

Brighton Line Time-Keeping and Recovery

By F. S. BOND



Victoria-Brighton electric train near Haywards Heath

THOUGH electric traction obviously lacks some of the individuality of steam locomotive working, there is considerable interest and variety in the handling of electric expresses, and especially in the matter of time-keeping and the recovery of lost time. It is hoped that the following notes on the Brighton electrics in 1948 will be considered to bear out this claim.

In the up direction 26 runs by various non-stop trains were recorded, including one in the course of which line-side repairs to a defective current pick-up shoe involved 20-min. delay; it is significant, however, that this was the first mechanical or electrical defect experienced by the writer in over 200 journeys during the past three years. Of the remaining 25 trains, 16 reached Victoria before time, 6 others were less than one minute late, 2 were just over a minute late, and 1 was just over 2 min. outside schedule. The average arrival of all 25 trains was, thus,

$\frac{1}{4}$ min. before time and the latest was 2 min. 9 sec. over time, a fine record achieved in every variety of weather and other conditions.

As, however, only one of the 26 up journeys made by the writer during the year had a clear road throughout—all others suffering from signal or temporary engineering checks—the net times were also remarkable, averaging only 56 min. 25 sec. for the 50.9 miles start to stop, despite the fact that 75 per cent. of the trains involved were diverted to the local road at Coulsdon North, this and the Croydon curves on that road representing a 2-min. delay not taken into account in assessing the net figure; there are two other permanent speed restrictions also, one to 30 m.p.h. As an example of time recovery by these electrics, it may be noted that on one occasion a signal stop of 1 min. 23 sec. duration, and six other checks caused fully $7\frac{1}{2}$ min. delay, but the enterprising motorman brought his train

into Victoria in 59 min. 20 sec. from Brighton, 40 sec. before time. To do so, he attained speeds of over 72 m.p.h. at five different points, five of the checks being interspersed between them. Considering the road and strictly-observed speed restrictions, this involved acceleration unattainable with steam, and the net time was only 51 min. 48 sec.

In the down direction non-stop performance was almost equally brilliant. The average gross and net times for all runs were 59 min. 51 sec. and 54 min. 54 sec., respectively, and no train arrived at Brighton more than 1 min. 40 sec. later than the public timetable arrival time of 60 min. Actually this train had a 58-min. working timetable schedule, and so was 3 min. 40 sec. late on that basis, but the net time was only 55 min. 43 sec. On this and other occasions signal stops outside Brighton made time recovery impossible.

Turning now to the 4.45 *ex*-Victoria, with its difficult 29-min. booking for the 27.5 miles from the East Croydon start to the Haywards Heath stop; 20 journeys were made by this train, but on only three was a clear road obtained throughout this section. Moreover, delays to the remaining 17 trains nearly all occurred in the last seven miles, making timekeeping almost impossible. Actually, besides the three unchecked trains, two others that suffered delays managed to better the 29-min. schedule. It is noteworthy that the average net time for the 20 runs was only 27 min. 46 sec., roughly 1½ min.

under schedule, and only ¼ min. over even time, no mean achievement.

The two fastest net times recorded were only 26 min. 34 sec. and 26 min. 38 sec. On these runs, the first 7.0 miles from the start—a continuous climb of over 120 vertical feet at 1 in 264 and 1 in 165—were covered in 8 min. 33 sec. and 8 min. 38 sec., and Three Bridges, 19.0 miles, was passed in 18 min. 42 sec. and 18 min. 44 sec., before delays spoil the remainder of both these fine runs. On another occasion the initial 7-mile climb took only 8 min. 28 sec. It may interest high-speed fans to know that, on one of these runs, the 7.6 miles from Earlswood to Three Bridges took only 6 min. 8 sec., the speed when passing the latter station, after nearly four miles uphill, was still over 71 m.p.h.

The high standard of operation and time-keeping prevailing in previous years has, therefore, been maintained and even bettered in 1948. It should be remembered, moreover, that the pre-war non-stop schedules are still in force and the 29-min. time of the 4.45 is better than pre-war. Also, the runs recorded include all journeys made by the writer and are, therefore, a fair sample of day-in-and-day-out standard operation. The trains concerned were the 9.35, 11.25, 1.25, 3.25 and 5.25 up non-stop, and the 4.45 (stopping at East Croydon and Haywards Heath *en route* for Eastbourne), and the 5.25, 6.00 and 6.30 down non-stop, all in the rush-hour period.

On the Southern Electric in Surrey



West Croydon-Holborn Viaduct train entering Sutton



Photos]

[G. H. Marillier

Victoria-Brighton stopping train approaching Merstham