I’d like to express my appreciation to the AAPA for the invitation today to discuss the issue of “Industry Partner Insights on Challenges and Opportunities”. The World Shipping Council believes strongly in the partnership it has been able to have with AAPA, and we fully understand that the ability of the maritime industry to affect change is assisted enormously when the various components of the industry are united in a coordinated and consistent purpose.

Let me start this morning by providing a very brief description of the liner shipping trade dynamics that we are facing together. American importers and exporters, like shippers around the world, are asking us to move substantially greater cargo volumes, and the remarkable growth in trade volumes is forecasted to continue into the foreseeable future.
The Growth in Volume

Some of this container growth is caused by the fact that an increasing percentage of general cargo tonnage continues to become containerized. In 2004, roughly 71% of general cargo was containerized. By 2010, it is expected that 83% of general cargo will be containerized.

But in addition, the sheer increase in volume of international goods movements, especially with global sourcing out of China, is expected to continue. If one measures global container handling activity, Drewry Shipping Consultants has estimated 100 million TEUs were handled in 2004, with a projected increase to over 150 million TEUs handled in 2010.

If one looks at the “head haul” traffic growth of the world’s major trade lanes, one sees the following forecasts:

<table>
<thead>
<tr>
<th></th>
<th>Asia to North America</th>
<th>Asia to North Europe</th>
<th>North Europe to North America</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>14.3% growth</td>
<td>16.5% growth</td>
<td>3.1% growth</td>
</tr>
<tr>
<td>2005 forecast</td>
<td>11-12% growth</td>
<td>15-16.5% growth</td>
<td>1.5-3% growth</td>
</tr>
<tr>
<td>2006 forecast</td>
<td>10% growth</td>
<td>13.5% growth</td>
<td>2.5% growth</td>
</tr>
</tbody>
</table>

Thus, for the three major head-haul trades, an aggregate volume increase of 13.5% in 2004 is forecasted to be followed by more than 12% in 2005 and 10% in 2006.

The industry has seen 10% growth rates before, but 10% growth rates now present larger challenges than they used to. In 2004, 10 million loaded cargo containers were imported into the United States. So in 2005, an 11% growth rates means we will handle more than a million more U.S. import container loads. In 2006, we will need to be ready to handle more than an additional million containers on top of that. And these trade growth trends are not expected to stop after 2006. The forecasted growth numbers are both remarkable and challenging for us all.

Consider the 8,000-9,200 TEU ship. Roughly 150 of them are expected to be deployed in the world’s major East-West trades by 2008 as one part of the system needed to handle these enormous trade volumes. A single vessel discharging 4,000 containers might on average require 2,000 truck moves and 10 stacktrains of 200 containers each. And while large vessels present their own operational issues and challenges, the bottom line is that it is the cargo volumes we are handling that are the root of the issue. Whether those 11 million plus containers arrive this year on big or small ships, that same volume of cargo has to be able to move efficiently.

Consider the requirements of one customer of our industry. Wal-Mart will import roughly 360,000 FEUs this year. If you were to place that volume on trucks bumper-to-bumper in a single line, it would stretch 3,750 miles. And that doesn’t even begin to count Wal-Mart’s domestic cargo movements. And those volumes have to be moved
efficiently at the same time as Target’s, Home Depot’s, the Limited’s, Procter & Gamble’s, McDonald’s, Hewlett Packard’s, General Motors’, Nike’s, Heineken’s, Pier One’s, and thousands of other shippers.

It borders on a trite underestimation to say that the demands on all of us in the transportation sector to handle these cargo volumes, as well as the growth in domestic cargo volumes, present major challenges.

The fact is that transportation congestion problems will become more severe. Costs will continue to rise. Delays in shipment will increase. Supply chain velocity will slow. Inventories and their costs will have to increase to adjust for the increasing delays and uncertainties in supply chain movements. Warehousing costs for additional inventory will grow.

In short, the consequences of the nation’s ability to meet these challenges are substantial. The recognition of the magnitude of the challenge and its consequences is, however, only just beginning to be appreciated.

Let me briefly turn to some of the issues facing the various components of the intermodal supply chain.

**Vessel Capacity**

Regarding ship capacity, the carriers have made enormous investments in new vessels and equipment and have been able – somewhat remarkably – to keep up with the increase in shippers’ demand. While we will still see peak season capacity challenges, and occasional equipment shortages, adequate vessel capacity appears likely for the foreseeable future. However, worsening port congestion and intermodal congestion could adversely affect vessels’ schedules, capacity utilization and service reliability.

This has produced and will continue to produce some port diversion or port diversification. Witness Wal-Mart building new distribution centers in Savannah, Norfolk and Houston. At the same time, many importers have existing investments in existing port areas that are difficult to change. And, we cannot forget that because the GDP of Los Angeles County is larger than Russia’s, and LA/Long Beach is the natural gateway for a lot of cargo going into much of the Unites States, we are going to continue to see a lot of freight arriving in Southern California. Last year roughly 43% of the nation’s containerized import commerce came through LA/Long Beach.

The Panama Canal, limited to Panamax size ships, is operating at close to capacity, so all-water services from Asia to the U.S. Gulf and East Coast are constrained until new post-Panamax locks are built in Panama – a project that, if approved in a referendum later this year, is likely to take a decade. Until then, there are substantial limitations on the ability of the Canal, or Mexico or Canadian ports, to being viable options for the diversion of additional substantial cargo volumes.
While the ocean carriers have done a fairly good job of planning for and meeting shippers’ projected demand for more capacity, ship capacity is only part of the system needed to move their freight efficiently. Shippers have been accustomed to port and intermodal capacity growing at a rate that accommodated trade volume growth fairly well. That is no longer the case, either in Europe or North America, as growing port and intermodal congestion shows how integrally linked the various pieces of the transportation system are.

Port Capacity and Intermodal Congestion

Like the carriers, ports have been working to expand their capacity to handle the rapidly growing cargo volumes of importers and exporters. Five new terminals in recent years in Southern California each over 300 acres, New York dredging to 51 feet draft with substantial terminal expansion, the new 400 acre APMT terminal in Norfolk, substantial terminal expansion in Tacoma, new large cranes in Oakland – all are examples of the significant efforts by the American port community to expand capacity. But there are no new facilities under construction in California (which handles 85% of the imported containers on the West Coast), and further marine terminal build-outs will involve difficult environmental, land use and community relations issues.

More port capacity will be essential to the nation’s long term economic health, but more physical space is only one part of the long-term answer. Port facility productivity and throughput has to be improved. One recent port facility productivity analysis showed Asian port facilities to be 44% more productive than U.S. port facilities. And while there are certainly real operating differences between ports in different parts of the world that can explain differences in terminal productivity, one of the best known terminal operations in Southern California has not been able to improve its port productivity in ten years.

The problem of port capacity and intermodal congestion is not a problem. It’s many problems. There is not a solution. There is a need for many solutions.

Regarding trucking, there are driver shortages, caused in part by poor port drayage profitability, hours of service rule restrictions, slow turn times, and air quality issues.

Regarding rail, there are connectivity and volume problems at a number of major ports, issues with terminals and railroads’ aligning and scheduling of operations and labor to maximize efficiency, decreasing average train velocity (which in turn require more locomotives, equipment, capital and labor), inadequate rail infrastructure at a number of important parts of the rail network, and challenges to finding the necessary capital for railroads to improve the rail network in a way that can optimally meet the needs of the nation’s commerce.

Regarding port facility operations, there are labor relations difficulties, particularly on the West Coast, too much free time provided to containers, a need for
ports and shippers’ receiving facilities to operate on extended hours, a need for more chassis pools, market forces that produce bunched vessel arrivals and resulting labor, volume and space challenges, and needed improvements in a number of highway connections into ports.

This morning’s topic is “Common Challenges”. These issues surely fit that description.

Carriers and ports understand this problem, and the World Shipping Council’s member lines have agreed that these issues require an honest, comprehensive analysis and set of actions to help address the challenge. A number of other supply chain participants have the same view. But as the challenge is so multi-faceted, several things will be needed if we are to move beyond talking about the problem to addressing it. To be successful, it seems to me that several things need to be done.

First, we have to figure out how to involve all the major players -- ocean carriers, terminal operators, railroads, ports, shippers, and labor – in identifying the problems and solutions. Every group needs to perform better, and every group has to be part of the solution.

Second, we need to map out the various things that industry and the commercial market need to do, as well as what we would like government to do. Government clearly has an important role, especially as to harbor dredging and landside transportation connectivity and capacity; however, much of what needs to be done will not involve or require government. Furthermore, when the industry goes to government with proposals for how to address these issues, it will need to have clear, specific requests to address clear, specific problems. Infrastructure improvement produces little when discussed conceptually. It is when the discussion involves specifics that infrastructure improvement will occur.

The Council looks forward to working with AAPA and the other supply chain participants on such an effort.

Maritime Security

At a time that the industry is struggling with how to efficiently move over 11 million U.S. import containers this year, we at the same time must address the unfinished task of enhancing maritime security. Let me provide a brief perspective on some of the many issues in this area.

a) National Maritime Security Advisory Committee Issues

Last month, the first meeting of the new Department of Homeland Security National Maritime Security Advisory Committee (NMSAC) took place. I am honored to
chair this 20 person committee, which has established an initial set of working groups to address the following issues:

1) **Transportation Worker Credentialing**: The first task of this working group will be to provide the Department with industry comments on the Transportation Worker Identification Card (TWIC), which would be required for U.S. domestic transport workers who seek unescorted access to secure areas within port facilities. The Coast Guard and Transportation Security Administration are expected to issue a proposed rulemaking on this issue this summer – a matter of keen interest to all who work in the port environment.

2) **Communications**: This task has been identified as determining how the government should structure the most effective maritime threat communication system between the government and industry. The NMSAC has requested that, before it addresses the many issues that may be involved in this issue, the government should provide the Committee with further clarity regarding its thinking and planning on this issue.

3) **Stowaways, Deserters and Absconders**: This Working Group will review and provide comments on the government’s proposed approach to address “high risk” seafarers, guards at U.S. ports for vessels with such seafarers, and vessels that may have a history of stowaway or deserter problems.

4) **Consistency in Government Boarding, Inspection and Enforcement Practices**: This Working Group will review and consider whether government agencies’ vessel boarding, inspection and enforcement practices are consistent and whether industry can offer suggestions for improvements in this regard.

In addition, the NMSAC will be given the opportunity to comment on the high level maritime security policy directives currently under development in the Department as a result of the President’s recent Maritime Security Policy Directive 13. These directives will largely focus on issues such as recovery from a maritime transportation security incident, enhancing supply chain security, and the integration of the array of government’s response and security plans under development.

b) **Customs and Border Protection and Cargo Security Initiatives**

There are a host of international cargo security initiatives that are currently being considered or addressed that will be of significant interest to the maritime industry.

First, Customs and Border Protection (CBP) is reviewing and amending the terms of the Customs’ Trade Partnership Against Terrorism (C-TPAT) program. The importers’ portion of the program has just been revised, and CBP will now turn to revisiting the terms of the program for those other business partners eligible for C-TPAT certification, including carriers, ports, terminals, brokers, and consolidators.
Second, CBP continues to grow the Container Security Initiative program. The quiet growth of this important program is a testament to the foresight and diligence of CBP. No nation by itself can protect international trade. In the absence of an international regulatory body, U.S. and foreign customs authorities are creating a network of bilateral cooperative relationships to enhance trade security. Last month Dubai became an operational CSI port, and Shanghai and Shenzhen are expected to become operational soon. When they are, 50% of U.S. containerized imports will be passing through CSI ports, with further program growth expected. The liner shipping industry is fully supportive of these efforts by Customs authorities and hopes the program will continue to expand as expeditiously as possible.

Third, CBP and DHS are currently working on proposed regulations to require that the container seals on all U.S. inbound containerized cargo shipments be inspected and verified before they are loaded on vessels bound for the U.S. This will be a significant rulemaking that will have to address a number of significant issues, such as seal anomaly reporting, consequences of detected seal anomalies and discrepancies, the impact at transshipment ports, and the consequences of a foreign terminal’s non-performance. Even though this rulemaking is expected to apply only to inbound containerized cargo shipments, U.S. ports should follow this issue closely because other trading nations may consider imposing reciprocal or mirror-image requirements for containers leaving U.S. ports.

Fourth, CBP is deploying radiation scanning equipment at all major U.S container ports with the objective of being able to check every container entering the U.S. for radiation by the end of this year. CBP is also working with foreign ports to encourage the installation of radiation scanning technology abroad as well. So is the Department of Energy, although it remains somewhat unclear how closely these initiatives are aligned.

Fifth, CBP and DHS are considering what additional advanced containerized cargo shipment information should be filed with CBP for cargo security screening purposes. The World Shipping Council and AAPA have both expressed strong support for the strategy that the U.S. government is deploying of conducting the security screening of containers before they are loaded on a U.S. bound vessel in a foreign port.

In order to be able to perform this advance security screening, Customs implemented the “24 Hour Rule” in 2003, under which ocean carriers are required to provide Customs with their cargo manifest information regarding all containerized cargo shipments at least 24 hours before those containers are loaded onto the vessel in a foreign port. Customs then screens the shipment in its Automated Targeting System (ATS) to determine which containers should not be loaded aboard the vessel at the foreign port, which containers need to be inspected at either the foreign port or the U.S. discharge port, and which containers are considered low-risk and able to be transported expeditiously and without further review. Our industry supports this rule and the strategy. The correct time and place for the cargo security screening is before the containers are loaded on a ship.
The function, effectiveness and credibility of the ATS risk-based analysis is a cornerstone of the government’s approach to container security.

The Department of Homeland Security’s strategy is thus based on its performance of a security screening of relevant cargo shipment data for 100% of all containerized cargo shipments before vessel loading, and subsequent inspections of 100% of those containers that raise security issues after initial screening. Today, the government reports that it inspects roughly 5.5-6% of all inbound containers (roughly 550,000 containers/year), using either X-ray or gamma ray technology (or both) or by physical devanning of the container.

We all have a strong interest in the government performing as effective a security screening as possible before vessel loading. Experience also shows that substantial disruptions to commerce can be avoided if security questions relating to a cargo shipment have been addressed prior to a vessel being loaded and sailing. Today, the ATS uses various sources of data, but the only data that the commercial sector is required to provide to Customs for each shipment for the before-vessel-loading security screening is the ocean carrier’s manifest data filed under the 24 Hour Rule. This was a good start, but manifest data has limitations. Customs itself has recognized some of its inadequacies.

Cargo manifest data should be supplemented in order to provide better security risk assessment capabilities. Currently, there is no data that is required to be filed into ATS by the U.S. importer or the foreign exporter that can be used in the pre-vessel loading security screening process, even though these parties possess shipment data that have security risk assessment relevance that is not available in the carriers’ manifest filings, and notwithstanding the fact that the law requires the cargo security screening and evaluation system to be conducted “prior to loading in a foreign port”. Today, this merchandise entry data is required to be filed with the government by the importer, but is not required to be filed until after the cargo shipment is in the United States, often at its inland destination – too late for security screening purposes. The COAC Maritime Transportation Security Act Advisory Subcommittee has submitted to DHS a recommendation that importers should provide Customs with the following data before vessel loading:

1. Better cargo description (carriers’ manifest data is not always specific or precise)
2. Party that is selling the goods to the importer
3. Party that is purchasing the goods
4. Point of origin of the goods
5. Country from which goods are exported
6. Ultimate consignee
7. Exporter representative
8. Name of broker (would seem relevant for security check.)

---

2 46 U.S.C section 70116(b)(1). Section 343(a) of the Trade Act also requires that cargo information be provided by the party with the most direct knowledge of the information.
9. Origin of container shipment – the name and address of the business where the container was stuffed.

The Council agrees with this recommendation.

The government’s strategy today is to inspect containerized cargo on a risk-assessment basis. Some argue that the risk assessment strategy is flawed, and that the seriousness of the risk of nuclear device in a container requires 100% container inspection above and beyond the 100% radiation screening discussed above, and a host of technologies that are not currently commercially available.

Some of these arguments can be seen as simply serving the interests of certain technology vendors or parties wishing to perform inspection services. Some of the arguments are based on good faith concerns about the effectiveness of risk assessment. None of them, however, have addressed and balanced the costs and complexities of how governments around the world would reliably inspect 100% of all containers before vessel loading, and still keep the huge volume of international commerce flowing efficiently. And, it is imponderably difficult to weigh the enormous consequences of a possible “nuke in a box” and the most effective prevention measures, against the fact that the government states that there are no known credible threats that terrorists are planning to infiltrate or attack the U.S. via maritime containers.

Whatever else can be said about the debate over whether the government should inspect 100% of all containers or 100% of all containers it has identified as high-risk, it seems logical that the government will improve the data it currently uses for its risk assessment. As ports interested in the efficient flow of commerce, and recognizing that if the U.S. were to require 100% of all import containers to be inspected at foreign load ports many of our trading partners would likely reciprocate with 100% container inspection requirements at U.S. load ports, the debate over what is needed to have an adequate risk assessment system is an issue in which AAPA has an interest.

c) “Smart” Containers

Let me now briefly touch on the issue of “smart” containers. Everyone recognizes that technology will play a role in increasing the efficiency and security of containerized cargo shipments. What makes a container “smart”, however, and what those technologies may be is an ongoing discussion.

The Council and its Member lines have been working within the International Standards Organization RFID container technology working group on standards for electronic seals, container tags and shipment tags. We expect that, once a seal verification requirement is imposed, these technologies will be seriously considered as an automated, efficient way to determine if containers have been tampered with while in transit. While some also discuss the possibility of the application of “container security devices” (CSDs), the currently tested CSD’s only indicate whether the container doors
have been opened – the same thing that a properly applied e-seal would tell you. A credible case for having both CSDs and e-seals has not yet been made.

The “next generation” CSDs that DHS is researching will have to address many issues, including what it is that needs to be “sensed”, the accuracy and reliability of the device, its cost, who applies the device, the reading infrastructure that would be needed, who would read it when and where, and the protocols for how different readings would be addressed by whom and when.

As different technology vendors jockey for position, some things are becoming clearer:

1. Industry and government need to cooperate and agree on what the security requirements are, and what the respective implementation roles of industry and government would be.
2. Cost does matter. A decision to invest in a particular technology applicable to the global container industry will be expensive and will require assurance that government is not likely to abruptly change requirements.
3. Whatever technology is chosen for application to international containerized cargo shipments, it will need to be a common, universally deployable technology.
4. Proprietary solutions that require a particular manufacturer’s product or reading system will not be acceptable.
5. Technology vendors who push products that involve the vendor capturing, managing, and profiting from all the data generated from the device -- and there are a number of these -- are highly likely to encounter hard questions, if not strong resistance, from industry.

It would appear that, at least for the immediate future, container device technology will focus on the effect of seal verification requirements, and the appropriate application of RFID e-seals and container tags. The liner shipping industry will be expending considerable effort on this issue during the rest of this year.

d. Security Funding

I’d like to close the discussion of maritime security issues by recognizing that the port community has a significant interest in federal funding. I do not intend to comment on recent criticisms by government watchdog agencies of the port security grant funding program. They speak for themselves. I would like to offer two observations, however.

First, one cannot fairly compare the cost that the Coast Guard projected the industry would have to spend to comply with the ISPS Code and MTSA regulations with the amount of port security grants, and imply that the difference reflects a lack of federal government commitment to port security. The Coast Guard’s cost estimates were estimates of what the industry was going to have to spend to comply with the new
security rules, not the amount of money the government needed to provide the industry. The industry is now in compliance with the new rules.

Second, in the present budget environment, requests for additional federal assistance may certainly be well justified, but appeals that identify specific, unique needs or problems that justify additional targeted federal assistance would seem more likely to succeed. Too much of the public coverage of this issue has created the unintended impression that maritime security enhancement is only about federal port grant spending, and that the government is neglecting security. While we certainly have further to go to improve security, much has been done by the industry and by the government. The public needs to know this too.

Summary

There is no shortage of challenges or opportunities facing us. We find ourselves in the center of two of the more profound dynamics affecting the world today. One is the remarkable growth of world trade and the economy’s appetite for imports – a demand that fills our ships, our ports, and our inland transportation infrastructure, but a demand that is also keeping the economies of many nations around the world healthy and prosperous. The other is the threat to our way of life from terrorists and the challenge of addressing the vulnerabilities that exist in the free flow of international trade, even when the specific risk is elusive to identify.

We are making real progress on both, but there is no rest as the challenges continue. The liner shipping industry appreciates and values the partnership with U.S. ports and the AAPA, and we look forward to continued cooperation and progress on these and other common concerns.