagemen, track supervisors, section foremen, supervisors of bridges and buildings, signal supervisors, signal foremen, and foremen of crews working on bridges, buildings and roadways.

Prior to 1883, cities and towns throughout the United States went by "sun" time, and since it requires about 195 minutes for the sun's meridian to pass across the United States from Eastport, Maine, to Cape Flattery, Washington, there were about that many different local times in this country.

Each railroad adopted the time standard of one of its principal cities. In all, the railroads of the United States were operating on more than 60 different standards of time. This medley of times created a great deal of confusion.

The railroads "put their heads together" and agreed to adopt a uniform standard of time in each of four time zones based upon mean "sun" time on the 75th, 90th, 105th and 120th meridians west of Greenwich, each time zone being one hour apart.

At exactly 12 o'clock noon on November 18, 1883, the sixty-odd railroad times were abolished throughout the United States and every railroad clock and every railroad man's watch was set to standard time in each of the four time zones. Cities and towns in all parts of the country promptly adopted standard time, and since then standard time has been adopted by the peoples of other countries until today it is in almost universal use.

