THE RAILROAD WEEK IN REVIEW

June 4, 2010

"*We will not lose market share.*" *-- Fred Green, President and CEO, Canadian Pacific Railway*

Canadian Pacific's Investor Day & Technical Train Tour June 2 and 3 was really all about technology. To be sure, there were "forward-looking statements" about traffic volumes, pricing and financial matters but for me the Big Takeaway was how CP is using technology to run a more efficient railroad that delivers strong competitive advantages to itself and its customers.

Many of the tools have been around for years if not decades: hot box detectors, top-of-rail lubrication, distributed power, mechanized inspection of trains at speed, automated track inspection, computerized train makeup, wheel impact load detectors, and so on. The CP difference is the way it's adapting these tools to the realities of 21st century railroad economics. Let me explain.

CP seeks to integrate all these technologies so that the data output from any combination of detectors or inspection devices can have a positive impact on train performance metrics. Take terminal inspections. A car-knocker walks the train to be sure all brake shoes are touching the wheel after an application and are not touching the wheel when released. But how does the inspector know if the shoe is pressing the wheel with the appropriate pressure after a ten-pound application at the head end?

He doesn't. But if you make a running ten-pound brake-pipe reduction that wheel is going to heat up. Roll the the train through a hot-box detector and you'll get a reading. Do it enough times and you'll have a collection of data that tells you how hot a wheel with a specific application can be expected to be. A cold wheel is a brake defect. Marry the hot-box detector with an AEI reader and you know what brake on what wheel is defective and where it is in the train.

Moreover, if a specific car keeps failing heat tests you know something is seriously wrong with its brakes. Or if a car keeps failing WILD readings you know something is wrong with the car -- why do the wheels keep getting flat spots? The beauty of these systems is they are predictive -- they spot failures before they can do serious damage and they flag perpetual bad actors.

Here's the payoff. A standing brake test in a terminal can take an hour. Take an hour out of terminal dwell and you add a thousand cars to the fleet. You also increase car-miles per day -- CP is doing more work today with 3,600 fewer pieces of equipment than they were using a year ago. You can do the same work with fewer yards because the focus is on keeping cars out of the yards by blocking for the distant node (Conrail did this particularly well); you can keep cars out of shops longer, close newly-redundant shops and reduce horsepower-hours per GTM.

Out on the railroad, let's say the low rail on a curve keeps getting pushed out of gauge. You're running a mix of duped intermodal hotshots of 10,000 feet or with power in the middle of the train plus bulk unit trains with power on the front and back and mixed freights with multiple

units on the point. Lateral forces vary between consists and where they are can affect wear on the low rail.

Try this: lay a piece of string round a right-angle curve delineated by a bunch of nails barely tapped into a board. Pull on the right end of the string and keep your finger on the left end. The string wants to straighten and it'll pop out the nails in the middle of the curve. That's your merch train with power on the point only putting pressure on the low rail. Lightly tap the nails back into the board and this time keep a little pressure on the left end as you pull from the right. The nails stay put.

So how much pressure do you put on the end of the string and where do you put power mid-train if at all? That's where CP's TrAM -- Train Area Management -- system takes over. This nifty piece of software builds and powers trains according to the profile of the train's route, the data warehouse of train operating experience, and how a given train can be expected to behave with a given power configuration.

What you're doing is reducing lateral forces which means less rail and tie wear (CP says TrAM plus rail-top lubrication has cut annual track repair-and replace expense by a third). As one chap said on the train (more on this below), "You get more work and less damage." And what you don't spend replacing worn-out low rails can be put to more productive use elsewhere.

Less equipment damage has allowed CP to reduce the number of bad-order equipment set-outs from numbers in the thousands to the low hundreds. They have also instituted NASCAR-styled in-train repairs that let trains keep moving on schedule, so that -- among other things -- meets occur where they're supposed to, thus allowing further compression of train schedules.

The marketing section of the Investor Day conference was loaded with tidbits that -- properly used -- can make CP short lines a lot of money both in top-line revenue and lowered operating expense. The first lesson is what Chief Marketing Officer Jane O'Hagen calls "reassessing the book of business to leverage strengths." CP started the year with a billion-dollar pipeline of new business opportunities of which $100 million (ten percent) is now money on the rails.

Energy is a biggie. It's 15 percent of CP's merchandise business, partly because CP is the only Class I that touches all three of the largest energy plays in North America: Alberta's Industrial Heartland that is keyed to the oil sands region, the Bakken shale and oil fields in Saskatchewan and North Dakota and the Marcellus shale gas fields in Pennsylvania, Ohio and West Virginia. And CP, thanks to the DME acquisition, now offers single-line ethanol unit train service to the northeastern US markets *and* the potential for DDGs to Mexico.

In bulk, CP has about 60 percent of Canada's high-throughput grain elevators in its network, many served by short lines, and grain is 18 percent of revenue units. It is the dominant export potash carrier (fertilizers are 7 percent of total loads and 30 percent goes through Portland, Oregon over the UP) with new expansion mines in the works for another 10 million tons of product. The coal franchise represents 12 percent of total volume with 86 percent of ton-miles being metallurgical coal for export. At 60 percent of total volumes moving in carload lots, CP leads the Big Six Class Is in this category.

Thus it was particularly gratifying to hear O'Hagen stress the need to "build new relationships" with other railroads. She spoke specifically of the need for "more customer face time" and "improving revenue quality," two particular strengths of the short line community. All the tech innovations and operating strategies above are designed to "reduce the cost to serve," which, combined with an intense focus on customer relationships that can support quality-based pricing, will undoubtedly lead CP to a mid-70s operating ratio in due course. (It was 82.4 in 1Q2010, down 5.7 points year-over-year; do it again and it's 76.7 by 1Q2011.)

The highlight of the day was in the Q&A. One of the analysts asked, "At what point will you reduce prices to keep a customer?" Fred Green never missed a beat, replying promptly and with no bones about it, "We will not lose market share." Everybody gasps. Everybody, that is, except those of us who understand Unique Selling Points and product differentiation.

As management expert Tom Peters points out in his classic tome *Thriving on Chaos*, price is not a Unique Selling Point (USP) because no matter what price you name, your competitor can put out a lower one. Quality in the eye of the customer *is* a USP and in the railroad business it's reliability and consistency at a reasonable price. CP seeks to make a market among transportation buyers who value efficient supply chain management and it is in this market that Green is determined not to lose share.

Looking at the value proposition another way, there are three words which, used in pairs, define every product or service: cheap, fast and good. Cheap and fast isn't going to be any good. Good and fast isn't cheap. And good and cheap isn't going to be fast. Fast, in supply chain management is having the right goods in the right place at the right time. That's what CP promises and defines its market. Do it right and you don't lose market share. I'm glad Fred had the chance to make the point in such a definitive manner.

So much for the afternoon in the conference room. The real treat was Thursday's Royal Canadian Pacific (www.royalcanadianpacific.com) train ride to Field, BC from Calgary, AB over the continental divide. My wake-up call comes at 0530 so I can be downstairs, full of coffee and ready to go when the bus comes to carry us to the Royal Canadian Pacific pavilion and enclosed train shed adjacent to the old Palliser Hotel, once owned by Canadian Pacific Limited.

After more coffee, ogling the historical displays and meeting more CP staffers, we are escorted to our assigned seats in our train's consist of 1920s-vintage business and parlor cars. I'm in the lounge section at the obs end of the Royal Wentworth, a 1926 product of Angus shops costing the grand sum of C$73,535.95 and taking five and a half months to build. In addition to the six passenger-carrying cars there's a full baggage car and a back-to-back pair of FP9s, the 4106 and 4107, on the point.

We pull promptly at 0800, gather croissants, breakfast rolls, a variety of juices and yet more coffee in the diner-buffet and return to our seats. By 0830 we're ready for the roving team of presenters, of which there were four. This was a brilliant stroke on CP's part. They wanted to do a rolling show-and-tell of How It Works in four areas and what better way than to have the presenters moving among the groups with story boards pre-positioned in each group's area.

Of the 60 souls who came to the presentations, 50 of us stay for the train ride, and we who stayed are all the richer for it. By *not* shoehorning us into a theater car, CP created small groups where Q's could be asked and A's given in a much more personal manner. Judging from the post-mortems on the bus back to Calgary, a lot of it stuck.

The fist topic is Automated Train Inspection and some of us have track charts so we know where to look for the hardware as we pass it. Then we are briefed on the advantages of Distributed Power and the several DP trains we pass -- including a 14,000-foot monster with two units on the point and three more throughout (one's just ahead of second box from camera in photo) -- provide an impressive first-hand view.

The Friction Management message is driven home with the help of the track-side lubricators we can see from the rear platform and and the Long Train Strategy presentation is supported by the merchandise, sulfur, intermodal, grain trains we see -- all big and fast, everybody meeting where they should. The presentations conclude on schedule at 1045.

It's a steady one-percent climb toward the Continental Divide, elevation 5,800 feet, from Calgary, elevation 3,500 feet. The F's never once lose their footing and the CWR gives us a smooth ride as we roll along at speeds from 25 to 50 mph depending on the grade and traffic density. The highlight of the trip is the two spiral tunnels as we drop down into Field from the Top of the World. I didn't see a soul reading their financial papers or studying their shoes through any of it, which reinforces my belief that there's no better way to tell the story of how you're working on the railroad than to take people out and let see How It Works first hand.

Fred Green opened his remarks admonishing the analysts to think three to five years out. That's what it's going to take to collect the data from the detectors and software models to translate what's happening into what's likely to happen before it happens. It's an important lesson to be learned and the railroad that does it best will be the soonest winner. CP is on the move.