Rail Start-Ups

Having the Right People in the Right Place at the Right Time

PETER R. BISHOP

Staff plans and practices are vital to the success of any light rail operation. In Buffalo, the Niagara Frontier Transportation Authority's Metro Rail system began its efforts to get the right people in the right place at the right time in 1981 with a nationwide search for a rail operations leader with a background in research and development. With this superintendent aboard two years before the system began revenue service start-up tasks such as developing a rule book and standard operating procedures began. Management personnel were recruited next and sent to the Port Authority Transit Corporation's facilities in New Jersey to learn from an operating light rail system. Filling the rest of Metro Rail's positions then began. Screening for nonunion employees was extensive and systematic. Union employees recruited from Metro's bus operations, however, could only be ranked by seniority. Training became the next consideration and was at times complicated by the fact that, although equipment had been delivered, not all of it was operational when expected. The success of the recruitment and training process shows up in Metro Rail's low turnover rate.

THE NIAGARA FRONTIER TRANSPORTATION AUTHORITY (NFTA) was created by an act of the New York State Legislature in 1967. The NFTA, a public-benefit corporation owned by the citizens of New York, was assigned responsibility for developing air, water, and surface transportation in Erie and Niagara counties. The authority was given the further mission of formulating and putting into effect a unified mass transportation policy for the Niagara Frontier.

Niagara Frontier Transportation Authority, 93 Oak Street, Buffalo, N.Y. 14203.

Between 1967 and 1970 the NFTA conducted extensive planning studies leading to the production of the Transit Development Program. This program, which was officially approved by the legislature in 1971, encompassed three major elements: the establishment of a regional bus transit network, the construction of a Metropolitan Transportation Center in downtown Buffalo, and the design and construction of a rail transit system between Buffalo's waterfront and the suburban community of Amherst.

During the early 1970s the design of such a rail transit system was planned as a heavy rail line operating through the principal urban corridor, with both subway and aerial structures. After intense local review, the route ultimately evolved as a combination light and heavy rail system with mall operation through the central business district (CBD) and in tunnel elsewhere. The substitution of tunnel for aerial structures, occasioned by community opposition to the latter, substantially increased the cost of the project. As a result, to remain within fiscal limits the length of the line had to be reduced. Instead of a 10-mi heavy rail line, the project was scaled down to a shorter light rail route located completely within the city limits.

Construction of the Metro Rail line began in 1979. The project created many hundreds of badly needed jobs and much of the total cost of $530 million was spent in the western New York area. As a public works effort, Metro Rail surpassed in size even the famous hydropower installations at Niagara Falls.

Metro Rail opened in stages. Operation through the downtown mall, itself under construction, began on October 9, 1984. On May 18, 1985, trains began to operate underground as well for a total distance of 5 mi from the downtown terminal. On November 10, 1986, the entire route from Memorial Auditorium to the south campus of the State University of New York at Buffalo was opened to the public.

The current Metro Rail line consists of 6.2 dual-tracked route miles, 27 double-ended cars, 8 architecturally distinctive subway stations, and 6 stations located along the world's largest pedestrian mall, Buffalo Place. By early 1987 this modest-sized rail operation was carrying 30,000 daily riders. It currently operates weekdays and Saturdays until midnight with limited Sunday service. During peak periods the trains run every 6 min. Between the morning and afternoon peak periods, the trains operate on 10-min headways, while in the base periods the headway is lengthened to 20 min.

In 1981 Metro Rail was faced with its initial application of the "right people in the right place at the right time" rule. A company philosophy for preliminary staffing necessitated a nationwide personnel search for a rail operations leader with a background in research and development. Revenue service was still 3 years away but there was a pressing need to put in place as many operational facets as possible. The very heart of the rail transportation

department began beating in 1982 when Anthony Schill came on board as superintendent. Through his efforts over the next 2 years, a rule book was developed, standard operating procedures were written, administrative and operational forms were designed, and a myriad of other start-up tasks were shouldered by the superintendent as the slow transition from construction to actual revenue operations got underway.

This transition developed its own set of prioritized problems. It also pointed up the importance of putting together a staff that could call on others in the industry to seek out knowledge and experience. Where possible, Metro Rail personnel wanted to avoid the problems cited by their contemporaries.

Supplemental staffing began in earnest in 1984 when employees from bus transportation, who would ultimately be responsible for various areas such as training, supervision, and operations, were reassigned to rail transportation. The superintendent's rail background was thus complemented by his staff's company background and experiences.

Metro decided that rail should be an entity separate from the established bus operations. This allowed the superintendent greater flexibility in performing his duties. However, it also developed a division within operations that is currently being evaluated. Initially such a division was appropriate, owing to the differences between the operating techniques of bus and rail. It also served as an enticement for recruitment within the rank and file. But now that a safe and efficient rail transportation has been operating for 4 years, the transportation division is taking steps to integrate rail with bus in all appropriate areas.

Once the initial candidates for transfer to rail management had been identified and approved, it was necessary to establish a training program. Rail familiarization and indoctrination for these management employees were accomplished during a 4-week tour of the Port Authority Transit Corporation (PATCO) facilities in Lindenwald, New Jersey. Basic concepts of training, operation of rail vehicles, record keeping, and ancillary functions such as maintenance, revenue, public relations, and control tower operations were viewed. More important, friendships were fostered that proved invaluable in the future. It was Buffalo's intention not to mirror PATCO's operation but to witness a successful operation and define those general concepts that could be applied to the new system.

Once back in Buffalo, management's attention was redirected to the immediate problems of accepting equipment and making it operational. Development of a training program dealing with the new equipment was an obvious requirement that resulted in its own unique set of problems. Personnel positions, both union and salaried, had to be structured. A system of recruitment for those positions from the rank and file was set up. All of this was accomplished against a timetable that kept slipping.

Operating personnel at Metro Rail are classified as either union hourly employees or nonunion salaried employees. The rail operations positions staffed by union employees are those of train operators, ticket inspectors, and station clerks. The rail operations positions staffed by salaried employees are those of train controllers and rail supervisors.

The train operator is responsible for proper and authorized operation of a rail vehicle in conformance with a published schedule of movements as well as other duties. The ticket inspector is responsible for passenger compliance with all published regulations regarding fare payment as well as other duties. The station clerk, an administrative position, is responsible for the distribution of work to train operators and all other clerical duties associated with the conduct of daily business at the station. The train operators and station clerks report to the district manager and are governed by a 3-year labor agreement between Metro Rail and the Amalgamated Transit Union Local #1342. (Union members are also covered by state legislation that prohibits public employees from engaging in labor strikes.)

The train controller is responsible for the operation of the sophisticated electronic and computer-based equipment that governs the movement of trains, controls traction power, and the ventilation in the tunnel. Rail supervisors are responsible for monitoring the train operators' proper attention to all rules, orders, and procedures that affect train movement. The train controllers and rail supervisors report to the operations control center manager (now retitled the assistant superintendent, rail transportation).

The balance of this presentation deals primarily with train controllers and train operators. The original operations equipment arrangements called for three train control consoles and four station control consoles. Based on this configuration, the initial manpower staffing levels would have required 10 controllers. The original hours of operations would have required four supervisors. Today's operations use fewer controllers, and more supervisors, and transit police personnel have been added.

During the early stages of the transition from construction to revenue service, a general mandate to cut costs triggered a review and subsequent reduction of staff and a shifting of responsibilities. The original complement of 10 controllers was cut to five. One console each was cut from the train control and the station control areas. The responsibilities for station operations were reassigned to the transit police, however, with the associated overhead costs retained by the rail transportation department.

The first two train controllers were recruited from outside the company. Individuals were solicited with previous rail operations experience, particularly those with control tower backgrounds. This was consistent with Metro Rail's philosophy of employing some "rail" people who could act as trainers. These two individuals, one from the Lehigh Railroad and the other

from the Southeastern Pennsylvania Transit Authority (SEPTA), were joined by three trainees from within the ranks of Metro. The in-house people had a variety of backgrounds. They included a bus operator, a schedule department clerk, and a transportation assistant from the bus operations department. This original nucleus of five controllers has now been expanded to seven due to the additional responsibilities associated with increased hours of operation.

All in-house Metro candidates for controller positions responded to a job posting displayed throughout the company's premises. The response was overwhelming to the point that a screening process had to be developed that could reduce the number of applicants to a manageable level. It should be noted that this position was and remains a nonunion position. The basic qualification sought by the recruitment process was trainability. This was determined by weighing an applicant's company seniority, experience, and education. Work records of all applicants were reviewed for disciplinary actions. Interviews were conducted and innate mathematics, vocabulary, and comprehension testing was completed. Final recommendations were made to the internal personnel selection committee for approval. These steps led to the appointment of trainees who proved very trainable. During 4 years of operation, the turnover rate has been extremely low. Only one of the original outside controllers has left, returning to his former employer. This outstanding retention is directly attributable to the early screening efforts.

To refurbish a cliché, equipment waits for no trainee. Metro was optimistic to expect that, as personnel became available, the equipment they would work with would also become available. In reality, the equipment was shipped in time, but was not operational in time. The silver lining in this cloud was that the controllers not only had to learn how the systems were supposed to work, but also how they actually did work and what had to be done to make those two concepts compatible. This required considerable mental agility and the development of crisis management techniques. Such a grounding in basic operations is still bearing fruit today. On-time performance associated with terminal departures exceeds 99 percent efficiency.

The hardware and software necessary for our operation were termed "the leading edge of technology." At the time of installation that was probably true and as such the chief benefits Metro Rail derived from the original two controllers were not only having them act as trainers but also having them keep the system operational under very rudimentary conditions. While they were doing that, the balance of the controllers were learning basic railroad operations along with the new technologies.

Finally it all came together and regular routines were developed to cover Metro Rail's commitment to the riding public. During peak periods, which are from 7:00 a.m. to 8:30 a.m. and from 2:30 p.m. to 5:30 p.m., two controllers are working—one for the surface activity and the other for the

subsurface activity. The balance of the day requires one controller to monitor the entire system. The controllers were given an opportunity to direct their own destiny when they offered suggestions on scheduling their work. Management listened, the controllers contributed, and thereby a measure of stress was removed from the control center. Currently 8-hour work assignments, which last 4 weeks, are selected by the controllers every 8 weeks. The order of selection is governed by a sliding seniority list. The only provision is that each controller must meet a quota of overnight assignments during a 6-month period.

All controllers are required to be certified every year, not only in their specific disciplines but also as train operators. Periodic train operation in revenue service is encouraged. This gives the controllers a better appreciation for the actual operating environment as seen through the eyes of a train operator. It also provided additional train operators when vacations, illness, and line practice training combined to produce a shortage of regular operators during summer 1987. No runs were cut.

Train controller recertification takes place annually. It is conducted by the assistant superintendent, who is responsible for the preparation of recertification criteria. Testing of rules, procedures, techniques, and experiences is required. This usually prompts the controllers to review annually those items that are a little vague before the testing begins.

Due to the expansion of operating hours Metro Rail has increased the original complement of five controllers. Using the established screening methods, we have added two more controllers. One was a bus operator and former yardmaster on the South Buffalo Railroad. The other was schedule designer from the service planning department. They have blended well with their coworkers. Their training was the responsibility of their fellow controllers, who developed an early relationship with them, nurtured through on-the-job training. The trainer-controllers were also able to relate real life experiences that helped to give a realistic perspective on the world of computers and electronics.

When a posting for 20 train operators was displayed, 134 employees responded and were placed on a trainee list. Their selection from the ranks of bus operators was less sophisticated because our attempts to use a screening method similar to that used for the train controllers were thwarted by the union. The only acceptable criterion was to rank the train operator applicants by seniority.

The train operator training program conducted by Metro's training department is 4 weeks long. The initial sessions deal with a concentrated review of the rule book, standard operating procedures, and all current orders and notices. This review features various written tests. Classroom sessions are supplemented with vehicle operation sessions. The second and third weeks

primarily provide "seat time" for the trainee operators. They are accompanied by a line instructor on trains not in service. Not only do the trainees gain familiarity with the rail cars but also with distance perception for speed and braking purposes, station announcements, troubleshooting, and yard techniques. The last week of training consists of actual revenue operation with another regular operator present and the final comprehensive tests on signals and the rule book. The trainees are given only two opportunities to pass these final tests. If they don't succeed, they are washed out of training.

The collective bargaining agreement in place during the period in which Metro Rail was recruiting train operators made no provisions for rail transportation. A separate memorandum of agreement was required. One of the original stipulations was a commitment from the permanent train operators of at least 3 years of service. Now that we are approaching the end of that time limit for some operators, Metro Rail has had to reevaluate its personnel replenishment program. The original concept was to train as many permanent train operators for assignment as dictated by the scheduled service. However, service needs expanded faster than manpower levels. It was thought that temporary train operators could fill these short-term voids and also become a reservoir for future long-term needs. Therefore a request for temporary train operators was posted throughout the company. This resulted in a trainee list separate from the permanent operators' trainee list.

The agreement also stated that temporary train operators could only refuse a permanent train operator position twice before being banned from the rail operations. This created a problem for the company because the trainees apparently were interested only in an exposure to rail operations. They did not want to relinquish their seniority position at a bus station for lesser privileges, relative to run selection, at the rail station. This lack of commitment from the temporary train operator trainees meant more trainees had to be processed than there were open positions.

Many other items were spelled out in this memorandum of agreement but experience showed that its best feature was its expiration shortly after the commencement of full-scale operations. All segments of union activities that relate to rail transportation are now included in the current collective bargaining agreement. This made contract negotiations a little lengthier, but the result was well worth the effort. To this day Metro Rail is still finding nuisances that are not covered, but special provisions for these can be made. Actual operation is a wonderful test ground for such things as relief points, turn-in times, and report times.

Every train operator must be recertified annually by the training department. Such things as additions or deletions to the rule book, the standard operating procedures, and the operations orders are reviewed and tested. Actual train operation is monitored and bad habits that have crept into the

train operators' techniques are corrected. System safety and emergency procedures are emphasized and troubleshooting methods are discussed. Retrofittings to the rail cars are explained and demonstrated. All questions are answered and test results are documented. With this program in place we have minimized our accident record and developed better harmony between operators and management.

Our work with the operators also includes informal "rap" sessions. These meetings between union members and management are usually held on a Sunday morning and attendance is voluntary and not compensated. Gripes are aired, suggestions for improvements are offered, and problems are resolved before they reach the grievance stage. These meetings definitely contribute to the sense of family at Metro Rail.

Everyone in Metro Rail understands that their efforts to make the system a success are well directed. Metro Rail is a tremendous catalyst in Buffalo. With the support this earns from the public, it is easy to understand our boasting that we have the right people in the right place at the right time.