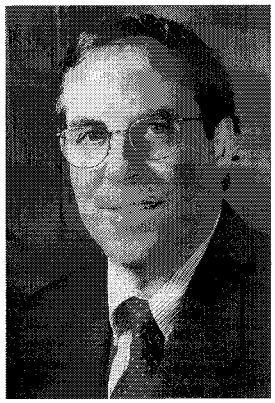
# V. PANEL PRESENTATIONS

## Motor Carrier Panel

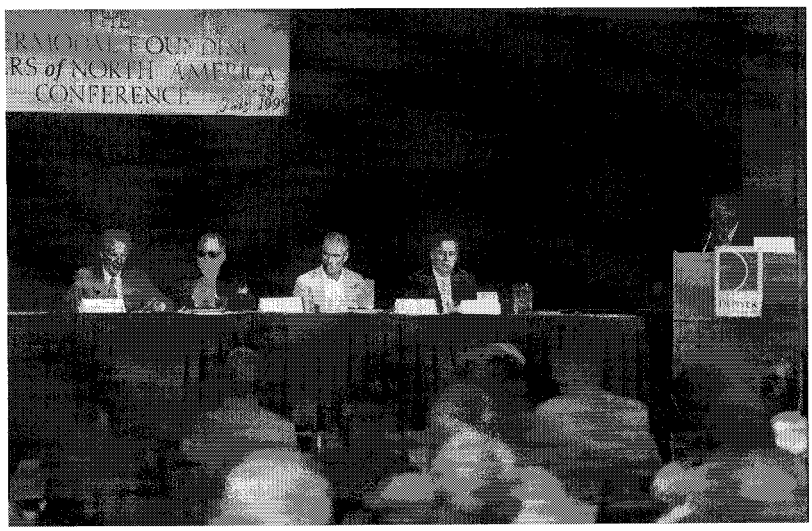
### Craig E. Philip, Moderator



*ITI Board of Directors*
*President and COO*
*Ingram Barge Company*

*I am with a barge company, and most of what barge lines do is actually intermodal. Of the 50-million tons that my company handles every year, nearly two-thirds of it starts or ends with a rail move. However, I began my career as an intermodal opponent, trying to save boxcar service on Conrail. I am now a convert, and certainly all of these panelists have always been intermodal proponents. They will discuss what is probably the least glamorous aspect of the intermodal business, the participation of the motor carriers. Motor carriers have had a complicated relationship with intermodal. At various times they have been customer, partner, and competitor. Yet, some of the greatest intermodal success stories involve the willingness of some motor carriers to use rail intermodal service, proving that the two modes could work together to benefit customers.*

**PANELISTS**
**Charles T. Connors, James G. Cunningham,**
**J. B. Hunt, Robert H. Maisch, Sr.**



*(Left to right) Klaus Nielsen, J.B. Hunt, James Cunningham, Charles Connors, and Craig Philip.*

**Charles T. Connors**
President and Chief Operating Officer
H&M International Transportation, Inc

Trucking companies are not mentioned as much as we would like, but in order to have intermodal, you have to have trucking companies. In order to talk about containerization in intermodalism, I have to talk about my past in the steamship business. After leaving military service in 1962, I returned to Maersk Line, a company that was prominent in the field of ocean transportation. I was assigned to assist the port captain in the daily operations of a breakbulk ocean terminal and was quickly promoted to assistant pier superintendent, responsible for many of the daily operations of the terminal. The breakbulk pier was in Brooklyn, New York. I was involved with one of the first mixed container breakbulk piers in the New York area. Containerization and intermodalism entered my life in the mid-1960s or 1970s.

## Breakbulk Ships

During this time, Maersk operated breakbulk ships. Maersk introduced side-port ships and flush-deck vessels, which introduced palletization to the industry. At the same time, SeaLand was getting involved with containerization. Maersk, Barber Line, US Lines, and Myer Line were all involved in a group called the Unit Load Council. They looked upon containerization as something they did not want to be involved with, saying it would have to be the number one method of transportation. For a number of years Maersk stayed with the side-port ships because it felt the financial investment and the marketplace favored side-port ships not containers. To think of containerization, you really have to think of the ultimate consignee.

In the early days, prior to consolidation, the real benefit of containerization was not realized. The movement of goods was basically vessel to vessel or port to port. Ninety percent of the containers loaded in the Far East had to be stripped and delivered less-than-truckload (LTL) to the common carrier on the pier. The investment in container vessels and equipment seemed more costly than the pallet concept. Our first 20-foot containers had to be loaded on flat bed trucks. They had no corner locks that would allow attachment to a chassis. In fact, our first 20-foot containers could not handle the weight of being stacked. The first containers Maersk used were 8-by-8 foot containers, and we loaded the vessels with 1,000 to 2,000 of them. The early ones were basically CONEX boxes loaded for a ship's convenience, which means they were loaded on the pier and discharged on the pier for delivery to a customer.

## Early Container Challenges

Chassis were quite different in those days. When we finally started to get into the container market, we married two 22-foot chassis using "bullets" to accommodate two 20-foot containers on one 40-foot container. Bullets were a foot and a half long and three inches in circumference. The problem was that the trucking companies did not know what to do with them or how to reattach them. When they did take them apart, they would discard the bullets, eliminating the benefit of marrying the two 20s and making the process very costly.

If Maersk Line was cautious in reacting to containerization, so was the trucking industry. The trucking industry had thousands of trailers in its system, a considerable investment. Truckers were accustomed to picking up LTL and to charging by the carton or by the hundredweight. How could they venture into a container market and what would they charge for the container movement? They were told that they would have to pick a container up, bring it to the customer, and bring the empty container back. They did not even have the advantage of using the container to load domestic freight because, until a couple of years ago, US Customs would not allow the trucking company to load domestic freight. So it was basically a one-way move.

The railroads were also slow to accept the intermodal story. Historically TIRs (identification documents) did not show chassis numbers. Intermodal containers remained at the terminal too long. Matching correct chassis with the proper steamship company was difficult. Weather conditions, the markings, night, and the responsibility for damages always were problems and still are problems for the railroad.

There was not enough space at the terminals to handle the movement of containers and chassis. The railroads were trying to catch up with intermodalism. At the time, the railroads required trucking companies and steamship companies to pick up their containers within 24- to 48-hours. When the container was emptied, steamship companies would have to pick up the chassis and take it off-dock. When the chassis was needed for an incoming train, steamship companies had to bring the chassis back. They were not accustomed to freight release and US Customs release. Imagine the additional cost to the steamship companies for all this additional trucking.

One other item that was often overlooked was US Customs penalties. The steamship companies did not have the wherewithal or the electronic data interchange (EDI) to know if a container had a freight release or a US Customs release. If a container is released prior to the freight being paid, the ultimate consignee does not have to pay the freight.

**Containerization and Consolidation**

American President Lines (APL) is credited with the first stacktrain. H&M was fortunate enough to be involved with APL's decision to be the first ocean carrier to discontinue their all-water service to the East Coast. We opened up a container freight station (CFS) to handle APL containers. In those days there were house-to-house classifications, which meant that a container was loaded in the Far East and delivered directly to the ultimate consignee. There were house-to-pier classifications, which meant that the container was picked up from a vendor in the Far East and then stripped at the pier or CFS. And, there were pier-to-pier classifications, which meant that a container was loaded loose at the pier in the Far East or Europe and then unloaded in the US.

Intermodalism came about because of containerization and because the vendors and the importers were becoming educated in their buying and distributing needs. For example, a Macys, a Home Depot, or a K-Mart buys products from various vendors in the Far East. Prior to containers, all these products were shipped loose. For every different vendor, a different US Customs entry had to be made and every different entry had to be examined. With containerization came consolidation. I would say that consolidation is an outgrowth of containerization and vice versa.

The Far East started consolidation terminals, allowing the Macys of the world to be off-dock consolidators. The trucking companies moved the full containers off the railroad facilities, bringing them to a neutral terminal, and performed all of the functions necessary to deliver the freight. Trucking companies basically became an all-water facility without the vessel. It was a part of the business that did not involve the railroads. So, when consolidation started, the trucking companies started a new business.

There was another new business that started, the non-vessel operator (NVO) market. The NVO market allowed the beginning of freight-all-class (FAK) rates. So the small importers, the people who import twenty cartons, or fifty cartons, or seventy-five cartons per vessel, could get involved with containerization. FAK rates allowed more shipments to be containerized and more shipments to go intermodal.

One big barrier to overcome was bridging, which port to go to. Whether you call it mini-bridge, landbridge, rail-bridge, or any other bridge, it was essential for the intermodal team approach among ocean carriers, railroads, and trucking companies. In the early 1960s and 1970s, the innovations were containers, container ships, terminals, and the supporting equipment. However, most of the steamship companies were basically tackle vessels. They had to continue going to the same ports. The

port authorities basically pushed this issue also. If the freight was coming through Charleston, Norfolk, Baltimore, or Miami, then the port authorities wanted that freight to come off their docks. The port authority of each area frowned upon freight leaving their port.

## Containerization and Labor

During the times of labor crisis, philosophies change. One particular incident was during the International Longshoremen's Association (ILA) strike of 1971, one of eight different ILA strikes that I was involved with. Several ocean carriers served all the points in the US. At this particular strike, the vessels were diverted to Montreal, and our vessels were half container and half breakbulk. The containers, whether they were 8-foot, 12-foot, 20-foot, or 40-foot, were loaded with a ship's boom. There were no container cranes. Most containers were stowed in the "'tween deck" or "upper 'tween decks" on the center of the vessel. During this strike, we were involved with the transportation of the goods from Montreal for four and a half months, both breakbulk and containers.

At this time we opened up a substantial container freight station (CFS). As each longshoremen strike occurred, more and more containers were going through the intermodal process, whether it was from Canada or from the West Coast, even during the Tugboat Strike of 1979. Remember, most of the containers had to be drayed from Philadelphia. The ultimate consignee had no idea, so the intermodal part of the business was being done without the customer's knowledge. This started to open the doors and the minds of the steamship companies. The customer started to realize that there were benefits. Should we continue shipping to the East Coast? Should we ship to the West Coast? From these humble beginnings we accepted the theory of bridging. Not only are fewer and fewer ports being used, but there are also fewer and fewer steamship companies. We have moved from the consolidation of freight to the consolidation of steamship companies and to the consolidation of ports.

The US Customs also contributed greatly to containerization, which enhanced intermodalism. It was very difficult for US Customs to get past the idea that it no longer could examine a particular carton at will. In the past, the terminal was wide open to the wishes and to the examinations of the US Customs agents. The freight that the agents wanted to examine was in the nose, or front, of the container. So the consolidators in the Far East got smart and put a sample of each type of commodity in the tail of the container. It was very difficult for US Customs to accept this manner of transportation. US Customs was not sure if there was collusion, if

there were drugs in the containers, and if there was quota freight that should not be in the containers.

### H&M International Transportation, Inc.

H&M International Transportation, Inc., is very fortunate to be operating one of the largest CY/CFS facilities on the East Coast. We handle such companies as NYK, Mitsui, Evergreen, and Yang-Ming. We truck the intermodal containers from the railroad to our off-dock facility. We went to Conrail, and as an added value to the intermodal part of the business, we suggested that Conrail leave the containers at the rail terminal. We would do the customer service, the stripping, the stuffing, the preparing the freight for US Customs inspection, maintenance, and prepare the empty containers for pickup by the Duponts or the GEs of the world. We convinced Conrail that a partnership should be made between Conrail and H&M. The first reaction of the steamship companies was that this was really the way to go. It is not that we were the first. We were the first multi-user facility that allowed the steamship companies to keep the equipment at the terminal longer than the 24-hours to perform all of the necessary procedures to receive and deliver the international freight. The railroads, historically, do not appreciate international containers staying five and six days nor do they appreciate empty equipment taking up too much space in their yards. The railroads do not appreciate the gate activities needed to bring empty chassis in or out of the terminal. The H&M facility can provide these functions and services.

### The Future

To go forward, we have to improve technology in order to reduce costs. A large percentage of the freight is controlled by many mid-size and often tightly held small businesses that do not or cannot adapt to the value of technology or they just do not have the resources to implement technology. Technology resources must be integrated among the shipping partners, rail, ocean, trucking, and the customer, in order to appreciate its full value and to benefit from the savings. Better equipment must be interchanged between the different modes, water, rail, ocean, and motor carrier, to enhance the safe, efficient, and seamless movement of freight from the origin to the ultimate customer. We must see to it that every chassis is certified FHWA, inspected, and roadworthy before it is offered to the trucking company. The real dilemma is the interchange of the equipment. Moving the equipment involves the railroads, the steamship company lines, the contractor who runs the terminal, and the motor carriers who use the equipment.

There must be a standard of service with agreements between the principals and the terminal operators who unload and/or load to and/or

from a vessel or to and/or from a train. There is a responsibility to have the chassis in good and roadworthy condition. Unfortunately, if the equipment is not roadworthy, it is up to the motor carrier to get the equipment changed or fixed, whether it is at a rail or ocean terminal. Unfortunately, it is the driver who is required to do this. He knows that he is not being paid for this. So, he will go out of the terminal with some minor damages. It could be a brake adjustment, it could be a cracked drum, or it could be a bad spot on the tires. Within fifteen minutes, he will receive a ticket from the US Department of Transportation (USDOT), since the USDOT is right outside of the ocean and rail terminals.

Labor has always been an issue, and it is now time for labor groups to come together, not to discuss protecting or preserving jobs, but to assist in the development of new ideas. Local and inland infrastructures have to be improved—the bridges, the tunnels, the interstate highways; and the federal government, the state government, and the local communities have to be involved. We still have a long way to go.

## James G. Cunningham

President and Chief Executive Officer
PTL Trucking

J.B. Hunt and United Parcel Service (UPS) represent the motor carrier as customers of intermodal. Our company, PTL Trucking, a former trucking subsidiary of the Pennsylvania Railroad (PRR) and later the Penn Central and Conrail, is in a quite different relationship as an associate. We like to think of ourselves as partners of the rails, or the vessel operators, or the intermodal marketing companies (IMCs). We are the drayage carriers, or as some people have characterized us, the weak link in intermodal with high costs and poor service. We have been called the Rodney Dangerfield of intermodal. This is where cost and service barriers to intermodal growth remain. There are, however, solutions to these problems.

I first got involved with intermodal problem solving in the 1970s. I was with Consolidated Freightways and on the Equipment Interchange Association (EIA) Committee of the American Trucking Associations (ATA). The ATA staff had decided that it was about time that we got together to work out interchange rules for conflicts between the modes. The ATA and the Association of American Railroads (AAR) staffers organized a meeting. EIA and the Interchange Rules people from the railroads got together in Chicago. At that time, truckers really did not like railroaders, and the feeling was probably a little bit mutual. But we began the dialogue, and that was important.

I also had the opportunity, later in the 1970s, to participate in the formation of the Intermodal Transportation Association (ITA). We felt very strongly that the key to solving equipment interchange problems was to get the modes together. That resulted, in the late 1970s, in the birth of the Intermodal Transportation Association, which has evolved with the inclusion of the intermodal marketing companies into the Intermodal Association of North America (IANA). I think it is fair to say that interchange is hardly an issue today.

## Drayage Costs

Drayage costs, however, can be a major impediment to the development of a more competitive and profitable intermodal service. I think it is time our industry addressed this area. The major causes of high intermodal drayage costs are imbalanced operations, gate and yard delays, connectivity, erratic train performance, load bunching, and carrier selection practices. I was taught thirty-five years ago as a management trainee that the three commandments of the trucking industry are balance, balance, and balance. Imbalanced operations are the primary cause of high drayage costs, whether your load is moving across the street from the railhead or across the country. The trucking industry's solution to balance is to manage the area closely. The number of empty miles is reduced by intense management of dispatch operations and directional selling techniques. Often this involves incentive compensation programs for the sales force. Obviously, the fragmentation of responsibility for providing service in intermodal significantly complicates the problem solving. It does not get any easier when a shipper or a consignee insists that its "house carrier" be used for the intermodal dray. One major IMC has begun to centralize carrier selection to concentrate volume and create balance opportunities, therefore reducing dray costs. These programs seem to be having limited success, however, because of field office reluctance in the IMCs to surrender carrier selection responsibility.

## Gate and Yard Delays

It is apparent that while the cost of operating a truck is proportional to distance, commercial zone drayage cost is a function of elapsed time. Terminal delay, to an ever-increasing extent, must be reflected in pricing. Independent contractors and owner-operators just cannot afford delays. Company drivers see delay time in their paychecks, which adds to drayage costs. A case in point was the disruption of operations at an East Coast port by striking independent truckers protesting loading delays at the piers. A primary reason for the formation of the Bi-State Carrier Conference, now part of the New Jersey Motor Truck Association, was to

present an organized approach to confronting this problem at the Port of New York.

The causes of delays are obvious: congestion, inadequate staffing, budget, and pier labor work practices. The gate and yard delay problem that rail facilities face is not much different. I recently saw a long queue of trucks awaiting inbound inspection at a small volume and state-of-the-art Midwestern terminal. This was a midday non-rush hour backup that was caused by inadequate staffing, thus pushing the cost/delay factor onto the drayage side of the total intermodal cost equation. That is almost good news. The bad news is that, at the typical large rail facility that is older, less efficiently designed, and usually in a congested urban location, gate and yard delays are worse.

## Driver Retention

While drayage costs are a major concern, retaining competent drivers in this environment is a challenge to intermodal growth. Our company continually faces a driver retention problem, resulting from excessive waiting at the piers. The truck drivers just cannot afford to wait. It is interesting to me, as an engineer, that the management at a large New York marine terminal has stated that its facility is capable of handling 20 to 25 percent more containers than at present, as a result of improved throughput. At a time when rail terminal capacity constraints are beginning to inhibit rail intermodal growth, some basic industrial engineering surveys of a classic queuing problem could show how to increase throughput with little or no capital investment.

The outlook on connectivity is more positive. One of the key issues that was addressed in the recent federal transportation legislation, the Intermodal Surface Transportation Efficiency Act (ISTEA) and its successor, the 1998 Transportation Equity Act (TEA-21), is connectivity. Lack of efficient connectors between the highway system and the port and the rail terminals increase drayage costs and, therefore, the overall cost of intermodal transport. Connectors are short segments of road, but they cannot properly accommodate large trucks because of lower engineering standards. Many of these roads are either locally owned with municipalities or local governments unable to finance improvements. We all need to participate in this planning process, and we can influence the selection of projects to improve freight flows. All Metropolitan Planning Organizations (MPOs) have a mechanism, such as Philadelphia's Freight Advisory Committee, for seeking industry input, and industry input is welcome. We can influence the decision making and through this process, lower our costs.

**Erratic Train Performance**

A regular customer of PTL has a consistent movement of containers from the Far East to Cleveland via the Chicago Gateway. This customer is on line with the railroad's computer system and can follow the shipment's progress from the West Coast, projecting an accurate time of arrival at the Chicago rail yard. We, therefore, can dispatch drivers into Chicago to meet the consignee's tight transit-time requirements to Cleveland. This is where the system comes unglued. The train arrives from the West Coast as advertised, but it does not get placed for unloading or grounding. Our PTL drivers wait perhaps six to eight hours, and the delivery schedules have to be revised by an unhappy consignee. From the driver's perspective, he could be almost back to Cleveland if he did not have to sit there for that period of time. He has lost the trip, and is wondering why he works in the intermodal area.

Erratic train performance undoubtedly is the root cause of the standard railroad practice of not providing notification of equipment arrival until after grounding. This practice virtually guarantees adding a full day to the transit time service performance of intermodal, as well as adding a full day to equipment turn cycle time. When notification takes place after the day's truck dispatch operation has been planned, the load then becomes part of the next day's operations. When railroads provide advanced, reliable inbound-loaded equipment availability information, more efficient appointment scheduling and dispatch planning is possible.

**Load Bunching**

PTL's North New Jersey terminal facility has been serving as a test bed or a data site for evaluating ways of improving the efficiency and the service quality of drayage operations. The objective of this study is to identify and evaluate ways in which a trucking company can improve efficiency and reduce the costs of the highway portion of trailer movements. This study focuses on changes in drayage operations, including centralized dispatching of tractors and trailers, computer model and information system decision aids, and related changes in terminal operations. It was funded by the US Department of Transportation (USDOT) and undertaken by the New Jersey Institute of Technology. We expect to identify practical alternatives for improving terminal and drayage operations.

The result has been the identification of significant trailer dwell time, which we found surprising in the absence of any complaints from consignees. The trailers were arriving ten at a time, but they were set up for delivery to the consignee at the rate of two per day. Equipment utilization is poor. Without having the full background, the drayman's delivery performance is horrible, but the customer does not seem to mind. Mer-

cer Management, in a preliminary report on intermodal equipment utilization, said that it is quite possible that customer dwell time is the last black hole in intermodal. Our experience in North Jersey confirms that this is true. We must, as intermodal managers, address with the shipper community why long-haul truckers appear to receive prompt unloading and scheduling of consignees and why intermodal equipment seems to have a lower priority.

### Carrier Selection Practices

Previously, in discussing lack of balance as the primary cause of high drayage costs, I mentioned fragmentation of responsibility. There needs to be a coordinated approach among the IMCs, the railroads, and the draymen to deliver a product that is both cost and service effective. Such an approach to the delivery of the product is an exception rather than a rule. We see little of this philosophy in the decentralized, uncoordinated, transactional-based, daily carrier selection process. In conclusion, there is a very large opportunity to reduce intermodal drayage costs while also providing a quality product. I would hope that this group could be the focus for a coordinated industry review of the interrelated pieces of our intermodal supply chain.

## J. B. Hunt

Founder and Senior Chairman
J. B. Hunt Transport Services, Inc.

Mike Haverty put me on a train with the red carpet out. Not far down the road, I reached over and shook hands with Mike saying we had a deal. He asked what we were going to do and I told him we were going to haul some freight. It was kind of tough trying to grow back in those days. Then deregulation came along. With Haverty, it was kind of like a new venture. We ran a full year without a contract. I guess the contract is still in effect, but I do not even know what it says. Sometimes I think about this, and I think personalities cause things to happen.

### Railroad Ambivalence

The intermodal business did not fit like a glove when we first started. In fact, the intermodal business and the railroads remind me of when I used to drive a truck from Little Rock, Arkansas, up to St. Louis, Missouri. I would go on a little turtleback road in Missouri. It would be iced over, and I would try to figure out whether I wanted to put my foot on the brake or the accelerator, because the road was slick. The railroads

were in a similar predicament. They did not know whether they wanted to haul intermodal freight or haul something else.

But I know Mike Haverty. I have been on the train with him. He would be sitting there and one of those big coal trains would go by, and he smiles. Then he sees that interstate highway and all that freight out there. Now, how is he going to get the trucks? Then he gets the trucks and he does not know which train he is going to run first. This is not just Mike Haverty; it is this way on every railroad. The problem is that everybody wants service, and everybody wants it cheap. That is the way my customers are. I heard someone say the other day that his customers wanted barge rates and air service.

## Waste

Waste is something that no one wants. The shipper loses, the railroad loses, the customer loses, and we lose. This is waste. What makes this country great is how we do things better and cheaper to be competitive with the world. I understand that we get about four turns per month with a container. I understand that the railroads get one and a half to two turns per month. That means that their trailer costs are twice our container and trailer costs. We are smarter than we were a few years ago. Now our maintenance costs on our trailers are less than half of what the railroads are, because we are in that business.

There is still a lot of slack in the chain here. For example, we do not take our equipment from the rail yard to the shop for minor repairs. We move all our small trucks with mechanics out on the yards, fix all the lights, fix all the tires, and do all the maintenance work there. I am sure that this has saved us a fortune. If we are all going to pull together, do the job most economically, get all the waste out of it, then I think that the railroads should run the trains, take care of the cars, and let the IMCs and the truckers do all the trailers.

But I have mixed emotions about this. I bought $400 M worth of trailers one time. For someone like me, that is a pretty good purchase. If the cheapest way to move across this great North America is by container, then we sure do not need to be buying trailers. I hear that the railroad is buying trailers and buying containers. J.B. Hunt is doing the same thing. What is really sad is that if there is waste here, we will just keep wasting the money. I do not know what is going to happen in the intermodal business in the next 10 years, but I think that we do need to get the waste out.

**Robert H. Maisch, Sr.**
Retired Vice President of Operations
United Parcel Service

*I am not Bob Maisch, nor will I attempt, in any way, to fill his shoes. Both within UPS and on the intermodal scene, he was a visionary. In addition to his prepared remarks, which I am honored to deliver for him, he sends the following a personal note. "To my friends, peers, and colleagues, I am so very disappointed to cancel attending this conference, but I am recovering from pneumonia and my doctors feel that I could not handle the Colorado altitude. However, following are my thoughts about UPS and the railroad-intermodal operation from 1966, when I became involved, until my retirement in 1984." Klaus W. Nielsen, PhD, ITI Board of Directors, Retired Manager of Simulation and Modeling, United Parcel Service*

In 1983, UPS shipped over 100,000 trailer loads per railroad. Each one of these trailers contained on average about 2,000 parcels. So our promised service was at great risk when any or all trailers did not reach their destination on time. At this time, not only was UPS the largest user of intermodal shipping service, but UPS had grown to be the largest small-parcel company serving all forty-eight states. How did we get there, and how did we use the intermodal movement to do so?

## The Beginning of UPS

UPS started in Seattle in 1907, and by 1956, we were operating in eighteen of the largest cities in the United States, delivering parcels for the local department stores. However, this type of delivery was on the decline due to the proliferation of shopping centers, to customers changing their shopping habits and driving to the stores, and, most of all, to customers taking their own parcels home. At this point, UPS turned to a new business mode of delivering for manufacturers, wholesalers, and distributors, covering both short and long distances. This required UPS to obtain authorization to move within and across state lines. Over the next eighteen years, UPS obtained both inter- and intrastate authorization, so that by 1974, UPS could serve all forty-eight states.

Since it took many years to reach our goal of all-points delivery in the forty-eight states, we had time to plan well ahead of our actual expansion activities, to plan how to move parcels over long distances, faster, safer, and less expensively than any carrier could by surface transportation. Our system concept called for 150 sorting hubs across the country, laid out in a grid pattern. This system has evolved over time so that we can now serve all points with the planned service. The hubs were con-

nected by truck, and we sorted moving parcels to their final destination or into the day-sorting hubs for local delivery.

### Intermodal Moves at UPS

Intermodal means were used from the early days to move loads to our hubs, where we had volume to make the right loads. In 1969, we developed a UPS intermodal train with the Erie Lackawanna Railroad from Croxton, New Jersey, to Chicago. At Port Jervis, New York, westbound trains picked up westbound loads that had been trucked in from New England. Some westbound sets of trailers were dropped off at Marion, Ohio, where UPS employees operated a circus ramp, while the train went on to Chicago with loads for the Chicago sort as well as trailers going farther west.

The reverse, the eastbound trains going from Chicago to New Jersey, made a pick up in Marion for the eastbound loads and included a drop at Port Jervis to be trucked to Worcester, Massachusetts, for sorting. The train then moved on to Croxton, and loads were sorted in New Jersey. This train operated very well for UPS until Conrail took over.

### UPS Business with Conrail

At first we received poor service from Conrail. When Conrail took over, it used the old New York Central route, and westbound loads were sent off at Toledo directly into Chicago. New England loads were sent directly out of Worcester to Chicago. After Conrail finally got its act together, we received grade A service.

By 1974, we were covering all forty-eight states, operating with dedicated trains to the New York City and New Jersey area highway, Potomac yards, Virginia, on the Seaboard to Florida; Chicago to Jackson, Mississippi, on the Illinois Central; Philadelphia to Chicago on Conrail; Worcester to Chicago on Conrail; Chicago to Dallas on the Missouri Pacific; Chicago to Los Angeles and San Francisco on the Santa Fe Railway; Chicago to Denver on the Burlington Northern; Chicago to Spokane on the Burlington Northern; Los Angeles to Portland on the Southern Pacific; and Los Angeles to Memphis on the Southern Pacific.

Basically, we found that intermodal movement by rail did not meet our time needs under 600 miles, on the average, although there were some exceptional shorter runs that were successful, such as Jacksonville to Miami with the Florida East Coast Railway, Chicago to Minneapolis on the Chicago Northwestern, and Chicago to St. Louis with the Illinois Central.

UPS always felt that moving by intermodal means offered great advantages over other surface transportation modes, except water, which

was, of course, too slow for the UPS mode of business. As fuel costs increased, movements by railroad became more efficient than movements by truck. Also, with changes in work rules, crew sizes, and cut backs on the numbers employed and acquired, railroads combined with new technology to offer significant advantages. Today, computers provide detailed operating information and billing data that had been managed with armies of clerks. These are, indeed, big changes since I worked with the railroads 15 or 20 years ago.

### UPS Intermodal Innovations

UPS did many things to make intermodal work better. We decided to highway trailers from the Northeast to the Potomac yards to get the needed service to Florida. In the same manner, we used the highways from Memphis, Tennessee, to and from the Southeast hubs to get needed service from California. We maintained a large fleet of intermodal trailers to balance movements. We positioned containers from New Jersey to the Midwest cities and used water carriers to move a lot of containers to Houston. We also leased a fleet of specially equipped trailers to handle paper rolls for Boise Cascade. We loaded northbound from Los Angeles to Portland, and Boise Cascade shipped paper back to the Los Angeles area.

We also started a specialty company, called Martrax, with a fleet of 1,500 refrigerated trailers. We loaded regular parcels in them, destined for California, and Martrax loaded produce for the return trip to the New York area, where the containers were cleaned up and filled for the return to California. This system was started in 1980 and is still working very well for us.

We also put UPS supervisors at each ramp to work with railroad ramp staff, unloading and loading our own shipments. Our drivers delivered trailers directly to assigned cars for loading and picked up incoming trailers, as they were unloaded. We held daily morning report meetings on all intermodal movements and policed our shipments very closely on almost an hour-to-hour basis. We had UPS teams on the East Coast working closely with the railroads on service, and one in Chicago working with the western railroads. We held monthly meetings with each railroad on its service record.

### The Future of Intermodal

I believe that intermodal has much to offer in providing reliable transportation over long distances. Shippers and receivers are located all over the country, not just in and around large cities. Intermodal service provides efficient trailer delivery and pick up and does not depend solely

upon truck movements. A lot of UPS's success came because we could serve customers wherever they were located.

I thought that rail mergers would be good for intermodal movement, and we saw it work well for Conrail. Some recent rail mergers have not been as successful, and some of our customers have lost considerable faith with intermodal service capabilities. Timely service was and remains a big problem and is the key to intermodal efficiency. UPS has always been on its service providers' backs about it. I know from personal experience that if top management gets behind it, service can and will happen. Among the best leaders that I have seen, in my seventeen years of working with railroad management, were Stanley Crane from Conrail, Larry Cena from the Santa Fe Railway, Bill Greenwood from the Burlington Northern, and Prime Osborn with Seaboard. They helped make this concept work.