# Proceedings



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# DOUBLE-STACK SERVICE: A BREAKTHROUGH IN TRANSPORTATION TECHNOLOGY

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On behalf of American President Lines, I'd like to thank you for inviting me to participate in this excellent forum. The fact that this transportation panel is devoted to double-stacked container trains, just three and a half years after the first solid configuration stack trains were introduced into service, is an indication of how quickly this mode has changed the transportation business.

I'd like to begin with a review of the basis for the fast growth in double-stack rail transportation, highlighting some of the key advantages of the mode available to all customers, including shippers of agricultural products. Then I will focus on some key benefits which are being made available to perishable shippers.

American President Companies -- the parent company which includes APL and our domestic transportation affiliates -- now has an annual stack train capacity of more than 300,000 containers, and offers multiple weekly departures from 14 U.S. cities. As I noted, this system began anew just three and a half years ago. During this period of rapid expansion, we have consistently carried full- or near-capacity loads.

Part of the explanation for this success lies in the simple, powerful economies of double-stack container transport. As the name implies, containers are carried two-high; in the case of APC's lightweight rail cars, it is possible to carry twice as many containers as on a conventional solid train, with virtually no increase in crew or power. Thus there are substantial economic benefits to railroads, intermediary agents and ultimately to the customer.

Another key reason for the popularity of stack trains is the smooth cargo ride these trains provide. The articulated, well-type design of each rail car minimizes vibrations or shocks during transit. Our in-house tests, and one conducted in cooperation with a major retailer, indicate the forces encountered during a typical APC stack train transit are significantly lower than those experienced during a piggyback or truck movement of similar duration. This is particularly significant for shippers of sensitive commodities, such as table grapes.

Along with these and other specific benefits that double-stack technology offers are a number of key advantages that result from the creation of multi-modal, high volume container transport systems, of which stack trains are one element.

By exploiting the full flexibility of the ocean container, an intermodal carrier can begin to offer value-added services for customers. "Value-added service" is more than a buzz-word. It refers to enhancing both the value of the transportation service that the carrier provides, and the value of the commodity itself, while contributing to the customer's profit margins.

In the case of American President Lines, our role as part of a highly integrated domestic and international distribution system has made it possible to increase the number of points served and the frequency of scheduled departures we offer; approve transit times; introduce new information services; and make available a large, diverse pool of equipment for both dry and refrigerated cargoes.

A large network of intermodal service points is important to growers far from major cities. With the APC system, customers are not limited to the facilities offered by any single railroad or intermodal operator; there are literally hundreds of pick-up and drop-off points available, providing greater flexibility and convenience. Similarly, exporters benefit from the broad market coverage a major intermodal carrier can provide overseas.

When operated in solid unit configurations, stack trains can provide highly competitive transit times compared to other modes of land transport; for example, 92 hours between Los Angeles and New York. This is because the trains avoid congested terminals, and stop only to change crew or locomotives. When combined with fast ocean transits, this can result in an intermodal service which is several days faster than a comparable all water transit from, say, the East Coast to Japan.

The fast transits and frequent departures, combined with the superior ride quality I mentioned earlier, are good examples of value-added benefits for a shipper of high-value or time-sensitive commodities.

In the area of information services, an agricultural shippers who uses a full-service intermodal carrier can track his cargo throughout its transit. This helps him better control the overall economics of his transportation and distribution operations. For example, APL now has more than 200 international customers that can access timely information about their shipments directly from our database, through their own PC's. And we are introducing a service which enables any exporter or importer to receive on-line information about their shipments through any Touch-Tone phone. Again, this information is drawn directly from our mainframe database.

Finally, an integrated computer system can provide the stack train customer with automated documentation. He receives a single, computer-generated bill of lading from origin point to destination. And, through computer links between the carrier and U.S. Customs or the Department of Agriculture, import shipments can be pre-inspected and cleared prior to vessel arrival.

The availability of a number of different container sizes ensures that a customer can match equipment dimensions with his particular type of shipments. High density freight such as canned foods may be more economically transported in 20-foot containers than a larger container or trailer size. The industry-exclusive 45- and 48-foot containers offered by APC are ideal for high-value, low density shipments.

These are some of the general benefits available to all customers from a highly developed stack train system, in conjunction with other modes of transport. I would now like to focus more specifically on how stack trains can meet the needs of international and domestic shippers of farm products.

In the area of bulk commodities, APC has carried a number of Midwestern products bound for Asia -- including cotton, bulgur, seeds and wheat. Some of these products are transported all the way to the Middle East, in one coordinated movement. Clearly, where containerization of these products is a viable option, the economies of stack train service can be applied for long-haul land transport.

Shippers of premium wines and other high-value food products are attracted to the APC stack train system by the availability of an insulated 45-foot container for use on the stack trains, as well as the superior ride quality and fast, reliable transits.

Now I would like to move into my area of expertise, the transport of perishable commodities. As a leading Pacific Basin carrier, APC has established a special commodities division and made a substantial capital commitment to develop new generations of refrigerated equipment, to meet the growing demand in Asia for fresh and frozen agricultural exports from North America.

The newest refrigerated containers feature microprocessor controllers, efficient bottom-air delivery, and data recording throughout transit. They can sustain a temperature level within a two-degree Fahrenheit range. At APL, we have found that such technology, in combination with expert planning and handling, can open up new overseas markets for highly sensitive commodities. Products which previously moved via air freight exclusively can now be shipped in large quantities via ocean container services.

APL has utilized a variety of transportation modes in combination with its ocean containership services, to provide a through transit from inland points for perishables. On the stack trains, the company has loaded refrigerated containers aboard special stack cars with built-in generators. Also, the company offers truck and refrigerated boxcar services for frozen poultry, pork, beef and other perishables.

While these options can meet a wide range of shipper demands, we are currently embarking on a new program to further enhance our ability to extend the benefits of stack train service to international and domestic perishables shippers, through the use of "self-contained" refrigerated containers.

A self-contained unit, as the name implies, is equipped with its own generator. To the carrier, such a design helps simplify the logistical considerations associated with refrigerated cargo transport. These containers can be loaded in any position on a stack train, and can be readily transferred to a truck, or conventional trains as required.

The APC self-contained refrigerated containers will feature the same precise temperature control I noted above. We see a number of potential benefits to customers resulting from the introduction of this technology:

-- First, the combination of service flexibility and advanced technology will make it easier to extend our through services to points remote from major cities. In other words, the numerous benefits of an intermodal system utilizing stack trains can be increasingly applied directly from the point of production.

-- Second, we believe a service based on self-contained equipment can expand the marketability of many perishable products. In international service, for example, I believe that Midwestern shippers of chilled beef and pork could benefit from the precise temperature control of the containers, fast transits and frequent departures to Asia. On the domestic front, western region shippers of fresh produce and frozen foods may find that stack train service with self-contained units is a highly attractive transportation option along routes traditionally serviced by over-the-road or piggyback carriers -- from the West Coast to the South Atlantic region or to Texas, for example.

-- Third, the improved logistics of these containers, combined with the frequent departures available on stack trains, greatly enhance a carrier's ability to respond to changes in market conditions or seasonal demands. Such a versatile container can be more readily made available where and when the customer needs it.

Throughout my remarks, I have noted how the various stack train and refrigerated container features can <u>together</u> provide a premium transportation service. In conclusion, I would stress that only a highly integrated stack train system can offer domestic and international shippers of agricultural products the combination of fast transits, reliable schedules, frequent departures, computer support services, and the latest generation of refrigerated container technology.

While some benefits of stack train transport will become more readily apparent as current systems are expanded and new refrigerated containers are phased into service, most of the service features I have highlighted are already available to agricultural shippers. Today, an East Cost shipper, for example, can depend on a regularly scheduled 19-day service from New York to Yokohama, with careful monitoring of his cargo throughout the combined rail and ocean transit. I believe that is a good example of the "value-added" potential of intermodal transportation, using stack trains.

Thank you very much.