

## DAY 1: PLENARY SESSION DINNER PRESENTATION

# Intermodalism and the U.S. Military

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## INTRODUCTION

*Kenneth Wykle*

When asked to introduce this evening's dinner speaker, I very quickly accepted because I have known Dan Brown for many years. First of all, he is a great American and also a great public servant and it is my pleasure to have the opportunity to introduce him. As with most military people, he and his wife have traveled around the world and sacrificed a lot from a family standpoint through all the moves and impacts on family. It is a real tribute for him to be with us tonight.

Dan has been on the front line during periods of many national crises. In the early part of his career, he served in Vietnam at the U.S. Army Vietnam Headquarters in the water section. More recently, he served in Desert Shield–Desert Storm, commanding the Seventh Transportation Group. For Somalia, he was Chief of the Combat Arms Assessment Branch that went over to assess the performance of our army. Earlier in his career, he served in Germany and later he had the opportunity to serve twice in Korea.

What can I tell you that is not in his bio? Not very much. I did have the privilege of promoting Dan to Brigadier General. I pinned on his first stars down at Fort Eustis, Virginia, and it was a real privilege to be able to do that. Later in his career, I guess he was so excited about me pinning on his stars that he started to follow me in terms of rotational assignments. I commanded the 19th Support Command in Korea and Dan went over there

and commanded it. He changed the name of it—made it a two-star command. Then he came back to Fort Eustis, Virginia, and served as Commander of the U.S. Army Transportation Center and school. He then moved up the road to the Combined Arms Support Command at Fort Lee, Virginia, and then ended up at U.S. Transportation Command as the Deputy Commander-in-Chief. The U.S. Transportation Command is the unified command that is charged with bringing together the modes within the U.S. Department of Defense. Along with the civilian transportation capability, this makes up the defense transportation system that we as a nation are so dependent on in periods of crisis and other times when our nation has a need for a lot of transportation assets.

## PRESENTATION: INTERMODALISM AND THE U.S. MILITARY

*Lieutenant General Daniel G. Brown*

It is a real pleasure to be with you this evening and to be surrounded by so many distinguished transportation professionals. Many of you have not been around the U.S. Department of Defense (DOD) or associated with the military and I would like to give you at least my perspective of where the DOD, and particularly some of the armed services, are going with intermodalism and where that fits in.

Simply stated, my message to you is that, although intermodalism is not new to the U.S. military, we have

now reached the point where it is essential that we integrate intermodal transportation systems into the way that we do business. The reasons are simple. We are undergoing a critical transformation in the way we conduct military operations and this transformation cannot occur without a fundamental revolution in the way we perform logistics. In effect, increasing intermodalism is a major key to achieving what many of us refer to as the revolution in military logistics.

Some of you may not think in terms of the military leading revolutions, but that is, in fact, what we are in the process of doing in the U.S. military. The concept of intermodalism is not new to our nation's war fighters. For example, during the Spanish American War, we used intermodal transportation to get our soldiers from their home station to the port of embarkation in Tampa, Florida. We even used railroads, although to our chagrin, there was no rail-to-ship interface at the port. Railcars were backed up all the way from Tampa to Savannah, Georgia. They were also waiting to discharge their cargoes. It sounds familiar with some of the things that I heard today. Not deterred, we loaded our troops aboard steamships along with the conventional intermodal workhorse of the time—that is, the mule. These beasts of burden later served as the primary mode of transport throughout the war, and we used them to a lesser degree to help our infantry soldiers and their many loads.

The loading and unloading techniques used were cutting edge technology and state-of-the-art back there in Tampa, Florida. In fact, when our steamships dropped anchor in Cuban waters, they expeditiously discharged their four-legged transporters by leading them up on deck and ceremoniously, or maybe unceremoniously, kicked them off the ships. That was one of the first exposures we had to intermodalism in the U.S. military.

Now, to go from ship-to-shore operations was really quite simple. We merely had the wagon master stand ashore. Many of these operations were done under the cover of darkness. The wagon master stood next to a fire and he blew his whistle, and these poor burdened beasts then swam all the way to shore. That was the military's first exposure of ship-to-shore discharge operations over what we now refer to as logistics over the shore.

Although our military concepts of intermodalism have come a long way since Teddy Roosevelt's time, we need to develop ever faster and more efficient transportation. The situation I described during the Spanish American War was not unique to that war but was merely indicative of the challenges that routinely confront us when we do go to war. Similar stories can be drawn from World War I when we deployed nearly 88 percent of all the forces through the port of New York, with the result that nearly 200 ships were backed up. In that case, and in that particular deployment, we had railcars backed up all the way from the port in Bayonne, New Jersey, to Buffalo,

New York. Eventually, the War Department had to issue a directive that all units deploying overseas would turn in their equipment before departure. They drew up new roles for drawing that equipment. As a matter of fact, units would stop drawing equipment in the United States and they started picking up their equipment over in Europe. It was the first exposure to what we refer to as pre-positioning stocks, which has become an integral part of the way we deploy forces.

What we do now is look at what we refer to as the strategic mobility triad. That is the combination of airlift, sealift, and pre-positioned stocks. Each of those modes of transportation has an advantage or a disadvantage—whether it be cost, speed, or quantity of service. Much of what we are about at DOD is trying to come up with the right weight between airlift, sealift, and pre-positioned stocks in order to deploy our forces quicker and faster.

Similar analogies can be drawn from World War II or Vietnam, when we had ships waiting—in many cases for over 200 days—to be assigned berths for discharge. Even during Desert Storm, which by every measure was a great deployment success, we were plagued by nearly 48,000 containers that often congested the ports because we could not readily transship them. In many cases, we did not know what was in those containers and frequently had to open them before we could give final disposition instructions.

### Why All This New Interest in Intermodalism?

The answer is simple—we have no other choice. Increased use of intermodalism is essential to the execution of our national military strategy. I would like to walk you through a little bit of what my thoughts are and why I make that statement.

As many of you know, the military has been undergoing great change since Desert Storm. The active force in the past 10 years since Desert Storm has decreased 33 percent. The active military has decreased in some services even greater than that. The budgets since Desert Storm are down 29 percent. Although we have reduced the size of the active military by nearly one-third since Desert Storm, we have had 41 deployments in the past 10 years of military forces to execute and support our national military objectives. That is an over 300 percent increase. Between 1955 and 1989, we deployed only 10 times in support of our national interests—that is a significant change for a force projection military.

To a large degree, we are basically a continental United States-based force today with a limited forward presence in Europe and Korea. We project forces worldwide by using that strategic mobility triad of airlift, sealift, and pre-positioned stocks, and we project them worldwide to meet our national interests.

From a strategic deployment perspective, two major factors are at work that appear to be irreversible and they are having a major impact on the way we deploy armed forces:

- First and foremost is the fact that forces must now deploy more rapidly than ever before in order to quickly support worldwide missions. There is an increasing relationship between the speed with which forces deploy and their very relevancy to provide humanitarian support, to deter aggression, or, when deterrents fail, to win our nation's wars. That is the mission of the U.S. military forces. It has not changed. What has changed is the speed with which it must occur in order to be relevant.

- The second factor that affects our deployment capability may be less evident but is equally important, and that is the fact that the mountains of supplies that many of you see in movies about the military do not exist. They have gone away. They went away because the fiscal resources forced them to go away—in many cases not because the military wanted to draw down their stocks. It is very similar to what has occurred in industry. As the mountains of supplies have gone away, to a large degree we have moved from a supply-based system—that is, a system that basically warehouses stocks—and we have transitioned to a distribution-based system, one that I frequently refer to as a transportation-based distribution system.

In many ways, we have become more dependent on the civil sector than ever before. Each year we spend in excess of \$2.0 billion in the commercial sector to ship DOD cargo around the world and we already outsource the delivery of our food and most of our medical supplies. That increase of what we call third-party sources or outsourcing is increasing throughout the DOD and more and more we are shifting key functions over to the civilian sector.

Truly our commercial partners are becoming a critical part of our wartime force structure. They provide 90 percent of our passenger airlift capacity and nearly 35 percent of our cargo airlift capacity. Over 50 percent of our strategic sealift capacity and nearly 90 percent of our surface transportation needs within the continental United States are provided by the civil sector. We also rely heavily on our commercial partners from the railroad, trucking, and shipping industries to move our forces and material from their mobilization sites to their ports of embarkation. As a result, we are vitally interested in what is happening in the commercial sector. A professional partnership between a strong commercial transportation industry and the military remains absolutely crucial to our national defense now and in the future.

During a contingency, DOD needs to rapidly move vast amounts of personnel, equipment, and supplies over

long distances and across national boundaries. We define the requirement as being able to surge and deploy in excess of two army divisions and a marine expeditionary force in a matter of weeks. We are looking at moving over 7,000 containers a week with a high degree of confidence that the intermodal system will work as well in war as you talk about it needing to work in peacetime.

### Why Intermodal?

First, because that is where the industry is moving. We depend on the commercial transportation industry, both in peacetime and in war. Intermodalism is essential if we are to meet the new deployment requirements of our war-fighting commanders.

Ten years ago, during Operation Desert Storm, we deployed nearly 8,000 mi and took 205 days before we went on the counteroffensive. We want to now be able to deploy a five and one-third division force, several hundred thousand people, the same distance and close in 75 days. Wishful thinking? No, that is a reality. That is the capability we are almost reaching today. It is unheard of in modern military terms in any kind of capacity since World War II. By the year 2002, we will have 110 percent more strategic surge sealift—that is nearly 10 million ft<sup>2</sup> of surge sealift—compared with what we had in Desert Storm; 110 percent more surge sealift for a military that deploys nearly 89 percent of all its force by sea means we will now deploy divisions, combat forces of 18,000 to 20,000 people, simultaneously instead of sequentially as we did in Desert Storm. We are talking in terms of moving 40,000 people a week through ports of debarkation and joining them with their unit equipment that comes by sea.

Are those increases unique to increased sealift? Not at all. There are a number of increases that we have had in a number of different areas. The ready reserve fleet is a fleet right now of about 84 ships. It is in the best condition of any time since I have been in the military. It is the right kinds of ships, roll-on/roll-off ships, in the right locations to facilitate a force projection military.

When we went to Desert Storm, an ongoing dialogue said the military units could not get to the port of embarkation and therefore we should reduce the readiness of the ready reserve fleet and spend less money on the maintenance of that fleet. The reality was that, when we deployed to Desert Storm, only 25 percent of the ships that were activated arrived at the ports of embarkation on time. Our forces could get to the ports faster than our ships. That is not the fleet we have today. Those are not the same capabilities. We have activated 117 ships in the past several years, with no notice; 115 of those ships, or 98 percent of them, arrived either before or by the timeframes that we are looking at. We have a fleet

that can join up with our existing fleet and deliver forces on time.

We have also pre-positioned equipment throughout the world. Tonight as we sit here and enjoy our dinner, there are three fleets—one in the Mediterranean, one in the Indian Ocean in Diego Garcia, and another in the Far East—that are pre-positioned with combat equipment, some of it intermodal, that can deliver forces throughout the world with equipment that is at a high degree of readiness. To a large degree, what we do is deploy our soldiers by air and they join that equipment by sea. It is the right equipment in the right places and it gives our country heretofore unheralded capability.

We have made a number of other substantial improvements in the areas of infrastructure to our ports of embarkation, staging areas, marshalling areas, and so forth—the types of things people who are involved with intermodalism are interested in. More importantly than that, we are interested in and have redesigned our force structure. Our armed forces are being redesigned so that they can rapidly deploy. This is the case for all the services. This is a new capability that offers unheralded options for our national defense and our international interests.

### **What Will Intermodalism Do for Us?**

It will give us speed—speed that will enable us to further reduce our supply stocks in peacetime and continue our move to a distribution-based logistics system. It is all about speed. If you are trying to sell something to the DOD right now and you are in the transportation business, come to sell us whatever can put velocity into the system—something that will take down mass, that will draw down the mountains of supply and put speed into the process, speed that will enable us to further reduce our order ship time and our customer ship time and our customer wait times. In the past 48 months, we have reduced order ship time for repair parts in the army by 55 percent. That is not miniscule. That is capability. That is putting velocity into a supply-based and a distribution-based system.

We want speed also to save us dollars—dollars that we will seek to reinvest in modernized equipment designed to help meet the challenges in the future. Like industry, we are interested in doing recapitalization and our equipment is aging. The average age of our trucks is over 30 years old. Many of our ships, like the C-5 transport, are going to have to be around for another 20 years. We have got to do recapitalization of those projects, and to a large degree we are looking at things that save us money. Speed can save us money.

In wartime, we want speed as well. We hope to use intermodalism to deploy the force more efficiently and faster. For example, there is some indication that merely by putting some of our equipment in containers, unit equip-

ment, we can deploy the force to a major theater by nearly 2 weeks, and we are doing some analysis on that right now.

Because we are transitioning from a supply-based system to a distribution-based system, we must now deploy and throughput our supplies simultaneously with our forces. That may sound like a little thing, but in the past we deployed forces strategically; we operationally throughput them. We did the reception, the staging, and the onward movement, and we built up 30 to 60 days of supply stocks, and then we went and fought. That is what we did in World War II and that is what we did in Desert Storm. That is not the way the U.S. Armed Forces are designed now. They must now strategically deploy operationally throughput and tactically fight all simultaneously and that means the forces and the supplies have to be deployed simultaneously, not sequentially.

Because we are transitioning from a supply-based system to a distribution-based system, we must now deploy our supplies very quickly. How are we going to go about doing that? It is a four-part strategy: (a) we are looking at our doctrine—what commercial industry might call policy; (b) we are looking at redesigning our organizations and our force structure; (c) we are looking at redesigning the training that force structure must then apply those new policies and doctrine to; and (d) we are buying the right technological enablers to give to that force to train and use differently. We are interested in technological enablers that can put speed and velocity into the deployment process.

### **Have We Made Some of the Right Investments?**

I think so. Let me share with you just a couple examples and I am going to go back to Desert Storm. During Desert Storm, we deployed nearly 850,000 tons of ammunition. I do not know how many of you have seen 1,000 tons of ammunition, but it is a lot—850,000 tons is 103 ships of ammunition. It is ammunition that takes about 9 months to load and to deploy.

During Desert Storm, we did not have much in terms of intermodalism. Here is how we moved ammunition. We loaded a pallet of ammunition at a depot in the United States. We lifted it up with material handling equipment, we put it on the bed of a truck or in a railcar, we blocked and braced it, we tied it down, we put a tarp on it, and we sent it by rail or by truck to a port of embarkation. We went through the same download process. We then loaded it on a self-sustaining break-bulk ship. It takes about 3 weeks to load an ammunition ship. That ship then traveled at about 18 knots. It took several weeks to go 8,000 mi. At the destination, it took about 10 days to unload the ship. Then we went through the process of uploading it on trucks.

To move 850,000 tons of ammunition looks something like this—a truck convoy of 50 trucks of ammunition leaving the port of debarkation every 6 hours, 24 hours a day, 7 days a week for 8 months. That is what moving that quantity of ammunition looks like—very manpower intensive. In every case, most of that ammunition was handled five times after it left the port of debarkation. We were talking today about frequencies—I think Jim was talking about Nabisco or somebody with crackers today picking up something 31 times. That is what it took.

That is not the system that we have invested in or have bought for the future. Bill Lucas talked a little bit about the system we are building. We are building an intermodal system. He talked to you a little bit today about something called the CROP—a container roll-in/roll-out platform that allows us to put 16 tons of cargo inside a 20-ft container without blocking and bracing in its own secure devices. What if I told you we have a device that can put 16 tons of cargo, be loaded at a depot, and load that container within 2 minutes? Take all the advantages of a container ship and a ship that travels not at 18 knots but at 23 or 24 knots, that can be loaded in 2 days instead of 3 weeks, that can be discharged in 2 days instead of 10 days, and that can transfer the cargo from the container ship onto a surface mode of transportation in 2 minutes. When you went from an on-the-road capability to what we call an off-the-road or tactical capability in rough terrain that could make the transfer of that container from one mode of transportation without material handling equipment and without additional people, and could do that in 2 minutes? That is the system. That is not only the system we are in the process of buying, it is the system we are fielding.

### **What Does It Mean in Terms of Velocity and Speed?**

What it means is instead of that first pallet, which took 75 days to get from a location in the United States to somewhere in Saudi Arabia, we now can do that same process in 35 days—an over 50 percent reduction in time. That is speed. That is velocity. That is intermodal transportation. When you can mix up the right kinds of trucks by surface with sealift and have in-transit asset visibility on top of them, you begin to put some power into the deployment process. That is what we are looking for in terms of speed—it is intermodal transportation at its very best and it is quantifiable improvements that are seen not only in the pocketbook and in reduced force structures, but also on the battlefield, when you can have a system delivering ammunition 40 days faster than the system used just 10 years ago. That is the system we are buying and fielding, and we are fielding and using it in

places like Bosnia, Kosovo, and the Republic of Korea tonight.

There are many examples of a force projection military adapting the age of intermodalism. Following are just a few: the conversion of military cargo units into intermodal transportation units that can work at airfields, seaports, and rail heads without having different kinds of equipment or different kinds of personnel and people; the adaptation of intermodal packaging concepts, such as strategic configured loads, the loads that we package in the United States that can then be used far forward on the battlefield; the procurement of special handling equipment designed to process containers and facilitate the rapid loading and unloading and procurement of nearly 10,000 20-ft containers and nearly 25,000 ISU (individual shipping unit) and 90 small package shipping units; the fielding of cargo tracking devices such as radiofrequency tags and two-dimensional bar code labels; and the procurement of movement tracking systems that tell us the exact location of our fleet of trucks.

Tonight in Kosovo and in Bosnia, we have something we call MTS—the movement tracking system. It is very similar to what commercial industry has and we know within 10 m where those trucks are. They are good not only for transportation, they help us achieve major changes in the way we deploy the force and have become a major means for communication.

All these and many other enablers are being tied together with an in-transit visibility system called the global transportation network. No intermodal system would be complete without a modern finance accounting system. Here too, we are at least beginning to make some progress. Thanks to a new freight payment service called Power Track, DOD has reduced payment time to nearly 200 commercial carriers from 50 to 70 days as it has taken them to be paid in the past, to nearly 2 days, which is what they are currently getting paid for, all within the past year.

In many ways, force projection is the synchronization of all the modes of transportation in an attempt to gain maximum throughput of whatever the supported commander desires. One of the measures of merit to the war-fighting commander is whether we can push the right amount of things to the right place at the right time.

When I talk about intermodalism, I am not just talking about containers. I am thinking in terms of troop movements through airfields, or moving rolling stock and several combat divisions through the commercial seaports, and moving and marrying the right equipment and the right people as quickly as possibly from the fort to the foxhole.

Equally important to us today and as important as we have had in the past is an intermodal network that allows us to deal with high up-tempo modern conflict. Just as private enterprise is seeking to get these goods to market

more quickly, strategic agility is the new benchmark of military strategy, not just strategic mobility. Transitioning the military to an intermodal system is not as easy as industry sometimes suggests. Nor is it as difficult as the military sometimes implies.

I will not give you the standard spiel tonight that our challenges on a global scale are more daunting than anything private enterprise might face, although this is the case some of the time. Most commercial enterprises do have short communications. They do have fixed transportation networks on hard surface roads, and generally they do know where their customers are and their customers do not change locations each day. Rarely does K-Mart have to use their containers for perimeter defense, living quarters, or an expedient field shower, although I will tell you that all three of those work just great and it is not too shabby living inside a container.

I offer that there are few seasonal rushes that compare with moving, on a few days notice, a city the size of Richmond, Virginia, to the other side of the world with American lives and interests at stake. Clearly, there are differences, but I am convinced the similarities more than outweigh the differences. To survive in today's competitive environment, successful civilian and military transportation organizations must be flexible and efficient on both a national and a global basis. Does that sound similar to some of the things Jim was talking about on a global basis today?

Industry is leading in just-in-time delivery concepts and merging the manufacturing and transportation systems in ways never before envisioned. At DOD, we are merging our maintenance, supply, and transportation programs in ways we never dreamed just a few years ago. Our ability to synchronize the movement of cargo such as ammunition through all modes of transportation, all types of weather, and all types of terrain while significantly reducing manpower and material handling devices is rapidly becoming the envy of militaries throughout the world.

Industry has been forced to streamline organizations and reengineer processes and drive down costs while increasing productivity. The ongoing budget debate over military costs is clear evidence that we face many of the same pressures within DOD. Industry has learned that it has to enter into partnerships with its shippers and, to some degree, even its competitors. So, too, are we learning that in the military.

We are coming to those same conclusions in the military and are outsourcing many of our noncritical support functions. In addition, over the past 5 years, we have seen an expansion of our peacetime and wartime partnership agreements with the commercial transportation industry. Some of you are involved in those. They are everything from the Civil Reserve Air Fleet to the Voluntary Intermodal Sealift Agreements.

However, as an integrated intermodal system, much remains to be done. We still must be able to capture commercial movements in our in-transit visibility system—the global transportation network I referred to earlier. We all must deal with labor issues, ramp space issues, highway congestion, congestion at the ports of exchange between modes, foreign carrier competition, and the fact that information management systems cannot always keep up with the speed of transportation. Velocity management, whether in the private sector or the military, includes information management and what we call in the military command and control. Data entry, the old garbage-in, garbage-out problem, continues to plague us in the military, just as it plagues those of you in industry.

The greatest of all challenges facing the military as it integrates intermodalism into its ongoing business practices is probably cultural. Technology does not overcome cultural resistance. Just as customers must be shown that a more efficient transportation system can help them reduce stocks, so too must the warfighters be convinced that reducing the mountains of supply will not adversely affect their operational readiness and, in fact, will improve their deployability, mobility, and combat readiness.

From a DOD standpoint, I see three major areas of focus within the international framework: policy, information technology, and the need for standardization.

- The first of these, policy, is key to the following two, because without clear policy we can never achieve a seamless transportation system that is efficient and effective.
- Second, information technology is as essential as the intermodal platforms themselves. Until we improve our ability to exchange accurate data in real time, we will reach a point where our finite number of transportation platforms cannot operate any more efficiently. Information is time and, whereas time means money to industry, it means lives in the very relevancy of the future of the U.S. military in some regards.

- Third is the need for standardization. It is essential that services build intermodal systems that are both compatible and interchangeable if we are to develop an integrated system that can function in a joint environment. It makes little sense to buy modular containers that can fit in an aircraft but not on ships or trucks. In the age of joint service operations, it makes little sense to buy fleets that are not capable of moving the palletized cargo racks of another service. In-transit visibility technologies such as linear bar codes, two-dimensional bar codes, smart cards, radiofrequency tags, satellite tracking devices, and optical memory cards all must fit into a common operating system. With few exceptions, we can no longer invest in service unique transportation systems. Systems that move by air must be just as compatible with moving things by sealift and truck transport. Cargo that is not

stowed in containers must be designed for rapid discharge and rapid loading.

My vision for the defense transportation system of the future is a seamless origin-to-destination distribution pipeline, efficiently bypassing many of the current echelons of support and aided by information dominance, leveraging information technologies, coupled with technological breakthroughs in the commercial sector and predictive maintenance systems that prove to be combat multipliers, which in turn, will lead to reduced logistics footprints. I envision a system that maximizes throughput of units and sustainment, bypasses support nodes, reduces handling, and increases velocity time definite delivery while stabilizing customer wait time and delivery consistency and providing methods to evaluate our new distribution-based logistics system.

In-transit visibility, speed, and flexibility will characterize this system. Our ability to deliver material on time and harvest the power of information will reduce logistic response times and will enable us to transition from reactive to predictive logistics. In effect, we will have a combat multiplier. Our force structure is undergoing a transformation with a revolutionary design created to precisely distribute units and sustain them anywhere in the battlefield.

The challenge for the United States Transportation Command is to ensure that the defense transportation system aggressively supports this strategy. This can be accomplished only in partnership with those of you who are here tonight from academia and business. A close relationship between the commercial and military transportation industries will continue to be key to our success.

I began this evening with some historical examples of military attempts at intermodalism, most notably from their failings. Let me close with a recent example of a

very successful military foray into the world of intermodal transportation in today's environment.

The challenge was great. The mission was critical. Move a task force of the first calvary division from Fort Hood, Texas, to Bosnia. A transportation group in Rotterdam began the initial planning. Task force equipment was moved by motor convoy, rail, and air to Beaumont, Texas. Long convoys of vehicles concentrated at the Beaumont docks. Port operations were kept apprised of the arrival of cargo by scanning bar code labels and radio-frequency tags. The cargo was mostly from Fort Hood; however, some cargo was from Fort Carson, Colorado; Fort Raleigh, Kansas; Fort Sam Houston, Texas; and Fort Polk, Louisiana. Helicopters flew into the ports, some from as far away as here in California. Army reservists from New Orleans began loading the cargo at the port of Beaumont, while soldiers prepared to fly to Bosnia. The cargo was loaded on one of the military's new large roll-on/roll-off ships. If you have not seen a large medium-speed roll-on/roll-off ship, it looks like a small aircraft carrier. It is about three football fields long and 15 stories high. The vessel cleared port and steamed to Wilmington, North Carolina, where it picked up cargo coming out of Fort Bragg, North Carolina, and also included movements by air. The helicopters flew to commercial airfields where they went to maintenance checks and then flew to their final destination.

We have come a long way from the port of Tampa and the Spanish American War and also from some of the problems we had in World War I, World War II, Desert Storm, Vietnam, you name the deployment. With strong partnerships and definitive far-reaching efforts, we can accomplish the intermodal goals and rewarding shared successes.

Thank you, ladies and gentlemen, and may God bless you!

## **Day 2: Concurrent Panel Sessions**

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**Institutional Relationships: Case Studies**

**Cargo Clearance, Security, and Safety**

**Implications of Trade Policy for  
Global Intermodal Development**

**Infrastructure Capacity and Connectivity:  
Federal Perspectives**

**National Security and Defense**

**Preparing for Change (*Luncheon Presentation*)**

**Information Technology**

**Financing Intermodal Development**

**International**

**Domestic**

**Environmental Issues**

**Service Reliability and Operations**