2 SPECIAL SUPPLEMENTS

CHEMICAL LOGISTICS

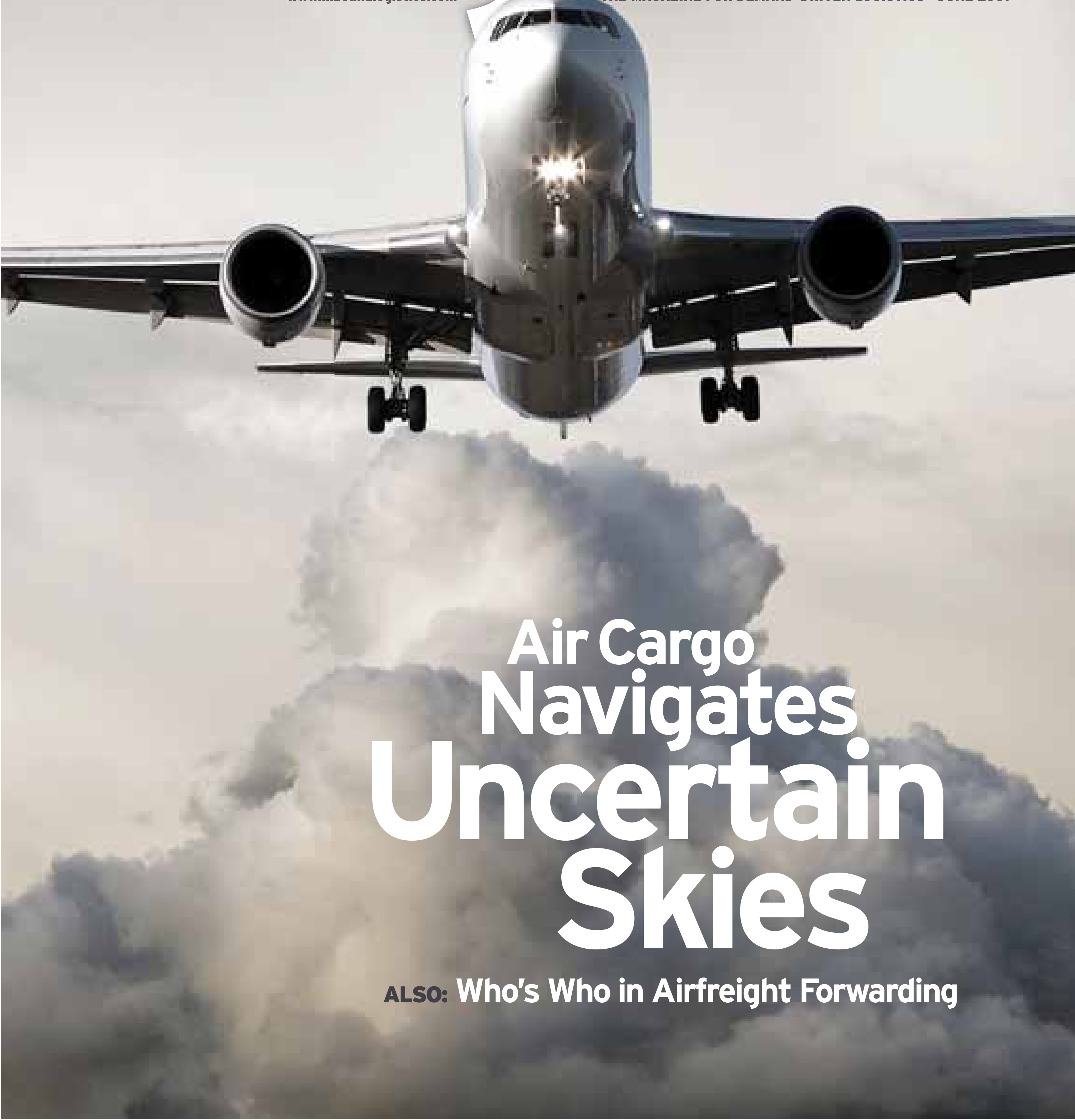
— AND —

GLOBAL SPOTLIGHT: LATIN AMERICA

inbound logistics

www.inboundlogistics.com

THE MAGAZINE FOR DEMAND-DRIVEN LOGISTICS • JUNE 2007



Air Cargo Navigates Uncertain Skies

ALSO: Who's Who in Airfreight Forwarding


BUSINESS PLAN
REVENUE
PROFIT
myyellow.com

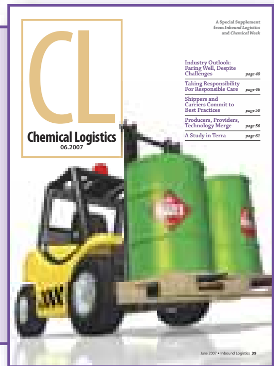
June 2007 • Vol. 27 • No. 6

inbound logistics

THE MAGAZINE FOR DEMAND DRIVEN LOGISTICS

INBRIEF

INDEPTH




June 2007 • Vol. 27 • No. 6
inbound logistics
THE MAGAZINE FOR DEMAND DRIVEN LOGISTICS
MEET THE TEACHERS
page 85


Plumbing fixtures from Memphis, TN. Delivery by 11:45 a.m.
Stethoscopes from Miami, FL. Delivery by 2:45 p.m.
Camera equipment from Boston, MA. Delivery by 2:15 p.m.
Computer games from Shanghai, China. Delivery by 1:35 p.m.
Automotive parts from Monterey. Mexico, Delivery by 1:30 p.m.
Nose landing gear from Toronto, Canada. Delivery by 12:45 p.m.
Flash drives from Chicago, IL. Delivery by 12:25 p.m.
MRI machine from Philadelphia, PA. Delivery by 2:25 p.m.
Plasma TV from San Diego, CA. Delivery by 12:15 p.m.

CHECKINGIN

Felecia Stratton

by Felecia Stratton | **Editor**

Sailing Into the New World

The Spanish and Portuguese sailed into the New World half a millennium ago seeking fame and fortune. Today, a new breed of intrepid business explorers is finding safe anchorage in Latin America, targeting the area's abundant potential for manufacturing and logistics activities in hopes of achieving fame and fortune of their own.

Inbound Logistics first made editorial inroads into Latin America in 2004 with the debut of *Inbound Logistics Mexico*, a monthly publication that reaches 15,000 transport and logistics professionals in Mexico. In this issue, we are extending our editorial coverage in Latin America and beyond, with a special Latin America logistics supplement available in English, Spanish, and Portuguese, in print (page 63) and online (to subscribe visit: www.inboundlogistics.com/mx or www.inboundlogistics.com/br).

Asia and Eastern Europe currently command the immediate purview of global sourcers and outsourcers. But Latin America remains in peripheral sight and is gradually turning heads in high places as transportation and logistics infrastructure continues to mature. Recent U.S. investment in Latin America, largely attributed to NAFTA and CAFTA trade agreements, confirms this trend. Between 2003 and 2005, U.S. foreign direct investment in Latin America grew from $297 billion to $353 billion, with Mexico ($57 billion to $71 billion) and Brazil ($30 billion to $32 billion) capturing the lion share of U.S. outlay, according to the U.S. Bureau of Economic Analysis.

While globalization opens new avenues for trade such as Latin America, it also places greater burdens on transportation connections, often requiring the expertise of third-party intermediaries. The air cargo industry, for example, is rife with questions about consolidation, security, and rising fuel prices, yet still continues an upward climb as you will read in Lisa Terry's article, *Air Cargo Navigates Uncertain Skies* (page 28). Not surprisingly, airfreight forwarders are capitalizing on this uncertainty. Our annual *Who's Who in Airfreight Forwarding* (page 34) offers some clarity, with detailed snapshots of some leading players to help you make informed decisions about potential partners.

Rounding out this month's editorial coverage is our annual Chemical Logistics supplement (page 39). In concert with *ChemicalWeek*, *Inbound Logistics* offers an in-depth look at the fast-growing chemical industry, complete with shipper case histories, logistics best practices, and profiles of available services and solutions for companies involved in the chemical supply chain.

Whether you are looking for low-cost sourcing locations, trying to keep pace with the air cargo sector, or perplexed by ever-changing hazmat protocol, this issue offers a comprehensive overview of trends shaping the new global world–and perhaps a little more incentive to flaunt your company's global conquests. Has your company made a successful leap into Latin America? E-mail your discoveries to editor@inboundlogistics.com. ■

inbound logistics

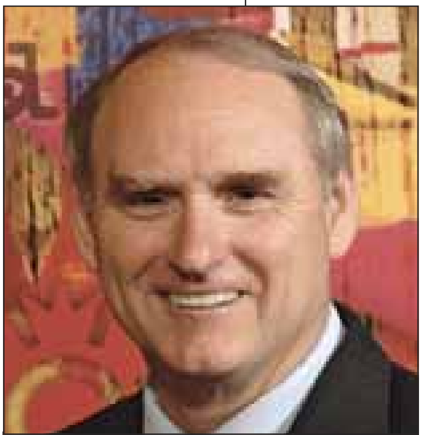
Vol. 27, No. 6 June 2007

THE MAGAZINE FOR DEMAND-DRIVEN LOGISTICS

www.inboundlogistics.com

Inbound Logistics welcomes comments and submissions. Contact us at 5 Penn Plaza, NY, NY 10001, (212) 629-1560, Fax (212) 629-1565, e-mail: editorial@inboundlogistics.com. For advertising, reprint, or subscription information, call (212) 629-1560, or e-mail publisher@inboundlogistics.com. Inbound Logistics is distributed without cost to those qualified in North America. Interested readers must complete and return the qualification card published in this issue, or may subscribe online at www.inboundlogistics.com/free. Subscription price to others: in North America: $95 per year. Foreign subscriptions: $129. Single copy price: No. Amer. $10, foreign $12, back issues $15. Periodicals postage paid at New York, NY, and additional mailing offices.

by Merrill Douglas



LASH IN A FLASH

NAME: Steve Lash

TITLE: Director of supply chain management, since 2000

COMPANY: El Pollo Loco, Irvine, Calif.

PREVIOUS EXPERIENCE: Armored cavalry officer, U.S. Army; operations manager, Carolina Freight; buyer, Ralston Purina, Commodities and Consumer Products Group; logistics manager, Rich Foods; director, supply and distribution, Burger King Corp.

EDUCATION: B.S. in logistics, University of Tennessee, 1972

Loco Like a Fox

"A chicken is actually corn with feathers," Steve Lash says. He should know. Lash is director of supply chain management for El Pollo Loco, a restaurant chain that built its success on citrus-marinated, flame-grilled, Mexican-style chicken. With more than 360 stores in seven states, and a 12-state expansion underway, El Pollo Loco (Spanish for The Crazy Chicken) runs through a whole lot of drumsticks, breasts, and wings.

That's why Lash's first stop on the web each day is the Chicago Board of Trade's site, to check the price of what, from his point of view, is basically chicken feed.

"As goes the price of corn, so goes the cost of chicken," says Lash, who's responsible for buying and moving about 700 items for the company's retail locations. "That's the key to business: anticipating costs, and making logistics decisions about the what, when, and how many, and ways to pay for it all."

Lash left Burger King to join El Pollo Loco, where he was charged with creating a new supply chain management group for the chicken chain, after a spin-off by its former corporate owner left it without that piece of infrastructure. He reports to the chief financial officer.

Along with purchasing and distribution, Lash also used to run quality assurance, but El Pollo Loco recently

The Big Questions

What do you do when you're not at work?
I'm an avid skier and sailor. On Saturdays in the fall, my wife of 35 years and I cheer for the University of Tennessee football team and for any team playing against the University of Alabama.

Ideal dinner companion?
If I had the opportunity to have dinner with Jesus, he'd probably say prophetic things that I wouldn't understand. Then I'd torture myself the rest of my life trying to figure out what he said and how to live that every day. So instead, I think I'll just have dinner with my wife. Her, I understand.

Business motto?
Make it happen.

What makes for a great day on the job?
No unhappy customers, internally or externally.

What's in your briefcase?
A copy of *Kitchener's War: British Strategy From 1914 to 1916*, by George H. Cassar. Lord Kitchener was responsible for Great Britain's supply efforts during World War I. It's amazing, but logisticians today can read this book and say, "Oh my gosh, I face the same challenges!"

established that as a separate department, staffed by people Lash hired and trained.

One big logistics issue for El Pollo Loco is the fact that many of the products it uses have a shelf life of only seven to 10 days.

"Managing products that are sourced in California, and have to be served on the East Coast before they expire, is more challenging than handling products with a more extended shelf life," Lash says.

One key to meeting that challenge is redundancy–in suppliers, products, and anything else that might require an alternative if demand suddenly outstrips supply, or events diverge from plan.

"If you don't have a direct backup, at least have a contingency plan in mind," Lash advises.

El Pollo Loco's current expansion also poses a logistics challenge–especially when the company first enters a new market, before it starts to realize economies of scale.

"If a store requires 700 items, I have to make sure all 700 items are there," Lash says. That's Lash's job whether El Pollo Loco operates one or 100 stores in an area. But the more stores, the simpler his task. "It's a lot easier to buy a truckload of chicken than it is to buy two cases," he explains.

Lash doesn't shy away from the rigors of corporate expansion. "At Burger King, we opened new territories in the United States and expanded internationally as well," he says.

That posed some interesting difficulties. "It was a challenge, for example, to expand into areas where products have to be Halal-certified (manufactured according to Islam's dietary restrictions)," he says. And in some countries, health departments require pages of documentation on a single product. When a restaurant uses hundreds of products, those pages pile up fast.

"But in the United States, you just have to answer who, what, when, where, and how many," Lash says. ■

10TIPS

STEP-BY-STEP SOLUTIONS

by Deborah Catalano Ruriani

Getting Involved in Transloading

When executed correctly, transloading goods from one transport mode to another can help shippers increase flexibility and supply chain velocity, reduce cycle times, effectively plan distribution to meet market demands, and reduce shipping costs. But transloading can be a tricky practice, warns Dan Bourcier, deconsolidation manager for APL Logistics, a logistics provider based in Oakland, Calif. To help you avoid common pitfalls when getting involved in transloading, Bourcier offers these 10 tips.

1 **Steer clear of a "one-track" approach.** Remember, transloading is multimodal; it does not only involve rail. Many transloading operations help shippers blend ocean and ground transportation by pairing international ocean shipping with domestic trucking or intermodal rail, depending on which offers the best combination of cost and speed to market.

2 **Become familiar with transloading economics.** Convincing management that extra shipment handling and transfers will reduce supply chain costs may be difficult. Arm yourself with the facts: on average, the contents of three standard 40-foot ocean containers fit in two 53-foot domestic trailers. So, using transloading, your company pays for two inland shipments instead of three.

3 **Use transloading to offset supply chain volatility.** As supply chains become increasingly global, they also become more volatile in terms of delivery reliability. The flexibility transloading affords can help. For example, you can fit reloaded shipments into an intermodal trailer or truck, depending on which has the capacity to meet your speed-to-market needs at that particular time. Or, you can expedite shipments by using trucks with team drivers instead of intermodal to make sure hot orders meet customer shipping expectations. You not only offset volatility, but you also can shave 25 to 40 percent off transit time with this method.

4 **Combine transloading with cross-docking and deconsolidation.** Embracing transloading means you already rehandle shipments, so why not add cost-cutting supply chain functions to the process? Instead of transferring all goods from one ocean container into one domestic trailer destined for one location, deconsolidate the contents into separate trailers bound for several destinations, and combine the goods with other shipments bound for the same destinations. Or, consider a DC bypass/direct-ship program: ship a portion of inbound freight directly from your transload facility to your end customer, then transload and ship the balance to your distribution center. Transloading also provides the opportunity to perform value-added services such as labeling for direct-to-customer shipments.

5 **Set your clock.** Unloading, handling, and reloading shipments can be time-consuming. Expect a transload turnaround to take 48 to 72 hours from the time an ocean container is available at the port to the time it leaves the transload facility. Be sure to factor transloading time in your total transit estimates.

6 **Realize that transloading is not a one-size-fits-all solution.** The added costs associated with rehandling product may outweigh the transportation savings that come with transloading for East Coast importers, who are usually closer to their end users and have shorter ground transit times

CONTINUED FROM PAGE 8

than West Coast importers. Also, consider product characteristics, size, shape, and weight when deciding whether to adopt transloading. Awkwardly shaped, fragile, or heavy cartons are poor candidates for transloading.

7 **Choose your transloading providers carefully.** If you decide to transload shipments, you will likely work with a 3PL, an intermodal marketing company, a drayage provider, and a carrier. Do your homework when screening providers. Consider their transloading experience and whether they have enough capacity to handle your throughput volumes. Examine the transloading center's proximity to your entry port. Look closely at the level of integration the providers can achieve. Check out their technology and what kind of visibility they provide.

8 **Invest in technology.** Transloading improves the way you transfer goods – make sure your information transfer practices are equally agile. Create a web-based supply chain visibility platform where you can integrate electronic data interchange information and advanced shipment notices (ASNs) with your enterprise resource planning system. You may also want to consider UCC128-compliant label printing and carton-level bar-code scanning.

9 **Plan ahead.** It's never too late to begin transloading operations, but the longer you wait, the more likely you are to face stiff competition for the best transloading space and the most reliable carriers. When partnering with a single-source provider to coordinate and integrate your transloading needs, allow nine months to one year to prepare a request for proposal, sift through responses, and make your selection.

10 **Include your transloading provider early on in the shipping process.** Many companies assume transloading starts when a drayage operator drops a load off at the facility. Companies that allow their transloading provider to become involved earlier in the shipment process, however, often receive a higher level of service and reliability. If you let your transloading facility coordinate drayage, for example, it can prioritize which containers should leave ports first, and alert dray operators to the best time of day to make a delivery. Or, if you communicate with your provider by sending electronic ASNs while goods are in transit, the provider can plan accordingly and get goods out the door faster. ■

Amy Roach Partridge is assistant managing editor of *Inbound Logistics*. E-mail her at *apartridge@inboundlogistics.com*

SUPPLY CHAIN TECHNOLOGY

by Amy Roach Partridge

What Are Your Tech Vendors Up To?

A sampling of new offerings from the top technology providers attending D/C Expo.

Twenty-five years after its initial launch, the annual Distribution Computer Expo is still an important event for previewing the latest in logistics and supply chain technology. The conference is a one-stop shop for catching up with the various providers that power supply chain technology.

Here are highlights from my meetings with technology companies that attended this year's conference, which took place May 22-24 at Chicago's Navy Pier.

SAP Spies Provider Opportunities

WHILE SAP HAS LONG SERVED A VAST number of shippers, it is now grabbing users from the 3PL and carrier worlds as well. SAP's upgraded, provider-focused product, *Supply Chain 6.0*, is set to debut this fall.

The application contains a robust transportation management system (TMS) geared toward 3PL, freight forwarder, and carrier users, says **Rod Strata**, industry principal for SAP's transportation and logistics segment. Strata has been helping shape SAP's push into the service provider field.

It is not hard to imagine SAP building on its current success with shippers by appealing to service providers. The increasing complexity of managing transportation has led many shippers to outsource the function to 3PLs; 3PLs, in turn, often need TMS technology above and beyond what they can develop in-house, explains Strata. This is where SAP comes in.

The new TMS product integrates seamlessly with SAP's existing software, making it a fairly easy sell for the many providers already using SAP's enterprise management tools.

A bigger challenge for the company is fighting off its best-of-breed rivals, who are also gearing up to win over logistics service providers. Strata cites a "build, partner, or acquire" approach to fighting off competition. "We look at capabilities we are missing, then decide the best approach for plugging those holes," he explains.

PINC Solutions Makes Tracks in the Yard

WHILE MANY IN THE LOGISTICS SECTOR have snubbed passive RFID tags in favor of active RFID applications, Berkeley, Calif.-based PINC Solutions is embracing passive RFID as an inexpensive way to deliver real-time yard visibility. The company, started in

CONTINUED FROM PAGE 13

2004 with seed funding from Siemens, delivers the first real-time yard visibility solution free of expensive hardware and significant manual intervention, says **Dr. Aleks Göllü**, CEO and founder.

The company's signature application, *YardHound*, uses passive RFID tags combined with positioning sensors to track trailer location and status, trace yard truck movement, and provide a real-time picture of all yard activities via a web-based application. The goal, says Göllü, is to offer DC owners real-time, 24-hour access to key yard data such as trailer positioning, check-in and check-out times, fuel status, and trailer temperature readings, among others.

PINC also offers users a complete yard management system through a partnership with Montreal-based C3 Solutions. Combining real-time yard visibility with strategic yard management helps users reduce operations costs, and achieve return on investment in less than one year, says Göllü.

Sterling Commerce Serves Up Services Solutions

LOOKING TO BULK UP PROFIT margins, many companies have embraced aftermarket services as a new source of revenue. The problem, however, comes in managing and automating these services as part of a normally product-based supply chain.

One solution comes from Sterling Commerce, a Dublin, Ohio-based software provider. Its just-announced *Sterling Service Contracts* offering aims to administer and automate the entire lifecycle of service, subscription, and other duration-based products.

The solution, which Sterling gained as part of its recent acquisition of e-business software provider Comergent, integrates order capture, order fulfillment, and CRM applications to help users define, manage, and build service bundles throughout the duration of the contract.

Specifically, *Sterling Service Contracts* enables companies to proactively monitor equipment warranties, maintenance agreements, and service commitments; automatically notify customers of contract expirations; and manage pricing issues such as subscription, cancellation, and usage charges.

"We manage complex issues that aren't addressed well by an ERP system," says **Ken Ramoutar**, Sterling's director of applications product marketing. That complexity is playing out in companies' desire to connect the way they sell products and services with how they fulfill them, he notes.

Sterling's new solution and its Comergent acquisition have nicely positioned it to support this trend.

Psion Teklogix Steps Back

MOVING BACKWARD IS NOT USUALLY something businesses are proud of–but it is exactly what **Greg Evans**, senior product manager for Psion Teklogix, boasts about. "Backward capability" is a key selling point for Psion's new generation of Workabout Pro rugged handheld computers.

"We are leveraging existing expansion modules from the first generation Workabout Pro, which are fully compatible with the second generation," explains Evans. This approach provides users an industrial tool that doesn't need to be replaced whenever new requirements emerge.

A thorough demo of the new tool from the Mississauga, Canada-based company shows off its many add-on capabilities: scanners, imagers, RFID modules, wireless LAN/WAN radios, and even a passport reader. The new models also possess increased ability to survive multiple drops from as high as five feet, as well as a higher-resolution screen, a new operating system, and ergonomic improvements.

The new handheld is part of Psion's move to appeal to users outside the four walls–it is expanding with applications for meter reading, ticketing, and livestock, for example.

Best Transport Plays Online Matchmaker

MUCH LIKE ONLINE DATING, ONLINE freight matching and transportation transacting has gone mainstream over the past few years. The newest entrant to the field is Best Transport's *BestMatch*, which bills itself a combination search engine/business-networking site for the transportation industry.

The web-based, on-demand tool, which debuts this summer, grants carriers and shippers access to a community of partners with whom they can conduct real-time shipping transactions and view transportation opportunities. After joining *BestMatch*, shippers invite their carriers to become members; carriers can then extend the invitation to their other customers.

In a crowded field of web wannabes, what makes *BestMatch* unique? "Shippers and carriers use *BestMatch* as a wide-angle lens into optimal service and customer matches, by lane or by load. *BestMatch* protects the private shipper-carrier relationship through individual controls over the exposure and use of information, instead of simply publishing that information to a board," explains CEO **Mark Shary**.

A demo highlights the simple user experience: shippers search for available trucks by lane or by shipment, and results display carriers with available capacity matching their criteria. Using the site helps shippers optimize carrier utilization, compare rates from a variety of carriers, improve tendering, and match to actual truck capacity, notes **Bill D'Amico**, vice president of sales.

The capacity shortage of recent years works to *BestMatch's* advantage, but with capacity loosening up, will shippers still go the extra mile and check online for freight opportunities?

Even with more available capacity, shippers still want to find the best price, D'Amico notes. "If capacity continues to loosen up, the site will instead become carrier-driven," he says. ■

Landstar Global Logistics

Welcomes Our Newest Stars...

Genex LP of Northfield, Illinois is one of the nation's oldest original intermodal marketing companies with over 40 years' experience in transporting their customers' goods via the railroads of yesterday and today.

Genex, utilizing the tools and services available through their new status as an independent agency for Landstar Global Logistics, will be able to bring additional value to their customers by offering truckload and LTL, transportation brokerage, air, ocean, and expedited ground services and warehousing, in addition to maintaining and growing their intermodal activities.

The Logistics Solutions You Need. The Service You Deserve.
866-660-1135
www.landstargloballogistics.com

LANDSTAR®
GLOBAL LOGISTICS

GLOBAL LOGISTICS

by Amy Roach Partridge

No Containing Container Growth

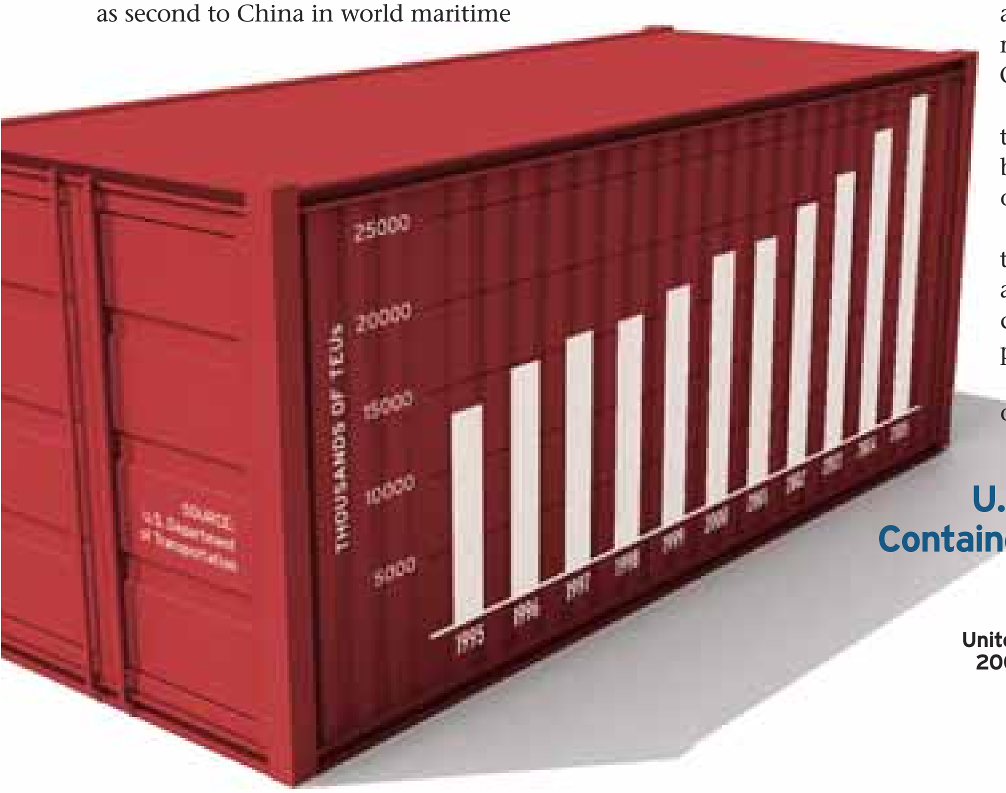
Port congestion remains a common concern for U.S. companies importing goods from overseas, and for good reason: one in nine of the world's maritime containers are either bound for or coming from the United States, according to *America's Container Ports: Delivering the Goods,* a new report from the U.S. Bureau of Transportation Statistics.

The report ranks the United States as second to China in world maritime container traffic–an estimated 46.3 million 20-foot equivalent units (TEUs) passed through U.S. ports in 2006, up from 22.6 million in 1996.

Interestingly, U.S. container traffic is becoming more concentrated as an increasing number of large, fast, specialized vessels call at a decreasing number of ports capable of handling them, finds the report. The top 10 U.S. container ports accounted for 85 percent of U.S. containerized traffic in 2005, up from 78 percent in 1995.

Overall, nearly 26 million containers of various sizes entered the United States via all modes of transportation in 2005, up 37 percent from 19 million in 2000 *(see chart)*. Of those containers, more than 15 million entered the nation by truck and rail from Canada and Mexico, while the remaining 11 million were imported as ocean freight. Other interesting findings include:

- Taken together, U.S. container trade in 2005 and 2006 more than double corresponding trade numbers from one decade earlier.
- Since 1996, total world container trade more than tripled, resulting in a decline in the U.S. share of world container trade from 16 percent to 11 percent.
- China has exceeded the U.S. share of world container trade since 1998.



U.S. International Maritime Containerized Activity: 1995-2005

(Thousands of TEUs)

Nearly 26 million containers entered the United States via all modes of transportation in 2005–up 37 percent from 19 million in 2000.

GLOBALLOGISTICS

CONTINUED FROM PAGE 17

China vs. India: The Debate Continues

Though China receives the most buzz when it comes to low-cost logistics, manufacturing, and technology capabilities, some Asian business leaders are more excited about growth opportunities in India, according to the *UPS Asia Business Monitor*.

Respondents to the UPS study rank China as the area with the greatest prospects for economic growth, followed by India and Hong Kong. But they report ambivalence about China's growing economic power, finds the survey of 1,200 small and mid-sized enterprise (SME) executives in Asia.

Asian SME leaders are equally divided between viewing China's continued dominance as a boost (34 percent) and perceiving it as both a boost and a threat (34 percent). Many also feel they are unable to compete with Chinese companies in terms of low labor and production costs (38 percent), and express growing concern regarding increased price competition (25 percent).

In contrast, SME leaders across Asia cite a desire to capitalize on India's rapid growth by leveraging its continued rise as a manufacturing base (30 percent) and outsourcing location (25 percent). They also seek to become an outsourcing destination for India (20 percent), and an exporter of raw materials to India for manufacturing (19 percent).

Eighty-five percent of respondents say India is or has the potential to be a regional economic leader, and 81 percent feel certain that India's economy will grow in 2007. Small business leaders in India are optimistic about their country's trade growth – 83 percent of Indian respondents project strong U.S.-India trade growth this year. In terms of overall prosperity, 89 percent of Indian SMEs expect greater economic prospects for their businesses in the year ahead.

Other survey highlights include:

- Respondents widely agree that China will surpass the United States as the world's largest consumer economy in 10 years or sooner.
- Small business leaders expect intra-Asia trade growth to continue its upward climb, with 74 percent of respondents saying that regional trade will grow strongly in 2007.

■ A majority of small business leaders in India (85 percent) say that globalization brings benefit to their businesses, whereas 55 percent of business leaders in Japan say it is a disadvantage.

Five for the Air

Though China plays an increasingly important role in the air transportation industry, the country faces five specific challenges on its road to leadership, according to Giovanni Bisignani, CEO of the International Air Transport Association (IATA). "China is at a critical moment, and to build a successful future it has to avoid mistakes made in other parts of the world," he explains.

The challenges, according to IATA, are:

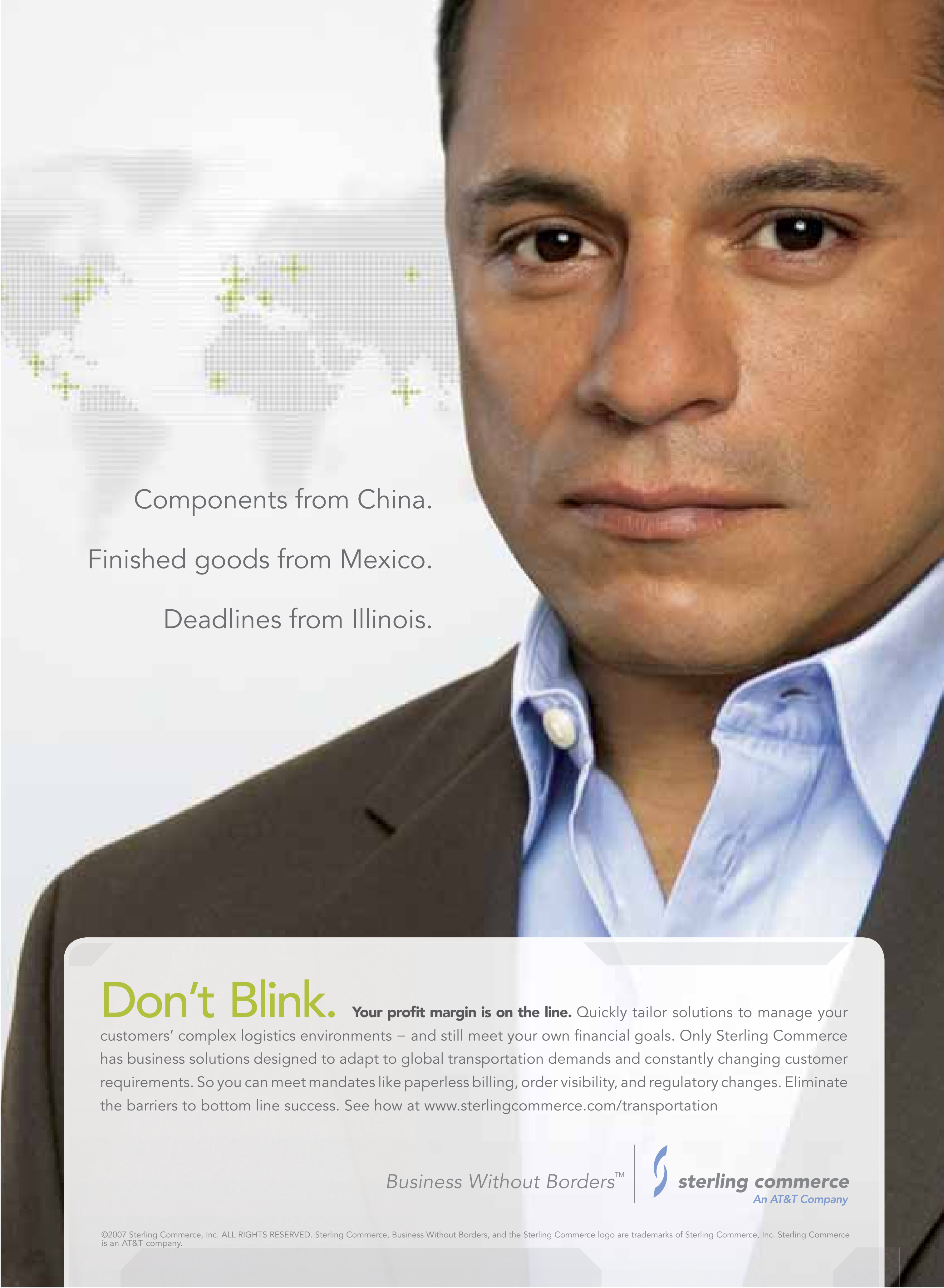
1. Efficient air traffic management: China's goal is to use global standards to make its airspace among the most effective in the world at meeting demand safely and efficiently. Current traffic management challenges include congestion delays in the Golden Triangle region and an inefficient airspace design in the busy Pearl River Delta.

2. Environmental sustainability: To ensure sustainability, China's aviation industry will need to use technology to further improve fuel efficiency, avoid taxes and charges, and adopt global solutions for emissions trading.

3. Cost-efficient airport infrastructure: China currently maintains among the highest infrastructure charges in Asia, which could hinder further progress. "IATA is working with the government to develop a charges regime that challenges airports on efficiency, provides a reasonable return to investors, and supports a competitive industry," notes Bisignani.

4. Internal cost control: Though China's aviation industry is growing, ignoring productivity issues could come back to haunt it. China can turn to cost allocation to understand where cost and productivity gaps occur, and identify areas for improvement, says IATA.

5. Commercial freedoms: China has made significant commercialization progress recently through U.S. and EU open-skies agreements, but it still has a way to go. China's fast-growing economy demands efficient air transport links, and China has the opportunity to shape policy where America and Europe have failed to do so, finds IATA. ■


Components from China.
Finished goods from Mexico.
Deadlines from Illinois.
Don't Blink. Your profit margin is on the line. Quickly tailor solutions to manage your customers' complex logistics environments – and still meet your own financial goals. Only Sterling Commerce has business solutions designed to adapt to global transportation demands and constantly changing customer requirements. So you can meet mandates like paperless billing, order visibility, and regulatory changes. Eliminate the barriers to bottom line success. See how at www.sterlingcommerce.com/transportation
Business Without Borders™
sterling commerce
An AT&T Company
©2007 Sterling Commerce, Inc. ALL RIGHTS RESERVED. Sterling Commerce, Business Without Borders, and the Sterling Commerce logo are trademarks of Sterling Commerce, Inc. Sterling Commerce is an AT&T company.

TRENDS

NEWS & EVENTS | SHAPING THE FUTURE OF LOGISTICS

by Amy Roach Partridge

New War Bill Impacts Supply Chain Security

Regardless of their political affiliations or opinions on the Iraq war, logistics and transportation professionals paid close attention to the compromise Iraqi war appropriations supplemental bill signed into law by President Bush in May. The bill contained two provisions impacting supply chain security: funding for port security measures, and further details on the hotly debated pilot plan to open the border to Mexican truckers.

The bill, known as H.R. 2206, includes $110 million in additional fiscal 2007 funding for the federal Port Security Grant program, hailed by the American Association of Port Authorities (AAPA) as "a giant leap forward" to help U.S. ports secure their facilities against terrorism.

Given the high cost of enhancing facility security at U.S. ports, including implementing the new Transportation Worker Identification Credential program, AAPA advocates a $400-million appropriation in fiscal 2008. The amount is an increase from 2007's $320 million funding total–an original $210 million plus the $110 million granted in the new bill.

While the ports were seeking additional funding from the war bill, Congress sought additional safeguards for the proposed cross-border trucking pilot plan announced in April by the Department of Transportation (DOT).

The Bush Administration remains committed to implementing the cross-border program. President Bush, however, did allow the new spending bill to require that DOT get approval from its inspector general that the

DHL Wins Other Amazing Race

While most people watch episodes of *The Amazing Race* on TV, Georgia Tech students devised their own race–they tasked FedEx, UPS, and DHL with delivering packages to Tikrit, Iraq; Harare, Zimbabwe; Yangon, Myanmar; Floranopolis, Brazil; and Apia, Samoa, as part of the annual *Great Package Race*.

Sixty students from the Supply Chain and Logistics Institute at Georgia Tech, with their professor, Dr. John Bartholdi, sent identical boxes containing Georgia Tech material to these out-of-the-way locations to learn which major express carrier could deliver fastest and cheapest. The carriers had no idea a competition was in progress.

The event is important, says Bartholdi, because it shows ideas the students study in the classroom–such as network design, scheduling, and packing–being used to make real-world decisions. "The sense of relevance is further heightened because some of the destinations are home to our international students," says Bartholdi. "We also discuss the logic of where carriers locate their sortation centers, and examine the dominant freight routes."

Georgia Tech's *Great Package Race* started in 2003, when Dr. Bartholdi needed to ship two boxes to Georgia Tech's sister organization in Singapore. "When I packed the two boxes I thought it might be interesting to send them via different carriers to compare results," recalls Bartholdi. "Afterward, a UPS vice president visited my class and explained the company's global freight network design and local issues in delivering shipments to Singapore."

This year marks the first time a clear race winner emerged. DHL was the only carrier to complete deliveries to all five locations. It also logged the fastest delivery time for three locations, and the second-fastest time for the other two. FedEx delivered to three locations, while UPS delivered only to two. UPS also did not recognize the country Samoa, which it still listed as Western Samoa, despite the country's name change in 1997.

Each carrier's prices varied greatly. For example, UPS offered the least expensive rate to Tikrit – $67.34 – even though the package was returned to sender. FedEx charged slightly more than $100, while DHL was the most expensive, at $125.26. Shipping to Harare via DHL, however, only cost $126.18, while FedEx charged $244.48, and UPS's tab totalled $336.60.

"The *Great Package Race* is more of an event than a serious study," notes Bartholdi. "The main message for students is that sending packages to such distant countries requires a lot more than just airplanes and trucks."

-Mark Rowan

ON YOUR MARK, GET SET. **Georgia Tech's *Great Package Race* pits UPS, DHL, and FedEx against each other to see who delivers fastest and cheapest to three remote locations.**

CONTINUED FROM PAGE 21

experimental program is in compliance with more than one dozen safety conditions laid out by Congress before it can move forward.

The war bill also includes a provision sponsored by Rep. Duncan Hunter (R-CA) requiring the government to publish its plans to enforce requirements that Mexican drivers be able to communicate in English. The provision also compels the agency to publish details of U.S. safety audits of Mexican trucking companies authorized to participate in the program.

SOUNDBITE

> "**Logistics is by far the single most significant element** in determining the speed and effectiveness of delivering the food, medicines and supplies that are **critical to alleviate suffering during disaster recovery efforts.**"
>
> – **LYNN FRITZ, founder of the Fritz Institute,** a nonprofit relief management organization, announcing its Certification in Humanitarian Logistics program.

PierPass Passes 5 Million Milestone

When it debuted in July 2005, the PierPass OffPeak program at the ports of Los Angeles and Long Beach was an experimental remedy aimed at easing peak traffic congestion. Today, it is an essential part of port operations, and has diverted more than five million truck trips from peak daytime traffic since inception. OffPeak is also credited with removing a weekly average of 60,000 truck trips from the freeways during commuting hours.

The PierPass program uses a congestion-pricing model that provides an incentive for cargo owners to move shipments at night and on weekends; those that move containers during peak daytime hours pay a traffic mitigation fee, which helps fund the cost of the night and weekend shifts.

Government officials and business leaders lauded OffPeak's five-million truck trips milestone, citing the program as a model for industry-led initiatives to eliminate costly bottlenecks, reduce gridlock on area freeways, and curtail air pollution from idling traffic.

"OffPeak has helped keep the economic engine of the ports running, while reducing the impact on Los

Angeles residents," says Los Angeles Mayor Antonio Villaraigosa.

The two ports recently announced another environmental initiative – the "San Pedro Ports Clean Air Action Plan," which aims to cut particulate matter pollution from all port-related sources by more than 50 percent within the next five years.

The plan, which launches Jan. 1, 2008, will phase out the use of old, "dirty-emissions" trucks under the following timetable: starting next year, 18 percent of trucks from 1989 or earlier will no longer be permitted to operate in the ports; by Jan. 1, 2009, the ban will extend to trucks older than 1994; by 2010 to trucks older than 1996; and by 2011, to vehicles older than 2004.

The ports, along with the South Coast Air Quality Management District, propose allocating more than $200 million toward this effort. ■

UP THE CHAIN

PEOPLE ON THE MOVE

Glass tableware manufacturer **Libbey Inc.**, Toledo, Ohio, recently named **Jonathon S. Freeman** to the new position of vice president, global supply chain. Freeman will maintain direct responsibility for all domestic operations including warehousing, distribution, logistics, plant operations, materials and finished goods purchasing for all businesses, production planning, customer service, and import procurement and sourcing. ● **Dr. Ralf Sonnberger** *(pictured)*, senior vice president of global supply chain management for German chemical company BASF Aktiengesellschaft, is now managing director of **BASF IT Services**. Sonnberger, a physicist, has managed BASF's global supply chain since 2004, and started his professional career at BASF as a researcher in the ammonia laboratory in 1986. ● Vehicle brake manufacturer **Carlisle Motion Control Industries**, Charlottesville, Va., has appointed **Joseph La Varra** president. An experienced lean manufacturing, operational performance, and inventory systems manager, La Varra is now responsible for all operations functions, and will spearhead the company's aggressive growth plans ● **Michael J. Metheny** has joined chain retailer A.C. Moore Arts & Crafts, Ardmore, Pa., as vice president of supply chain. Prior to joining A.C. Moore, Metheny worked for Federated Department Stores. He also served for 15 years with the May Department Stores Co. until the company was acquired by Federated.

– Mark Rowan

VIEWPOINT

by Carrie Ericson
& Leron Baum

Carrie Ericson is managing director, Ariba
cericson@ariba.com • 925-367-3832
Leron Baum is an Ariba consultant
lbaum@ariba.com • 415-786-5387

Sourcing in a Seller's Market

Rising commodity prices, growing global consumer demand, and increased political instability have put an end to the buyer's market in procurement. Today, buyers are just as likely to be "fired" by their suppliers as they are to experience supply chain shortages or out-of-stock notices.

So what is this new "seller's market" like? And is the sourcing professional really captive to it?

A seller's market exists when demand for a certain product is strong and prices remain relatively high. Several other factors–capacity constraints, unexpected supply disruptions, proprietary components or materials–can lead to the perfect storm that creates a seller's market.

BEATING THE ODDS

Despite these factors, sourcing professionals with the right strategy can overcome the odds that are stacked against them. The trick is to anticipate the forces that create a seller's market and organize supply chains in advance to ensure minimum disruption.

Applying information from key market indicators can help sourcing professionals do just that. Sources to consider include Producer's Price Index, capacity utilization, and inventory levels (*see chart at right for details*).

Like all sourcing strategies, smart sourcing in a seller's market requires analysis of not only the supply market, but also specific factors related to the products or goods being sourced.

A supply market characterized by little competition, full production capacity, specialized products, long lead times, and/or difficult or localized fulfillment issues requires a well-thought-out, proactive, flexible sourcing strategy that takes into account a variety of factors, including:

- Supplier competition.
- Production capacity and/or supply chain issues.
- Specialization.
- Pace of industry change.
- Geographic impact.

For certain products or goods, understanding the buyer's specific, internal organizational factors may be critical to deciding which suppliers to work with and which sourcing methods to choose. Among the factors influencing buyers' sourcing strategies are:

- Strategic importance.
- Influence of incumbent suppliers.
- Subject matter.
- Buying power.
- Stakeholder impact.

The more important a product is to a company, the more important it is to develop a flexible, robust sourcing strategy that balances supply market competition with supply market risks. Companies should consider the following when analyzing products:

- Size of current spend and future spend forecast.
- Product complexity.
- Switching costs.
- Total cost of ownership.
- Product's impact on the current supply chain.

NEXT STEP, EXECUTE

Typically, the most productive sourcing strategy for improving negotiating leverage in a seller's market is to expand the traditional supply base. Common methods for developing alternate supply sources include direct investment in or acquisition of suppliers, developing low-cost country supply sources, or insourcing products. These strategies, however, are also among the most difficult to deploy, and require significant investment.

If up-front investment is not an option, buyers should implement a sourcing strategy well before supplier negotiations begin. Developing strong relationships with the supply base will help buyers negotiate advantageous pricing. Although pricing may increase over time due to constrained supply market conditions, suppliers in deep relationships have incentive to ensure that their valued customers remain strong and viable. They may even be willing to sacrifice short-term margin.

In some cases, buyers face a seller's market without the benefit of available investment capital or solid working relationships with suppliers. Companies in this position can use several tactics to strengthen their negotiating position with suppliers:

- Link purchase of one product to another.
- Enact long-term contracts with forecasts.
- Reduce payment terms.
- Leverage supply continuity.
- Make credible threats.

Sample Supply Market Indicators

INDICATOR	DEFINITION	MARKET RELATIONSHIP
Producer's Price Index (PPI)	A monthly measure of producers' selling price changes.	**PPI inflation means rising prices; PPI deflation indicates falling prices.** Reviewing PPI for your given category and related categories will keep you updated on pricing trends.
Capacity Utilization	Ratio of production output to available capacity; gauges how much slack exists in the economy.	**The key threshold is 85 percent** – capacity utilization higher than this level is seen as inflationary and yields a seller's market. The opposite is true for capacity utilization less than 85 percent.
Inventories	Inventory levels defined as stocks of goods held by businesses either for further processing or sale.	**Excess inventory indicates a recession environment.** Sellers need to reduce inventory, which drives prices downward. **Low inventories signal a growth market for sellers.** They need to produce more goods, which drives prices higher.

SOURCE: ARIBA

NEW TOOLS FOR BUYING

Recently, buyers have also begun to incorporate online tools into their sourcing strategies. The traditional Request for Proposal delivered online can certainly help buyers gather supplier qualifications and start prices for negotiations, but doesn't offer much incremental benefit or power to drive negotiating leverage in a tough supply market.

If it is apparent that competition will be limited, buyers should consider sacrificing the liquidity derived through an online market or auction for a more traditional, offline negotiating strategy. Traditional negotiations protect the buyer's position by ensuring that the number of bidders and interest in the business remain confidential.

If several suppliers compete in the same market, however, buyers should consider the potential impact and value of an auction. Where multiple suppliers exist, an auction can drive results, even in a constrained supply market. Auctions including two suppliers typically yield 9 percent average savings, while those with three or more suppliers increase savings to more than 13 percent on average.

The trick to running an auction in a seller's market is to generate competition. The specific set-up of an online auction event can dramatically influence the perception of competition among suppliers. Example set-up strategies include:

- Provide suppliers with visibility into rank position only.
- Low bid wins all.
- Creative lotting.

Another auction format gaining acceptance with buyers in a seller's market is a Dutch Auction, which lets the buyer set the initial price and price increments, while suppliers bid on the quantity of product they will provide at each given price. This format encourages seller participation by focusing on volume versus price. It also allows multiple sellers to compete for business, increasing surety of supply.

Finally, when buyers are considering more than just price, an optimization strategy may enable them to sort through and compare competing seller offers. This technique is effective when buyers want to parse an award among various sellers–it allows buyers to test multiple award scenarios to optimize their best interests.

In addition, optimization gives sellers flexibility to craft a proposal that best meets their sales objectives, thereby providing more incentive to compete for the buyer's business.

PLAY TO WIN

Strategies such as these, however, don't easily come together.

To win in a seller's market, sourcing professionals must keep current on all factors that affect their strategic supply markets. They must also anticipate changes. Then, when a seller's market does occur, they can quickly execute innovative strategies that allow them to level the playing field and make sure they receive the most competitive pricing possible, given the circumstances. ■

C. Daniel Negron is vice president,
TT Club •201-557-7320
daniel.negron@thomasmiller.com

RISKS & REWARDS

ISSUES AFFECTING LIABILITY MANAGEMENT

by C. Daniel Negron

Buying Insurance: Domestic or Foreign?

Q: I am a logistics operator who handles inbound and outbound shipments for partners around the world. I am currently reviewing insurance options to ensure that my cargo and company are protected against accidents or damages that may occur during transit. My broker recently sent a proposal that fits my needs, but I feel uncomfortable because the broker uses a non-U.S. insurance company. What if it refuses to pay a claim? What if it goes bankrupt? How do I protect myself?

A: The United States has a well-developed insurance industry comprised of companies that can address the needs of most business enterprises. So it may come as a surprise that certain types of international trade insurance are often placed with insurers located outside the United States.

Both historical and commercial reasons explain this. Since the days of mercantilism, steamship lines have insured their shipside risks with insurers known as protection and indemnity (P&I) clubs. Only one P&I club operates in the United States, so the majority of steamship lines are insured with foreign P&I clubs.

Conversely, because of the huge volume of goods transported within the United States and abroad, many American insurers offer cargo insurance for loss or damage during transit.

Shippers running worldwide operations face the challenge of insuring their companies for professional and operational liabilities both within the United States and throughout the world. They need insurers that understand their industry, provide seamless insurance programs, and possess the resources to handle global claims. Unfortunately, only a small pool of insurers offers coverage for these complicated risks.

When a particular type of insurance is not readily available, many buyers look to the international insurance market for cover. This may seem risky, but safeguards exist.

STATE YOUR DIFFERENCES

Each U.S. state regulates its own insurance industry. Although laws differ from state to state, certain concepts are common to all states. Every state, for instance, considers an insurer to be "domestic" if it is either constituted or licensed with an office in that state. Insurers domiciled in other U.S. states or other countries are considered foreign or alien. These insurers are known by various names such as "non-admitted", "excess lines", or "surplus lines."

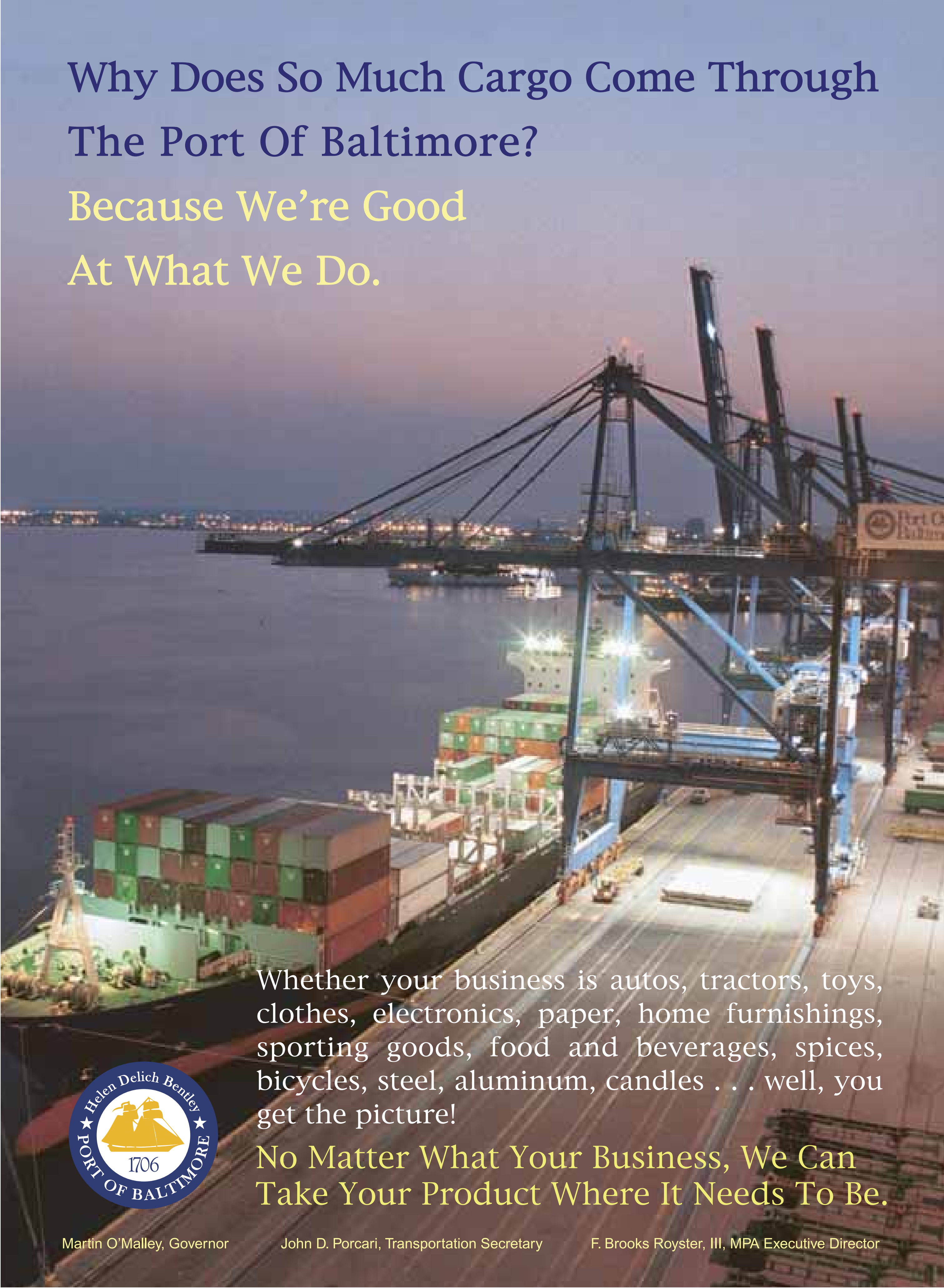
These insurers must qualify separately with each state for authority to offer insurance in that state. Non-domestic insurers are not less capable than domestic insurers; if a company opts to use one, it simply means the desired insurance is not otherwise available in the state where the company operates.

Domestic insurers contribute to their state's solvency funds, which are earmarked for paying bankruptcy claims. While foreign insurers do not normally contribute to a state's fund, they sometimes establish separate funds with the National Association of Insurance Commissioners, an organization recognized by all states.

CHECK WITH THE AGENCIES

The best way to measure the quality of an insurer – domestic or foreign – is to check its agency ratings. Agencies assign insurers a series of letters, similar to a school grade, based on their financial strength. An insurer that receives any variation of an "A" rating is usually financially solvent.

Ultimately, whether your company chooses a domestic insurer or one based in another country, your broker should conduct background checks as part of its analysis. If the broker feels it can meet your requirements with a properly qualified and financially sound insurer, you can be confident that your interests will be protected. ■


Why Does So Much Cargo Come Through
The Port Of Baltimore?
Because We're Good
At What We Do.
Whether your business is autos, tractors, toys, clothes, electronics, paper, home furnishings, sporting goods, food and beverages, spices, bicycles, steel, aluminum, candles . . . well, you get the picture!
No Matter What Your Business, We Can Take Your Product Where It Needs To Be.
Helen Delich Bentley
PORT OF BALTIMORE
1706
Martin O'Malley, Governor
John D. Porcari, Transportation Secretary
F. Brooks Royster, III, MPA Executive Director


HOLD STEADY!
CONTENTS SUBJECT TO
TRADE IMBALANCES
SURCHARGE
$
APPLIED
CAUTION!
AVOID CUSTOMER LOSS
TO COMPETITIVE MODES

Air Cargo Navigates Uncertain Skies

BY LISA TERRY

When it's imperative that freight arrives overnight, or even sooner, shippers of time-critical goods including donor organs, emergency airplane parts, or critical legal or financial documents often turn to Aeropoint Delivery Services, an Atlanta-based time-critical delivery courier. That means Aeropoint is heavily impacted by air cargo trends: when a carrier downsizes a plane on a Boise-to-Chicago route, for example, that reduced capacity could send Aeropoint scrambling for a different way to transport a shipment.

Unfortunately, such aircraft downsizing has been one response to pressures faced by the $55-billion air cargo industry as carriers seek ways to cope with fuel cost uncertainty, increased regulation, financial struggles, trade imbalances resulting in unused backhaul, and competition among themselves as well as from expedited, time-definite ground services and ocean shipping.

Not-So-High-Flying Growth

Despite large gains in the Middle East and Asia Pacific, international air cargo volume increased only modestly from March 2006 to March 2007.

REGION	FTK GROWTH*	ATK GROWTH**
Middle East	12.7%	14.7%
Asia Pacific	4.5%	5.5%
Africa	3.1%	8.7%
Industry Average	**2.3%**	**4.3%**
North America	−0.9%	4.5%
Europe	−1.0%	3.1%
Latin America	−6.9%	−1.5%

* **FTK:** Freight ton kilometers measures actual freight traffic.

** **ATK:** Available ton kilometers measures total available capacity (combined passenger and cargo).

Source: International Air Transport Association

Analysts place the international industry growth rate at a modest 2.3 percent year-over-year as of March 2007, according to the International Air Transport Association (IATA), but note high variability behind those numbers. Some international routes, such as Asia to North America, are growing much faster than well-established routes such as North America to Europe, while domestic air cargo is slightly down overall.

"Three cargo trends are key right now: the concentration of growth in Asia, an increasing trade imbalance, and losing business to ocean shipping," said Giovanni Bisignani, director general and CEO of IATA, at the recent IATA Cargo Symposium 2007, held in Mexico.

Dealing with Globalization

The globalization of manufacturing has strongly impacted air cargo. In concert with their customers, air cargo carriers and integrators continue to grapple with the right distribution of capacity and services to manage growing output from China and other Asian markets.

"The TransPacific market has been chaotic in the last year – supply outpaced demand, and the industry endured a weak peak season and significant capacity ramp-up," says Brian Clancy, managing director of MergeGlobal, a Washington, D.C.-area consultancy. "Many carriers have eliminated frequency or pulled out of certain city markets entirely."

By 2010, Intra-Asia will account for 26 percent of total international freight, according to IATA. But concerns are growing over how well the infrastructure can handle that volume, as well as possible bottlenecks at export gateways.

Despite these challenges, "transporting global freight via air still makes sense for many products – including apparel, footwear, high-value consumer electronics, and high-tech computer components – to offset demand variability," says Clancy. The shorter transit times more than offset the cost of air freight for these products because they are difficult to forecast over the long term, he notes.

"Long-term price deflation, however, is occurring across all consumer product segments," Clancy says. "At some point, it will be a challenge for these companies to continue using air freight on a planned basis."

That inflection point could arrive sooner rather than later due to rising fuel prices and a widening trade imbalance. For many shippers, ocean transportation is becoming a viable option.

"Companies currently transporting medium-value SKUs via air freight may switch to ocean to take advantage of new consolidated ocean/trucking services," says Clancy.

"Direct sailings and expedited inbound options have increased and infrastructure at ports is improving," adds Eric Bond, COO of Mach 1 Air Services, a freight forwarder based in Phoenix, Ariz. "Ocean carriers are filling capacity quickly and getting creative with inbound services."

From 2000 to 2005, ocean container freight grew at twice the rate of air cargo and will grow at a 7.2-percent rate through 2010, compared with air freight's 5.3 percent, according to IATA.

In addition to luring away scheduled air shipments, consolidated ocean offerings may even siphon off some last-minute shipments that typically go via air, in cases where certainty of delivery outweighs speed.

This trend away from air cargo isn't limited to international freight movement; expedited trucking is making significant inroads in domestic shipping as well.

"The industry is undergoing a mode shift," says Neel Shah, vice president of sales and marketing for United Air Cargo. "Domestically, freight moving within 1,500 miles is usually shipped via truck. The domestic market for air cargo today is limited to transcontinental shipments and to states unreachable by truck."

Domestic air carriers' financial struggles have created uncertainty in the market, which has many freight forwarders engaging in contingency planning, and carriers seeking to secure their place in the industry.

"Air carriers are being tested now," says Matt Buckley, senior director of cargo, Southwest Airlines Cargo. "Carriers that want to stay in business must invest in the resources to provide cargo customers high service levels."

Cushioning themselves from such uncertainty is one reason shippers such as Avnet, a Phoenix electronics distributor, rely on freight forwarders for both domestic and international service. On any given morning, Avnet's scheduled shipments account for only 20 percent of what it will ship that day.

"Being able to call a forwarder at 4 p.m. Saturday and arrange a shipment to Warsaw, Poland, is more commonplace now," says Mike Madeleine, director of global transportation for Avnet. "To meet customer needs, we have to work with a flexible provider that offers a variety of services and can make the process seamless. We want to work with a known entity, not a partner of a partner of a partner."

That need is accentuated as Avnet's business continues to grow globally. To ensure its forwarders meet Avnet's demands, the company rates its providers each month.

Express Cruises Ahead

Air express service, which MergeGlobal expects to account for 25 percent of the airfreight market in seven to 10 years, is less vulnerable to the industry's troubles. International express volumes grew 9.5 percent from mid-2005 to mid-2006, dominated by integrated express companies, according to the most recent numbers from Air Cargo Management Group, Seattle.

Southwest Airlines Cargo, for example, reports its scheduled airfreight business is flat, but posts greater than 20-percent annual growth for its next-available-guaranteed and rush services. This growth has enabled Southwest to invest in new POS/booking, capacity management, salesforce, and security technology, while kicking off international expansion – adding its own planes and forming targeted partnerships.

Couriers such as Aeropoint rely on express service to satisfy customers' time-critical shipment needs. "If we send a customer shipment to a location more than 200 to 250 miles away, we transport it by air," explains Stephen Divine, president of corporate sales for the Atlanta courier. "Customers dictate their time parameters and we decide how best to ship." The company sends 95 percent of its shipments via air, largely through scheduled service with commercial airlines such as Southwest, though its own 17 aircraft are available for charter flights.

One issue even express providers are not immune to is fuel surcharges. With oil prices skirting $67 a barrel (as of press time), and the summer travel season looming, fuel surcharges are expected to continue, impacting all sectors of the air cargo industry.

"We now examine fuel surcharges weekly," says Divine. "Two years ago, we checked them only once per quarter."

Because only 20 percent of daily shipments from its Phoenix warehouse are scheduled, electronics distributor Avnet relies on airfreight forwarders for their flexibility and service variety. The company uses forwarders for both domestic and international shipments, and rates them each month to benchmark service quality.

Despite challenges from ocean and expedited ground services, air is still the logical mode choice for many products, including fresh seafood. Carriers such as United Cargo specialize in efficient handling to ensure seafood is delivered on time, at maximum freshness.

Surcharges are currently at increased levels because carriers expect continued volatility and high prices for the remainder of the year, says United's Shah. Hedging is one strategy to counter the impact. "Ninety percent of Southwest's fuel is hedged at $50 a barrel," says Buckley. "We're trying to hold firm."

Shipping rates are similarly in flux. Some markets are experiencing strong price swings thanks to the ongoing dance between capacity and demand. Speculation ensues over whether rate increases and surcharges will start to box out some shippers. Companies importing and exporting with China may be in for a tough ride.

MergeGlobal's Clancy expects overcapacity in China will result in a tightening of prices there this fall, while other Asian markets experience weaker pricing. "China grows at the expense of other markets in Asia," he notes.

Like all shipping modes, air cargo businesses continue to absorb security measures imposed over the past few years and anticipate stringent requirements ahead.

The numerous – and ongoing – attempts to pass legislation requiring 100-percent screening of cargo on passenger flights poses the biggest threat. IATA opposes 100-percent screening because it believes the expense – an estimated $3.6 billion over 10 years – is prohibitive.

Also concerning the industry is a proposed pre-notification plan from U.S. Customs and Border Protection (CBP) that will require importers to provide 10 additional data elements about their shipments 24 hours prior to foreign lading. The plan would require two data sets from ocean carriers. CBP intends to expand the concept to other modes in the near future, a prospect that worries air cargo executives.

"Pre-notification will change all our procedures," says Aeropoint's Divine. "We're very concerned."

Bond of Mach 1 predicts both a cost and a time impact if pre-notification becomes a reality, delaying airfreight movement by as much as one day. "The information CBP is requesting is often not available until the time material ships," he explains.

Increased security regulations are expected to have a significant effect on shippers such as Avnet. For electronics distributors, being able to commit to delivering orders first often means winning the sale, and overnight service is the norm.

Avnet is not waiting on the outcome of pending legislation to act, however; the company has already attained Customs-Trade Partnership Against Terrorism (C-TPAT) certification and supports Technology Asset Protection Association (TAPA), the group behind a set of freight security requirements in the high-tech industry.

Connecting a Disconnect

Security is also one of IATA's top priorities. The organization has formed an Air Cargo Security Action Group to better convey to governments what it believes is a disconnect between the current direction of regulation and measures that would actually accomplish security goals.

Meanwhile, IATA's e-freight program aims to ensure security and improve air cargo's competitive position by eliminating the need to produce and transport paper documents for air cargo shipments. Its goal is to switch to an industry-wide, electronic shipping environment.

Despite the industry's many challenges, air cargo executives are cautiously optimistic about the future. Carriers and integrators are continuing to invest in fleets and equipment, and are expanding service offerings. All involved in the industry share a common goal: to retain customers and keep competition from other modes at bay. ■

Who's Who in Airfreight Forwarding

To get your search for an airfreight forwarder off the ground, check out this list of leading players.

COMPANY NAME / WEB ADDRESS	PHONE	ASSET- OR NON-ASSET-BASED	SERVICES MANAGED: CUSTOMS CLEARANCE	COMPLIANCE	OTHER SERVICES MANAGED	WEB SERVICES: RATE QUOTES	REAL-TIME TRACKING	DOCUMENTS	OTHER WEB SERVICES
A.N. Deringer www.anderinger.com	888-612-6239	N	✈	✈	Ocean freight forwarding, warehousing & distribution		✈	✈	Online PO management
Agility www.agilitylogistics.com	714-513-3000	B	✈	✈	Supply chain management	✈	✈		
AIT Worldwide www.aitworldwide.com	800-323-6649	N	✈	✈	Transportation & warehousing management		✈		PODs, scanned document images
BDP International www.bdpinternational.com	215-629-8900	N	✈	✈	Import/export, warehousing & distribution	✈	✈	✈	
Bellair Expediting www.bellair.com	206-241-7710	B	✈	✈	Warehousing & distribution	✈	✈	✈	POD tracking
CFF World Freight www.cffworldfreight.com	516-825-0106	B	✈	✈	Import/export, distribution	✈	✈	✈	
Concert Group Logistics www.cglship.com	866-CGL-SHIP	N			Trans-border		✈	✈	Shipment booking & dispatch, bills of lading
DHL Global Forwarding www.dhl-dgf.com	800-234-2778	N	✈	✈	Duty drawback, Free Trade Zone	✈	✈	✈	
Dimerco Express Group www.dimerco.com	404-684-9188	N	✈	✈	Cross-border trucking (Hong Kong-South China), 3PL, hand-carry		✈	✈	B2B e-commerce
EA Logistics www.ealogistics.com	800-863-5948	N	✈	✈	Ocean, documentation services, customs brokerage	✈	✈	✈	
EGL Eagle Global Logistics www.eaglegl.com	800-888-4949	N	✈	✈	Import/export	✈	✈		Shipment booking, payments
Expeditors International www.expeditors.com	206-674-3400	N	✈	✈	Order, vendor & cargo management		✈	✈	Shipment booking, quote monitor
Hassett Air Express www.hassettair.com	800-323-9422	N	✈	✈	Documentation		✈		Management reports, signature POD, EDI
ICAT Logistics www.icatlogistics.com	800-572-1324	N	✈	✈	NVOCC licensed, customs brokerage, letters of credit, charters, couriers	✈	✈		Customized solutions
IJS Global www.ijsglobal.com	203-504-9760	N	✈	✈	Export licensing, consulting, consolidation	✈	✈	✈	Report downloads
Kintetsu World Express www.kwe.com	800-275-4045	N	✈	✈	Logistics & supply chain management	✈	✈		Shipment reports, inventory visibility
Kuehne + Nagel www.kn-portal.com	201-413-5500	N	✈	✈	Inbound logistics, aftermarket logistics		✈	✈	Shipment & order visibility and monitoring
Lynden Air Freight www.laf.lynden.com	206-777-4650	N	✈	✈	Supply chain and logistics	✈	✈	✈	Reports on activities, payments, invoicing, deliveries

KEY:

Asset- or Non-Asset-Based: N = Non-asset-based; A = Asset-based; B=Both

Compliance: shipments comply with government, security, and trade regulations

Documents: shippers can book/create customs or import/export documents online

SPECIAL SERVICES:									SERVICES OTHER THAN AIRFREIGHT FORWARDING						
HEAVY FREIGHT	HAZMAT	DOOR-TO-DOOR	PERISHABLE	OVERNIGHT	NEXT FLIGHT OUT	CHARTER	HIGH VALUE	OTHER SPECIAL SERVICES	NVOCC	OCEAN	CUSTOMS BROKER	CONSOLIDATOR	LOGISTICS	OTHER NON-FORWARDING SERVICES	CERTIFICATIONS
✈	✈	✈							✈	✈	✈	✈	✈	Customs consulting, USDA meat inspection	Proprietary quality program
✈	✈	✈	✈	✈	✈	✈	✈	Defense & government services, project logistics	✈	✈	✈	✈	✈	Chemical logistics, humanitarian relief	
✈		✈	✈	✈	✈	✈		White glove, government svcs.	✈	✈	✈	✈	✈	Carrier management, inventory control & receiving	IATA, TAPA, C-TPAT
✈	✈	✈	✈	✈	✈	✈	✈	Chemical logistics	✈	✈	✈	✈	✈	Humanitarian aid	C-TPAT, Six Sigma, ACC Responsible Care Partner, ISO
✈		✈		✈	✈	✈	✈	Hand-carry, expedited				✈	✈	Trade show/convention services	
✈	✈	✈	✈	✈	✈	✈	✈	Ocean, trucking, customs	✈	✈	✈	✈	✈	Warehousing	
✈		✈		✈	✈	✈	✈	Time-critical & time-sensitive shipments	✈	✈		✈	✈	Trade show service, returned assets management	
✈	✈	✈		✈	✈	✈		Consolidated distribution	✈	✈	✈	✈	✈	Project cargo	ISO 9001:2000
✈	✈	✈				✈	✈	Personal effects & household movement	✈	✈	✈	✈	✈	VMI, warehousing & distribution	IATA, C-TPAT, ISO 9002, OTI/FMC, TAPA
✈	✈	✈		✈	✈	✈	✈	Trade show and event freight forwarding	✈		✈		✈	No. America LTL, TL, hotshot/ exclusive truck	
✈	✈	✈	✈	✈	✈	✈	✈	Residential white glove, local pickup & delivery	✈	✈	✈	✈	✈	VMI, warehousing & distribution, packing & crating, project cargo	ISO 9001:2000 and ISO 14000
✈	✈	✈	✈	✈	✈	✈	✈	Distribution planning	✈	✈	✈	✈	✈	Site selection, risk management	ISO 9000, C-TPAT , IATA,
✈		✈		✈	✈	✈		Time-sensitive, oversized cargo		✈			✈	Expedited ground, trade show shipments	ISO 9001, IATA
✈	✈	✈	✈	✈	✈	✈	✈	Courier	✈	✈	✈	✈	✈		NVOCC, HazMat, Dangerous Goods
✈	✈	✈	✈	✈	✈	✈	✈		✈	✈	✈	✈	✈	Consolidation, consulting	C-TPAT
✈	✈	✈	✈	✈	✈	✈	✈	Aerospace, medical freight, automotive	✈	✈	✈	✈	✈	VMI, inspection & repack	TAPA, C-TPAT, ISO 9001, 9002, 14000, 14001
✈	✈	✈	✈	✈	✈	✈	✈	Product-specific services	✈	✈	✈	✈	✈	Emergency & relief logistics, hotel logistics	C-TPAT, ISO9001 , Cargo 2000
✈	✈	✈		✈	✈	✈	✈	Warehousing & distribution, RMAs, pick/pack	✈	✈	✈	✈	✈		Quality business reviews, customer satisfaction surveys

Who's Who in Airfreight Forwarding

To get your search for an airfreight forwarder off the ground, check out this list of leading players.

COMPANY NAME / WEB ADDRESS	PHONE	ASSET- OR NON-ASSET-BASED	SERVICES MANAGED: CUSTOMS CLEARANCE	COMPLIANCE	OTHER SERVICES MANAGED	WEB SERVICES: RATE QUOTES	REAL-TIME TRACKING	DOCUMENTS	OTHER WEB SERVICES
Mach1 Global Services www.mach1air.com	480-921-3900	N	✈	✈	Warehousing	✈	✈	✈	EDI
OIA Global Logistics www.oiaglobal.com	800-938-3109	N	✈	✈	Domestic transportation management, 3PL services		✈		
Panther Expedited Services www.pantherexpedite.com	800-685-0657	N		✈	Time-critical, custom-critical transportation	✈	✈		Order entry
Pegasus Logistics Group www.plg.cc	800-997-7226	N	✈	✈	Warehousing, supply chain management		✈		EDI, handheld POD
Phoenix International www.phoenixintl.com	800-959-9590	N	✈	✈	Warehousing & distribution, vendor management	✈	✈		Shipment status information, printable forms
Pilot Air Freight www.pilotair.com	800-447-4568	B	✈	✈	Inbound logistics		✈		E-mail alerts
Priority Worldwide Services www.priorityworldwide.com	410-766-7470	N	✈	✈	Bonded warehousing	✈	✈	✈	
Schenker/BAX Global www.baxgoesschenker.com	516-377-3000	N	✈	✈	Supply chain management, contract logistics	✈	✈	✈	EDI
SDV International Logistics www.sdvusa.com	718-525 8100	N	✈	✈	Cross trade in 88 countries, international logistics		✈		PO management, business intelligence, WMS, EDI
SEKO Worldwide www.sekoworldwide.com	800-228-2711	N	✈	✈	Air & ocean import/export, transborder, carnets, AES/SED filing, letters of credit	✈	✈	✈	Shipment reports, interactive shipment calendar
Service By Air www.servicebyair.com	800-722-0402	N	✈	✈	Remote location filing, import/export	✈	✈	✈	
Target Logistic Services www.targetlogistics.com	310-900-1974	N	✈	✈	Custom packaging and crating	✈	✈	✈	Forms library, claims status
Team Worldwide www.teamww.com	800-527-1168	B	✈	✈	Warehousing		✈		Create shipments online
U-Freight America www.ufreight.com	650-583-6527	N	✈	✈			✈		
UPS www.ups-scs.com	800-443-6379	B	✈	✈	Consolidation, transload/crossdock, DC bypass	✈	✈	✈	
US Express Freight Systems www.usexpressfreight.com	800-328-8000	B	✈	✈	Convention freight services	✈	✈	✈	Automatic e-mail updates
Worldwide Express www.worldwideexpress.com	610-521-5450	A	✈	✈		✈	✈		
WPX Delivery Solutions www.wpx.com	800-562-1091	B		✈	On-demand & logistics services	✈	✈		Place orders online

KEY:

Asset- or Non-Asset-Based: N = Non-asset-based; A = Asset-based; B=Both

Compliance: shipments comply with government, security, and trade regulations

Documents: shippers can book/create customs or import/export documents online

SPECIAL SERVICES:									SERVICES OTHER THAN AIRFREIGHT FORWARDING						
HEAVY FREIGHT	HAZMAT	DOOR-TO-DOOR	PERISHABLE	OVERNIGHT	NEXT FLIGHT OUT	CHARTER	HIGH VALUE	OTHER SPECIAL SERVICES	NVOCC	OCEAN	CUSTOMS BROKER	CONSOLIDATOR	LOGISTICS	OTHER NON-FORWARDING SERVICES	CERTIFICATIONS
✈	✈	✈		✈	✈	✈	✈	Hot shot/ground expedite, truckload, local cartage	✈	✈	✈	✈	✈	Repackaging, crating	ISO 9001:2000, C-TPAT, CBSA-ASFC, FAST, PIP, CSA, BASC
✈		✈	✈		✈				✈	✈	✈	✈	✈	Creative packaging & design, value-added warehousing	ISO 9001:2000
✈	✈	✈	✈	✈	✈	✈	✈	Recoveries, transportation protective services					✈	Ground expedite, air charter	ISO 9001:2000
✈	✈	✈		✈	✈	✈	✈	Freight optimization, reverse logistics					✈	Entertainment industry specialist	
✈	✈	✈	✈	✈	✈	✈	✈	Project moves, global textile logistics	✈	✈	✈	✈	✈	Vendor assembly & consolidation	C-TPAT
✈	✈	✈	✈	✈	✈	✈	✈	Government services			✈	✈	✈	Home delivery	
✈	✈	✈	✈	✈	✈	✈	✈	Packaging, crating, warehousing	✈	✈	✈	✈	✈	Purchasing & invoice auditing	
✈	✈	✈	✈	✈	✈	✈	✈	Land operations, ocean freight	✈	✈	✈	✈	✈	Reverse logistics, temp-control, 3PL, crossdock	ISO 9001:2000, C-TPAT
✈	✈	✈	✈	✈	✈	✈	✈	Aerospace, oil & gas, projects, health care, cosmetics, NGO	✈	✈	✈	✈	✈	Warehousing & distribution, crating	ISO 9001:2000, ISO 14001:2004, ISO 18001: 2004, C-TPAT, IATA, FMC
✈	✈	✈	✈	✈	✈	✈	✈	Trade shows, pharmaceutical sample distribution	✈	✈	✈	✈	✈	Warehousing & distribution, inventory, PO & vendor management	ISO 9001: 2000, C-TPAT, HazMat, IATA
✈		✈		✈	✈	✈		Government services	✈	✈	✈		✈		
✈	✈	✈	✈	✈	✈	✈	✈	2/4-man deliveries, reverse logistics, white glove services	✈	✈	✈	✈	✈	Warehousing, pick/pack	C-TPAT
✈	✈	✈		✈	✈	✈	✈	Hot shot, airport-to-airport, full truckload	✈	✈	✈	✈	✈	Compliance training, banking	ISO 9000:2001
✈	✈	✈	✈	✈	✈	✈	✈		✈	✈	✈	✈	✈		ISO 9002, C-TPAT
✈	✈	✈	✈	✈	✈	✈	✈	Hand-carry and various value-added services	✈	✈	✈	✈	✈	Rail intermodal, ground freight	Internal quality review process
✈		✈		✈	✈	✈	✈	2-day service, 3-5 day service		✈	✈	✈	✈	Warehousing & distribution	AFA
✈	✈	✈	✈	✈		✈	✈	Duty drawback	✈	✈	✈	✈	✈	Consultation	
	✈	✈		✈	✈				✈	✈		✈	✈	WMS, inventory control	

A Special Supplement
from *Inbound Logistics*
and *Chemical Week*

CL
Chemical Logistics
06.2007

A JOINT SUPPLEMENT FROM
chemicalweek inbound logistics

All articles written by Gregory DL Morris

Industry Outlook: Faring Well, Despite Challenges

Advances in safety and technology contend with stubborn tactical challenges.

SAFE AND STRONG: Chemical producers and shippers report strong business growth and a continued commitment to safety. Overall, the industry posted fewer safety incidents for more ton-miles, largely due to Responsible Care initiatives.

The spectacular tanker fire that melted an access ramp to the San Francisco Bay Bridge dominated the news for only one day. Never mind that it was a gasoline tanker and not a chemical tanker that crashed and burned – the incident provided an opportunity for the popular press to pry into the millions of shipments and billions of pounds of chemical products transported throughout North America every year.

But the next morning, it was back to partisan politics and *American Idol*.

Chemical producers and carriers likely gasped upon seeing the footage of towering flames and smoke on the highway, then heaved sighs of relief when no one began an exposé on hazardous materials transport. The industry, in fact, has a good story to tell: fewer safety incidents for more ton-miles, and improved efficiency throughout the chemical supply chain.

Some of the credit for these improvements goes to producer initiatives, notably Responsible Care (RC). This code of management practice – invented in Canada and quickly adopted in the United States and worldwide – includes a provision for carriers and logistics providers to become partners. The program has received mixed reviews, but the American Chemistry Council, an industry trade group based in Arlington, Va., plans to begin tracking and publishing data on the degree to which member companies use RC-partner carriers.

Technology also deserves credit for chemical logistics advances, say shippers and carriers. Third-party logistics providers (3PLs) are leading the way in this arena. 3PLs have realized that the power of enterprise resource management databases lends itself well to supply chain efficiencies.

At the other end of the supply chain, Elemica, a global network for chemical buying, selling, and supply chain management, has advanced the cause of e-commerce since its formation in 2001.

Software standardization, however, remains elusive among

Continues on page 44


MAERSK
MAERSK
CREATING
OPPORTUNITIES
IN GLOBAL
COMMERCE


Safety. Together, it's the most important thing we deliver.
Congratulations to the winners of the 2006 CN Safe Handling Awards, our partners in the safe delivery of dangerous goods. The awards, which are part of the chemical industry's Responsible Care® safety initiative, are our way of thanking you for all your hard work in making our business so much safer.
www.cn.ca
CN
NORTH AMERICA'S RAILROAD

A N Resources Inc.
Ace Ethanol LLC
Afton Chemical Corporation
Air Liquide Industrials US, LP
Airgas Carbonic Industries
Algoma Steel Inc.
Ashland Inc.
Aventine Renewable Energy, Inc.
BASF Corporation
Bitumar Inc.
BOC Gases
Border Chemical Company Ltd.
BP Products North America Inc.
Brenntag Canada Inc.
Canada Colors & Chemicals Ltd.
Canadian Enterprise Gas Products Ltd.
Canexus Chemicals Canada LP
Celanese Corporation
Chemtrade Logistics Inc.
Consumer's Co-Operative Refinery Ltd.
Cyro Industries
Cytec Industries, Inc.
Degussa Corporation
EKA Chemicals Canada Inc.
Elbow River Marketing LP
EnCana Oil & Gas Partnership
EPCO Carbon Dioxide Products, Inc.
FMC Corporation
Gas Supply Resources LLC
GE Petrochemicals
Gibson Energy Ltd.
Hexion Specialty Chemicals Inc.
Husky Energy Inc.
Hydrite Chemical Co.
ICEC Canada Limited
IMTT
Ineos Fluor Americas, LLC
Ineos USA LLC
Innophos, Inc.
International Chemical Company
Irving Oil Ltd.
Kemira Chemicals Canada Inc.
Kemira Water Solutions
Keyera Energy
Koppers, Inc.
LBC Baton Rouge
Lucite International
Marsulex Inc.
Methanex Corporation
Moose Jaw Refinery Inc.
Nalco Chemical Company
NGL Supply Company Ltd.
Norfalco Sales Inc.
Nova Chemicals Corporation
Occidental Chemical Corporation
Osmose Wood Preserving Inc.
PCS Sales USA Inc.
Petresa Canada Inc.
Petrosul International Limited
Pioneer
Plains Marketing Canada LP
PPG Industries, Inc.
Praxair
Provident Energy Ltd.
Provista Renewable Fuels Marketing
Pursue Energy Corporation
Quadra Energy Trading Ltd.
Recochem Inc.
Rentech Energy MidWest Corp.
Rhodia Inc.
Saskferco Products Inc.
Semstream LP
Shell Chemical Company
Shell Chemicals Canada Ltd.
Southern Chemical Corporation
Spectra Energy Empress LP
Statoil ASA
Stittco Energy Ltd.
Sun Chemical Corporation
Taminco Higher Amines
Targa Midstream Services LP
Tembec Enterprises Inc.
Terminaux Canadiens Canterm Inc.
Terra Industries, Inc.
Tidal Energy Marketing Inc.
Total Petrochemicals USA, Inc.
Transammonia
Ultramar Ltd.
VeraSun Energy Corporation
VFT Canada Inc.
Western Explosives Ltd.
Western Wisconsin Energy, LLC
Williams Olefins LLC
WRR Environment Services Company Inc.

Continued from page 40
chemical producers and carriers, many of whom still use legacy systems or paper records.

Overall, shippers and carriers report chemical shipment increases. Some 3PLs have doubled their chemicals business, and even the mature less-than-truckload (LTL) highway sector is posting gains.

"We have continued our aggressive growth in the chemical market," says Steve O'Kane, president of A. Duie Pyle, a trucking carrier based in West Chester, Pa. More of the company's business is coming from new customers than from expanding operations with existing shippers, O'Kane says.

This growth reflects chemical shippers' desire to partner with carriers that maintain strong safety performance, says Tom Walker, director of import/export for A. Duie Pyle. "Our drivers have all earned hazmat endorsement," he explains.

In addition, every truck contains a spill kit, and each driver completes eight hours of hazmat training, notes Pete Dannecker, the company's safety director. These practices are standard for bulk tank operators, but not LTL carriers, he notes.

Bulk tank operators are also faring well in the current market. "We have experienced 25-percent growth per year during the last five years, and we expect to continue growing over the next five years," reports Tom Blaney, president of Northwest Tank Lines, Vancouver, British Columbia. Northwest is focused on building relationships with shippers, often using Responsible Care as a common language. Long-term agreements drive about 95 percent of the company's business.

> *"We have experienced 25-percent growth per year during the last five years, and we expect to continue growing over the next five years."*
>
> — **Tom Blaney,** President, Northwest Tank Lines

As with all highway carriers, Northwest continues to grapple with a shortage of trained drivers. Hoping to help mitigate the shortage, the company recently hired a recruitment and retention manager.

"We have also added a safety manager, a maintenance manager, and, as director of Responsible Care, Terry Litchfield, who is active in the Canadian Chemical Producers' Association's Responsible Care initiative," says Blaney. Northwest will begin its first RC verification audit next summer.

Remaining Challenges

Congestion and scheduling remain challenges for all chemical carriers. "Streamlining loading and unloading is key for all sectors," says Blaney.

Time lost loading and unloading puts pressure on the supply chain, explains George Grossardt, vice president and general manager of Schneider National Bulk Carriers, Green Bay, Wisc. "One or two hours of driver time lost to loading/unloading is a high percentage. Shippers would not accept that level of inefficiency in their own production," he says.

On the shipper side, integrating logistics into the highest levels of corporate planning is becoming more common for producers such as Dow Chemical.

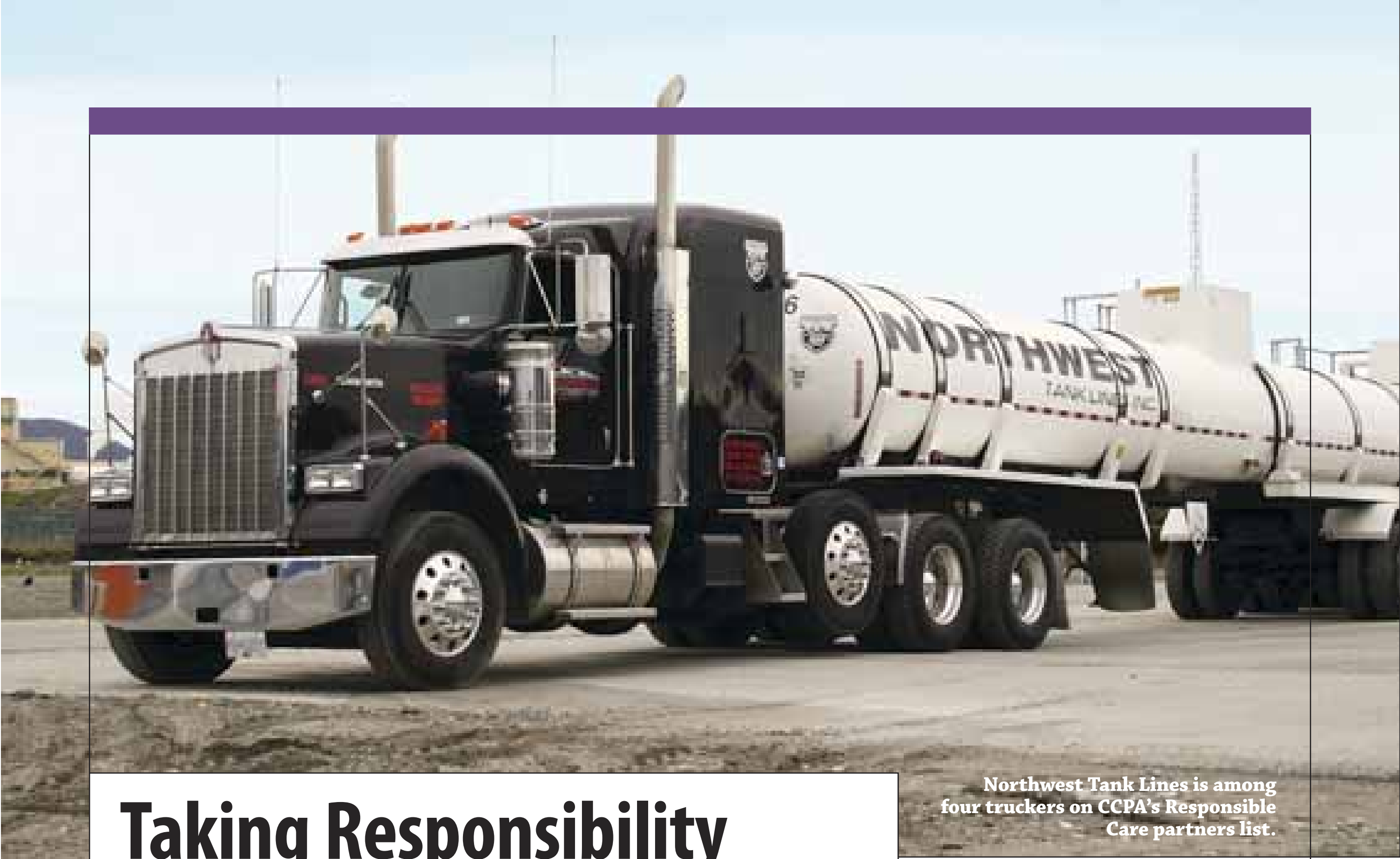
"We talk to carriers about their role in our supply chain, and consider logistics in strategic planning," says Dana Mathes, Dow's director of global logistics. "Logistics is quickly gaining a voice within the company." CL

The Business of Chemistry

The U.S. chemical industry is the nation's largest export sector, accounting for 10 cents of every dollar of U.S. exports. Because chemicals are now manufactured in many production locations around the world, international trade has grown.

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Shipments (billion $)	$377.1	$385.8	$415.6	$416.7	$420.3	$449.2	$438.4	$461.5	$486.5	$526.5	$558.0
Production (index where 1997=100)	84.4	86.1	91.2	92.7	94.6	96.0	94.3	100.0	99.7	102.8	102.5
Exports (billion $)	$60.8	$61.8	$69.5	$68.0	$70.5	$79.9	$80.2	$81.1	$91.6	$109.5	$119.5
Imports (billion $)	$40.3	$44.9	$50.3	$54.6	$62.2	$73.6	$78.9	$86.1	$101.1	$112.9	$128.3
Trade Balance (billion $)	$20.5	$16.9	$19.1	$13.4	$8.3	$6.3	$1.3	-$5.0	-$9.5	-$3.5	-$8.8

Sources: Bureau of the Census, Bureau of Labor Statistics, National Science Foundation, American Chemistry Council



Northwest Tank Lines is among four truckers on CCPA's Responsible Care partners list.

Taking Responsibility For Responsible Care

Shippers and industry organizations help push carriers and 3PLs to become RC partners.

Maybe it was the motivation to put their money, and movements, where their mouths are. Maybe it was the mojitos. At the annual Responsible Care (RC) conference in Miami last May, the American Chemistry Council (ACC) announced a plan to begin surveying all members on the extent to which they use Responsible Care partner carriers to transport their shipments.

This major development is one of several important new trends in the safety and security of hazardous materials in commerce. Beyond the ACC plan, some member companies are developing their own initiatives to convince carriers and third-party logistics providers (3PLs) to become RC members.

North of the border, the Canadian Chemical Producers' Association (CCPA) is taking a targeted approach to spreading the RC ethic and processes to the service sector. The association and member producers are carefully selecting specific carriers and working closely with them.

The RC codes of management practice for process safety, health, and environmental compliance were first developed by the CCPA in 1978. They were soon adopted by ACC, and both organizations have continued to expand and adapt the codes.

ACC developed Transportation Community Awareness and Emergency Response in 1985, which CCPA quickly adopted. The U.S. codes of management practice contain an explicit product stewardship code, and CCPA developed specific product stewardship guidelines at the end of 2004.

Initially, both associations urged carriers and other service providers to adopt RC in its entirety. Railroads were more willing than truck lines, given the time and expense of adoption. Carriers, manufacturers, and associations were frustrated, however, because while the RC ethic was easily transferred, the practices that applied to manufacturing were not readily adopted by the service sector.

Proactive Partners

In response, both ACC and CCPA created partner programs, with codes adapted for service providers. The initial response was promising, but when early adopter service providers did not gain much new business, some soured on the idea and others put off joining.

"The partner program started as a marketing tool for carriers," says Debra Phillips, manager of Responsible Care for ACC. "The idea was that carriers would earn more business by adopting the codes. That was a success to a certain degree." She admits, however, that the bump was likely less than early partners had hoped.

No matter what

you ship, we

move your

bottom line, up.

Why do some of the world's best known companies trust BDP International to handle their most precious cargoes? It's not just because we reduce costs by managing shipments more intelligently for on-time, intact delivery. It's not only because our proven knowledge of global trade compliance rules for diverse cargoes — from specialty chemicals and health care products to industrial and consumer goods — has earned the respect of customers and government agencies alike. And it's not because we never lose our zealous but personal touch in spite of being one of the most respected providers of on-line logistics performance information.

Sure, it's all of that. But it's largely because we look beyond the obvious to leverage measurable economies that move your bottom line, up.

We are BDP. In every major market around the globe. For the full story, visit bdpinternational.com.

BDP
INTERNATIONAL

Global Logistics & Transportation Solutions

ACC cannot require members to work only with RC partners, "which would violate anti-trust regulations," Phillips notes, but starting next year the association will begin polling its members to determine how much business they give to RC partners.

"We will ask members if they consider partnership status when seeking bids, then publish the results," says Phillips. "We cannot obligate producers to use partners, but making the survey results public will generate peer pressure."

Setting the Standards

Producers can select their own metrics – total value and/or number of shipments, tons, and ton-miles, for example. Obviously that allows a great deal of leeway to choose the most flattering light. But Phillips says the industries will eventually develop standards.

Indeed the response has been strong.

"We have received an onslaught of new partnership applications since the RC conference," says Phillips. "We are trying to grow the portion of shipments for which our members use partner carriers, and this is an important component of that effort."

ACC currently claims 70 partners of all types, largely railroads and bulk truck lines, and has received close to 20 recent partnership applications. All U.S. Class 1 railroads have become partners; Canadian National (CN) and Canadian Pacific (CP) are partners of both ACC and CCPA. Fewer LTL carriers and 3PLs have pursued membership, a fact that is not likely to change given the nature of the LTL business, Phillips says. She is confident, however, that significantly more 3PLs will enter the fold.

"3PLs are market driven," says Phillips. "Producers have outsourced a good portion of logistics services, and chemical logistics is a growing business for 3PLs, so we expect more of them will become partners."

ACC is meeting them halfway. "Until two years ago, we did not have a sector in the codes for 3PLs. As we discovered how far into the chemical supply chain they have moved, and what decisions they are making for chemical producers, we realized 3PLs are an important part of our industry," Phillips explains.

Individual producers are also fostering the partnership program, according to Phillips. She declined to name specific firms, but says many are actively offering to sponsor their carriers.

ACC cannot obligate producers to use RC partner carriers, but it will begin polling members to determine how much business they give to partners.

"One member has offered to pay the partnership dues – which can total tens of thousands of dollars – for its top-performing carriers," she notes. In addition, some RC members plan to phase out their non-partner carriers over the next few years.

For its part, CCPA is taking a tightly focused approach to recruiting service provider partners.

"Joining RC is not a universal value proposition," says Brian Wastle, vice president of Responsible Care at CCPA. "We have simplified the membership process, and added value for carriers. But we complete a needs assessment with each carrier to determine if it makes sense to pursue partnership."

Last year CCPA held a workshop to kick off the new partnership initiative, and has formed a new committee to pull together issues common to carriers and 3PLs. CCPA is also working with the Canadian Trucking Association to enhance the motor-carrier evaluation process.

Both the CN and CP railroads have become CCPA RC partners; so have two of Canada's leading railcar leasing operators, Procor and GATX Canada. CCPA's partner list also includes four truck lines: Harmac Transportation, Northwest Tank Lines, PDI, and Harold Marcus.

Harmac, based in North York, Ontario, has been involved with RC for six years and has just completed its re-verification.

"One of our core customers, Ashland Canada, approached us in early 2000 about becoming a partner," says Curt Roush, director of security and compliance for Harmac. "We knew it would be a challenge, but with Ashland as a sponsor, we started the three-year cycle to our first verification, ensuring that we had the codes of practice in place."

That verification came in October 2003, with re-verification last October. In that time, the partnership codes have evolved. "In the first verification we were scrutinized as a manufacturing company would be," says Roush. "It was cumbersome. How could we show, for example, that our research and development complied with RC requirements?"

Verifying the Process

Since then, CCPA formed the Transportation Partners Council, which developed a verification protocol specifically for carriers. The 151 verification elements were consolidated into 37.

"The other elements were not eliminated," says Roush, "they were aligned with transportation operations. It makes the re-verification process more meaningful. Not easier – it's not supposed to be easy – but more sensible.

"Internally," he adds, "we recognize that becoming an RC partner makes us a better company." CL

Shippers and Carriers Commit to Best Practices

Best practices keep chemical shippers and carriers thriving.

As a case study, Dow Chemical is an able proxy for the bulk of the process industries. The Midland, Mich.-based firm transports 125 billion pounds per year of raw materials, intermediates, and finished products around the globe. Half of its outbound shipments are transported by truck, one quarter by rail, and one quarter by bulk marine. That excludes Dow's inbound pipeline deliveries, and a fragment of small-volume specialty chemicals it ships by air. Dow's annual freight bill alone equals $2 billion.

Further down the supply chain, Dow maintains 45 different businesses, called "value centers," that ship products to 140 countries – about three-quarters of all countries in the world. In developing countries, Dow uses a mix of local distributors and logistics providers, as well as international firms with a strong presence in a given country, to handle its shipments.

"One challenge for Dow is to find international service providers that can meet our minimum supply chain requirements," says Dana Mathes, the firm's director of global logistics. "In China, for example, we use a mix of local over-the-road carriers, global terminal companies, and marine pre-pack firms."

Domestically, Dow completed outsourcing most of its transportation – including its truck fleet, and one of the largest tank-barge fleets on the inland waterways – four years ago. It began leasing its huge railcar fleet some time ago.

"We have experienced both efficiency gains and cost reductions as a result of outsourcing," says Mathes. "We had to tweak certain processes, but in general, we are pleased with the results. We work with some 3PLs on site, but our partners vary based on local markets, union rules, and work councils."

With such wide range and scope, it is not surprising that Dow constantly identifies, implements, and disseminates its best practices. At the strategic level, for instance, Dow plans to reduce shipments of toxic inhalation hazards (TIH) 50 percent by 2015. After all, the safest possible hazmat shipment is no hazmat shipment.

"We have experienced efficiency gains and cost reductions as a result of outsourcing."

— **Dana Mathes,**
Director of Global Logistics, Dow Chemical

The plan might sound more like a health, safety, and environment initiative, but, according to Mathes, "it requires strategic thinking about our supply chain, geography, and infrastructure." To emphasize the logistical nature of the TIH reduction push, Dow will measure progress by the number of shipments as represented by ton-miles.

Dow's carriers and 3PLs need not worry about the business impact of reducing overall volumes through these efforts. Reducing or eliminating hazmat shipments is likely to lead to a concentration of manufacturing for certain products – with the probable result of a greater volume of safer finished-goods shipments.

Dow's desire to reduce TIH shipments isn't simply strategic, however. The company suffered a rail-switching accident at one site a few years ago. "We worked with our railroads in Europe and North America and revised our procedures based on that incident," Mathes says.

Best practices flow both ways, he adds, noting that highway carriers in Brazil are using Dow protocols to improve their driving under a program called "Sharp Eyes on the Road."

Worldwide, Dow has at least one dozen GPS/RFID pilot projects underway covering TIH railcars, containerized freight, tank truck hauls, and cylinder gas shipments.

Getting Connected

Another group focused on industry best practices is the chemical consortium Elemica. The organization, which includes 22 major producers and distributors such as BASF, Rohm & Haas, and Shell Chemical, has been developing a standard electronic order tendering and status check system.

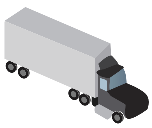
"This kind of electronic tendering

LTS
LOGISTICS

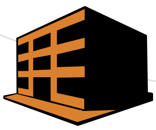
We believe in doing whatever it takes to get your product there.

LTS Logistics' forward thinking approach to logistics management means real innovation and better solutions. We have the right team, the best technologies, and the strategic vision you need to maximize supply chain efficiency.

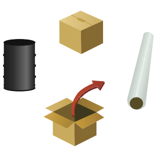
The LTS Difference



Transportation – When your product has to get there, turn to LTS Logistics. We can move your freight efficiently by truckload, LTL, expedited, air freight, shuttles or parcel programs. The world-class LTS transportation management system keeps you tuned into changing market conditions so your product never misses a ship date. Flexibility from our non-asset approach lets us leverage our buying power to ensure you always get the best pricing possible.



Warehousing and Distribution – Turn distribution into a competitive advantage with LTS. No-cost logistics audits from our top management team help ensure you get the best mix of locations and services. Our flexible, national network of public and contract warehousing facilities can put your product wherever needed. With years of experience serving chemical and food & beverage clients, you can count on our infrastructure, procedures and policies to exceed industry standards and your expectations.



Value Added Services - Your logistics needs don't stop with trucking or warehousing. And, neither do we. LTS provides value added services to prepare products for "final mile" delivery to customers and retailers – shrink-wrapping, kitting, drumming, packaging, and more. These comprehensive services provide ultimate flexibility needed to manage fast growth, seasonal spikes in demand or a lean management approach.

TO LEARN MORE ABOUT OUR SERVICES AND PUT OUR TRUSTED EXPERTISE TO WORK FOR YOUR COMPANY, CALL 1-866-720-5871 OR VISIT US ONLINE AT WWW.LTSLOGISTICS.COM.

is common in the van world, but does not yet exist in the chemical world," explains George Grossardt, vice president and general manager for Schneider National Bulk Carriers, based in Green Bay, Wisc. "This kind of digital connection is difficult because chemical loads have their own idiosyncrasies."

Schneider, however, is currently developing standards, and hopes to have a pilot operating by the end of the year. "Then we can plug into Elemica and have access to all 20 shippers. Because we predict cost savings as high as 18 percent, we are committed to the program," Grossardt explains.

Committing to logistics best practices was a mission Ashland Inc., based in Columbus, Ohio, began roughly one year ago. The parent company comprises a range of process industries including one of the largest chemical distribution firms in the country, and also consumer goods such as Valvoline motor oils. It recently consolidated all its operations into a single logistics group.

"We now have one supply chain inbound and outbound, across all business divisions," says Brian Brockson, Ashland's director of global logistics. "We are an asset to the entire corporation."

Gaining Global Visibility

As part of that consolidation, the company is implementing a single system based on SAP.

"We will soon possess global visibility into all volumes and sales information," says Brockson. "That visibility will allow us to implement modern technology, such as GPS in all our fleets, electronic driver logs, and mileage tracking for highway use taxes."

Ashland is one of the few large chemical producers that has retained its proprietary truck fleet: 450 power units and 900 trailers – about 60 percent van and 40 percent bulk liquid. The company primarily uses its proprietary fleet for outbound shipments, while common carriers deliver inbound loads.

"We have also improved our capacity planning," adds Ed Kelly, Ashland's director of global logistics central support. "Some carriers are still struggling to implement homogeneous systems or deliver the information we need. But within the next two to three years, we will get down to one standard. Electronic load tendering is the real prize; some carriers can do it today."

On the rails, a classic case of shared best practices is the awards railroads now give to recognize

producers that have achieved zero shipper-caused non-accident releases.

All of the Class 1 railroads now bestow such awards, and the number of recipients each year grows as the number of shipper-caused releases decreases.

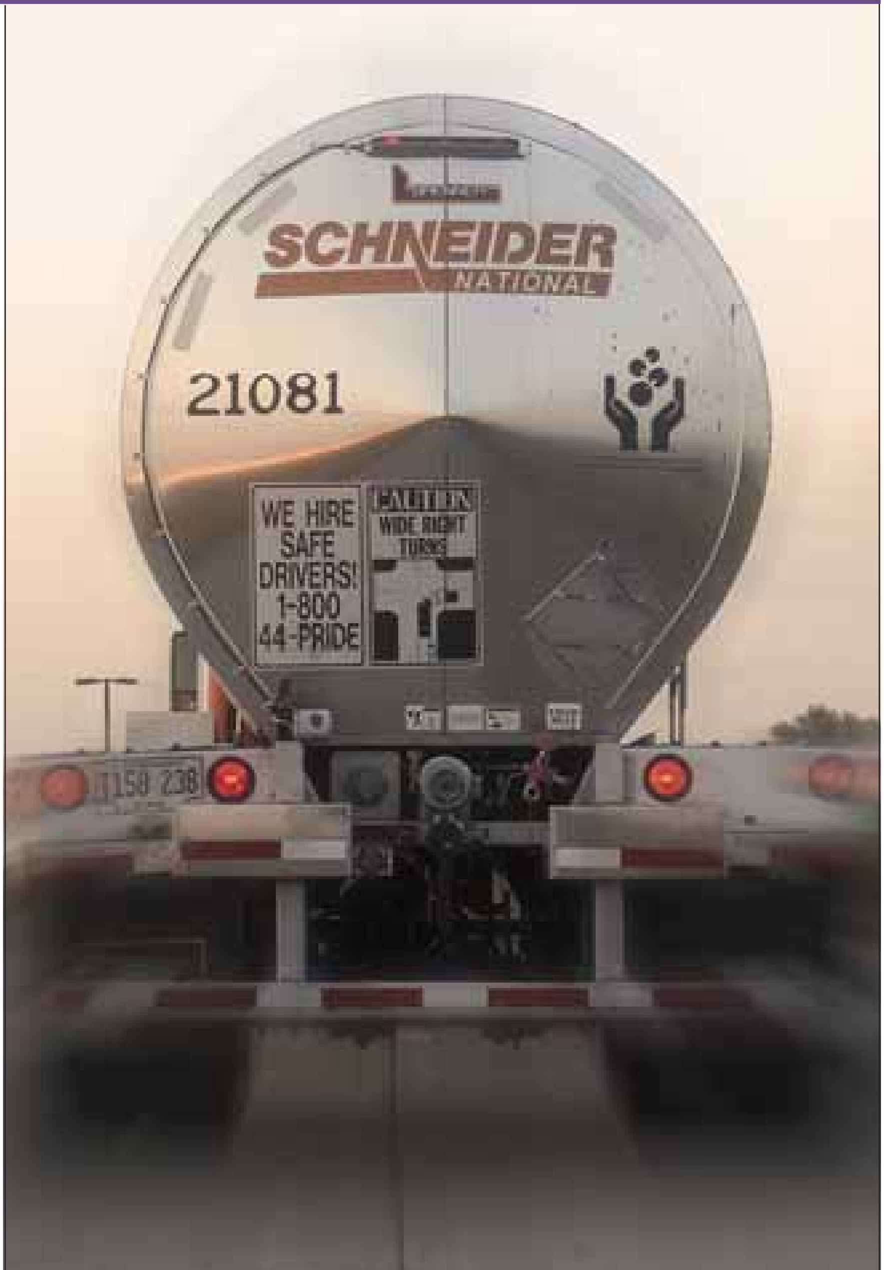
BNSF Railway, one of the largest chemical-carrying railroads in North America, celebrated the 10th anniversary of its Product Stewardship Award by recognizing 60 shippers – one more than it recognized last year, and 16 more than in the program's first year.

"In the stewardship meetings we often review basic functionality," says Mark Stehly, assistant vice president for environment and research and development for BNSF. As in sports and business, the fundamentals are often where problems arise first, he notes.

"Preparing the car for shipment, making sure no damage occurs, ensuring bolts are tight – these are the basics," says Stehly. "We have found that checklists and examples of damage are helpful. Often, entry-level employees go first to the loading rack. They do receive some training, but don't have the experience to know what to look for.

"Schedules are also very effective," he continues. "Changing gaskets regularly, for example, rather than after someone notices damage or wear, is a best practice."

"Companies are getting the message that safety is a collaborative effort," adds Katie Farmer, vice president of industrial products sales for BNSF. "In our last stewardship meeting we discussed new Department of Homeland Security and Federal Railroad Administration rules. We emphasized continuous improvement through best practices. BNSF has transported nearly one million hazmat shipments without incident. But we know it is that one-in-a-million case that will cause problems for everyone."



SHARED RESOURCES: Chemical producers and their carriers now collaborate closely to implement transportation and supply chain management best practices, such as electronic order tendering and status check systems.

BNSF's Emerging Growth Team is another example of doing well by doing good. The team's primary mission is to find new customers for the railroad, but by extension, it also brings new shippers into the fold for the Stewardship Award and Responsible Care initiative.

"We have an opportunity to build relationships with shippers," says Farmer. "We are looking for the most efficient and effective way to transport chemicals. When shippers choose to do business with us, they recognize our safety record."

This new BNSF business initiative is also involved with the Assess-Improve-Maximize (AIM) initiative, which is allied with the National Industrial Transportation League's "First Mile Last Mile" program. CL


Putting Your Logistics Pieces in Place
So You Can Focus on Business

Producers, Providers, Technology Merge

3PL technology hits the chemical market.

Chemical production is one of the most varied and complex industries that carriers and logistics providers serve. Major chemical producers comprise some of the largest companies in the world, operating manufacturing complexes that sprawl for miles. Other chemical firms are family-owned businesses in niche markets, or major global producers with tiny production units.

Moreover, a small company is just as likely to be the shipper, and the huge multinational the consignee, as the other way around. And because of the specialized nature of the business, it is served by the major Class 1 railroads, as well as dozens of shortline railroads; and the largest bulk highway haulers, as well as single owner-operators.

Some producers and carriers boast the latest in enterprise resource management and logistics software, while many others still employ a cadre of clerks to keep paper records. Even computer-enabled shippers and carriers often juggle multiple legacy systems. And shippers and carriers with single systems often find them incompatible with those of other carriers and consignees.

Many shippers with technology needs turn to 3PLs, some of which have made important inroads into the chemical industry in the past few years. The second batch of 3PLs making a push into the chemical sector is being carried on a wave of technology.

"We have doubled our business with the chemical sector over the past two years, and are on track to triple our business this year," says Mike Kinnard, CEO and co-founder of SCO Logistics, based in Northbrook, Ill.

The key to that growth, Kinnard says, is SCO's web-based planning and execution tools for both inbound and outbound transportation. "Some customers ask us to provide a complete solution, so they can outsource several services to us. Others in-source our technology by licensing our systems," he explains.

At the core of its technology is a tendering, tracking, and tracing system that integrates business processes and allows shippers to optimize logistics across multiple trade lanes and transport modes.

Automate Everything

"We automate all processes," says Kinnard. "Our systems are completely database-driven. We receive orders from our customers' SAP or Oracle systems, then tender and review the data – all behind the scenes. This drives the process automation that is key to lean logistics, supply chain management, and manufacturing."

The lean aspect capitalizes on intelligent communication. "It is essential to keep systems scalable," says Sreelatha Surendranathan, director of technology for SCO.

Automation and communication are also available in less elaborate systems. "Even small shippers and customers can send e-mail or a spreadsheet," she notes. "The object is to automate so they only have to manage exceptions. A business rule-driven engine should handle routine workflow."

Logistics automation in action

produces definitive results. "Using a web-based tool, for example, carriers can plug their data directly into a shipper's loading schedule," says Mike McGuigan, SCO's executive vice president of sales and marketing. "With this system, shippers know what trucks to expect when, and carriers are not waiting to load, so they can better manage driver hours of service." Some consignees now require delivery appointments, which can also be reported back with web-based tools.

Logistics Management Solutions (LMS), a 3PL based in St. Louis, also relies on technology. It started as a traditional 3PL serving Monsanto when it was a chemical company, and has continued to serve that firm as well as others that still operate in the process industries.

LMS has been a Responsible Care partner provider for about three years, and was one of the first 3PLs to join the program. The company manages LTL and truckload shipments in the United States, Canada, and Mexico for BASF, and was recently hired by plastics distributor M. Howland in Chicago.

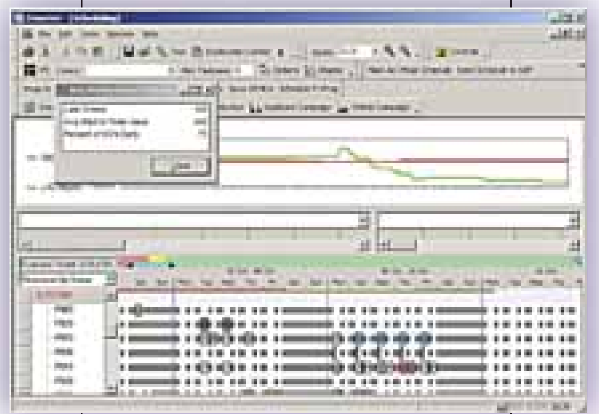
Collaboration in Action

LMS focuses on collaboration, says Dennis Schoemehl, president and CEO. Collaboration does not mean sharing markets or customers, he says, but rather logistics capacity. Rival producers still compete aggressively for markets and customers, but agree to cooperate on shipments and storage, he explains. After all, it is wasteful to duplicate warehouse space or multiple carrier dispatches.

"Our technology allows us to manage collaboration without divulging shippers' proprietary price or volume information," says Schoemehl. "Everyone serves their own customers, but they share space, reduce duplication, and take cost out of the system. As long as they are not sharing cost, price, or customer data, everyone benefits.

"LTL carriers are already collaborating this way, and they are reaping the benefits. Why shouldn't shippers do it themselves and share in the savings?" he adds.

LMS uses an SAP-based ERP system to centralize planning information. By receiving orders three or four days in advance, it can optimize transportation and consolidate several LTL moves into one truckload shipment.



HIGH-TECH TOOLS: Maintaining a production schedule in the face of constantly shifting priorities is a challenge for chemical companies. Solutions such as Supply Chain Consultants' *Zemeter* can help.

"This process does not require much flexibility from carriers – only the ability to make stops en route, which they likely already do. That incurs a small additional charge, but still costs less than a separate LTL shipment," Schoemehl says.

On a global level, chemical producers are starting to incorporate technology-driven logistics planning into their strategic thinking.

"We start developing supply chain strategy by asking customers what they need," says Sujit Singh, chief operating officer of Supply Chain Consultants, based in Wilmington, Del. The firm grew out of proprietary efforts by DuPont to manage its global supply chain, but is now an independent third-party service provider.

"Once we know what customers need, we examine where production and inventory are positioned, and figure out how to meet that demand profitably," says Singh. "Starting with their needs and deciding what is required of each plant and carrier is a basic idea, but the trick is knowing how to execute that detailed plan, all the way down to scheduling."

Until recently, chemical producers might reevaluate logistics every three years or so; now they do it annually, Singh notes. "The chemical market has become a dynamic market," he explains.

SCC's technology solution, which includes forecasting and optimization engines, is called *Zemeter*. Some shippers hire the firm to conduct a one-time supply chain analysis; others license the software for continuous use.

Back to basics

Two common problems persist as shippers and carriers attempt to improve operations and service through technology, notes Singh. "Many companies have not mastered the basics. If the systems inside are not under control, opening technology connections to the outside world will hurt," he says.

Even for producers and carriers that have the basics under control, applying technology intelligently can be a challenge. "Even with a good understanding of information technology, you cannot leave processes and people out of the equation," says Singh. "Software is thought of as an answer to everything, but merely throwing tools at a problem doesn't help. Companies must think holistically." CL

Spend your time doing what you do best

If time is money, Dupré can help you get both.

expertise

Safety Innovator | HazMat Focused | Bulk and Packaged Shipments

flexible, customized solutions

Asset-Based 3PL | Integrated Site Logistics | Private Fleet Services | Transportation Management and Brokerage

world-class execution

Value Based | Vision Focused | Mission Driven

DUPRE'

"safe service that's profitable!"

Call for a free evaluation 800-356-3659 | Explore our Web site at www.dupretransport.com

A Study in Terra

Four questions for Joe Giesler, senior v.p. of commercial operations for chemical company Terra Industries, Iowa.

Q What transport modes does Terra use and have you made any major changes to that mix or to your carrier base? What about third-party logistics services?

A To deliver finished products to customers, 29 percent of shipments move by truck, 50 percent by rail, 13 percent by barge, and eight percent by pipeline from six originating points in North America. One major difference to our transportation operations is that we diversify equipment as customers and products change. For instance, we needed to add specialized tankers to our rail and truck fleets. Terra uses third-party logistics services to automate freight rating, and implemented tracing software to keep up with railcar movements.

Q How important is it to you that a service provider be a Responsible Care partner? Can you compare the safety auditing process for carriers that are and are not partners?

A It is difficult to say how many of our carriers are Responsible Care partners. Before entering into a contract with a truck or barge carrier, however, we thoroughly investigate the carrier's safety, maintenance, and compliance records. We also inspect each truck, railcar, or barge before and after loading. We conduct an annual review of our inspection practice with our carriers and the Department of Transportation to be sure we meet best practice standards. Safety and inspection practices over the last several years, specifically for hazardous materials, have become standard – any risk of a carrier having its operating license revoked is too high for Terra to contract with that carrier.

Q Have any of your carriers or customers recently implemented any methods that you would consider a new standard for chemical logistics best practices?

A Terra and its main carriers work diligently with The Fertilizer Institute, along with the rest of our industry. It is not appropriate to say that Terra specifically has designed new best practices; however, we and our truck, rail, and barge carriers are continually involved in updating industry best practices for loading, unloading, safety, environmental, and training procedures.

Q How has technology helped Terra improve safety and efficiency or reduce costs?

A Terra has partnered with technology provider Supply Chain Consultants. Its software package, *Zemeter,* integrates our internal supply planning and record-keeping with logistics tracing and freight rating, providing an efficient tool for pulling information from our third-party logistics packages and operating system. The ability to view and analyze forecasting, supply, and production planning against actual demand and replenishing needs is a must for Terra as we diversify our product mix and customer base.

As our supply chain and customer demand model has become more intense, a software package that provides the flexibility to integrate with other solutions is necessary. After reviewing several alternatives, we chose the *Zemeter* demand planning and supply chain package because it provides this capability efficiently, and is less costly than going through a single system upgrade. CL

A SPECIAL SUPPLEMENT FROM INBOUND LOGISTICS

Race to the Border:

CATCHING UP WITH LATIN AMERICAN LOGISTICS

by Joseph O'Reilly and Kathleen Hickey

Progressive trade policies and foreign investment, developing transportation infrastructure, and a growing 3PL presence in Brazil and Mexico are heating up Latin American logistics.

With so much focus on the Far East and the West Coast, and to a lesser degree the Near East (Eastern Europe), U.S. consignees and shippers need only look due south to find one of the world's emerging commercial and outsourced manufacturing and logistics markets. In terms of geography and logistics development, Latin America is on the periphery of U.S. distribution networks–and on the minds of forward-thinking global supply chain executives.

Race to the Border:

CATCHING UP WITH LATIN AMERICAN LOGISTICS

Given Latin America's proximity to the U.S. market; the institutionalized difficulties of pulling Asian-origin cargo through congested West Coast ports; ongoing development of transportation and logistics infrastructure in the region, thanks in part to 3PL penetration; and growing foreign direct investment from the United States and elsewhere, the region's two leading economies—Mexico and Brazil—are making a concerted effort to transform Latin America into an emerging logistics hotspot.

The convergence of logistics and trade compliance functions is becoming commonplace and companies are finding amenable locations to base their operations in Brazil and Mexico, says Alvaro Quintana, the business leader for JPMorgan Chase Vastera's trade and logistics operations in Mexico. These centralized facilities are elevating logistics standards across the board for Latin American countries and companies alike.

Aside from its location, Mexico's low manufacturing costs and developing transportation capabilities make it an excellent option to consider when placing logistics and supply chain operations. Historically, Mexico has been passive about investing in and growing its transportation connections, but new government leadership is dictating a more progressive and committed approach to driving infrastructure improvements, as well as intermodal partnerships and trade agreements with the United States and other leading economies around the world.

"Recently Mexican President Felipe Calderón said that we need to increase border crossings. That is not a typical statement from a president. It's very encouraging," observes Quintana.

The Beat Goes On

Brazil's economy, too, is dancing to the beat of rapidly increasing commercial growth, anchored by a strong commodities export market that totaled $138 billion in 2006. Export volumes are expected to grow because of Brazil's strong currency compared to the U.S. dollar, and low labor costs, says Carlos Gonzalez, director of SEKO Brazil, a branch of global logistics company SEKO.

This growth potential has given the government and private sector more reason to develop transportation infrastructure to meet pulsating demand.

As U.S. businesses continue their quest to find the most economic and reliable global sourcing and outsourcing locations, Mexico and Brazil are gradually catch-

Mexico

Tracking Trade

GDP: $742 billion

2005 U.S. Foreign Direct Investment: $71 billion

2006 Exports:	**$249 billion** (manufactured goods, oil and oil products, silver, fruits, vegetables, coffee, and cotton)	**Export to U.S.:** 85.7%
2006 Imports:	**$253 billion** (metalworking machines, steel mill products, agricultural machinery, electrical equipment, car parts for assembly, repair parts for motor vehicles, aircraft, and aircraft parts)	**Import from U.S.:** 53.4%

INFRASTRUCTURE SNAPSHOT: Benito Juárez International Airport (Mexico City)

CARGO VOLUME (2006)	RUNWAYS	
380,397 tons	**05R/23L:** 12,795 ft.	**05L/23R:** 12,966 ft.

AIRLINES SERVED: Aero California, Aeromexico, Air Canada, Air France-KLM, Alaska Airlines, American, British Airways, Continental, Delta, Grupo Taca, Japan Airlines, LAN Airlines, Lufthansa, Mexicana, Swiss International, United, US Airways, Varig

DID YOU KNOW? Mexico City Airport is the largest airport in Mexico, ranking 44th in the world in total tonnage. The airport links the Mexican capital to 48 cities nationwide and 55 cities abroad.

INFRASTRUCTURE SNAPSHOT: Port of Manzanillo

Main Channel Depth: up to 46 feet	**Container Volume (2006):** 1.3 million TEUs

CARGO FACILITIES: Specialized facilities for handling grain, vegetables, cement, and raw materials; refrigerated facilities for handling, transporting, and warehousing perishable products; multiple-use facilities for handling and storing general and container cargo.

DID YOU KNOW? The Port of Manzanillo is the only port in Mexico able to double-stack containers onto railcars.

Sources: CIA World Fact book; AAPA; Airports Council International; U.S. Bureau of Economic Analysis; U.S. Direct Investment Abroad; World Aero Data

Race to the Border:

CATCHING UP WITH LATIN AMERICAN LOGISTICS

ing up with other emerging logistics and distribution markets. Progressive trade policies and increasing foreign investment, improvements to transportation infrastructure, and a growing 3PL market have many U.S. companies considering a run for the border.

THE FIRST STEP: Liberating American Trade

Free trade agreements have dramatically changed the logistics landscape in Latin America and opened the doors to greater trade within the region and with other countries, especially the United States, says Al Benki, senior vice president of international services at Ozburn-Hessey Logistics (OH Logistics), a Brentwood, Tenn.-based third-party logistics provider.

"Ongoing trade policy changes throughout Latin America are moving trade from restrictive to open," he adds. These free trade agreements will continue to accelerate the maturation of Latin America's logistics capabilities.

Latin America's trade growth will continue over the next five to 10 years, spurred not only by open trade policies but increased political stability and continuing investment in infrastructure, Benki predicts.

For example, the North American Free Trade Agreement (NAFTA), which covers trade among Canada, the United States, and Mexico, has dramatically increased freight volume. From 1993 to 2005, trade among the NAFTA nations climbed 173 percent, says J. Anthony Hardenburgh, vice president global trade content, Management Dynamics, an East Rutherford, N.J.-based global trade software provider.

The Americas may even become its own trading bloc–operating in a similar format as the European Union–within the next 10 years, says Hardenburgh.

"Free trade agreements within the Americas will absolutely help the region compete with the European Union," he asserts.

Other major free trade agreements impacting Latin America include Mercosur and the Dominican Republic-

Public-private partnerships aimed at creating and connecting U.S. and Mexican logistics facilities are key to increasing cross-border trade efficiencies. A newly announced partnership between the State of Nuevo Leon, Mexico, and U.S. developer The Allen Group will link the Dallas Logistics Hub (*below*) with an intermodal facility in Monterrey-Saltillo, Mexico. The Dallas facility will include BNSF and Union Pacific intermodal terminals and key road and airport access points.

Central America Free Trade Agreement, commonly called DR-CAFTA. Mercosur is a regional trade agreement founded in 1991 among Brazil, Argentina, Uruguay, Venezuela, and Paraguay. Bolivia, Chile, Colombia, Ecuador, and Peru currently hold associate member status.

DR-CAFTA encompasses trade among the United States, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and the Dominican Republic. It comprises the second-largest U.S. export market in Latin America, behind Mexico, and is currently the biggest free trade agreement in the region.

"A free trade agreement can be the deciding factor in whether a company locates a plant in a certain country, or imports/exports to other countries that are part of the agreement," says Hardenburgh.

As a result of these agreements, U.S. foreign direct investment in Mexico specifically, and Latin America in general, has accelerated. Since NAFTA was ratified in 1994, U.S. outlay to Mexico has increased from $17 billion to $71 billion in 2005, according to the U.S. Bureau of Economic Analysis. In Latin America, U.S. investment has more than tripled from $117 billion in 1994 to $353 billion in 2005.

3PLs Lead the Way

In May 2007, Reading, Pa.-based Penske Logistics partnered with Belgian freight forwarder ABX Logistics to create a joint company that provides international freight management services to companies in Brazil. The ABX-Penske Air & Sea venture reflects the growing maturity of Latin American markets and the demand for complementary logistics expertise to meet the shifting challenges of companies in the region.

Penske's inroads into Latin America began in the 1980s when it followed automotive manufacturing customers south of the border to Mexico. In the two decades since, the 3PL has expanded its presence in Mexico, while targeting logistics partnerships and acquisitions to cement its footprint in Brazil.

Inbound Logistics **spoke with ◀ Joe Gallick, senior vice president of sales for Penske Logistics**, to parse out the different contexts of doing business in Mexico and Brazil, the growing outsourced logistics market, and the challenges facing companies establishing manufacturing and distribution competencies in the region.

IL: How has Penske Logistics grown its business in Brazil and Mexico to serve U.S. and global customers?

JG: Penske's business in Mexico and Brazil has evolved for different reasons. In Mexico, we operate six facilities serving seven customers. Much of this activity originated in northeastern Mexico when some manufacturing customers migrated there in the mid-1980s. So we naturally followed their lead into Mexico.

Because of Mexico's proximity to the United States, our customers' business strategies were largely driven by U.S. interests – exporting intellectual capital and management resources, then marrying that with requisite labor needs in Mexico.

Penske penetrated the Brazilian market in the mid- to late 1990s through a joint venture with Cotia Trading S.A., then the largest independent Brazilian trading company. We entered this partnership to leverage Cotia's in-country knowledge and expertise to serve Brazil's growing consumer market, while also gaining access to other trading partners in the region. Since then, Penske has bought out Cotia and doubled business in Brazil.

Because business opportunities and needs in Brazil are more domestic and distribution oriented, leveraging Cotia's knowledge of the market and understanding of tax issues in different areas has been vital. When Penske partnered with ABX Logistics, our customer base required that we develop greater competency managing intercontinental product movement, so its freight forwarding capabilities complemented our contract logistics expertise. Likewise, ABX Logistics was looking for a logistics counterpart to its forwarding business. This joint Brazilian venture brings to bear both companies' specialized capabilities as we go to market.

IL: What types of customers and what industries are leveraging Penske's resources to target the Latin American market for manufacturing, distribution, and logistics activities?

JG: The automotive industry brought Penske into Mexico; since then we have expanded our footprint into the truck manufacturing vertical as well. Penske has also been able to move successfully into the automotive supply base, and horizontally into more diversified industrial and durable goods manufacturing. The sheer scale and volume of North America's automotive sector requires logistics service providers to design effective material flow networks, and adapt information technology systems to support OEMs' lean manufacturing processes. Penske has leveraged this expertise into other supply chain verticals.

Brazil has some overlap in its automotive sector. For example, Penske manages inbound moves for 50 General Motors automotive suppliers. Elsewhere, many customer needs focus on domestic distribution and Penske has created a foothold in the consumer electronics market for

Race to the Border:

CATCHING UP WITH LATIN AMERICAN LOGISTICS

Central American countries are optimistic that the 2005 CAFTA legislation will have a similar impact on foreign investment.

While these free trade agreements are a boon to importers and exporters, companies still need to develop mechanisms to fully take advantage of and be in compliance with these policies, says Quintana.

Many importers and exporters face initial difficulties with trade authorities as they begin embracing new, and potentially unfamiliar, free trade agreements, Quintana reports. These issues are mitigated somewhat by the similar structure of treaties over the last 10 or 15 years, many of which are based on NAFTA language.

Still, enforcing these treaties can be challenging, and without enforcement benefits are minimal, says John Price, president and director of the trade, competitiveness, and investment practice for InfoAmericas, a logistics consultancy based in Coral Gables, Fla.

"A truck in Colombia can transport goods to Ecuador but can't move goods from Ecuador to Columbia," he says. "Without enforcement, companies don't achieve regional consolidation, and the market remains fragmented with small players that can't invest in modern logistics facilities."

companies such as Sony and Samsung.

IL: What are the logistics and transportation advantages for companies doing business in Brazil and Mexico?

JG: Mexico's manufacturing capacity and proximity to the United States are obvious advantages. Most of its consumer demand is still in the United States, but as the economy strengthens it will create more opportunities to target the domestic market as well. Brazil's explosive consumer growth and position as South America's most progressive economy have created a space for logistics service providers and companies to make inroads there and help build it into a major manufacturing hub. As economic growth slowly filters out to other South American countries, companies will be able to support these markets from Brazil as well.

Through complementary logistics partnerships and acquisitions, Penske Logistics cemented its footprint in Brazil. From its warehouses there, Penske serves global corporations such as GM and Sony.

IL: What areas need to be addressed?

JG: Infrastructure improvements are shared concerns for both Brazil and Mexico. Companies in Brazil are not only importing product into market for resale, but are beginning to more comprehensively establish manufacturing operations in locations such as Manaus, a port city on the edge of the Amazon that relies on river-flow transport to deliver product to Brazil's larger consumer markets. More efficient transportation options are needed to meet growing domestic demand. In Mexico, developing the necessary infrastructure to ease port congestion and safely and securely facilitate transportation across the border are areas being addressed.

IL: Do you expect to see more companies locating distribution facilities in Mexico to circumvent U.S. West Coast port congestion and facilitate inland distribution to the United States?

JG: Penske is urging more customers to look at some emerging intermodal options. In Kansas City, for example, we bring product inbound from Asia into the Port of Manzanillo, and the Port of Tampico can accommodate European and Brazilian freight volumes. Penske manages this freight from the ports, using stack trains for transport to Kansas City, where it can then be offloaded and deconsolidated for U.S. redistribution. This option makes sense for certain types of manufacturers.

IL: Are Brazil, Mexico, and the U.S. governments talking and working with private enterprises to support growth initiatives in Latin America?

JG: I see activity that indicates ongoing conversation across the political and business community. Academic and policy forums foster much of this dialogue. Whether or not this discourse is trickling down to the regional and local level, I don't know. Ongoing discussions about world trade's ebb and flow, and the challenges of doing business globally, are meaningful. At the very least, these types of discussions are beginning to take root, enabling companies in Brazil and Mexico to continue investing in and growing their businesses.

Race to the Border:

CATCHING UP WITH LATIN AMERICAN LOGISTICS

As more liberal trade policies become standard rules for engagement, Latin American countries will have even greater incentive to invest in the necessary transportation infrastructure and modern logistics facilities to accommodate greater trade volumes and lure additional foreign business. In Mexico and Brazil, the race has already begun.

MEXICO: Making Inroads and Laying Track

Currently, 70 percent of Mexico's trade with the United States is shipped via land, and 37 percent of that moves through Laredo, Texas. But if current NAFTA and inbound Asian freight volumes are any indication, Mexico's potential as a logistics hub is equally predicated by comprehensive transportation capabilities from the ports to the highways, and all modes in between.

With several globally competitive ports, a top-50 global air cargo hub in Mexico City, 16,156 miles of railroad track, four intermodal corridors, 62,137 miles of two-lane roads, and more than 6,213 miles of four-lane highways, Mexico is poised for supply chain growth, according to a recent Council of Supply Chain Management Professionals (CSCMP) report.

In order to compete with developed nations' logistics operations, however, Mexico must overcome several challenges, including infrastructure issues–especially its rail network–and customs delays. Currently Mexico's port delays are twice that of international standards, reports CSCMP.

Despite these shortcomings, Mexico's ports are a pivotal component of its supply chain prospects. Transportation authorities are laying the groundwork to improve intermodal connections and infrastructure to accommodate Asian-origin overflow volume increasingly diverted from the U.S. West Coast.

"Mexico needs to continue to build infrastructure and grow its seaports and land border crossings," notes Quintana.

Currently, public and private sectors within the United States and Mexico are collaborating to improve cross-border trade operations and link Mexico's ports with U.S. inland port facilities.

For example, in May, the State of Nuevo Leon, Mexico, which is developing an inland port and manufacturing facility, and The Allen Group, architect of the 6,000-acre Dallas Logistics Hub in Texas, signed a memorandum of understanding to create a new trade corridor between Mexico and the United States.

Shipments from Mexico's Port of Cardenas can be delivered directly to America's heartland via Kansas City Southern's rail corridor into the Kansas City SmartPort.

In the Zone

The agreement includes designating a customs pre-clearance zone for developing integrated logistics systems linking the Interpuerto intermodal facility in Monterrey-Saltillo, Mexico, and the Dallas Logistics Hub. Their shared objective is to increase trans-border transport efficiency and improve trade competitiveness among enterprises located in both areas.

"Customs pre-clearance is important for both parties because it will expedite the flow of goods between Nuevo Leon and Texas and provide additional security for enterprises operating within the facilities," says Ambassador Francisco Javier-Alejo, Nuevo Leon's executive coordinator.

The Dallas Logistics Hub adjoins Interstates 35, 45, and 20, and is in close proximity to Dallas/Fort Worth International Airport. Current plans for both BNSF and Union Pacific to build and operate intermodal facilities in and near the hub will offer U.S. consignees and shippers a full complement of intermodal resources to move shipments to and from Mexico.

Elsewhere, Kansas City SmartPort, an inland port supported by both public and private sectors, has created a rail corridor with Kansas City Southern Railroad linking the Port of Cardenas on Mexico's West Coast to the heart of the American Midwest. With the convenience of an

on-site Mexican customs facility, stateside consignees can clear goods moving through the Mexican port in Kansas City, streamlining transit and circumventing congested ports in the United States.

These developing projects should help boost efficiency on the motor freight side as well. Mexico's trucking network is currently comprised largely of single operators, reducing efficiency and exposing security and theft concerns.

"Difficult traffic patterns in Mexico create routing and security issues. Hijacked trucks, for example, are prevalent in Latin America," says Nancy Troutman, vice president of distribution and logistics for Neoris, a Miami-based consulting firm.

But these pain points are easing as U.S. over-the-road carriers such as Schneider National, Roadway, CFI, and Swift Transportation penetrate the Mexican market, bringing with them modern equipment and IT capabilities that enhance customer service and raise transportation expectations for Mexican businesses.

For its part, Mexico's transportation and logistics competencies are complemented by ongoing initiatives to minimize challenges for consignees and shippers, as well as the cross-border Free and Secure Trade project (FAST) implemented by Mexican and U.S. authorities to reduce customs delays between the two countries.

BRAZIL: Joining the Global Stage

From the Amazon River in the northwest to the coastal cities of São Paulo and Rio de Janiero in the southeast, Brazil lays claim to a fast-developing network of port facilities. Tubarão, Itaqui, Santos, and Sepetiba rank among the world's top 50 ports in terms of cargo tonnage. Current efforts to better connect the ports and develop Brazil's expanding railroad network will help reduce logistics costs and enhance the country's competitiveness on the global stage.

"Brazil is still a young logistics market worldwide," says SEKO Brazil's Gonzalez. "It is moving out of the undeveloped category."

Brazil's airfreight sector is on a fast ascent. São Paulo is Latin America's number-one air cargo hub, pulling in 475,182 tons of freight in 2006—an 8.3-percent increase over 2005. Global air carriers are taking notice.

Delta Air Lines, for example, started its Latin American operations in 1998. It

Brazil

Tracking Trade

GDP: $943.6 billion

2005 U.S. Foreign Direct Investment: $32 billion

Exports:	**$138 billion** (transport equipment, iron ore, soybeans, footwear, coffee, autos)	**Export to U.S.: 19.2%**
Imports:	**$91 billion** (machinery, electrical and transport equipment, chemical products, oil, automotive parts, electronics)	**Import from U.S.: 17.5%**

INFRASTRUCTURE SNAPSHOT: São Paulo/Guarulhos International Airport

CARGO VOLUME (2006):	RUNWAYS:	
475,182 tons	**Runway 09R/27L:** 9,843 ft.	**Runway 09L/27R:** 12,140 ft.

CARGO FACILITIES: Five cargo terminals; free Port/Foreign Trade Zone; refrigerated storage; fresh meat inspection; livestock handling; X-ray equipment; dangerous and radioactive goods handling; large/heavy cargo

AIRLINES SERVED: ABSA Cargo Airline, Aerolineas Argentinas, Aeromexpress, Air Canada, Air France-KLM, Alitalia, American, British Airways, Continental, Delta, FedEx, Iberia, Korean Air, Lufthansa, Nippon Express, Panalpina, Polar Air Cargo, South African Airways, Tap Air Portugal, Tristar Air, United

DID YOU KNOW? São Paulo ranks 36th in the world in total tonnage.

INFRASTRUCTURE SNAPSHOT: Port of Santos

Main Channel Depth: up to 44 ft.	**Container Volume (2005):** 2.3 million TEUs

CARGO FACILITIES: Special warehouses for inspecting and sorting coffee; facilities for handling bulk corn, bagged sugar, bulk sugar, bulk wheat, and cotton; cold storage warehouse; three wheat grain silos; 101 tanks for liquid flammables.

DID YOU KNOW? The Port of Santos ranks 38th globally in total tonnage, and is the largest port in South America.

Sources: CIA World Fact book; AAPA; Airports Council International; U.S. Bureau of Economic Analysis; U.S. Direct Investment Abroad; World Aero Data

began with five flights a day to Central and South America, mostly on narrow-body aircraft, reports Abimael Ortiz, regional director, cargo sales, Latin America, Caribbean, and Asia for Delta. Its cargo operations continue to grow, particularly in perishable shipments. Today, Delta operates a Boeing 757 medium- to long-haul aircraft out of Lima, Peru, to handle the country's expanding perishables export business.

Delta transports perishables including plants, flowers, fish, and vegetables globally from Latin America. It also ships apparel, automotive parts, and electrical equipment to a range of customers in Latin America, including freight forwarders, and local and international companies.

Because of its proximity to the United States, Latin America is an ideal location from which businesses can ship U.S.-bound perishable and time-sensitive cargo. "In contrast to Asia and Europe, shippers can move goods into the United States from Brazil within four to six hours," Ortiz adds.

Consumers Drive Change

Moving forward, Brazil's fast-growing, consumer-driven market will demand a more concerted effort on the part of both transportation and government sectors to create better connections and more fluid movement of goods within the country. This will help reduce inefficiencies and drive down costs, making Brazil's burgeoning manufacturing regions even more accessible and attractive to global outsourcers.

While infrastructure growing pains are certainly cause for pause, public and private enterprises in Latin America are coming together to stimulate funding and facilitate improvements across the board. Brazil's coastal port development and capacity to accommodate significant volumes of inbound container freight volume is a huge boon to the country's future economic reckoning—as is its burgeoning air cargo sector.

GLOBAL SHIPPERS: Outsourcing in a New World

For global businesses still wary of going it alone in Latin America, a growing cadre of 3PLs with strong competencies in Latin American trade are prepared to facilitate introductions.

Outsourcing logistics functions to 3PLs averts risky capital investment, offers greater flexibility in engaging in or disengaging from a market as needed, and allows businesses to grow their presence organically.

In Latin America, where transportation and warehousing/distribution infrastructure development has been patchy, companies are compelled to consider outsourcing options to gain efficiencies and reduce costs from the start. For many, the first step is overcoming the anxiety associated with outsourcing.

"Fear of outsourcing in Latin America stems from a weak legal environment and a lack of security. Many companies are slow to outsource because they don't want to trust inventory management to a company they don't know," says Price of InfoAmericas.

With Latin America's accelerating pace of change, companies require guidance as they adapt their go-to-market strategies and the logistics resources and capabilities necessary to support end-consumer demand.

"One typical problem for Latin American companies is that their supply chain infrastructure didn't grow in a planned manner. They may have introduced a new product or acquired a new company, but haven't adjusted their supply chain infrastructure to that changed reality," reports Jose Nava, president of Latin America's DHL Exel Supply Chain.

Given challenges such as this, 3PL expertise in Mexico and Brazil is vital for businesses looking to make inroads there.

There is, however, growing indication that outsourcing anxieties in Latin America are wearing off—thanks in large part to the forward-thinking initiatives of several trans-national corporations.

While consumer demand in Brazil is growing, infrastructure has not kept pace. Companies still rely on operations such as this river port in Manaus to transport products to Brazil's larger consumer markets.

Race to the Border:

CATCHING UP WITH LATIN AMERICAN LOGISTICS

Within the last five years, Latin American-based companies have begun supply chain improvement projects to compete globally. While the automotive and consumer goods industries sit at the forefront, "today almost any industry in Latin America is outsourcing at some level," notes Nava.

General Motors de Mexico (GMM), for example, turned to Penske Logistics in 2002 to act as lead logistics provider. The companies created a three-phase plan to reduce costs and inefficiencies for the automobile manufacturer's expanding inbound transportation network, enhance overall supply chain visibility, and create benchmarking processes to drive better accountability among suppliers and carriers.

Prior to bringing Penske Logistics on board, GMM's eight operations in Ramos, Toluca, and Silao were managing transportation and logistics activities independent of each other, creating myriad inefficiencies and redundancies. GMM implemented Penske's proprietary Logistics Management System (LMS) to create a collaborative platform for its sites and logistics partners to access and share real-time information.

Higher Visibility, Lower Transport Costs

The initiative helped GMM improve supply chain visibility, which increases communication among the plants and their carriers; holds carriers accountable for performance; and drives accurate capacity forecasting. Within six months of rolling out the project, GMM reduced transportation costs 15 percent.

"LMS is more than a cost-reduction plan. It has changed the way we manage inbound transportation at the individual level. GMM operates with a new degree of accountability–the system has enabled us to maximize our best performers, while weeding out the liability of low-performers," reports Roger Peterson, director of production control and logistics, General Motors.

"I can count on one hand the number of Latin American universities that offer logistics degrees. We have to do extensive work internally to develop talent."

—***Jose Nava**, president of Latin America's DHL Exel Supply Chain*

In 2004, Cummins Latin America, a São Paulo, Brazil-based diesel engine manufacturer and distributor, began using the *Tradesphere* management solution from JPMorgan Chase Vastera to facilitate and expedite import/export cargo through Brazil's Linha Azul (Blue Line) trade program.

Utilizing the global trade management software, the manufacturer is able to expedite information exchange with Brazil's trade authorities, create supply chain visibility of inbound parts–which, in turn, creates outbound efficiencies–and reduce inventory and costs while increasing productivity.

In March 2007, Cummins' Mexico division partnered with JPMorgan Chase Vastera to help manage freight transportation to and from manufacturing plants in Juarez and San Luis Potosi, Mexico. These facilities manufacture and distribute diesel engines and handle approximately 60,000 import/export transactions per year. As part of the agreement, JPMorgan Chase Vastera handles import/export compliance, duty and broker management, and U.S./Mexico border logistics management.

In Mexico and Brazil, where 3PL penetration is approaching a level of maturation, global companies such as Cummins and GM are successfully adapting their outsourced logistics operations and strategies to account for their own growth, forcing local companies to become more competitive, while also paving the way for other enterprises to make inroads into Latin America.

No Pain, No Gain

While these successes in Mexico and Brazil point to the overwhelming capacity for increased manufacturing and distribution/logistics activity in the region, both private and public sector businesses are addressing the following growing pains elsewhere in Latin America as they get up to speed:

› **The 3PL market in Latin America, while consolidating, continues to be fragmented** with many small to medium-sized 3PLs operating in niche markets, says OH Logistics' Benki. Shippers that operate across Latin America need to work with multiple providers or with a large provider that has partnerships in place throughout the region. Countries and companies are developing programs to address these concerns and these issues shouldn't stop companies from doing business in Latin America, he says.

› In some cases, **outsourcing needs**

are growing faster than the logistics service providers capable of meeting them. "I can count on one hand the colleges and universities in Latin America that offer logistics degrees. Logistics providers struggle to obtain talent at the speed the market requires. We have to do an extensive amount of work internally to develop talent," says Nava.

› Credit and wealth distribution is another factor impacting Latin American logistics operations. **Credit-based transactions are expanding and gaining on once prevalent cash-based purchases,** notes Benki.

Wealth distribution also affects trade. Ten major Latin American cities, representing 20 percent of the population, control 60 percent of the purchasing power for the region. Trade is concentrated in these areas rather than across broader geographic regions, as is the case in the United States. But as the middle-class consumer sector grows in Latin America, so will geographic trade regions, Benki predicts.

› **Customs clearance can be an issue for companies considering doing business in Latin America.** "An express package delivered in Argentina can still take up to one week to clear customs. If the same package arrived in Taipei it would clear customs in 18 minutes," says Price.

› **Supply chain security is an additional concern.** "Ten years ago, it was rare for trucks to be hijacked. Today it happens more frequently," says Nava. "This fear has pushed Latin American businesses to develop additional security capabilities and constantly review security practices."

While growing consumerism is a positive sign of economic stability, the real potential for Latin America is the capacity to connect existing cargo portals with modern transportation links and distribution facilities.

› MOVING FORWARD: Growing Consumerism, Collaboration

One reality for Brazil and Mexico is that increasing trade–a result of investments in transportation and logistics infrastructure–is driving economic growth.

Brazil already has a viable and hungry consumer base that is luring manufacturers and retailers to set up operations. In Mexico, domestic consumption is growing at a slower clip, but trending in the right direction.

Consumption has outpaced GDP growth in Mexico since 2000, when internal consumption, rather than exports, began driving Mexico's economy.

The real driver of internal consumption growth is the rapid expansion of consumer credit from a very narrow base, according to data collected by InfoAmericas.

"In spite of the fact that consumer credit has grown at more than 25 percent per year in Mexico since 2000, the economy remains one of the most underbanked among large global economies," the report notes. "In Mexico, consumer credit equals 20 percent of GDP, versus U.S. consumer credit, which is equal to about 105 percent of GDP."

Making the Connection

While growing consumerism is a positive sign of economic stability, the real potential for both Brazilian and Mexican business interests, and Latin America at large, is the capacity to connect existing cargo portals with modern transportation links and distribution facilities. As these transportation and logistics competencies continue to develop and mature, companies are becoming more comfortable operating in Latin America and will inevitably expand their footprints into other emerging markets.

For Payless ShoeSource this is already the case. The Topeka, Kansas-based footwear manufacturer opened its first retail location in Central America–a store in San Jose, Costa Rica–in 2000. Since then it has partnered with a third-party service provider to open a distribution center within the free trade zone in Colon, Panama, that supports inventory replenishment to all its stores in Latin America.

Payless now operates 185 stores across six countries in Central America, two countries in the Caribbean, and one country in South America.

Blazing Their Own Trails

Countries such as Panama (which has the added bonus of global trade moving through the Canal), Chile, Colombia, Costa Rica, Argentina, and Puerto Rico are picking up the trail blazed by both Mexico and Brazil to create their own economic paths for the future. In some cases 3PL penetration already exists; elsewhere U.S. companies are taking their third-party logistics partners along for the ride.

As a developing region, Latin America still needs to address a range of issues to improve its logistics potential. Questions concerning infrastructure, trade policies, and the importance of transportation and logistics initiatives in the public sector are legitimate, but these concerns materialize in other promising logistics locations in Asia and Eastern Europe as well.

Continuing efforts to drive private/public sector collaboration are optimistic signs for Latin American trade and ambitious U.S. businesses. The run for the border may soon become a sprint. ■

American Business Conferences

The First US Carbon Footprint Event To Set Out Roadmaps For Rationalizing, Planning & Establishing Cost-Effective Carbon Reduction Programmes

CARBON FOOTPRINT CONSUMER PRODUCTS

Presenting The 2nd Event In Our International Series Of Carbon Footprint Supply Chain Events

Understanding The Business Case for

Measuring and Reducing Your Carbon Footprint

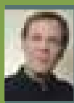
Across Operations And The Supply Chain

The Inaugural Summit For US Retailers & Consumer Product Manufacturers On the Practical Tools, Knowledge & Key Measurements Required To Initiate Carbon Reduction Programmes & Mitigate Future Climate Change Legislation

September 13-14 2007
Marriott Chicago Midway, Chicago

Practical Pre-Conference Workshop Wednesday September 12 2007:

How To Grow Your Business While Reducing Your Carbon Footprint



Workshop facilitated by Eric Olson, Vice President, Advisory Services, Business for Social Responsibility

Sponsor: SmartWay Transport Partnership – Getting There With Cleaner Air

"Excellent content and speakers with practical tools. I'm thrilled that it will be coming to the US. We'll be there for sure!"

NANCY HIRSHBERG, VP NATURAL RESOURCES, STONYFIELD FARM INC.

For further information visit **www.carbonfootprint-consumerproducts.com**

Ensure You Attend This Unique And Timely Event To:

- Understand Why Reducing Your Carbon Footprint Is Crucial To Your Business
- Learn How To Measure And Set The Most Accurate And Efficient Reductions Within Your Internal Operations And Across Your Supply Chain
- Examine The Cost Benefits Of Carbon Offsets vs Carbon Reduction Programmes To Identify The Greatest Impact On Business Sustainability

Lead Media Partner: CSRwire

Media: inbound logistics

Partners: BSR, Sustainable Business Alliance Chicago, GreenBlue

Expert Speaker Panel Featuring Contributions From North America's Top Brands & Retailers

Betsy Cohen
VP for Sustainability
Nestlé Purina

Ben Packard
Director of Environmental Affairs
Starbucks Coffee Company

Chuck Bennett
VP, Earth & Community Care
Aveda

Wayne S. Evans
VP of Procurement
DHL

Neel Bradham
VP, Business Development
Interface, Inc

Dave Newman
Head of Global Sustainable Logistics
Nike

Dave Guernsey
Corporate Environmental Affairs Program Manager
UPS

Dr Michael Walsh
Executive Vice President
Chicago Climate Exchange

Dave Stangis
Director, Corporate Responsibility
Intel Corporation

Brian Glazebrook
Manager of Supply Chain Social Responsibility
Cisco

Erin Meezan
Director of Sustainable Development
Interface, Inc.

Bryan Lembke
Senior Manager, Sustainability
Pepsico

Andrea Asch
Manager of Natural Resources
Ben & Jerry's

Ryan Boccelli
Director of Logistics
Stonyfield Farm, Inc.

Paul Comey
VP of Environmental Affairs
Green Mountain Coffee Roasters

Buddy Polovick
Chief Shipping Coordinator
EPA Smart Way Transport Partnership

Allison Hannon
Corporate Engagement & Research
The Climate Group

Dr. Mark C. Trexler
Director
EcoSecurities Global Consulting Services

Ellen W. Feeney
VP Responsible Livelihood
WhiteWave Foods Company

Tim Smith
Senior Director, Business Development & Market Research
Shaklee Corporation

Edward A. Klein
VP Environmental Affairs
Tetra Pak, Inc.

Call: (1) 800 721 3915 Fax: (1) 800 714 1359 Email: info@american-business-conferences.com

Day One **Thursday September 13, 2007**

www.carbonfootprint-consumerproducts.com

08.00 Coffee and Registration

08.45 Chairman's Opening Remarks – Defining "Carbon Footprinting" & "Carbon Neutrality" Into Clear & Actionable Business Terms

Assessing the context for thinking about Carbon Footprints? Where has this issue come from since it started more than a decade ago and where is it going? Carbon footprinting as such is not the objective, it is to change the way companies do business, to educate employees and consumers and set the stage for effective policy on climate change. How do all these things fit together?

Why Take Action? Demonstrating The Benefits Supporting A Business Case For Measuring Your Carbon Footprint

OPENING KEYNOTE PANEL SESSION

THINKING WIDE ABOUT THE OVERALL BUSINESS BENEFITS ASSOCIATED WITH REDUCING YOUR CARBON FOOTPRINT

09.00 Why Take Action To Measure Carbon Reduction In The Absence Of Regulation – What Are The Economic, Environmental And Risk Management Benefits?

- Why managing your carbon footprint is important
- Demonstrating the key economic, environmental and risk management benefits
- Examining the interplay between the latest business thinking and the emerging state, regional and possibly future federal legislation
- Defining the key stakeholders – consumers, retailers, manufacturers, the supply chain players

Betsy Cohen, *VP for Sustainability,* **Nestlé Purina**
Ben Packard, *Director of Environmental Affairs,* **Starbucks Coffee Company**
Chuck Bennett, *VP, Earth & Community Care,* **Aveda**

09.35 Followed by 10 Minutes of Q & A

RATIONALE 1 - MANAGING REGULATORY RISK

09.45 Making Sense Of The Latest Regulatory Trends To Predict The Most Likely Future Legal Framework Over The Next 5–10 Years

In the US, the regulatory framework is currently led by individual US states. With such a divergence of requirements, this session will help companies plan for the future through a detailed analysis on the key developments on the horizon.

- Analysing the existing and emerging systems in place today
- How are companies preparing for a carbon-constrained world
- What is the interplay with emerging policies and businesses
- The role of standardization and price discovery on the emerging emissions market

Dr Michael Walsh, *Executive Vice President,* **Chicago Climate Exchange**
Timothy D. Juliani, *Markets & Business Strategy Fellow,* **Pew Center on Global Climate Change**

10.05 Followed by 5 Minutes of Q & A

RATIONALE 2 - EVALUATING THE COST EFFICIENCY SAVINGS

10.10 Demonstrating The Cost Efficiency Benefits Of Reducing Your Carbon Footprint

- Integrating an energy efficient carbon strategy into the business and economic planning
- How to maximise and realize cost benefits through more efficient processes and products
- Motivating employees to stimulate creativity & the value of carbon footprinting throughout the business

Dave Stangis, *Director, Corporate Responsibility,* **Intel Corporation**

10.30 Followed by 5 Minutes of Q & A

RATIONALE 3 - BRAND EQUITY

10.35 How Superior Carbon Efficiency Performance Builds Brand And Reputation

- Capping into the intrinsic value to the brand
- Investing in the future with a carbon conscious mentality
- Building internal alignment

Ellen W. Feeney, *VP Responsible Livelihood,* **WhiteWave Foods Company**

10.55 Followed by 5 Minutes of Q & A

11.00 Networking Break and Exhibition

PANEL SESSION

11.30 Comparing The Payback Of Genuine Carbon Reduction Programs vs Carbon Offsetting

- Evaluating the business benefits and acceptance of prestigious and cost effective offsets vs realistic and direct emission reduction
- Comparing the payback of carbon reduction in the supply chain vs carbon offsetting initiatives
- Analyzing investment data to indicate the most beneficial way of spending your money
- Considering the "intangible" PR benefits of offsetting and measuring the impact on the brand

Facilitated by **Dr. Mark C. Trexler,** *Director,* **EcoSecurities Global Consulting Services**
Paul Comey, *VP of Environmental Affairs,* **Green Mountain Coffee Roasters**
Erin Meezan, *Director of Sustainable Development,* **Interface, Inc.**
Björn Fischer, *Managing Director,* **3C The Carbon Credit Company LLC**

12.20 Followed by 10 Minutes of Q & A

12.30 Lunch and Exhibition

How To Get Started! Defining A Reference Point To Focus Your Carbon Footprint Reduction Investments

2.00 Defining The Scope For Measuring The Boundaries Of Your Carbon Footprint Internally & Across The Supply Chain

- Determining the current size of your footprint
- Calculating carbon reduction through your business' direct emissions from operations & logistics or via indirect emissions across the supply chain
- Evaluating where to mark the boundaries against the potential returns across different distribution & energy networks and your specific product environment
- Understanding the priorities of the consumer if they expect to see the carbon reductions in the finished product
- Positioning the carbon message to the consumer in a simple and easily understandable manner

Dave Newman, *Head of Global Sustainable Logistics,* **Nike**

2.20 Followed by 5 Minutes of Q & A

PRACTICAL CASE STUDY

2.25 Setting Up Systems And Decision Making Processes For Measuring Your Carbon Footprint

- Outlining the initial start-up costs and payback periods for the expected cost efficiency benefits
- Understanding the costs of developing data management systems
- Communicating the message across the organisation
- Starting the process of engaging the supply chain

2.45 Followed by 5 Minutes of Q & A

MANUFACTURING OPERATIONS CASE STUDY

2.50 Transferable Principles For Measuring The Carbon Footprint Of Your Key Manufacturing Processes

- Identifying the areas with the biggest carbon impact with the greatest potential for energy reduction
- Financial incentives for energy efficiency
- The benefits of using renewables suited for your location
- Practical steps for defining a reference point for carbon reduction within manufacturing operations

Andrea Asch, *Manager of Natural Resources,* **Ben & Jerry's**

3.10 Followed by 5 Minutes of Q & A

Identifying Your Strategic Leverage Points In The Supply Chain

3.15 Applying The "Lowest Hanging Fruit" Concept To Your Supply Chain – Focusing Your Communication Efforts To Maximise Carbon Reduction Impact

- Assessing your priorities - deciding where in the supply chain to apply your efforts
- Identifying best practice on engaging upstream as well as downstream
- Developing mechanisms for reporting results
- Demonstrating the cost efficiency drivers and environmental benefits

Allison Hannon, *Corporate Engagement & Research,* **The Climate Group**

3.35 Followed by 5 Minutes of Q & A

3.40 Networking Break and Exhibition

Day Two **Friday September 14, 2007**

PANEL SESSION

4.10 **Designing Carbon Emissions Out Of The Supply Chain - Practical Strategies For Engaging Your Supply Chain To Disclose Commercially Sensitive Data**

- Overcoming data ownership issues to promote a genuine commitment to carbon reduction across the supply chain
- Working with soft and hard targets

Tim Higgs, *Environmental Engineer,* **Intel Corporation**
Brian Glazebrook, *Manager of Supply Chain Social Responsibility,* **Cisco**
Leann Speta, *Director of Supply Chain Social/Environmental Responsibility Program,* **Sun Microsystems**

4.40 **Followed by 10 Minutes of Q & A**

4.50 **Building Business Relationships With Trading Partners, Retailers, Manufacturers And Carriers To Find The Specific Leverage Point To Deliver Hard Reduction Targets**

- Evaluating the different carbon reduction options and targeting the areas with the lowest carbon intensity to ensure the greatest carbon reductions – are these sectors the most attainable too?
- Identifying why the size, history and nature of the business relationships in those key areas is also important
- Establishing clear baseline figures and what the trade-offs will be for cost vs. quality for each measurement to identify the priority areas of the business for reducing emissions
- Setting goals and targets with suppliers and working for future best practices

Eric Olson, *Vice President, Advisory Services,*
Business for Social Responsibility

5.20 **Followed by 10 Minutes of Q & A**

MATERIALS PROCUREMENT CROSS-FERTILIZATION CASE STUDY

5.30 **Developing Systems For Measuring The Sustainability Of Your Materials Procurement Processes – Identifying The Key Metrics**

- Where do you start? How do you start?
- Examining the sustainability of key materials – defining the key metrics

Neel Bradham, *VP Business Development,* **Interface, Inc**

5.50 **Followed by 5 Minutes of Q & A**

5.55 **Close Of Day One Followed By Networking Drinks In The Exhibition**

Day Two September 14, 2007

08.30 **Coffee and Registration**

09.00 **Chairman's Welcome To Day Two and Recap of Day One**

LOGISTICS PANEL SESSION

09.10 **Optimising Efficiency Within Distribution & Logistics Networks To Reduce Carbon Emissions**

- Gaining clarity on the cost efficiency and carbon effectiveness of new vehicle and route optimization technologies
- How different transportation strategies can have an impact on reducing CO2 from transport
- Examining carbon impact and financial costs of different fuel types
- Introducing hybrid technologies or bio-fuels to reduce carbon emissions further
- Minimizing the amount of empty miles that transportation providers go to fill up the trucks quicker

Facilitated by
Buddy Polovick, *Chief Shipping Coordinator,* **EPA Smart Way Transport Partnership**
Wayne S. Evans, *VP of Procurement,* **DHL**
Dave Guernsey, *Corporate Environmental Affairs Program Manager,* **UPS**
Ryan Boccelli, *Director of Logistics,* **Stonyfield Farm, Inc**

10.00 **Followed by 10 Minutes of Q & A**

10.10 **Improving Transportation and Supply Chain Efficiency While Reducing Your Carbon Footprint**

- Quantifying the baseline to judge the degree and direction of improvement
- Aligning distribution locations with production and customer demand
- Maximizing the efficiency of the dedicated fleet

Ryan Boccelli, *Director of Logistics*, **Stonyfield Farm, Inc**
Mark Swenson, *VP, Business Development,* **Ryder Logistics**

10.30 **Followed by 5 Minutes of Q & A**

10.35 **Defining A Baseline For Measuring Different Transportation Modes**

- Practical steps for defining the scope across container shipping and rail
- Defining the geographical regions of your operations
- Assessing the degree of your control over transportation modes or whether you need to collaborate with others

11.00 **Followed by 5 Minutes of Q & A**

11.05 **Networking Break and Exhibition**

11.35 **Developing Collaborative Data Management Systems To Gather The Most Accurate Information and Save On Inventory In Transportation**

- Understanding all of each unit of freight movement to identify the baseline
- Compiling a loading report to discover what the baseline is to understand the actual current footprint
- Sharing more demand information - what kind of data, industry-specific or geographic data? CPFR
- Partnering with the service providers to choose low carbon intensity alternatives - green renewable and hybrid technology

Raj Sapru, *Manager, Advisory Service,* **Business for Social Responsibility**

12.05 **Followed by 10 Minutes of Q & A**

12.15 **Defining Best Practice For Measuring The Carbon Footprint Within The Refrigerated Distribution Environment**

- Analysing set point optimisation of systems
- Refrigerant choice
- Life cycle cost analysis of synthetic vs natural refrigerants

Andy Campbell, *Head of Refrigeration UK,* **TESCO**

12.35 **Followed by 5 Minutes of Q & A**

12.40 **Lunch and Exhibition**

2.00 **Understanding What The Utilities Can Do To Help Lower Your Carbon Footprint**

- Why the utilities are important – the role they play
- Offering energy incentives or premiums to customers
- How to set up renewable energy programmes
- Overcoming difficulties of establishing a footprint calculator

2.20 **Followed by 5 Minutes of Q & A**

Understanding The Need To Demonstrate And Carefully Position Carbon Footprinting To The Consumer

HOW DO YOU EXPLAIN THE CARBON IMPERATIVE TO CONSUMERS?

2.25 **Making Carbon Labelling Real For Consumers - Understanding Consumer Perception And Priorities To Maximize Business Benefit**

- Why carbon labeling is important for consumers and which products are of prime importance
- Assessing the consumer reaction to product price increases as a result of products being carbon friendly
- Clarifying how consumers perceive one carbon friendly product offering from another

Tim Smith, *Senior Director, Business Development & Market Research,* **Shaklee Corporation**

2.45 **Followed by 5 Minutes of Q & A**

2.50 **Networking Break and Exhibition**

3.20 **Optimizing Packaging To Reduce The Carbon Impact**

- Evaluating the business case for more sustainable packaging
- Analyzing the life cycle costs
- Approaches that will motivate the supply chain to seek out optimized packaging and to reduce food waste entering the household garbage

Edward A. Klein, *VP Environmental Affairs,* **Tetra Pak, Inc.**

3.40 **Followed by 5 Minutes of Q & A**

3.45 **Lowering The Carbon Quantities In Materials & Packaging To Reduce The Carbon Footprint & Engage The Consumer**

- Ensuring the package system adds value across product protection, consumer functionality and environmental performance
- Evaluating the environmental benefits of using different types of materials
- Developing consumer insights to influence communications and purchase behaviour

Bryan Lembke, *Senior Manager, Sustainability,* **Pepsico**

4.05 **Followed by 5 Minutes of Q & A**

4.10 **Chairman's Closing Remarks and Close of 2007 Summit**

CARBON FOOTPRINT CONSUMER PRODUCTS

Measuring And Reducing Your Carbon Footprint: A Roadmap To Achieving Cost Efficiency Benefits And Supply Chain Collaboration

Breaking down the complexities of carbon footprint reduction into easy to follow steps…

With rises in the costs of fuel and widespread media coverage on the threats of global warming, reducing your carbon footprint is increasingly at the forefront of the sustainability agenda for retailers and consumer product manufacturers. Together with the potential for standards and upcoming regulation in the US, the whole value chain must start thinking about how to effect and deliver carbon reductions within their life cycle costs as a serious commercial and environmental proposition, if they have not already done so.

Yet, where do you start? With so much uncertainty about what a carbon footprint or even a carbon-rated product is, there is a primary need to define the concept and understand why measuring your carbon footprint is important, what it is exactly and how to even embark on such an initiative, whether in the first instance it is being eco-efficient and lowering greenhouse gas emissions within your own operations, or whether it is mapping out the baselines across your supply chain and setting targets to make the greatest carbon reductions as cost-effectively as possible.

The Carbon Footprint Consumer Products Summit is the first ever conference to demonstrate the business case for measuring your carbon footprint. After dissecting the WHYS the event will then show you how to get started, literally taking you step by step to define a reference point for your carbon reductions investments, both internally and across the supply chain.

American Business Conferences

American Business Conferences is a division of London Business Conferences Limited, a UK-based company specializing in hosting industry-specific global summits for end-users of new technologies, including government, research and private sector organizations. Our mission is to combine the traditional values of program integrity and quality as well as excellent customer service with outstanding value for money.

The Carbon Footprint Consumer Products Summit follows the Carbon Footprint Supply Chain Summit, which was organized by London Business Conferences and attracted over 200 international delegates across the Retail, Product Manufacturing, Transportation and Logistics and Packaging sectors. The Carbon Footprint Consumer Products Summit is part of a series of Carbon events staged internationally by both sister divisions, including the Carbon Footprint Construction Summit and Carbon Footprint Finance Summit.

Supported by:

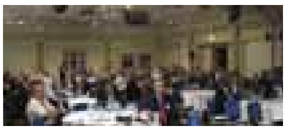
SmartWay℠ Transport Partnership — Getting There With Cleaner Air

SMARTWAY TRANSPORT PARTNERSHIP

Higher energy costs and the need for reduced carbon footprints are encouraging shippers and freight carriers to find new ways to optimize the transportation networks in their supply chain. The SmartWay Transport Partnership addresses these concerns with an innovative public-private initiative focused on improving the fuel efficiency of goods movement. Participating companies are benchmarking their current freight operations, identifying technologies and strategies to reduce their carbon emissions, documenting emissions reductions and projecting future improvement.

In doing so, these Partner companies are demonstrating to customers, clients, and investors that they are taking responsibility for goods movement emissions throughout their supply chain. SmartWay Transport Partners are leaders in their industries, demonstrating their commitment to corporate social responsibility and sustainable business practices. Partners who demonstrate superior environmental performance qualify to use the SmartWay logo to enhance their visibility as good corporate citizens, working to reduce their carbon footprint.

Who Will Attend?



Senior Retail Experts including: Vice Presidents for CSR, Heads of Environmental Affairs, Health, Safety & Environment Directors, Directors of Sustainability

Leading Directors from Consumer Product Manufacturers including: VPs of Sustainable Development, Heads of Natural Resources, Directors Environmental Stewardship, Corporate Affairs Directors

Top Logistics & Transportation Providers: Directors of Procurement, Vice Presidents Business Development, Directors of Supply Chains

Key Packaging Directors and Suppliers: Marketing Directors, Sustainable Packaging Directors, Heads of QA, Energy Managers

PRE-CONFERENCE WORKSHOP

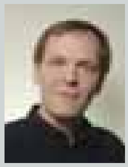
Wednesday September 12, 2007

09.00 – 12.30

How To Grow Your Business While Reducing Your Carbon Footprint

Businesses are already being affected by climate change and the challenge is how to respond in a way that makes sense for your company. Through interactive discussions and practical case study examples the workshop will focus on the following key questions:

- What are the components of a smart corporate strategy for companies that are serious about climate change?
- How does carbon footprinting support the understanding of a spectrum of options that includes energy efficiency, offsetting and a shift to renewables?



Workshop Moderator

Eric Olson
Vice President,
Advisory Services
Business for Social Responsibility

Eric joined BSR in January 2005 with fifteen years of work in the consulting field, including significant experience both in supply chain management and issues related to sustainable development. Eric leads BSR's growing advisory services practice delivering consultation on the design of successful CSR strategies, and the integration of those strategies into core business practices at BSR's member companies and other clients.

Most recently Eric served as Vice President, Advisory Services, with The Natural Step in San Francisco, where he led that organization's work to deliver advice and counsel to a broad range of companies on sustainability matters. Prior to that he served as a Vice President at the Boston Consulting Group, and was a Partner and Founding Member of the Mitchell Madison Group, a global consultancy focused on strategic sourcing and supply chain management.

Eric currently serves as Board President for the Climate Neutral Network.

Call: (1) 800 721 3915 Fax: (1) 800 714 1359 Email: info@american-business-conferences.com

CARBON FOOTPRINT CONSUMER PRODUCTS

www.carbonfootprint-consumerproducts.com

Official Associations

Lead Media Partner

Media

Partners

CSRwire

CSRwire is the leading source of corporate social responsibility ("CSR") press releases, reports, news, and information.

"CSR" is defined as the integration of business operations and values whereby the interests of all stakeholders - including investors, customers, employees, the community, and the environment - are reflected in the company's policies and actions.

The company distributes full-text news releases through its syndication network, News Alerts, Web site, RSS feeds, news aggregators, "send to friend" feature, and search engines.

CSRwire reaches a global audience of journalists, corporate executives, analysts, investors, public relations and advertising professionals, academics, and activists in over 200 countries.

CSRwire Members range from Fortune 500 companies to NGOs, from investment funds to mission-driven organizations - all interested in communicating their corporate citizenship, sustainability, and socially responsible initiatives.

Material carried via CSRwire covers such issues as corporate governance, socially responsible investing (SRI), business ethics, diversity, philanthropy, the environment, human rights, and community development.

CSRwire's parent company, Meadowbrook Lane Capital, LLC has been described as a 'socially responsible investment bank' by the Wall Street Journal. The company specializes in turning values into valuation while concentrating on succession issues for mission driven companies. We are a carbon neutral company committed to sustainable environmental and business practices.

inbound logistics

Inbound Logistics mission is to provide today's business logistics managers with the information they need to speed cycle times, reduce inventories, and use logistics expertise to get closer to their markets and customers. Through the use of inbound logistics techniques, readers discover and create wealth for their companies by matching demand signals to supply and aligning their business process to support a demand-driven logistics philosophy. IL readers serve a number of strategic functions acting change agents across their organizations, and use supply chain practices to drive efficiencies that impact their customers, vendors and within their own companies. Inbound Logistics Magazine provides the informational resources to enable that process.

BSR

Since 1992, **Business for Social Responsibility (BSR)** has been providing socially responsible business solutions to many of the world's leading corporations, such as Coca-Cola, Starbucks, HP, Time Warner, GE, Disney, Sony and more. Headquartered in San Francisco and with offices in Europe, China and Hong Kong, BSR is a business membership organization that serves its 250 member companies and other Global 1000 enterprises. Through advisory services, convenings and research, BSR works with corporations and concerned stakeholders of all types to create a more just and sustainable global economy. As a non-profit business association, BSR is uniquely positioned to promote cross-sector collaboration in ways that contribute to the advancement of corporate social responsibility (CSR) and business success. For more information, visit www.bsr.org.

Sustainable Business Alliance Chicago

The Chicago Sustainable Business Alliance serves a growing community of businesses in the Chicagoland area that strive for economic success while reducing their environmental footprint and contributing positively to social well-being. This mission is served primarily through facilitated peer-based learning, networking, resource dissemination, promotion and advertising, and other programs.

GreenBlue

GreenBlue (www.greenblue.org) stimulates the creative redesign of industry by focusing the expertise of professional communities to create practical solutions, resources, and opportunities for implementing sustainability. GreenBlue supports the practical realization of a positive future for economic and industrial systems:
… that purify air, land, and water.
… that use only current solar income.
… that generate no toxic waste.
… that align economic, social, and environmental benefit.
… whose materials replenish the earth or can be infinitely recycled.
… whose products contribute to the beauty and abundance of life.
GreenBlue asks: How can we design, prototype, and realize this positive future? GreenBlue asks this question in specific contexts and industry sectors to reveal practical design and business opportunities. GreenBlue achieves success through industry sector-based partnerships that convene stakeholders, establish ambitious objectives, and develop practical design tools and resources to achieve meaningful change.

Engage Senior Decision Makers On The USPs Of Your Carbon Reduction Solutions

Exhibition Plan - Marriott Chicago Midway

The exhibition showcase will provide the opportunity for vendors to demonstrate their technology solutions in an informal setting. Unlike a traditional large exhibition or trade show you will gain access to the strategic decision makers at a time when the attendees are relaxed yet focused on discussing the solutions to their key business issues.

For further information on exhibiting please call (1) 800 721 3915 or email info@american-business-conferences.com

What Past Sponsors Have Said They Like About Our Events

- Exhibitor lounge adjacent to main conference room which facilitates networking
- High proportion of Director-level and VP attendees
- Good spread of countries represented, a truly global event
- Really in-depth discussions that get to the root of the issues and challenges faced by governments
- Full contact information of delegates (who have opted in) is provided to sponsors and exhibitors after the event

REGISTRATION FORM

CARBON FOOTPRINT CONSUMER PRODUCTS

Understanding The Business Case for Measuring and Reducing Your Carbon Footprint Across Operations And The Supply Chain

2 DAY CONFERENCE SEPTEMBER 13-14 2007

YES ✔ I would like to register the delegate(s) below for the 2 day conference Understanding the Business Case For Measuring and Reducing Your Carbon Footprint Across Operations And The Supply Chain

DETAILS *PLEASE USE CAPITALS* — **PLEASE PHOTOCOPY FOR MULTIPLE DELEGATES**

Delegate 1. Miss/Ms/Mrs/Mr/Dr/Other:

Position

Delegate 2. Miss/Ms/Mrs/Mr/Dr/Other:

Position

Organization name

Address

Country — ZIP/Postal Code

Telephone

Fax

E-mail

Signature — Date

DELEGATE RATES - WE HAVE TEAM DISCOUNTS SO YOU CAN INVOLVE YOUR WHOLE ORGANISATION OR TEAMS. CALL (1) 800 721 3915

Early Booking Discount - book and pay by July 16, 2007 and Save 10% on your Booking.

☐ Check Box to claim early booking discount and we will automatically deduct 10% off your total bill*

DELEGATE FEES (Guests are responsible for their own accommodation and travel arrangements)	STANDARD RATE
☐ 2 day conference only:	$1700.00
☐ 2 day conference plus post-conference workshop:	$2200.00
☐ Post-conference workshop only:	$600.00

DELEGATE FEES INCLUSIVE OF ACCOMMODATION	STANDARD RATE BOOKING WITH ACCOMMODATION*
☐ 2 day conference only plus 1 nights accommodation:	$1899.00
☐ 2 day conference only plus 2 nights accommodation:	$2078.00
☐ 2 day conference only plus 3 nights accommodation:	$2269.00
☐ 2 day conference plus pre-conference workshop plus 1 night accommodation:	$2389.00
☐ 2 day conference plus pre-conference workshop plus 2 nights accommodation:	$2578.00
☐ 2 day conference plus pre-conference workshop plus 3 nights accommodation:	$2767.00
☐ Pre-conference workshop only plus 1 nights accommodation:	$798.00
☐ Pre-conference workshop only plus 2 nights accommodation:	$978.00

* Accommodation will be a single occupancy room at the Marriott Chicago Midway (Guests are responsible for their own travel arrangements). Please note an additional 16.5% local taxes will be added to the portion of your delegate fee relating to your hotel accommodation' Delegate places with accommodation inclusive are subject to availability only.

Accommodation Nights Required

☐ Wednesday 12 September

☐ Thursday 13 September

☐ Friday 14 September

Additional nights accommodation/double occupancy rooms available on request and depending on availability.

Please call (1) 800 721 3915 to arrange.

Media Partner

CSRwire is our Lead Media Partner for this event. Please check the box to sign up for CSRwire weekly or custom News Alerts ☐

Please check the box to request information or be contacted by CSRwire ☐

I cannot attend the conference but would like to order the presentations on CD only:

☐ CD, including audio files $499

☐ I am interested in sponsorship and exhibition opportunities at the Carbon Footprint Consumer Products Summit. Please provide further details

VENUE INFORMATION

MARRIOTT CHICAGO MIDWAY, CHICAGO, 6520 South Cicero Avenue, Chicago, Illinois 60638 USA
Phone: 1-708-594-5500 Fax: 1-708-594-5510 Online: www.marriott.com

PAYMENT *PLEASE TICK APPROPRIATE BOXES AND COMPLETE DETAILS*

Payment must be received in full prior to the event.

☐ **Check**
I enclose a check in US Dollars payable to London Business Conferences Limited for $ ________________

☐ **Payment by WIRE TRANSFER**
A copy of the bank transfer document should be attached to your registration form so appropriate allocation of funds can be made to your registration.
Barclays Bank: SWIFT/BIC Code: BARCGB22 IBAN: GB59BARC20982142331166
EIN. no: 98-0514924

☐ **Credit Card**

Please debit my ☐ Access ☐ Visa ☐ American Express ☐ Mastercard ☐ Switch/Maestro for *Amount* $

Card Number — Start Date

Name on card — Expiry Date

Signature of card holder — Date

HOW TO REGISTER

From the US and Canada:

Call Toll Free on 800 721 3915
Fax Toll Free on 800 714 1359

By email:
info@american-business-conferences.com

Online:
Register online on our website at www.american-business-conferences.com or www.carbonfootprint-consumer products.com

Address:
American Business Conferences
2300 M Street, NW
Suite 800
Washington, DC 20037
USA

Team Discounts Available. Call 1 (800) 721 3915

A limited number of sponsorship and exhibition opportunities are available at this event.
For further information please call (1) 800 721 3915

Terms and Conditions

The conference is being organised by American Business Conferences, a division of London Business Conferences Ltd, a limited liability company formed under English company law and registered in the UK no. 5090859.

Cancellations received on or before August 16, 2007 will be eligible for a refund less $150 administration fee. Cancellations must be made in writing. After August 16, 2007 no refund can be made. If you are unable to attend, no refund can be given but you may nominate a colleague to take your place. American Business Conferences reserves the right to alter or cancel the speakers or programme. Receipt of this booking form, inclusive or exclusive of payment constitutes formal agreement to attend and acceptance of the terms and conditions stated.

*if you are claiming the early booking discount this may not be used in conjunction with other discounts advertised elsewhere.

We would like to keep you informed of other American Business Conferences products and services. This will be carried out in accordance with the Data Protection Act. Please write to the Head of Marketing, American Business Conferences at the address below if you specifically do not want to receive this information.

American Business Conferences. 2300 M Street, NW. Suite 800. Washington, DC 20037. USA

American Business Conferences will not accept liability for any individual transport delays and in such circumstances the normal cancellation restrictions apply.

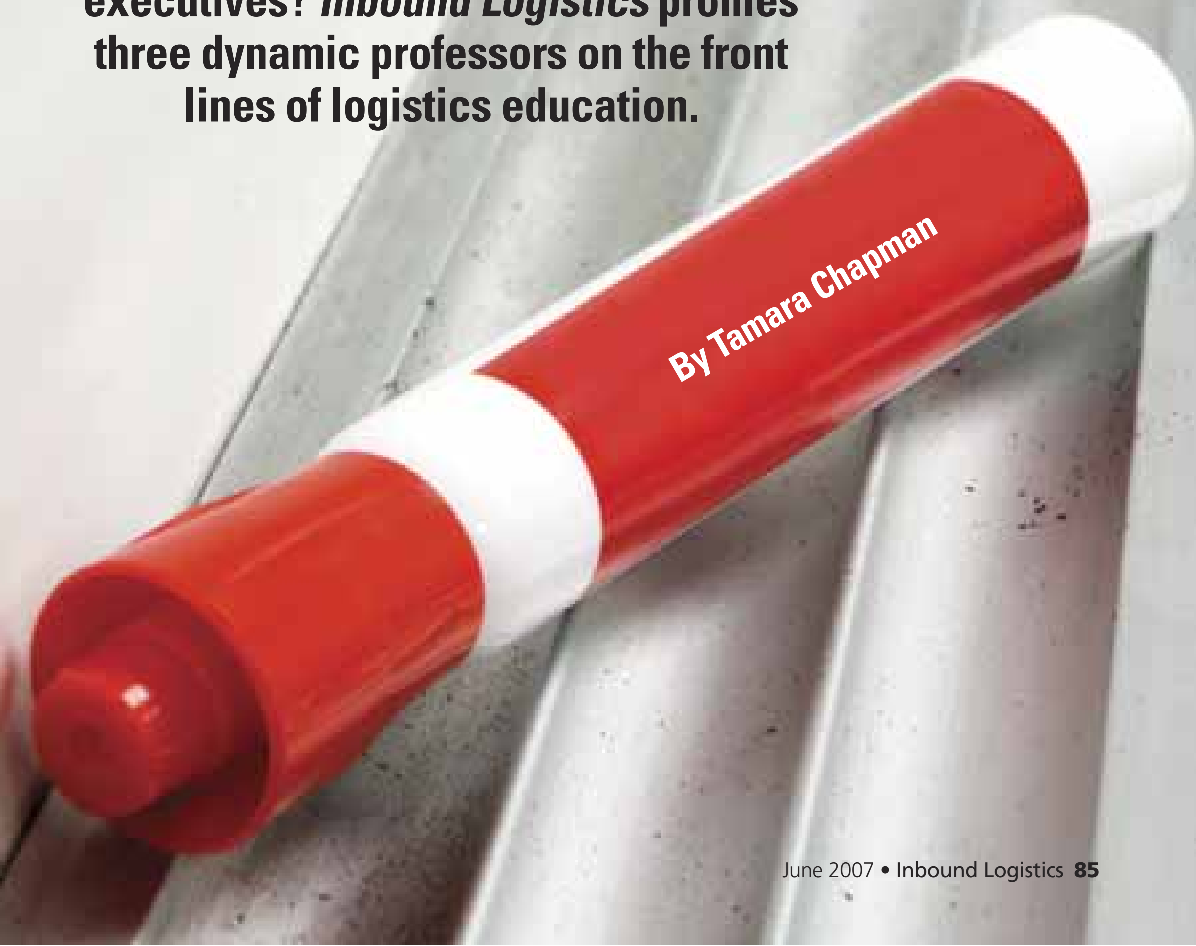
American Business Conferences is a Division of London Business Conferences Limited,
Registered in England No. 5090859
EIN. no: 98-0514924

Call: (1) 800 721 3915 Fax: (1) 800 714 1359 Email: info@american-business-conferences.com

CAREER SOLUTIONS:

Meet the Teachers

Who better to comment on the future of the supply chain than the people educating the next generation of logistics executives? *Inbound Logistics* profiles three dynamic professors on the front lines of logistics education.



By Tamara Chapman

Playing the Global Game

Thomas Corsi took a curious route to his professorship at the Robert H. Smith School of Business at the University of Maryland in College Park.

Thomas Corsi
Professor of Logistics & Co-Director, Supply Chain Management Center, Robert H. Smith School of Business, University of Maryland

His undergraduate studies at Kent State University, Ohio, and graduate work at the University of Wisconsin, Milwaukee, focused on transportation geography. If anything, he was primed for a career in urban planning. But Corsi opted for a less-traveled fork on the geographer's career path, joining the Smith School in 1976 as professor of logistics and transportation at a time when business schools were typically staffed by business scholars with firsthand experience.

"I had never taken a business class in my life when I was hired by the University of Maryland," he says. "I learned about business on the job."

During his 30-plus years at the Smith School, Corsi has watched logistics emerge as a priority in the corporate world and as a key component of the business school curriculum. "In the 1970s, firms regarded logistics as an afterthought," he recalls. In the aftermath of transportation deregulation, and with the advent of new markets, logistics has risen from the backroom to the boardroom, Corsi notes.

Today, as co-director of the university's Supply Chain Management Center, Corsi focuses on the challenges of globalization and the strategic importance of a well-managed supply chain. For these front-and-center issues, his non-business background gives him an advantage. "Globalization is all spatial," he says, drawing on his geographer's vocabulary.

To help students contend with global realities and bring value to their future employers, Corsi and his colleagues strive to introduce the technology and real-world challenges that await them in the workplace. "We replicate the modern corporation's systems and applications," he says.

Corsi's latest tool for spot-on replication is the real-time, continuous-play Global Supply Chain Game, which he and his Smith School colleagues developed in conjunction with researchers at Delft University of Technology in the Netherlands, known for its simulation and graphics capabilities. The Smith researchers supplied the supply chain know-how, while the Delft team created an interactive gaming environment to engage even the technophobic student.

Corsi uses this game at the beginning of his core classes at both the undergraduate and graduate levels. Well before students delve into their first case studies, they plunge into the supply chain game, getting a taste for the complex decision-making that facilitates efficiency and profitability.

HE'S GOT GAME: **Professor Tom Corsi (*standing*) prepares logistics students for the real world by playing the Global Supply Chain Game.**

Played over a four-hour block of time, the game simulates several months in the life of an international company. It asks competing two- and three-person teams to devise and deploy strategies that create an efficient supply chain while increasing profits and expanding market share. Along the way, each team confronts the consequences of its decisions, as well as unanticipated snafus. At game's end, the team with the strongest financial position wins.

In actual play, each team represents a competing firm – computer manufacturers, for example. The team must decide what types of computers to make; where to source parts and sell the product; and how to transport and price the merchandise. After making these decisions, the team must analyze market conditions to forecast sales and place orders. One bad decision, and the company can flounder.

Because of all the variables, the game does not lend itself to easy formulas or standard approaches. Once the game is over and the winners identified, Corsi asks the teams to compare results and strategies. What worked? What failed? Why? What should have been done differently? The teams usually can't wait to test their new knowledge in another round of competition.

"The game creates excitement about the supply chain," Corsi says. "Students gain experience operating in the field, facing a whole range of decisions. When they directly experience supply chain complexity, they understand it faster."

What's more, the game supports future learning. "We use the game at the beginning of the semester because all the subsequent cases and lectures then fall into place," he notes.

The A-Ha Moment

It's not uncommon for readings and lectures to lead to post-game epiphanies – "a-ha" moments when students realize they could have altered their game standing had they grasped a certain concept. They also learn how other teams' decisions affect their own performance. These lessons remind them they are facing a highly competitive marketplace, says Corsi.

Five years in the making, the Global Supply Chain Game grew out of research originally financed by the U.S. Department of Defense. In time, the Smith/Delft team partnered with Sun Microsystems to refine the simulation model, enhance its flexibility, and adapt it for competition.

"There were times when I didn't think the game would take off," Corsi recalls. But persistence paid off, and to date more than 320 Smith School MBA students have tackled the simulation. In addition, the game is now the centerpiece of a global supply chain competition, which includes student teams from the United States, Europe, and Asia, all competing over the Internet.

As Corsi sees it, the game is the perfect complement to class readings, including *The World is Flat*, by *New York Times* columnist Thomas Friedman. Like Friedman, Corsi believes globalization will require American companies and business leaders to adjust nimbly to ever-changing realities. In the future, supply chain management will require executives skilled in everything from information technology and financial planning to real-time event monitoring and business intelligence.

For that, Corsi says, there's no better preparation than hands-on experience afforded by tools such as the Global Supply Chain Game. Apart from its suitability for classroom instruction, the game may have applications in corporate education. "We like to think the model we're developing here is the trend of the future," Corsi says. ■

Change Agent

As Leslie Pagliari sees it, constant change is the only constant facing logistics educators.

Leslie Pagliari

Assistant Professor & Coordinator, Industrial Distribution and Logistics Program, East Carolina University

An assistant professor in the department of technology systems at East Carolina University in Greenville, N.C., Pagliari is coordinator of the school's undergraduate logistics program. Her job is to prepare students for never-ending, all-encompassing, head-spinning change.

"The ideas we teach students as freshmen will be obsolete by the time they become juniors," says Pagliari, known to her students as Dr. P.

Coping with unplanned obsolescence turns a professor's life topsy-turvy. How do you prepare students for a future that defies predictability? Pagliari does it by embracing the few certainties that characterize the field: The technology in use today will be quaint and outmoded tomorrow. The workforce that greets you this week will look vastly different next week. And the conditions shaping business operations could change dramatically with one international crisis.

So how can a scholar keep up with, if not stay ahead of, non-stop change? Pagliari, who has a Southerner's gift for easy exchange, insists on building and maintaining personal ties with the companies that hire her graduates.

Her courses – which range from freshman-level Introduction to Distribution and Logistics to senior-level Distribution Research – feature the requisite case studies and textbook readings. But they also incorporate on-site visits to the front lines and guest speakers from all facets of logistics. Pagliari counts on these delegates from the trenches to supply lessons in Reality 101, lessons that not only instruct her students, but also keep her in tune with the latest industry developments.

Face-to-face contacts, along with ongoing research, ensure that she doesn't fall back on old classroom tricks.

"Some professors teach a supply chain class the same way year after year," Pagliari says. They hammer home spreadsheet analysis and insist on a mastery of certain software programs. Pagliari incorporates these into her syllabus, too, but she also trains her students to scan the horizon for approaching trends, technologies, and market demands.

Pagliari, who hails from the North Carolina foothills, came to her current post after earning her undergraduate degree and a master's in occupational safety and health from East Carolina University (ECU). A job with Procter & Gamble, as well as on-site experience associated with her continuing studies, landed her in numerous manufacturing and warehouse/distribution settings.

With these experiences under her belt, Pagliari decided to pursue studies that would marry her long-time interest in safety and health with her emerging interest in logistics challenges. Mixing online classes with periodic residencies at different businesses, she earned a PhD in applied management and decision sciences, with an emphasis in engineering management, from Walden University, Minneapolis.

Pagliari no sooner finished her doctoral course work when her old alma mater offered her the opportunity to help convert its undergraduate logistics concentration into a full major. The proposal was too intriguing to pass up.

Since the program's launch in the 2002-2003 academic year, the number of ECU logistics students has grown from 80 to 185. Each semester, the department graduates about 40 students, most of whom are hired before the ink dries on their diplomas. "We have more job requests than graduates," Pagliari says.

Many of these graduates refine their classroom skills on the job, then return to ECU for graduate degrees that prepare them to assume leadership roles. This leads to the kind of two-way knowledge exchange – professor to student and student to professor – that Pagliari considers essential for the development of the logistics field.

With ECU's undergraduate enrollment on the rise, Pagliari is working on curriculum enhancements that ensure her students' preparedness for change and even for catastrophe. She's currently developing a syllabus and conducting research to support a class on security risk analysis and logistics. Scheduled to debut in 2007-2008, the course will be taught in the undergraduate program and eventually become part of the graduate curriculum.

The course stems from Pagliari's interest in the safety and logistics challenges the business community grappled with in the aftermath of Sept. 11.

To prepare, she's studying the way various companies respond to changing homeland security regulations regarding everything from transporting oil and gas to warehousing chemicals. How do they track the location of hazardous materials? How do they know if a shipment has been hijacked? How do they respond if a worst-case scenario materializes?

She's also examining the logistics challenges that face the public-health sector. In collaboration with North Carolina's health agencies, Pagliari has analyzed possible responses to a hypothetical radiation scare. This opportunity drew on her relish for solving logistics puzzles and her interest in the human side of her discipline.

The study explores the logistics of communication, especially in a state with a swelling population of Spanish-speaking immigrants. How should the relevant health and government agencies communicate with all sectors of the population? And assuming the agencies will need to coordinate response, where should they post translators, dispatch health care workers, and distribute medicine?

In addition to keeping the curriculum current and change-sensitive, Pagliari also wants to diversify her student population. Currently, female students account for less than 25 percent of all ECU logistics majors.

As Pagliari sees it, women are missing out on a career that plays to their strengths: problem-solving, listening, and big-picture thinking. Unfortunately, she says, too many women think logistics is only about warehouses, and overcoming these perceptions is not easy.

"It takes me twice as long to interest a female student in this program as it does a male student," she explains.

That will change once more women, her students among them, permeate the field and spread the word. In the meantime, Pagliari says, "you don't hear much about females in the field."

Present company excluded.

THE TIES THAT BIND: Dr. P (*fourth from right*) maintains personal contact with the companies that hire her graduates.

The Softer Side of Logistics

Mark Barratt

Assistant Professor, Supply Chain Management, W.P. Carey School of Business, Arizona State University

In the spreadsheet-fixated, technology-focused world of logistics, Mark Barratt is a self-described heretic.

At Arizona State University in Tempe, where he is an assistant professor of supply chain management, Barratt ventures into touchy-feely territory. He extols the importance of cultural awareness and preaches the virtues of collaboration – all, he insists, in the name of preparing students for a radically different future.

If his students are to have productive careers in an increasingly competitive marketplace, they certainly need to master the latest software and conquer the art of managing inventory. Just as important, they need to understand how people think and behave in foreign countries, says Barratt. And they need to embrace the possibilities of collaborative partnerships, both inside and outside their organizations, and up and down the supply chain.

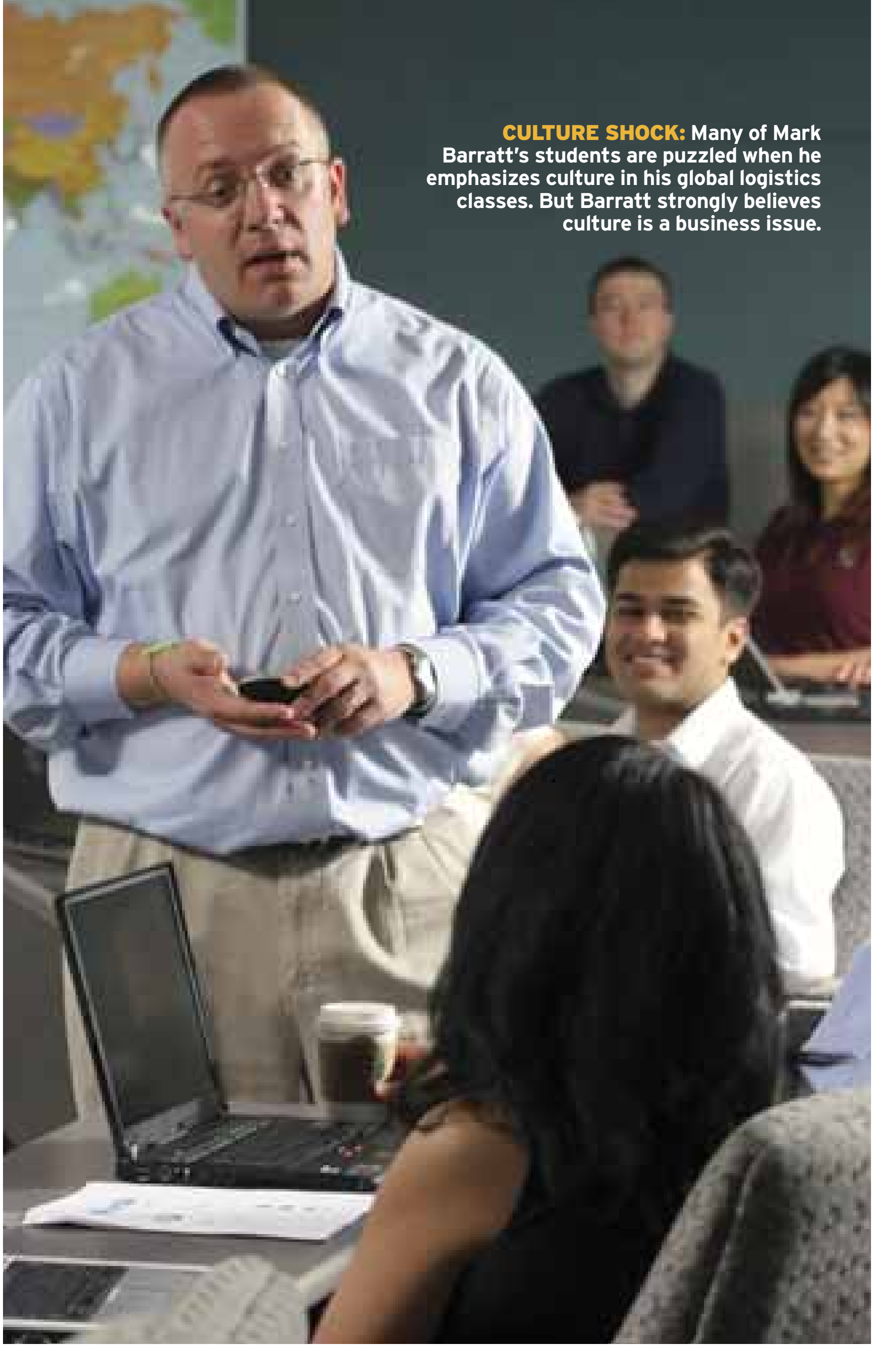
"Sometimes my students get sick and tired of me rattling on about collaboration," he says, but that doesn't dampen his enthusiasm.

Barratt traces his affection for the softer side of logistics to his graduate school days in London. He grew up in England and worked for several years in the legal profession, specializing in property conveyance. "I decided I wanted to do something more honest for a living," he jokes, so he enrolled at Cranfield School of Management, not sure specifically what he wanted to do.

A few chance encounters with one of Europe's leading logistics professors, Martin Christopher, captured Barratt's imagination. Christopher's maverick approach to logistics – a topic that seemed downright uncongenial to eccentricity – inspired Barratt, and for the next five and a half years, he immersed himself in logistics studies, particularly the possibilities for maximizing efficiency through collaboration.

"At the time, collaboration was a dirty word," he explains. Dirty word or not, collaboration has become an imperative in today's world. But that doesn't mean collaborating is easy, particularly within organizations, notes Barratt. Too often, when logisticians analyze supply chains, they fall back on models that stipulate how people will behave: Person A in Department B will provide data to Person C in Department D, who will then activate Plan E. Neat as that scenario appears on paper, it seldom corresponds with reality.

Savvy logistics professionals need to understand organizational behavior and develop strategies for dealing with it, he says. To illustrate this point to MBA students, Barratt asks them to look in the mirror. "I ask: How many of you trust all



CULTURE SHOCK: Many of Mark Barratt's students are puzzled when he emphasizes culture in his global logistics classes. But Barratt strongly believes culture is a business issue.

your colleagues 100 percent?' Maybe one person will raise their hand," he says. From there, they analyze how the models fall apart when trust is eroded and the possibilities for collaboration are derailed.

Collaboration outside the organization is just as essential for supply chain success, Barratt says. To achieve maximum efficiency, players up and down the chain have to pool resources and focus on outcomes desirable to all. That may mean sharing information once regarded as a trade secret. It certainly means win-win deals and numerous partnerships with outside players, he notes.

European and Japanese companies are adopting this model with relative ease, but too many American businesses cling to a competitive model that prizes short-term advantage – deals that squeeze suppliers or place unreasonable burdens on carriers, he notes.

"It scares me when I hear companies still perceive collaboration as unnecessary," Barratt says. "I don't think they will be around in 10 years."

Nor will they be viable if they fail to prepare for the challenges of the human side of globalization.

In his undergraduate and graduate global logistics classes, Barratt tells students they will spend much of the semester talking about cultures. Most of his students are dumbfounded.

"Half the problem," he says, "is that we don't even know culture is a business issue."

At the beginning of his class, Barratt typically asks how many students speak more than three languages, and how many have traveled to more than 10 countries. Few hands rise, and those that do often belong to international students.

To illustrate his point about cultural awareness, Barratt draws upon an anecdote from his own experiences. On a recent trip to Bahrain, he witnessed a business encounter involving an American, an Australian, and a Bahraini. The American was informal and talked assertively about business deals. The Bahraini, Barratt recalls, was clearly uncomfortable with the American's casual manners and the hard-driving nature of his business talk. He was more at ease with the Australian, who adopted a formal approach and mixed business talk with conversation about family.

"Students need to grasp the cultural differences that exist throughout the world," Barratt explains. "If you understand what happens in these countries, then you can do business with them."

With that in mind, Barratt urges his students to take internships in Hong Kong, to travel the world between semesters, or to volunteer with a non-governmental organization in Africa and study how aid is distributed.

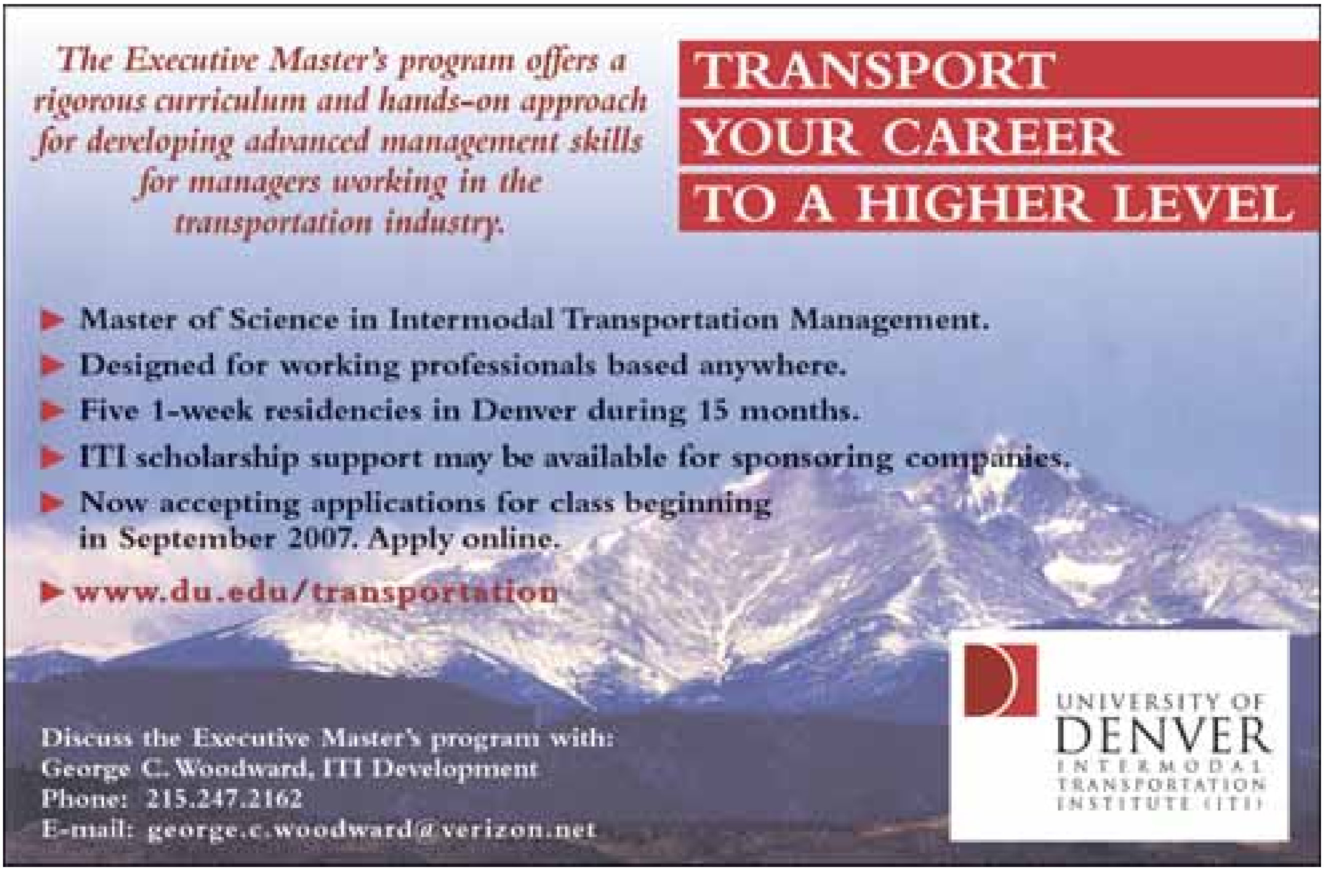
Many students catch his contagious curiosity, but others hesitate to leave their comfort zones. Too many remain mired in the assumption that people everywhere want to do business with American companies, that the American tradition of innovation will secure U.S. companies a permanent advantage, he says.

As Barratt sees it, that's a prescription for obsolescence, a mindset that invites stagnation. "The rest of the world," he says, "is not sitting around waiting for America to lead the way." ■


PROJECT EAGLE
QUESTION:
Why Study Supply Chain Management at Columbus State?
a) It's affordable - only $79 cr/hr Ohio residents
b) It's convenient - all courses online
c) It's courses are taught by logistics professionals
d) All of the above
ANSWER: d)All of the Above
Columbus State Community College offers certificates for supply chain management professionals. Each certificate offers an in-depth review of the subject and is taught by practitioners with current and relevant knowledge of the field. Each certificate can be completed in a year's time through Columbus State's online campus.
Certificates are available in:
Global Trade * Purchasing * Supply Chain Management
Contact: Lee Blyth
lblyth@cscc.edu
COLUMBUS STATE
Community College
View the curriculum:
http://www.cscc.edu/Programs/descriptions/supply.htm


JobsInLogistics.com
HIRE QUALIFIED CANDIDATES
Logistics ■ Distribution ■ Transportation
Supply Chain ■ Materials ■ Management
3PL ■ Manufacturing ■ Warehousing
Engineering ■ Freight Forwarding
GET DETAILS NOW!
www.jobsinlogistics.com
The #1 Job Board In Logistics.


SNELLING™
TRANSPORTATION GROUP
JON FRICKE
TRANSPORTATION/LOGISTICS RECRUITER
HIGH ROAD PARTNERS, INC.
Leading the transportation, logistics, distribution and supply chain vertical by identifying, recruiting and placing superior talent.
PO Box 1627, Bentonville, AR 72712 • 479.271.0505 Ext. 113
www.snellingtrans.com • jfricke@snellingtrans.com


The Executive Master's program offers a rigorous curriculum and hands-on approach for developing advanced management skills for managers working in the transportation industry.
TRANSPORT
YOUR CAREER
TO A HIGHER LEVEL
Master of Science in Intermodal Transportation Management.
Designed for working professionals based anywhere.
Five 1-week residencies in Denver during 15 months.
ITI scholarship support may be available for sponsoring companies.
Now accepting applications for class beginning in September 2007. Apply online.
www.du.edu/transportation
Discuss the Executive Master's program with:
George C. Woodward, ITI Development
Phone: 215.247.2162
E-mail: george.c.woodward@verizon.net
UNIVERSITY OF DENVER
INTERMODAL TRANSPORTATION INSTITUTE (ITI)

L.I.T. TOOLKIT

by Merrill Douglas

Box Ho! RFID Replaces Telescopes

Tired of playing hide and seek with its containers, CIMC finds a new RFID system to help locate product in its yards.

A nearly endless variety of products moves around the globe in shipping containers. For China International Marine Containers Group (CIMC), though, the container itself is the product. And just like any other product, the shipper needs to keep track of its location.

The world's largest manufacturer of shipping containers, headquartered in Shenzhen, Guangdong, China, CIMC moves its product out of more than 20 manufacturing plants and 40 container storage yards across China. It delivers to major shipping and leasing companies in Asia, Europe, and North America.

Although each container is made to order, the boxes look an awful lot alike. And in a yard that relies on workers to manually record ID numbers from the sides of containers, then spot and retrieve the right containers as needed, similarity breeds inefficiency.

In the typical CIMC facility, workers receive a container at the storage yard gate, record its arrival on a shipping list, direct it to a quality checking zone and, if it passes inspection, assign it to a forklift driver who takes it to a storage zone. The driver writes down the container ID and location, and yard staff enter that data in CIMC's information system. When it is time to retrieve the container for delivery to a customer, a driver hunts for the box in the location noted on the pickup list.

SCOPING THE YARD

Workers use telescopes to locate containers in the yard. But that method doesn't always work well.

"The containers are so packed in, even a telescope is sometimes not able to make out the container ID," says Shouquin Zhou, director of CIMC Smart and Secure Container Group.

The manual process presents other challenges. When a worker writes down a container ID, for example, it might take one or more days for that data to be entered into the computer system. Or, a worker writes a number incorrectly, sending a driver to the wrong storage location. And, the extra time needed to hunt for misplaced containers while all the other work of

CONTINUED FROM PAGE 99

To improve yard visibility, CIMC implemented a passive RFID tracking system from Laudis Systems. Benefits include less time spent searching for containers and performing yard checks, improved shipping accuracy, and fewer lost containers.

the yard continues can translate into higher costs. "Sometimes the yard has to rent extra forklifts," Zhou notes.

Further problems arise because supervisors and employees use two-way radios to communicate across storage yards. "Misunderstandings occur because voices don't always come across clearly," Zhou says. "And workers have to rely on memory to complete assignments correctly."

Not surprisingly, CIMC executives wanted to implement technology that would capture information about container movements in real time, eliminate paper, regulate daily workflow, and improve the ability to plan work.

CIMC has achieved those goals at two of its facilities, and hopes to implement similar changes at the others over the next three years. The improvements come thanks to a yard management system using passive RFID tags that CIMC developed with Laudis Systems, Edison, N.J.

Founded four years ago, Laudis Systems provides RFID-based technology for tracking assets through the supply chain.

"The system works for high-ticket, high-volume products that are susceptible to being misplaced or lost," says Laudis CEO Frank Ritota.

In the United States, PPG Industries uses the Laudis *Sequor* system to locate materials and products in its Tipton, Pa., auto glass plant. Laudis is also developing a system for a New Jersey computer recycling and asset management company.

COME TOGETHER

For the container yard application, the two companies collaborated to adapt Laudis' system to CIMC's requirements; CIMC designed the RFID tags. CIMC chose to work with Laudis in part because it was impressed by the vendor's RFID experience and three-dimensional location capabilities.

Laudis' software provides a 3D graphical view of a company's assets. In the PPG plant, for example, four pallets of product might be stacked one on top of another.

"The system can zoom down into the third pallet from the top and identify its contents," Ritota says. "It also can identify the height of the pallet stack through RFID readers and computers installed on the material handling equipment used to put away and retrieve product."

At first, CIMC considered using an active RFID tag, which is powered continuously by an internal battery. Instead, Laudis helped it design a ruggedized passive tag, which powers up only when it receives a signal from the reader. "The passive tag costs $5; an active tag costs $50," Ritota says.

A flexible plastic housing protects the tag. "The tag can be applied to a container, then forgotten," Ritota says. "It was designed to withstand the rigors of shipping."

One factor contributing to the implementation's success is the use of passive RFID tags on metal containers. "Metal can definitely wreak havoc by creating interference challenges for the wireless RFID technology," Ritota says. Strategic use of insulating materials solves this problem, he adds.

Along with the forklift readers, which scan the tags as containers are put away and retrieved, the system uses readers at the yard and factory gates to scan IDs as containers pass in and out.

CIMC started using the system at

one storage yard in September last year, and at a second this April. Under the new process, as a container passes out of the factory gate, an RFID tag is attached and a reader records its ID. At the yard gate, a second scan notes that the container has arrived for storage.

Using a CDMA wireless network, the reader transmits the ID to a system on a forklift truck, which then displays instructions to the driver. When the driver places the container, the system records its location.

Forklift drivers don't have to enter data as they work. "We've kept them out of the loop, eliminating human error," Ritota says. Drivers could make a mistake, though, by failing to follow instructions displayed on the screen. If that happens, the system sends an alert.

"The system tells drivers what to do and where to go," Ritota notes. "If a container is put in the wrong place, an alarm notifies the driver."

Because the system records the container's location, the driver knows exactly where to look when it's time to retrieve it. As the container leaves the yard, the reader there scans it for a final time to note its departure. Then the tag is removed for reuse.

The new system provides more accurate and current information than the previous process. By eliminating manual procedures, it allows CIMC to check containers in and out in less time, saves time spent searching for misplaced containers, and reduces labor.

CIMC expects to see a return on its investment within one year. To date, the system has produced these results:

- Eliminated four searches for misplaced containers per month.
- Eliminated the loss of about eight containers in transit per year.
- Reduced by 50 percent the need to lease forklifts for the yard during peak demand times.
- Improved shipping accuracy by nearly 100 percent.
- Eliminated one hour's worth of yard checks per day.

Over the next three years, CIMC plans to install the system in about 40 of its yards, as well as in seaport facilities. "CIMC's goal is to make RFID tags an essential part of the container to increase global supply chain management efficiency and reduce asset management costs," Zhou says.

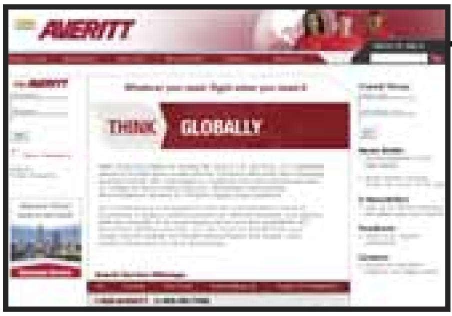
Laudis is pursuing other contracts in China, including one aimed at tracking barge traffic as it travels from the interior to the coast. The company already has a contract to implement a system at one port. "If we do well with it," Ritota says, "we have an opportunity to track barge traffic down the Yangtze River, all the way to Shanghai." ■

WEB_CITE CITY

www.inboundlogistics.com/web_cite

IN THIS SECTION:
3PLs • Air/Expedited

3PLs



Averitt Logistics • www.averittexpress.com

Averitt's years of experience with Fortune 500 companies across diverse industries enable its top-notch logistics professionals to provide built-to-fit solutions for effective sourcing, order fulfillment, and transportation services. A balanced equation of technology, facilities, equipment, and personnel is how Averitt determines the best options for you to gain time and cost efficiencies in your supply chain. Learn more about Averitt's capabilities in warehousing services, portside distribution, dedicated fleet management, transportation network design, and transportation management by visiting this web site.

Peninsular Warehouse • www.pentrans.com

Solving Your Logistics Challenges. Peninsular Warehouse and Penser Transportation believe in the "Correct Approach"–developing the right solution to the unique logistics challenge you face. From our headquarters in Jacksonville, Fla., to our terminals in Miami and Orlando, we reach a service area enabling us to serve most of the Southeast and much of the Caribbean. Our full range of logistics services includes warehousing, inventory management, pool distribution, import/export, and more.

AIR/EXPEDITED

BAX Global • www.baxglobal.com

The integration of Schenker AG and BAX Global has created a new global logistics and transportation solutions powerhouse. Enviable rankings in strategic industry mobility and logistics service sectors include: No. 1 in European land transport, No. 2 in worldwide air freight, No. 3 in worldwide ocean freight, and No. 3 in integrated heavyweight freight in North America.

Lynden • www.lynden.com

Over land, on the water, in the air–or in any combination–Lynden has been helping customers solve transportation problems for almost a century. Operating in such challenging areas as Alaska, Western Canada, and Russia, as well as other areas around the globe, Lynden has built a reputation of superior service to diverse industries.

IN THIS SECTION:
Auto ID • Chemical Logistics

AUTO ID

SATO America Inc. • www.satoamerica.com

SATO America Inc. is a pioneer in the Automatic Identification and Data Collection industry, and the inventor of the world's first electronic thermal transfer bar-code printer. It revolutionized the bar-coding industry by introducing the Data Collection System and Labeling concept – a total bar-code and labeling solution providing high-quality bar-code printers, scanners/handheld terminals, label design software, and consumables.

CHEMICAL LOGISTICS

BDP International • www.bdpinternational.com

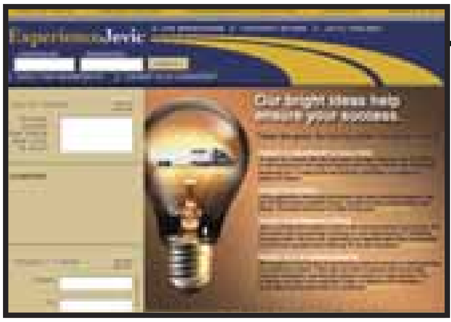
Some of the world's most respected companies rely on BDP International to handle their demanding air, ocean, and ground shipments, and logistics challenges. Browse BDP's web site to learn how it has helped companies reduce costs, improve efficiencies, and streamline processes using its global network of operations spanning 120 countries, including more than 20 offices in the United States. BDP's broad spectrum of services and customer support make it a trusted company for a full range of integrated solutions.

BNSF Logistics • www.bnsflogistics.com

Find out more about BNSF's four service specializations – modal solutions, transportation execution, supply chain services, and consulting–on its web site. The site includes an eTools link, which allows shippers to request a quote, view load status, or view load document images. Companies can also request additional information through the site's contact page. BNSF offers an array of logistics services, from single shipments to complete network analysis and redesign.

Dupré Transport LLC • www.dupretransport.com

Dupré is a $100-million, asset-based 3PL based in the Gulf South. Our logistics solutions are designed for your specific needs. You save time and money, and experience world-class execution. We work to understand your business and measure how our system meets your expectations. With specific emphasis in the chemical, consumer products, and beverage industries, our unique solutions provide expertise in the following areas: dedicated fleets, transportation management/brokerage, materials handling, and reverse logistics. Experience Dupré. We meet your needs.



Jevic Transportation • www.jevic.com

Jevic Transportation offers a wide range of services, and so does its web site. Shippers can access a variety of secure applications and services through Jevic's online ToolBox, or quickly calculate transit times on its home page. With Jevic's real-time tracing feature, site visitors simply enter the provided account code and receive detailed tracking information. Users can also access up to two years of shipment data through the freight cost report and other customized reports. A real-time rate engine, PreSys transaction notification, and the Jevic Desktop Tracer are among the site's other features.

LeSaint Logistics • www.lesaint.com

LeSaint Logistics' overall objective is to provide customers with the opportunity to focus on their core business by offering the full range of third-party logistics services: contract warehousing, public warehousing, hazardous materials management, common carriage, dedicated transportation, transportation management, information management, customer call centers, inventory management, and fulfillment. We provide value-added fulfillment services such as pick/pack and ship, repack, labeling, subassembly, kitting, and returns management, to name a few. We're flexible to our customers' requirements, providing them with the option of selecting from our menu of services, and choosing the capabilities that meet their specific needs.

LOGISCO Transportation Services (LTS) • www.teamlogisco.com

LOGISCO has been providing logistics services to the chemical and food and beverage industries for 30 years. Three decades of service has helped the company develop the necessary skills to provide exceptional solutions and added value to a wide range of businesses. LOGISCO's high level of knowledge, responsibility, performance, and security make it a leading service provider to the chemical industry.

Maersk Logistics • www.maersk.com

At Maersk Logistics, we combine our international transport and logistics experience, innovative information technology, worldwide reach and strong local operations to help you improve the effectiveness and efficiency of your supply chain. To cater to your unique needs, we offer decades of industry leading supply chain experience in the retail, wholesale, apparel, electronics, refrigerated goods, consumer healthcare, and furniture industries. Our worldwide infrastructure includes over 20.6 million sq. feet of strategically located warehousing and consolidation space in Asia and Europe. Our acclaimed visibility solutions, offering end-to-end supply chain visibility, blended with our experience, bring you a truly effective product.

IN THIS SECTION:

Chemical Logistics

Miller Transporters • www.millert.com

With a commitment to quality, and dedication to satisfying customer needs, Miller Transporters has moved to the forefront of the bulk transportation industry. Its customers in the chemical and process industries can use its web site to request a rate, place an order, and check shipment status – all with a click of the mouse.

Odyssey Logistics & Technology • www.odysseylogistics.com

Odyssey Logistics & Technology combines deeply skilled industry professionals with a leading technology solution to provide multimodal logistics management services to the chemical industry and other process manufacturers. Odyssey Logistics & Technology enables these companies to outsource any part of the management and transportation of their raw materials and finished goods. They achieve savings through reduced transportation and infrastructure costs, measurable customer service and process improvements, and improved data quality and management.

Old Dominion • www.odfl.com

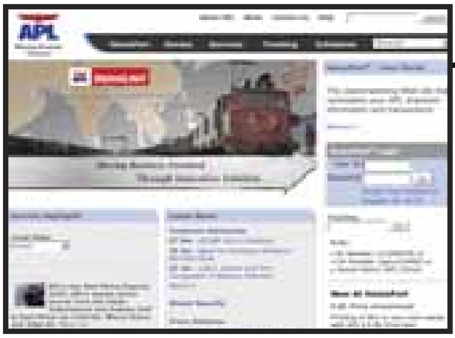
Old Dominion is a leading national less-than-truckload carrier providing direct service to 47 states, including 100-percent full-state coverage to 38 states. Old Dominion offers a variety of online capabilities, such as free rate estimates for domestic shipping, speed service, and international shipping. Site visitors can also track shipments and calculate transit times through the site's easy-to-use interface.

Penske Logistics • www.penskelogistics.com

Whether you need an LLP partner to oversee all logistics operations or you just want to optimize your warehouse design, Penske Logistics offers a full spectrum of transportation, warehousing, inbound/outbound, supply chain management, and freight forwarding solutions. Its collaborative "best teams" approach enables Penske to be more than a logistics service provider. Penske provides practical success stories online through case studies.

IN THIS SECTION:
Expedited Ocean/Land – Recruiting

EXPEDITED OCEAN/LAND

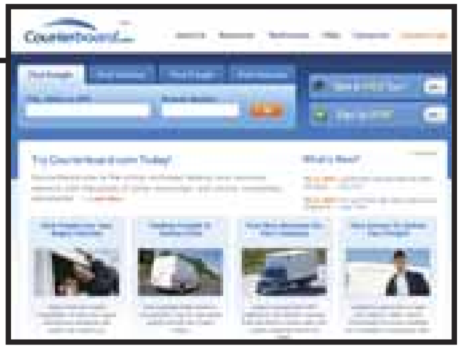


APL • www.apl.com

APL's containership fleet is among the most modern and largest in the world. Together with its alliance partners, APL is able to provide worldwide coverage across all major trade lanes. And at a time when control can make the difference to how smoothly cargo flows through the supply chain, customers benefit because APL operates its own marine terminals at eight strategic points around the world, including three on the U.S. West Coast. In addition, APL has priority access in major ports in Singapore and China. Details are available on the APL site.

FREIGHT MATCHING

Courierboard.com • www.courierboard.com



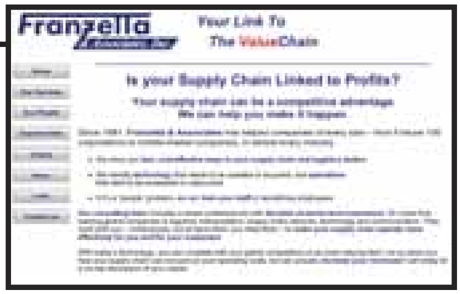
Courierboard.com is the company-to-company online exchange designed specifically for the messenger and courier industry. Looking for a car, van, sprinter, or small truck (up to 24 foot)? Courierboard.com is the place to find a courier company, anywhere in the nation, to move your freight. Posting freight is always free on Courierboard.com. Register for our free Premium Account trial membership and enjoy all features, including unlimited freight postings, vehicle searches, and e-mail alerts when available vehicles are posted in your area. Find a courier company meeting your delivery requirements on www.courierboard.com.

RECRUITING

The Everest Group • www.mrglendora.com

For 15 years, The Everest Group, an affiliate of Management Recruiters of Glendora, has operated as a full-service executive recruiting firm working with both domestic and international clients. We recruit executives for all positions within the supply chain and place an emphasis on: transportation–all modes; 3PLs–asset and non-asset based; supply chain software solutions; pharmaceutical and medical device–regulatory affairs and quality assurance; retail; consumer products; and the food industry. Visit www.mrglendora.com, call (626) 963-4503, or e-mail Matt Albanese at malbanese@mrglendora.com.

Franzetta & Associates Inc. • www.franzetta.com



Franzetta & Associates, Inc. is an all-encompassing supply chain consulting firm. One of the services we provide for our clients is specialty focused recruiting. Through the years, our impressive list of clients includes Fortune Top 10 as well as mid-market and small firms. We know the business and understand your needs. We have access to many top-notch logisticians, and will be able to more than accommodate your requirements. We nurture close relationships with both our clients and recruits to ensure success for both. E-mail: resumes@franzetta.com or call (814) 466-9010.

IN THIS SECTION:

RFID – Warehousing

RFID

SATO America Inc. • www.satoamerica.com

SATO America Inc. is a pioneer in the Automatic Identification and Data Collection industry, and the inventor of the world's first electronic thermal transfer bar-code printer. It revolutionized the bar-coding industry by introducing the Data Collection System and Labeling concept–a total bar-code and labeling solution providing high-quality bar-code printers, scanners/handheld terminals, label design software, and consumables.

TRANSPORTATION MANAGEMENT

Peninsular Warehouse • www.pentrans.com

Solving Your Logistics Challenges. Peninsular Warehouse and Penser Transportation believe in the "Correct Approach"–developing the right solution to the unique logistics challenge you face. From our headquarters in Jacksonville, Fla., to our terminals in Miami and Orlando, we reach a service area enabling us to serve most of the Southeast and much of the Caribbean. Our full range of logistics services includes warehousing, inventory management, pool distribution, import/export, and more.

TRUCKING – LTL

Peninsular Warehouse • www.pentrans.com

Solving Your Logistics Challenges. Peninsular Warehouse and Penser Transportation believe in the "Correct Approach"–developing the right solution to the unique logistics challenge you face. From our headquarters in Jacksonville, Fla., to our terminals in Miami and Orlando, we reach a service area enabling us to serve most of the Southeast and much of the Caribbean. Our full range of logistics services includes warehousing, inventory management, pool distribution, import/export, and more.

WAREHOUSING

Peninsular Warehouse • www.pentrans.com

Solving Your Logistics Challenges. Peninsular Warehouse and Penser Transportation believe in the "Correct Approach"–developing the right solution to the unique logistics challenge you face. From our headquarters in Jacksonville, Fla., to our terminals in Miami and Orlando, we reach a service area enabling us to serve most of the Southeast and much of the Caribbean. Our full range of logistics services includes warehousing, inventory management, pool distribution, import/export, and more.

NEWSERVICES

YOUR BUSINESS LOGISTICS RESOURCE

Serco Company

WHAT'S NEW: New dock leveler design.

THE VALUE: Serco's SafeTFrame design improves long-term structural integrity by adding more steel and structural strength to the dock leveler's rear frame, resulting in fewer service calls. The structural design also ensures an even transition from the warehouse floor to the dock leveler. SafeTFrame is standard on all Kelley and Serco brand dock leveler models up to 50,000 pounds capacity.

www.sercocompany.com
800-933-4834

Network Global Logistics

WHAT'S NEW: A merger between Network Courier and Commodity Logistics.

THE VALUE: Same-day shipping company Network Courier has merged with 3PL Commodity Logistics Inc. (CLI) to form a new organization, Network Global Logistics. The merger combines Network Courier's core strengths in same-day/next-flight-out services with CLI's integrated warehousing and logistics services. Network Global Logistics provides complete supply chain solutions – from shipping raw materials to e-commerce fulfillment.

www.nglog.com 888-285-7447

University of Michigan

WHAT'S NEW: A master's degree in supply chain management.

THE VALUE: The Stephen M. Ross School of Business at the University of Michigan will offer a new Master of Supply Chain Management program beginning January 2008. Admission deadline for the inaugural class is Aug. 1, 2007. The one-year program includes courses in supply chain management, logistics, strategic sourcing, and IT. Electives in operations management are also available.

www.bus.umich.edu/mscm
734-763-5796

Crowley Maritime Corporation

WHAT'S NEW: A third sailing launched in the U.S. Gulf.

THE VALUE: Crowley now offers a third, weekly, fixed-day sailing between Gulfport, Miss., and the Central America northern zone countries of Guatemala, Honduras, Nicaragua, and El Salvador. The new ship can accommodate 45-foot trailers, 20- and 40-foot garment-on-hanger containers, and 20-foot standard and 40-foot high-cube refrigerated containers. Crowley's vessels now leave Gulfport on Tuesday, Friday, and Saturday.

www.crowley.com 228-865-4340

A. Duie Pyle

WHAT'S NEW: A Rhode Island terminal.

THE VALUE: Johnston, R.I., is home to A. Duie Pyle's new 60-door distribution facility. The facility, which is expandable to 110 doors, is expected to be completed by the fourth quarter of 2007. Construction on the terminal began early this spring.

www.pyleco.com 610-696-5800

FedEx Corporation

WHAT'S NEW: An agreement designed to boost exports and simplify international trade for U.S. businesses.

THE VALUE: FedEx and the Commerce Department's U.S. Commercial Service have entered a five-year agreement to boost U.S. exports, specifically among small and medium-sized businesses. The two organizations use free resources such as market research, trade leads, and export seminars to help businesses develop successful export and supply chain management strategies. The Commercial Service has trade specialists in more than 100 U.S. cities and 80 countries, while FedEx provides access to more than 220 countries and territories worldwide.

www.export.gov/cspartners/fedex_partner.asp
800-USA-TRADE

Kuehne + Nagel

WHAT'S NEW: An office in Japan.

THE VALUE: Kuehne + Nagel has opened a new office in Yokohama, Japan. The facility offers ocean

To learn more, contact these companies directly. Remember to mention this issue date and page to get the right information.

freight import and export services, including in-house customs clearance.

www.kuehne-nagel.com ✆ +81 (45) 662-7421

APL, CMA CGM, and Hapag-Lloyd

WHAT'S NEW: Ocean container carriers coming from Sri Lanka now stop in Savannah, Ga.

THE VALUE: APL, CMA CGM, and Hapag-Lloyd extended their Indian Subcontinent Service down the U.S. East Coast. The three carriers run seven vessels – ranging in capacity from 3,800 to 4,500 TEUs – in the service.

www.apl.com ✆ 800-999-7733

Paradigm Logistics

WHAT'S NEW: The launch of Paradigm Canada.

THE VALUE: Paradigm Logistics, a non-asset-based logistics provider serving the food products industry throughout North America, has opened Paradigm Transport Group Canada Ltd. The company's offices are located in the Toronto business district.

www.paradigmlog.com ✆ 866-941-7400

Warehousing Education and Research Council (WERC)

WHAT'S NEW: A program designed to help companies develop high-potential young employees in warehouse and distribution management.

THE VALUE: The Warehousing Education and Research Council has established a new program called *Mentoring Membership*, which allows companies and managers to accelerate learning and development of young workers through exposure to WERC expertise. Resources include new information on trends, industry-leading events, and WERC's extensive library.

www.werc.org ✆ 630-990-0001

Liquid Transport Corp. Intermodal

WHAT'S NEW: Intermodal operations expand in Charleston, S.C.

THE VALUE: LTC Intermodal has expanded local drayage and linehaul operations. It now offers in-house cleaning, and complete one-stop depot services, as well as 2.5- and 5-year tank inspections, repair work, and competitive loaded-storage rates.

www.liquidtransport.com ✆ 317-841-4200

Agility

WHAT'S NEW: A San Diego office to serve the United States and Mexico.

THE VALUE: The new facility is located a few miles from the U.S./Mexico border and manages customer freight

ADT, Salpomec, UPM Raflatac

WHAT'S NEW: The opening of the first Apparel RFID Solution Center.

THE VALUE: Based in Lahti, Finland, this new facility is a joint venture that brings together all the elements of an RFID-enabled apparel supply chain – source tagging, automatic goods reception, an RFID-based sorting system, replenishment and store inventory management, and point-of-sale analytics and security – to demonstrate a complete end-to-end solution. The Apparel RFID Center opened to garment manufacturers, brand owners, retailers, logistics providers, and other visitors at the beginning of May. Visits can be arranged by contacting any of the three partners.

www.upmraflatac.com

✆ +358 40 740 9588

CONTINUED FROM PAGE 109

Jungheinrich Lift Truck Corp.

WHAT'S NEW: An energy-efficient 3-wheel high-rack stacker.

THE VALUE: Jungheinrich introduces a new version of its EKX 513-515 electric man-up turret truck, which allows for more hours of work output per battery charge. The new truck also includes an electrically adjustable operator's console, which can be used to lift and lower loads depending on need. The company can configure the truck's mast in two or three different stages for various lift heights, and provide the potential to handle a variety of pallets.

www.jungheinrich-us.com
804-737-7400

needs in the San Diego area and between the two countries. The new branch contains warehouse facilities and operational and sales staff, and handles air, ocean, and road freight forwarding and customs clearance.

www.agilitylogistics.com 619-661-6456

BNSF Railway

WHAT'S NEW: Enhancements to the proposed Southern California International Gateway (SCIG).

THE VALUE: BNSF Railway has made new improvements to the SCIG program. All BNSF trucks servicing SCIG will now be 2007 models or newer upon facility opening. These trucks will also be limited to traveling on specified non-residential truck routes, which will be monitored and enforced by GPS. BNSF will also plant an "urban forest" at the site, and will fund construction of a sound wall to diminish freeway noise.

www.bnsf.com 800-795-2673

Caterpillar Logistics Services

WHAT'S NEW: A parts distribution center to open in Moscow.

THE VALUE: Cat Logistics will open its first parts distribution center in the Commonwealth of Independent States later this year. The 110,300-square-foot logistics center will support five Caterpillar dealers in the region. The center will stock more than 23,000 Caterpillar parts and provide an integrated logistics solution including inbound, outbound, claims, and return services.

logistics.cat.com 630-743-4101

Dean Warehouse

WHAT'S NEW: A division to provide logistics solutions.

THE VALUE: Dean Warehouse, one of New England's largest warehousing, logistics, and transportation companies, has launched a new division, Dean SupplyChain Management (DSM). The division creates customized solutions for any logistics and transportation need, coordinating and managing freight both domestically and internationally.

www.deanwarehouse.com 401-334-4677

Nippon Yusen Kaiska (NYK Line)

WHAT'S NEW: A 200,000 deadweight ton bulk carrier.

THE VALUE: NYK Line will put its new vessel, *Ocean Prometheus*, into service under an 18-year contract with Korea East-West Power Company for the transportation of coal from Australia to Dangjin, South Korea. *Prometheus* is the largest coal carrier in the world to serve under a long-term contract.

www.nykline.com 201-330-3000

A-B-C Packaging Machine Corporation

WHAT'S NEW: A pick and place packer/unpacker for cans, cartons, glass, or plastic containers.

THE VALUE: A-B-C's Model 101 Pick & Place Packer/Unpacker offers precision control and improved product handling. The machine allows packagers to thinwall containers and improve bottle stability for lightweight plastic containers. The Unpacker offers

To learn more, contact these companies directly. Remember to mention this issue date and page to get the right information.

secure handling for heavy, industrial-sized containers, as well as glass. Other features include broad speed capability, and a full-color touchscreen panel that allows for revising production parameters, running self-diagnostic programs, or executing a changeover.

www.abcpackaging.com 727-937-5144

Raymond Corporation

WHAT'S NEW: A visual assistance system for lift truck operators storing and retrieving pallets at greater lift heights.

THE VALUE: Raymond Corporation's color imaging Vantage Point System speeds and simplifies pallet tag identification when working with high racking, thus increasing productivity and accuracy in warehouse operations. The Vantage Point System provides a 52-degree view in all directions, and is an available option on new or retrofitted Raymond 700 Series Reach-Fork and Deep-Reach trucks, as well as tall EASi Reach-Fork and Deep-Reach trucks.

www.raymondcorp.com 800-235-7200

Pelican Products

WHAT'S NEW: A 17-hour, off-road LED work light.

THE VALUE: Keep your fleet ready for any emergency with Pelican's 9450 Remote Area Lighting System (RALS), a rapid-deploying, emergency-area light built to go off-road where vehicles can't. The RALS features a multi-angle telescoping light tower that can reach up to eight feet. It assembles in minutes and allows for nine hours of peak light.

www.pelican.com
800-473-5422

Pacer Distribution Services Inc.

WHAT'S NEW: A Los Angeles transload and distribution warehouse.

THE VALUE: Pacer Distribution Services Inc. has expanded capacity by opening a new 52-door transload center in Carson, Calif. Located on 5.4 acres adjacent to the ports of Los Angeles and Long Beach, the facility supports increased demand for transloading services for international freight shipments moving from the West Coast to inland points. While primarily dedicated to transloading services, the new facility also provides additional capacity to Pacer's previously existing warehouse operations that already occupy more than 800,000 square feet. These facilities support transload, cross-dock, and customized freight distribution services in the Los Angeles area.

www.pacerdistribution.com
323-568-8055

Averitt Express

WHAT'S NEW: An expansion into West Palm Beach, Fla.

THE VALUE: Averitt Express has expanded its presence in the West Palm Beach area by opening a new service center. The 7,000-square-foot facility offers 26 bay doors dedicated to Averitt's operations, resulting in improved delivery times for shippers in the area.

www.averittexpress.com
1-800-AVERITT

TECHUPDATE

THE LATEST | IN LOGISTICS TECHNOLOGY

Zebra Technologies

WHAT'S NEW: A mobile and wireless on-demand bar-code and label printer.

THE VALUE: The Zebra MZ series provides on-demand mobile printing housed within a compact, economical, easy-to-use unit. The lightweight mobile printers fit comfortably in the palm of the hand, and offer a wide range of connectivity options from IrDA and USB 2.0 connectivity to optional Bluetooth and 802.11b/g. The MZ series also features Zebra's advanced networking support and security protocols.

www.zebra.com
✆ 847-423-0442

partnerships

Savi Technology and Unipart Logistics

WHAT'S NEW: A partnership in Europe.

THE VALUE: The partnership will market Savi's RFID-based supply chain solutions to European businesses. Under the agreement, Unipart is able to sell and implement Savi's products, services, and solutions to its commercial customers in Europe. In turn, Unipart Logistics will provide supply chain expertise to enhance the value of Savi's RFID solutions.

www.savi.com ✆ 800-428-0554
www.unipartlogistics.co.uk ✆ 01788 514000

Trans-Soft and CargoWise edi

WHAT'S NEW: A strategic alliance.

THE VALUE: The strategic alliance combines the sales and development strategies of these two freight forwarding software companies. The partnership delivers the next generation of software applications for global freight forwarding and logistics. Trans-Soft is also expanding services at its managed data center in Phoenix, Ariz., which will become the preferred hosting hub for CargoWise edi users.

www.cargowise.com ✆ 847-364-5600
www.trans-soft.net ✆ 866-508-0800

Tyco Electronics and OATSystems

WHAT'S NEW: A partnership to provide RFID solutions.

THE VALUE: The strategic alliance will help companies in a variety of industries – including aerospace and defense, and transportation – efficiently implement RFID solutions. Tyco Electronics provides RFID labels, readers, antennas, and integration and support, while OATSystems software covers the RFID process – from tagging to data capture and analysis.

www.tycoelectronics.com ✆ 800-522-6752
www.oatsystems.com ✆ 781-907-6100

rfid/wireless

PeopleNet

WHAT'S NEW: A handheld platform that integrates PeopleNet's g3 system with ruggedized handhelds.

THE VALUE: PeopleNet's new handheld platform creates a hybrid of onboard and portable technologies, extending capabilities from behind the wheel to wherever a driver actually works – at customer facilities and around the truck. Using the handheld platform, drivers can quickly fill out essential business and regulatory forms, document deliveries, and photograph and document damaged merchandise with the built-in digital camera. All handheld data can be electronically transmitted via PeopleNet's g3 mobile communications system.

www.peoplenetonline.com ✆ 888-346-3486

Mikoh

WHAT'S NEW: The *Smart&Secure* retail RFID tag.

THE VALUE: Mikoh's new tag balances the need for RFID in the retail environment with the need for customer privacy. Retailers can decrease the read distance of the *Smart&Secure* tag after an item is purchased, and reactivate the read distance if the product is returned. This allows products to be reintroduced into inventory and tracked in the same way as an unsold item, while alleviating shopper fears of privacy invasion.

www.mikoh.com ✆ 571-258-0530

To learn more, contact these companies directly. Remember to mention this issue date and page to get the right information.

PINC Solutions

WHAT'S NEW: *Yard Hound*, an RFID-based real-time yard visibility application suite.

THE VALUE: Combining advanced sensor and passive RFID technologies, *Yard Hound* offers yard managers automatic yard checks, alerts, and documentation for all yard activities, as well as numerous reports used to increase operational efficiency. Optional components include: *Yard Hound Director*, which communicates assignments to drivers; *Reefer Monitor,* which observes temperature and fuel levels in refrigerated units; and *PINC Gate*, which expedites check-in and check-out processes.

www.pincsolutions.com ✆ **510-845-4900**

web

Caterpillar Logistics Services

WHAT'S NEW: The launch of a newly designed web site.

THE VALUE: CatLogistics.com now offers improved navigation tools, valuable new business content, and upgraded maintenance capabilities. The redesigned site integrates Cat Logistics' capabilities with potential industry solutions and client benefits in a clear, easily navigated format.

www.catlogistics.com

International Warehouse Logistics Association (IWLA)

WHAT'S NEW: A redesigned Logistics Services Locator (LSL).

THE VALUE: IWLA has redesigned its 3PL search tool, LSL. The locator allows shippers to search IWLA member warehouse logistics providers by ZIP or postal code, company, and keyword. Upon finding an IWLA member facility using the search mechanism, shippers have the ability to send a request for information to the main contact at each member location. Listings include location, services, a company profile, and a link to the provider's web site. The tool also allows users to access overhead views of facilities, street names, and other pertinent facility information.

www.logisticsservicelocator.com

The Raymond Corporation

WHAT'S NEW: A re-designed web site.

THE VALUE: Equipped with educational resources and financial and planning tools, Raymond's new site helps materials handling professionals make informed purchasing decisions. Features on the site include: the Reach Truck Performance Calculator and Space Utilization Guide; pre-owned vehicle inventory listings; expert resources; and specifications, photos, and videos of Raymond lift trucks.

www.raymondcorp.com

Ultra Logistics

WHAT'S NEW: Online demo of Ultra's Private Carrier Network solution.

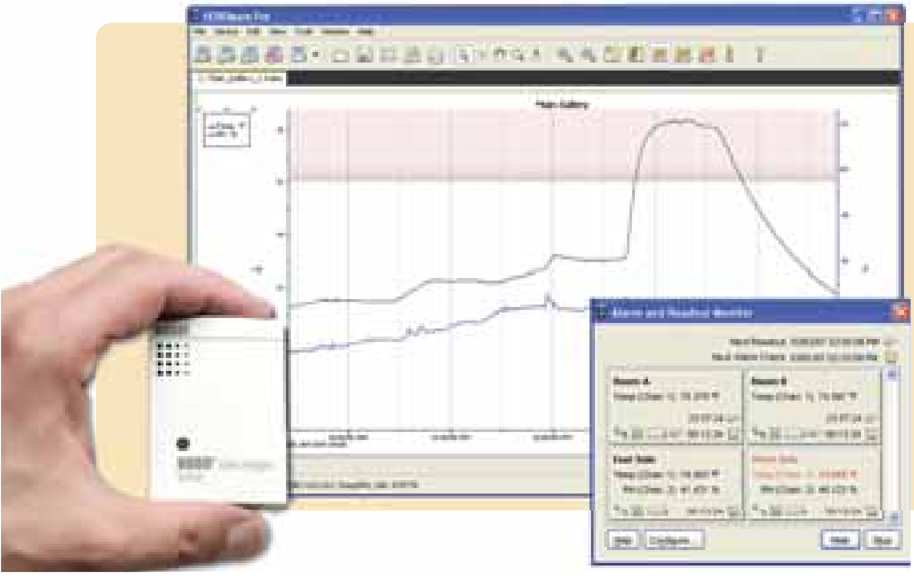
THE VALUE: Shippers interested in learning more about Private Carrier Network, a web-based, private network tendering tool, can now view an online demo at Ultra's web site. The demonstration explains the software's capabilities, and details how shippers can notify carriers of exception loads in real-time and award loads based on price; and how carriers can place bids on loads they want.

www.ultralogistics.com/privatecarriernetwork

TECHUPDATE

CONTINUED FROM PAGE 113

To learn more, contact these companies directly. Remember to mention this issue date and page to get the right information.



Onset Computer Corp.

WHAT'S NEW: The Alarm and Readout Tool, for use with Onset's temperature data loggers.

THE VALUE: The new tool, a plug-in software module for use with *HOBOware Pro* software, automatically notifies users via cell phone, text message, or e-mail when temperature, humidity, and other conditions exceed user-defined limits. It also enables data from networked HOBO data loggers to be automatically offloaded and stored on a centralized computer. This is particularly useful in applications where numerous locations are being monitored throughout a facility.

www.onsetcomp.com/hobo ✆ 800-564-4377

Nebraska Department Of Economic Development

WHAT'S NEW: The launch of a new economic development web site.

THE VALUE: The site provides easy access to information about economic development programs and services in Nebraska. New features include: scrolling photographs, simplified categories and links, greater accessibility to departmental programs and services, and readily updated information.

www.neded.org

software

National Private Truck Council (NPTC)

WHAT'S NEW: *Member Match*, a backhaul networking program for NPTC member companies.

THE VALUE: *MemberMatch* provides a free information exchange that lets NPTC members fill empty capacity in their own fleets with shipments from other fleet companies, or to utilize other private fleets to haul their company's shipments. The program is for fleet managers seeking strategic, long-term partnerships with peer private fleet operations.

www.nptc.com ✆ 703-683-1300

TradeCard

WHAT'S NEW: Upgrades to the global trade platform and visibility suite.

THE VALUE: The new enhancements add logistics tracking capabilities across TradeCard's global trade platform and visibility suite. This integration provides trading partners an in-depth view of their transactions, and enables unique control of product and money flow. Other updates include: enhanced adjustment capabilities, new options for early payment programs, improved invoice navigation, new inbound logistics tracking, and new shipment restructuring and ASN features.

www.tradecard.com ✆ 212-405-1800

SYSPRO

WHAT'S NEW: Upgrade to SYSPRO *Lot Traceability*.

THE VALUE: In addition to enabling manufacturers to trace goods from their source to current location while tracking expiration dates, SYSPRO now offers one-to-one tracking between component serials/lots and parent-item serials/lots. The upgraded solution also maintains a history of traceable items for accountability and customer service follow-ups, and keeps detailed inspections notes.

www.syspro.com ✆ 800-369-8649

Accellos

WHAT'S NEW: The release of Accellos *Enterprise 3PL Version 2.8*.

THE VALUE: This new release encompasses enhancements including an operational board that lets managers view labor requirements for a given facility or across multiple facilities; indirect time tracking; and voice-directed picking. It also features an improved user interface and menu-optimizing system navigation.

www.accellos.com ✆ 719-433-7000

Catalyst International

WHAT'S NEW: *CatalystCommand Labor Management*, which shows real-time performance, progress, and production information for multiple warehouses, yards, and other applications.

THE VALUE: This release includes Catalyst's new BestPath technology, which maps work paths in facilities, and offers real-time graphical displays and alerts to reveal performance bottlenecks and capacity.

www.catalystinternational.com
✆ 800-236-4600

TD TIRE DISTRIBUTION

877-719-0914
FAX: 877-719-0915
Order online at **www.tdtires.com**

SAVE UP TO $50 PER TIRE

1000s of Tires...IN STOCK NOW!

FEATURING **BENCHMARK** TIRES

STEER

11R22.5	$169.95
11R24.5	$179.95
295/75R22.5	$169.95
285/75R24.5	$179.95

DRIVE

11R22.5	$174.95
11R24.5	$186.95
295/75R22.5	$174.95
285/75R24.5	$184.95

TRAILER

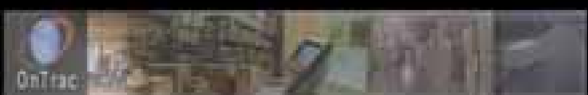
11R22.5	$155.95
11R24.5	$165.95
295/75R22.5	$155.95
285/75R24.5	$165.95

Terms are available on approved credit. These prices are for full container's. F.O.B. Southern california.
Delivery available.Tire test data is available upon request. F.E.T. And any applicable taxes are not included in above prices.

OnTrac

On Demand WMS

1 866 668 7229



Ideal for 3PLs & warehouses

fast implementation

www.affordablenetwork.net

WebFreightPro

Do You have the Technology to Compete?

- If you had the right freight and warehouse software tools in place, could you grow your business? *Your Profits?*
- Multi-modal, multi-station, worldwide, web and browser, e-mail alerting, easy to implement, customer accessible 24/7.
- Quoting to invoicing with integrated auto rating, document generation, imaging, solutions customizable to your business.

Contact us today to grow your business more profitably.
www.webfreightpro.com or 800-758-6065

Freight claim management on the Internet, Anytime, Anywhere.

myEZClaim.com
A TranSolutions Company
The Future of Web-based Claims Management

For a free demo, call
480-473-2453
or go to
www.myezclaim.com

TranSolutions, Inc.
22015 N. Calle Royale
Scottsdale, AZ 85255
sales@myezclaim.com
www.transolutionsinc.com

EZ-Claim software available for desktop and network applications

RESOURCE CENTER

06.07

INBOUND LOGISTICS WORKS FOR YOU!

For a specific response, contact these advertisers directly. Please tell them you saw their ad in *Inbound Logistics*.

For general questions about particular industry segments, use the card between pages 12-13 and pages 108-109.

For faster service, go online: inboundlogistics.com/rfp

3PLs

- **3PDelivery** pgs. 18–19
  Does the name 3PDelivery ring a bell? It should – its employees ring bells every day as part of the company's 3 million last-mile deliveries each year.
  www.3pdelivery.com 866-373-7874

- **Agility** Cover 3
  Agility's affiliated companies are now under one single, global identity. Let Agility help you meet all the challenges of global trade.
  www.agilitylogistics.com 714-513-3000

- **Averitt** pg. 9
  Customized, end-to-end solutions are the future of logistics. Let Averitt take you there.
  www.averittexpress.com 800-AVERITT

- **Landstar Global Logistics** pg. 15
  Landstar's unique network of third-party transportation and warehouse capacity owners delivers cost-effective solutions for your business.
  www.landstargloballogistics.com 904-390-1078

- **Lynden** pg. 11
  Lynden International offers services and solutions to help you master your part of the world.
  www.lynden.com 888-596-3361

- **Meridian IQ** pg. 5
  Meridian IQ helps you find opportunities in your global supply chain.
  www.meridianiq.com 877-232-1845

- **Ozburn-Hessey Logistics** Cover 4
  You'll know exactly where your shipments are when you have OH Logistics as your global supply chain management partner.
  www.ohlogistics.com 800-401-6400

- **Schenker/BAX Global** pg. 3
  Schenker and BAX's integration creates a global logistics powerhouse highly ranked in worldwide air, land, and ocean transportation.
  www.baxgoesschenker.com 800-CALL-BAX

Air Cargo

- **National Air Cargo** pg. 111
  Need to ship anything, anywhere, anytime? National Air Cargo delivers.
  www.nationalaircargo.com 800-635-0022

Career Development/Education

- **American Society of Transportation and Logistics (AST&L)** pg. 97
  Invest in AST&L's Certified in Transportation and Logistics program because your career matters.
  www.astl.org 703-524-5011

- **California State University, Long Beach** pg. 92
  For a Master's or professional designation in global logistics, turn to California State University.
  www.uces.csulb.edu/citt 562-296-1170

- **Columbus State Community College** pg. 95
  Columbus State Community College offers certificates in global trade, purchasing, and logistics.
  www.cscc.edu 800-621-6407

- **East Carolina University** pg. 97
  Enhance your logistics career potential with a degree from East Carolina University.
  www.tecs.ecu.edu/tsys 252-328-9663

- **Elmhurst College** pg. 93
  Elmhurst's Master of Science in Supply Chain Management offers real-world experience.
  www.elmhurst.edu 800-581-4723

- **Institute of Logistical Management** pg. 94
  The Institute of Logistical Management offers distance learning in supply chain management.
  www.logisticseducation.edu 609-747-1515

- **Lion Technology** pg. 92
  Lion's unique online hazmat training brings your team up to speed on DOT regulations.
  www.lion.com/hazmat 888-546-6511

- **Logistics Horizons** pg. 92
  With 40 years of successful personnel recruiting, let Logistics Horizons be part of your team.
  www.logisticshorizons.com 201-507-8880

Use our Resource Center and let the information you need find you.

- **Maine Maritime Academy** pg. 97
  Maine Maritime Academy offers certificate and graduate diploma programs in logistics.
  http://ibl.mainemaritime.edu 800-227-8465

- **Snelling Transportation Group** pg. 95
  Snelling places superior talent in the logistics, transportation, and distribution segments.
  www.snellingtrans.com 479-271-0505

- **Sullivan University** pg. 94
  Sullivan University's e-learning program is the perfect solution for your career goals.
  www.sullivan.edu 866-755-7887

- **Syracuse University, Whitman School of Management** pg. 96
  Whitman *is* supply chain – it has the oldest supply chain management program in the nation.
  whitman.syr.edu/scm 315-443-3751

- **Transportation Intermediaries Association** pg. 96
  TIA's certified transportation broker program helps you to be a leader. Sign up today.
  www.tianet.org 703-299-5700

- **U.S. Merchant Marine Academy** pg. 94
  The U.S. Merchant Marine Academy offers training and education for the transportation industry.
  www.usmma.edu 516-773-5120

- **University of Alaska, Anchorage** pg. 96
  Study logistics at the air crossroads of the world. UAA offers undergrad, grad, and online programs.
  http://logistics.alaska.edu 907-786-4171

- **University of Denver, Intermodal Transportation Institute (ITI)** pg. 95
  Transport your career to a higher level with ITI's Executive Master's program.
  www.du.edu/transportation 215-247-2162

- **University of Wisconsin – Madison** pg. 97
  The University of Wisconsin – Madison offers transportation planning and quality modeling programs.
  www.uwexeced.com/transportation 800-292-8964

Chemical Logistics

- **American Commercial Lines (ACL)** pg. 53
  ACL's barge and towboat fleets offer chemical shippers maximum flexibility to meet schedule and delivery requirements.
  www.aclines.com 866-288-6225

- **BDP International** pg. 47
  No matter what you ship, BDP increases your bottom line. BDP's proven knowledge of specialty chemicals shipping works to your advantage.
  www.bdpinternational.com 888-999-BDP9

- **BNSF Logistics** pg. 55
  With expansive knowledge and integrated technology systems, BNSF Logistics puts your logistics pieces in place so you can focus on business.
  www.bnsflogistics.com 877-853-4756

- **Canadian National** pgs. 42–43
  Canadian National salutes its Responsible Care partners with the 2006 CN Safe Handling Awards.
  www.cn.ca 888-MOVIN-CN

- **Dupré Transport** pg. 59
  Dupré Transport designs logistics solutions for your specific needs, so you save time and money.
  www.dupretransport.com 800-356-3659

- **Jevic** pg. 38
  With 25 years of chemical transport experience, Jevic is the best – and safest – carrier choice.
  www.jevic.com 888-GO-JEVIC

- **LeSaint Logistics** pg. 57
  Looking for a logistics provider that knows the chemical industry? Turn to LeSaint Logistics.
  www.lesaint.com 847-783-4940

- **LTS Logistics** pg. 51
  LTS Logistics' forward-thinking approach to logistics management yields innovative solutions for chemical companies.
  www.ltslogistics.com 866-720-5871

- **Maersk Logistics** pg. 41
  Maersk Logistics helps the country's leading chemical companies create new opportunities in global commerce.
  www.maersklogistics.com 973-514-5187

For a specific response, contact these advertisers directly. Please tell them you saw their ad in *Inbound Logistics*.

For general questions about particular industry segments, use the card between pages 12-13 and pages 108-109.

For faster service, go online: inboundlogistics.com/rfp

RESOURCE CENTER 06.07

INBOUND LOGISTICS WORKS FOR YOU!

For a specific response, contact these advertisers directly. Please tell them you saw their ad in *Inbound Logistics.*

For general questions about particular industry segments, use the card between pages 12-13 and pages 108-109.

For faster service, go online: inboundlogistics.com/rfp

- **Miller Transporters** pg. 52
  Miller Transporters celebrates 65 years of award-winning service to the chemical industry.
  www.millert.com 800-MILLERT

- **Odyssey Logistics & Technology** pg. 60
  Chemical and process companies turn to Odyssey Logistics & Technology for their multimodal global transportation needs.
  www.odysseylogistics.com 203-448-3900

- **Old Dominion** pg. 49
  Old Dominion's full range of services offers logistics solutions that chemical companies count on.
  www.odfl.com 336-889-5000

- **Penske Logistics** pg. 45
  Penske approaches logistics management with dedication and determination, helping chemical shippers achieve profitable growth.
  www.penskelogistics.com 800-221-3040

Environmental Partnerships

- **SmartWay Transport** pg. 12
  The EPA's SmartWay Transport program helps shippers reduce emissions, while giving the average truck a fuel savings of $2,000 per year.
  www.epa.gov/smartway 734-214-4767

Events

- **Carbon Footprint Summit** pgs. 79–84
  Learn about the business case for carbon reduction at the first-ever Carbon Footprint Consumer Products Summit, Sept. 13-14, 2007, in Chicago.
  carbonfootprint-consumerproducts.com 800-721-3915

- **LogiChem 2007** pg. 62
  Attend LogiChem, Sept. 24-27, 2007, at the Hyatt Gainey Ranch Resort, Scottsdale, Ariz.
  www.logichem2007.com 888-482-6012

Expedited Air/Ground

- **Pilot Air Freight** pg. 25
  When you need to track down the fastest route to anywhere, Pilot Air Freight's online shipping navigator helps you get the job done in no time.
  www.pilotair.com 800-HI-PILOT

Latin America Logistics

- **Almazo Line** pg. 75
  Almazo Line offers full-service customs brokerage and border logistics services.
  www.almazoline.com 899-922-06-63

- **Delta Cargo** pg. 67
  With continued international expansion, Delta Cargo makes it easier than ever to send cargo all over the globe.
  www.deltacargo.com 800-352-2746

- **InfoAmericas** pg. 77
  InfoAmericas is Latin America's transportation and logistics business intelligence leader.
  www.infoamericas.com 305-569-9133

- **Intramerica** pg. 73
  Intramerica provides strategic locations and excellent working environments in Mexico.
  www.intramerica.com.mx 52 (818) 153-6430

- **Menlo Worldwide** pg. 65
  Menlo Worldwide's customer-specific solutions help global shippers cut waste and cost from the supply chain.
  www.menloworldwide.com 650-378-5200

- **Prudential Financial** pg. 71
  Looking for a real estate team you can trust in the Mexican market? Look to Prudential Financial.
  www.prei.com (52) 55 5093 2780

Logistics IT

- **Datatrac** pg. 101
  Datatrac offers real-time shipment tracking, wireless mobility, and compliance analysis.
  www.datatrac.com 800-827-2677

- **MagicLogic Optimization** pg. 113
  Magic's Cube-IQ Load Planning software helps you optimize your inbound and outbound shipments.
  www.magiclogic.com 888-274-8616

- **Sterling Commerce** pg. 20
  Eliminate the barriers to bottom-line success with Sterling Commerce's technology solutions.
  www.sterlingcommerce.com 800-299-4031

Use our Resource Center and let the information you need find you.

Ocean

- **APL Logistics & Con-way Freight** pg. 16
  OceanGuaranteed, APL & Con-way's port-to-door TransPacific service, has been expanded to Japan, Singapore, South Korea, and Taiwan.
  www.apllogistics.com 866-896-2005

Ports

- **Port of Baltimore** pg. 27
  Why does so much cargo come through the Port of Baltimore? Because the Port provides world-class services.
  www.marylandports.com/il7 800-638-7519

Site Selection

- **Virginia Economic Development Partnership** pgs. 22–23
  More than 240 major companies have set up DCs in Virginia. Shouldn't you, too?
  www.yesvirginia.org 804-545-5700

Trucking

- **Yellow** Cover 2
  You will out-think, outperform, and outshine the competition when Yellow takes care of your transportation needs.
  www.myyellow.com 800-610-6500

INDEX

For a specific response, contact these advertisers directly. Please tell them you saw their ad in *Inbound Logistics*.

For general questions about particular industry segments, use the card between pages 12-13 and pages 108-109.

For faster service, go online: inboundlogistics.com/rfp

Inbound Logistics (ISSN 0888-8493, USPS 703990) is published monthly for approximately 60,000 business professionals who buy, specify, or recommend logistics technology, transportation, and related services, by Thomas Publishing Company LLC, 5 Penn Plaza, NY, NY 10001. José E. Andrade, chairman; Carl T. Holst-Knudsen, president. Periodicals postage paid at New York, NY, and additional mailing offices.

POSTMASTER SEND ADDRESS CHANGES TO: Inbound Logistics, 5 Penn Plaza, New York, NY 10001

THE LAST MILE

Import/Export Expertise

Before you move your next international shipment, check out these suggestions from the import/export experts.

"**Craft a compliance policy based on your company's size, product type, transaction volume, and country breadth.** Small export companies that deal in non-controlled products may only need to implement an online restricted-party screening tool; while large organizations might need to design and deploy a global solution to help manage and automate import/export transactions. Compliance policies also help shippers gain visibility into their import/export transactions details, which brings additional benefits."

—**Ty Bordner,** vice president, solutions consulting, Management Dynamics

"To take full advantage of your 3PL's import/export capabilities, inform them of your organization's long-term goals. **Choose a 3PL that maintains long-standing relationships in multiple markets, which could include your next target.** Also, be sure your 3PL has the expertise to manage fluctuating import/export volumes and changing distribution requirements."

—**Carey Treadwell,** director of global business, Mallory Alexander International Logistics

"Many shippers leave millions of dollars in duty savings unclaimed because they fail to understand and leverage free trade agreements. **Shippers need to determine trade program eligibility, review new trade programs for applicability, manage complex documentation requirements, and use auditable processes** and technology to quickly identify and capture duty savings."

—**Bernie Hart,** global product executive, JPMorgan Chase Vastera

"Companies don't necessarily need to invest in complex or expensive import/export technology; **with on-demand software delivery, shippers gain access to vast data management power via the web**. Pay as you go, only for the capabilities you use."

—**Greg Johnsen,** co-founder, GT Nexus

CONVENTIONAL WISDOM–MORE ADVICE FROM THE PROS: ▶ **Select global forwarders/carriers wisely.** Determine your overall requirements by analyzing imports, exports, distribution, and brokerage needs. Identify your shipment requirements–such as destination shipment schedule, transportation methods, and special requirements or restrictions–up front. Consider total cost, not just transportation cost by lane. ▶ **Fill out import/export documents completely and accurately.** Integrating technology systems with trading partners can help flow data through the import/export and documentation process and eliminate manual rekeying errors. ▶ **Standardize business processes around the world.** Investigate automated solutions that get all parties in a global supply chain to follow consistent, compliant procedures and processes. ▶ **Get familiar with U.S. Customs and Border Protection (CBP) policies** and procedures before you import or export your goods. You should also be aware of any entry requirements, including those of other federal agencies, specific to the particular commodity you are importing/exporting.