How Milwaukee's new train speeds freight

The 'XL Special,' which the Milwaukee calls the fastest run in the Northwest, takes only 55½ hours to travel from Chicago to Seattle, Wash.—which rivals some passenger-train schedules.

An engineer's slide rule and the operating department's experience are responsible for setting up and checking out the timecard for the Milwaukee's newest freight train—the "XL Special." A milepost-by-milepost study of the new freight's movements during the past month has convinced Milwaukee officers that the snappy time of 55½ hours from Chicago to Seattle—which rivals some passenger-train schedules—can be maintained.

The study—made from the vantage points of an office car and a dynamometer car— has revealed an astonishing similarity between the working schedule and the timetable charted by the slide-rule railroaders at headquarters. The only changes indicated have been rolling adjustments — less time for the eastern end of the run and more time for the mountain territory.

● **Guide schedules prepared.** The XL Special, naturally dubbed the fastest run in the Northwest by Milwaukee, began to take shape late in 1961, when the road's tunnel-clearance improvement program was completed. Guide schedules, set up some time before the train went into service Oct. 26, resulted from conferences of division superintendents who gave their estimates of how much time a train would need to get over their divisions.

Assistant Engineer Matthew Lewis, the man who worked out the theoretical schedules for the "Hiawathas" in 1935, was called in to compute a schedule for the XL Special which reflected all factors "that might in any way affect the movement of the train. We knew what kind of a train we had to have. We worked on the basis of a 3,000-ton train hauled by four GP-30's—9,000 horsepower." Other factors were a 2:30 p.m. departure from Chicago on Monday, for example, pickups at Milwaukee, St. Paul-Minneapolis and Aberdeen, S.D., and arrival Wednesday at 11:30 a.m. at Spokane and at 8 p.m. in Seattle.

Milwaukee President William J. Quinn points out that the fast train's afternoon departure from Chicago was designed to permit inclusion of cars loaded in the Chicago area the night before, TOFC traffic delivered as late as an hour-and-a-half before departure, and late-morning deliveries from Eastern and Southern connections. The train's arrival time in Seattle was set up to allow delivery throughout the Puget Sound area on the morning following arrival in Seattle. "Our new schedule," explains Mr. Quinn, "was worked out to help shippers operate their businesses as efficiently and competitively as possible."

● **Mile-by-mile checks.** When the first XL Special roared out of Chicago on Oct. 26, an office car and a dynamometer car were in the consist. Riding the train were top Milwaukee operating and engineering officers, checking the formula for the eye-opening schedule: controlled tonnage, reduced terminal time and increased horsepower. "Our guide schedule was, of course, based on experience," notes Virgil Glosup, assistant vice president operations-chief engineer, "but experience isn't enough. We had to see how time allocated for runs between terminals, for set-outs and for crew changes worked out."

Importantly, Milwaukee officers wanted a milepost-by-milepost diagram of the XL Special, with speed, drawbar pull and times indicated. This information is checked against the theoretical schedule to insure the kind of "cast-iron dependability" that David Valentine, Milwaukee's general superintendent of transportation, says is at the heart of any good schedule.

"One thing we found immediately," he notes, "was that there were areas in the schedule that needed tightening. Also, there were spots that needed letting out. For instance, we found it advantageous to put the additional time in our mountain territory—that gave us more flexibility where the possibility of delays is strongest." Mr. Valentine points out that many factors can affect train operation in Milwaukee's mountain territory: snow, unpredictable weather and, of course, the steep grades over the mountains.

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RAILROADING AFTER HOURS WITH JIM LYNE

CHEERFUL WORD FROM BRITAIN—Transportation is going to be an issue in Britain's next general election—and a writer (Peter Jenkins) in the Manchester Guardian Weekly says the political parties are lined up this way: Conservatives for the highway haulers; Labor for the railways; Liberals for private transportation.


LYNE

The author believes independent students of transportation will support railways as carriers of "goods and people in large quantities at fast speeds over long distances," getting rid of their lines of feeble traffic. (One-third of the railway mileage now carries only 1% of total traffic.)

If Labor gets in, Mr. Jenkins predicts that they'll up the user charges on the big trucks, making them pay "something nearer to the economic social cost of their operation." The Labor party, he reports, aims to achieve "an economic division of traffic between road and rail."

The author suspects that the day may come when transport investment will be made "on knowledge of total cost and advantage" and that charges will be based on "full social cost"—in which case he foresees that motorists may find themselves paying "three times more to drive or park in London in peak hours."

From these optimistic predictions, I deduce that Britain must not have a counterpart of James Hoffa or the National Highway Users conference operating in its fair land.

DELAWARE RR BOOSTER—Jack Smyth, editor and publisher of the Delaware State News in Dover, has sent me a full-page advertisement for railway passenger service from his paper—which was printed free of charge, with the publisher's compliments.

Editor Smyth suspects that the railroads are trying to discourage passenger business—but he feels they have a salable product (emphasis on convenience, safety and luxury). My own belief is, if railroads would get even half of a fair shake from government, most of them would lose any reluctance they might have to promote their passenger service (wherever there's really a need for it). But, in the meantime, when a fellow can invest scarce capital in some ways and earn 20% and up on it—where the same money invested in other ways will earn 0% or less—what should he do?

JAMMED AND RISKY, BUT IT'S FAST—Speaking of passenger service, I've had to do some traveling by air recently (where time offered the alternative of flying or staying home). Most of it was in so-called "tourist" or "economy" class—a more accurate name for which might be "steerage."

When there are three seats on each side of the aisle, in a cabin no wider than a passenger coach, and your knees hit the seat ahead, the crowding is even worse than in the old-time steerage on ships. But you do have to hand it to these air fellows for getting you there fast, even if they do lose your baggage. And I note that some jet planes now seem to be suffering from the dropsy (down 20,000 feet or so, suddenly).

Many people have forgotten how comfortable and safe train travel is by comparison. Getting faster (comfort not much emphasized) plane service seems to be a major governmental objective. Santa Claus comes down the chimney for all modes of transportation except the railroads.

BC ROAD ON UPCURVE—The British Columbia Hydro Authority has sent me a copy of its quarterly publication "Progress," which tells a lot about the Authority's freight railway, which surprises me (such was my ignorance) by reporting 104 miles of main line and 52 miles of secondary tracks—south and east of Vancouver, paralleling the Fraser River.

Even more eye-opening is the fact that the road grossed $5 1/3 million in its latest fiscal year (up 6.2% over the preceding 12 months), and that it has connections with three Canadian and three U.S. railroads—the Canadian National, the Canadian Pacific, the Pacific Great Eastern, the Great Northern, the Northern Pacific and the Milwaukee—the latter connection being right smack-dab on the U.S. border at Huntingdon (Sumas).

Any part of the railroad industry (small or large) that is showing healthy growth merits a spotlight.

'XL Special' speeds freight

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● **Set for winter.** Milwaukee's schedule takes into account the extreme cold weather of mountain-territory winters and the operating problems that go with it. "We don't intend to reduce the tonnage during the winter," Mr. Valentine explains. "By having a car limit and by keeping the train moving, we should have fewer problems than we would have with a longer heavier and slower train.

One of the problems that has been worked out is crew changes. The XL Special is manned by 20 different crews —105 men—during the 2,179-mile run (some of the men are required by full crew laws).

Milwaukee is running some high-priced equipment in the XL Special—including piggyback flat cars and auto-rack cars—and is getting better car utilization with the faster schedule.

● **Schedule holds up.** Mr. Lewis's slide-rule schedule, the operating department's theoretical schedule and experience during the XL Special's first month all indicate that Milwaukee will be able to maintain the new timetable. Mr. Lewis's computations are based on a 3,000-ton train. In practice the tonnage varies—but still "the theoretical matched the practical schedule to a remarkable degree."

The advertised schedule calls for the train to leave Chicago at 2:30 p.m., Milwaukee at 5 p.m. and the Twin Cities at 1:30 a.m. Seven hours later, at 8:30 a.m., it's due out of Aberdeen for the 1,170-mile dash to Spokane.

The XL Special's time now is 21½ hours faster than previous schedules—and only a few hours slower than some transcontinental passenger schedules. (A second section of the special, Milwaukee Train No. 83-263, is continuing to operate on the 77-hour schedule, serving intermediate points.)

Mr. Lewis first made a route profile, showing the speeds milepost-by-milepost. Then a series of calculations determined the changes in speed mile by mile, "even to a tenth of a mile, with every change of grade." Average speeds between terminals were computed and added up to get the total time required. The next step was to compare the computed schedule with the results of operation and dynamometer-car tests.

"After several weeks of experience," comments Mr. Valentine, "we're certain that we'll maintain this schedule. We've accomplished arrivals ahead of schedule on these trains. . . . We feel we have a solid, realistic schedule."