# REMARKS PREPARED FOR DELIVERY BY DEPUTY SECRETARY OF TRANSPORTATION ELAINE L. CHAO GOVERNMENT/INDUSTRY FORUM ON THE FEDERAL MAGLEV INITIATIVE WASHINGTON, D.C. MAY 2, 1990

Thank you, Jim, for that kind introduction. I am happy to be here to open the Government/Industry Forum on the Federal Maglev Initiative. This is an important opportunity to discuss one of the most exciting transportation technologies, Maglev.

A few decades ago, who could have imagined that we would be experiencing today's pace and variety of change? Science, basic research and technological development are expanding at a remarkable rate. Today's global trade and competitiveness far outmatch any period in the history of commerce. We may be embarking on an era of unprecedented global economic expansion and, with it, unprecedented challenges.

The stakes are high for each country competing in this new global economy. Many factors will determine how well a nation copes with the pace of change, and confronts the onslaught of competition. No one here needs to be reminded of the critical importance of one key factor: transportation. Nations setting the global pace in the 21st century will be those with the safest and most efficient transportation systems. They will be the

most innovative and the most creative in their transportation ventures. They will capture the future, because they planned for the future.

This forum is about planning for the future. It is about identifying this nation's transportation needs and identifying ways to meet those needs. It is about the federal government sharing its traditional leadership role in planning and developing our transportation infrastructure with the private sector. This forum is the National Transportation Policy in action.

On March 8th, Secretary Skinner and I presented the National Transportation Policy to President Bush at the White House. That policy has stimulated an intensive and continuing dialogue between the public and private sectors to harness the challenges of change in transportation in the remainder of this decade.

As President Bush said, "No sector is more important to the American economy than transportation. As world trade grows even larger, as we continue our leadership in an increasingly global society, we will become even more dependent on transportation."

Coming from the private sector, I believe that successful businesses have a strategic plan to guide them, and that the government should as well. Our document, therefore, is a comprehensive, strategic

decision-making framework to guide the nation into the 21st century.

It is based on more than 118 hearings conducted across the country. We heard from the whole spectrum of American society: transportation managers, individual citizens, community groups, unions, researchers, academics, trade associations, corporations, and state and local governments. We also sought the expertise of America's transportation pioneers, the scientists, technicians, and engineers like those of you in this room.

The strategy takes a fresh look at the nation's transportation agenda. It integrates transportation into the Administration's goals of competitiveness and economic growth. It is intermodal in nature, and organized around the major transportation markets.

The strategy encompasses all modes of transportation. It maintains the flexibility necessary to deal with the differing needs of states as diverse as California and North Dakota.

Our National Transportation strategy encompasses six major themes.

 Rebuilding and expanding our transportation system;

- Providing a sound financial base for the development of transportation facilities;
- Keeping the nation's transportation industry strong and competitive;
- 4. Supporting public safety and national security;
- Preserving our quality of life and our environment;
- Promoting transportation technology and expertise.

There are several long-term goals among the 169 guidelines and 65 legislative objectives outlined in the new strategy that will help preserve and expand transportation facilities. We want to close the gaps in the transportation network in order to provide effective connections between rural and urban areas and the various modes of transport.

We want to continue efforts to increase private sector investment in transportation and promote joint public-private initiatives for financing transportation facilities and operations.

We will encourage future development of rail passenger service in high volume corridors, including the introduction of high speed rail and Maglev service.

We will attempt to provide seed money for research on new transportation systems, and assist in assessing their feasibility and needs.

We will work to ensure that regulatory and institutional barriers do not impede implementation of viable new technologies, while assuring that procedures are in place to maintain safety.

We will promote adoption of new technologies and reassert U.S. international leadership in transportation by fostering increased awareness of and interest in research and development activities.

By implementing the guidelines of our strategy, we will take a great step forward in enhancing the safety and efficiency of our transportation system, and in strengthening America's ability to compete in the global economy.

The National Transportation Policy is, in short, a charter for a sharper focus on America's transportation requirements. With our transportation system essentially in place, we must now embark on a new era of maintenance, modernization, and appropriate expansion. We must find new ways to use existing systems, while developing new technologies and more innovative approaches to financing. The foundation era

in transportation must now give way to the innovation era.

The part of our National Transportation Policy of most interest to this gathering is our commitment to advance transportation technology and expertise. Technology alone will not solve our transportation problems. But in combination with sound management of capital and human resources, technological innovation can provide the solutions to many, of our transportation challenges.

In fact, technology is critically important to the future of U.S. industry across the board. That's why President Bush is committed to allocating about \$71 billion for research and development in 1991. This reverses a 20-year decline in R&D spending as a share of the federal budget, and demonstrates the importance the President places on research and development.

Over time, it will yield new knowledge, products, and processes that will enhance economic growth, spur U. S. competitiveness, and improve the quality of life for all Americans.

President Bush's support for science and engineering is underscored by his commitment to double the budget of the National Science Foundation by 1993. This money

directly supports America's best researchers and most talented scientists and engineers.

The President's transportation initiatives also underscore his commitment to research as an investment in America's future. We are asking Congress for a 17 percent increase in funding for an array of innovative transportation technologies. One of the most exciting of these transportation technologies is magnetically levitated high speed ground transportation, or "Maglev."

I traveled to Emsland, West Germany and rode in the Transrapid prototype of the first generation Maglev system. I met with the designers of that system and the system under development by the Japanese railways. I have also met with state and local officials and entrepreneurs who want to build Maglev systems in the United States.

I have come away from those experiences convinced that Maglev has the potential to play an important role in the nation's transportation system. It offers the potential to dramatically improve surface transportation mobility with a system that is intermodal, energy efficient and environmentally sound.

It is ironic that I had to travel as far as Germany to ride on a prototype Maglev system. So much of the creative spark behind both the German and Japanese systems came from this country. In fact, it came from some of the participants in this forum. Much of the original research and concept demonstration was funded by the Department of Transportation. Now we are at a point where Maglev systems are being marketed in this country by foreign countries who are selling us back our own ideas.

We have talked about "leapfrogging" the existing foreign prototypes, and I see from the forum's program that there is a panel session scheduled to address that subject. But what do we mean? What is the federal government's Maglev research goal?

Building on previous research efforts and the results of the Federal Railroad Administration's current feasibility study, the federal program is designed to determine the appropriate role for Maglev in the domestic transportation system. The goal is to facilitate private development of an operational Maglev system in this nation based upon a domestically designed and manufactured technology, if that is feasible.

To accomplish this goal, I believe we must first identify what transportation needs Maglev is best suited

to meet. We must explore the travel characteristics of Americans, both now and in the future. We must identify where the present system is inadequate, and where there is demand that will be unfulfilled for lack of appropriate transportation. We then need to identify the critical factors of this demand and which portions can best be met by a new transportation system such as Maglev.

Having identified the performance parameters for the ideal American Maglev system, we then need to determine the best way to develop the system that meets those parameters. Whether it is developed primarily from an American design or a combination of American and foreign design will depend on the economics and the technological advantages in each approach.

While an American system would carry technological benefits for the nation, substantial economic benefits in terms of jobs, business activity and profits will accompany the implementation of a successful Maglev technology, either domestic or imported.

And what of the federal government's role in this process? Our new transportation policy calls for fresh approaches. In the past, the federal government took the lead in developing the nation's transportation

systems. The time has come for the federal government to share its leadership role. Not to <u>transfer</u> it, as some say we are doing, but to <u>share</u> it by creating full partnerships with state and local governments and placing greater reliance upon the creativity and resources of the private sector.

The federal government can help focus the attention and energy of the public and private sectors on the importance of transportation for the nation's future. By encouraging transportation research, offering seed money, and providing mechanisms for coordination, the federal government can create a positive climate for research and innovation and help attract broader involvement in the effort.

Federal government programs must foster increased public-private partnerships and strengthen the tools and incentives for innovative research funding by the private sector, state and local governments, and non-profit organizations.

Particularly where the benefits of investment in research and development would accrue beyond an individual firm, there is little incentive for a single firm to undertake a research project on its own. Frequently, U.S. firms are competing with foreign companies with research activities at least partially subsidized by their governments.

To assure the viability and technological competitiveness of the domestic transportation industry, additional steps may be required to foster research efforts in this country. Cooperative agreements for research can help all members of the transportation community contribute to funding research and increasing the payback from this activity.

The federal government will examine legislative and administrative strategies that can reinforce U.S. competitiveness in the world market, without harming competition and the interests of consumers.

The development of Maglev in the United States will require a major effort on the part of the government and the private sector. Some have questioned this approach. They assert we should use our limited resources to repair our existing systems or buy this technology overseas and thereby save the expense of research and development. These comments come from the same mindset that used to judge every corporation's investments only on how they affected the next quarter's bottom line.

When approached with such arguments, I think of the designers, engineers and entrepreneurs that began

America's railroad industry over a century and a half ago. The railroad was radically different from the horse drawn wagon. Many critics were sure that railroads would not replace the horse. Not only did the railroad radically alter the nature of the transportation industry, but its insatiable demand for steel and machinery led to this country's emergence as the world's preeminent industrial power.

Maglev is in much the same situation as the fledgling railroads one hundred and fifty years ago. There are skeptics, to be sure. Meanwhile, there is a tremendous challenge to reshape a transportation system capable of meeting the needs of a dawning century.

There is a role for Maglev in that new system. If wideranging application of Maglev technology is feasible, we will make a major contribution to solving our transportation problems. We also will help create a new industrial base, with benefits spreading beyond transportation and contributing to innovation and competitiveness in other sectors of our economy as well.

This is the kind of catalyst that can fuel a second American industrial age in the 21st century.

Thank you and God bless you.

# REMARKS PREPARED FOR DELIVERY BY DEPUTY SECRETARY OF TRANSPORTATION ELAINE L. CHAO U.S. MERCHANT MARINE ACADEMY KINGS POINT, NEW YORK MAY 8, 1990

Admiral Krinsky, honored guests [list provided on arrival], ladies and gentlemen, and midshipmen of the regiment: Good morning, and thank you for that kind introduction. I am very proud of the United States Merchant Marine Academy, and it is a great honor to be back at an institution I know so well.

Franklin Roosevelt, a great lover of all things nautical, once outlined three cardinal rules for public speaking: Be brief, be sincere, and be seated. I assure you, I have every intention of adhering to all three today.

My thoughts for you are not to promise success in merchant shipping, but to emphasize that your experience here at the Academy is equipping you to meet the future in any number of ways. The basic tradition of this great academy is to teach principles such as courage, self-assurance, perseverance, and dedication which spell success in all walks of life.

Through your training and hands-on experience aboard merchant ships around the world, you acquire a sense of purpose and the willingness to accept responsibility. You can take great pride in this

accomplishment, as well as the profession you have chosen.

At a time when jobs are tight in the merchant marine, I pledge to you that we in government will continue to make every effort to revitalize the maritime industry in order to enhance its future and yours. There are several good reasons why I am optimistic that we can achieve this goal.

First, we have a President and Administration that believes the United States should be returned to its rightful position of leadership among maritime nations. A strong merchant marine is needed to serve the country's commercial and national defense requirements.

In March, we announced a comprehensive National Transportation Policy which provides a long-term strategic approach and decisionmaking framework for our transportation needs into the next century.

Fundamentally, it moves away from government regulation, interference, and subsidy and returns to the safe harbor of a free market. This is the cornerstone for a stronger U.S. maritime industry.

Another reason for optimism is the commitment we have made to greater safety on the seas. While the U.S.

has among the oldest merchant fleets, its safety standards are the highest in the world.

Our outstanding maritime safety record is due to the high quality of the seamen at this Academy and the high standards demanded by the Coast Guard. Ships built well, properly maintained, and crewed by competent people have fewer accidents. No simpler or more sweeping formula can be applied to an industry seeking the key to its own renewal.

And it will be renewed. The famous English novelist Joseph Conrad expressed it best: "The true peace of God," he wrote, "begins at any spot a thousand miles from the nearest land."

There are days in Washington when I agree with Conrad's wisdom. And yet, I would not abandon the challenge of helping to prepare America's transportation network for the future, any more than you would lose your appreciation for the sea and that unique peace so well defined by Conrad.

If I leave a legacy of new maritime jobs and a climate of increased safety for all of you who hope to serve as merchant seamen, then I will consider my service as Deputy Secretary a success.

Good luck, and God bless you all.

#### REMARKS PREPARED FOR DELIVERY BY DEPUTY SECRETARY OF TRANSPORTATION ELAINE L. CHAO PROFESSIONAL WOMEN CONTROLLERS 12TH ANNUAL CONVENTION LAS VEGAS, NEVADA MAY 8, 1990

Good afternoon, and thank you, Rose, for that kind introduction. I am delighted to be here in Las Vegas for this 12th annual gathering of the Professional Women Controllers.

I think it is appropriate that your theme this year is "Pioneering the 90s." In many ways, women in your chosen field are pioneers, since only 13% of all air traffic controllers are women. But you are pioneers in the finest air traffic control system in the world.

Much of this country's eonomic life and growth depends on an aviation system that is well designed and maintained, and which will keep pace with the increasing demands of the flying public.

In the decade since airline deregulation, we have experienced an explosive growth in demand for commercial aviation services. More people are flying to more places on more scheduled flights than ever before. The number of airline enplanements has almost doubled in the last ten years. We will have nearly a half-billion this year, and by the turn of the century we could have close to a billion.

Aviation growth is not limited to passenger traffic. In the next decade, major carriers and commuter lines will increase the size of their fleet by more than 1,000 aircraft. Another 1,200 will be added during the following ten years. The general aviation fleet, already operating more than 220,000 aircraft, is expected to grow five times as fast as the commercial airline fleet.

This has a direct effect on air traffic controller needs. Anticipated growth up to the year 2010 includes a 55 percent increase in aircraft operations at airports with traffic control towers, a 62 percent increase in instrument operations in terminal areas, and a 73 percent jump in air carrier hours flown.

In order to meet this challenge, we must take a number of steps to improve our air traffic control system, and that includes making things better for those who make up the heart of our system: the air traffic controllers.

First of all, everything we do relates to one overriding goal: safety. I know that Admiral Busey will continue to see that nothing is allowed to jeopardize safety and security.

Let me point out some of the progress we are making. Improving on 1988's record, near midair collisions,

operational errors and pilot deviations decreased again in 1989 to the lowest level in five years.

After safety comes personnel. There is no question that we need more controllers who are as dedicated and hardworking as all of you present today. We need the right people, in the right numbers, and in the right jobs. We are determined to make sure that our air traffic system is the kind of workplace that attracts and keeps the best.

This means establishing salary systems that are fair and equitable to all concerned. As you know, many air traffic facilities are difficult to staff because of unique pressures, high living costs, and other drawbacks. Yet, the pay is the same as that at other less difficult locations. In this regard, let me stress that our Pay Demonstration Program is only an interim solution. The ultimate solution is a revised pay system.

I support the Office of Personnel Management's draft bill to modernize and reform the federal pay system. The proposed legislation lays the foundation to address issues of particular interest to the FAA. It would establish separate pay and job evaluation systems for occupations fundamentally incompatible with the federal and local pay systems. This would certainly be warranted for civil aviation and security occupations.

Another way to attract and keep the right people in the air traffic system is to listen more closely to what you have to say. One way to accomplish this is through a program called "Partners in Problem Solving." Since 1988, we have brought facility managers together with union representatives for special three-day workshops. Last year, the participants were selected for workshops in pairs. A manager was paired with a representative with whom he or she worked. They searched for new ways to work together, and new approaches to problem solving.

I am told that almost all of those who participated in Partners in Problem Solving felt that the training helped expand their knowledge about labor/management relations. They also agreed that it established new levels of open interaction and discussion between managers and the union.

Training is another particularly important element in a time when we are in the midst of rapid technological change. We are experiencing a technological revolution in aviation. The way we fly, communicate, navigate, and control traffic are all changing. Glass cockpits, datalink communications, automated air traffic control, satellite navigation, fly-by-wire and other developments are engulfing the field.

This new technology will give us the capacity to serve those millions of additional passengers in the years ahead, and go a long way toward helping address the problem of flight delays.

I am fully aware of the delay problem. Continued delays have an impact not only on our aviation system, but on our economy as well. However, it is important to keep perspective. Only 1.1 percent of total operations experienced delays last year. Half of those occurred at only five airports. More than two-thirds of all delays occurred at 10 airports. So the problem, while serious, is not spread throughout the system. And technology will help immensely in finding a long-term solution.

The DOT's massive Capital Improvement Program is a case in point. As you know, we are now preparing to install the largest computer-controlled system ever developed. I am speaking of the Advanced Automation System to improve automation of the primary traffic control facilities nationwide.

I hope you will agree that the air traffic control system is far too complex to change without considering the human beings who run it. Safety data collected by NASA and the FAA shows that where accidents are attributed to human error, the basic problem was often

traced to the way the human interacted with the automated system.

Without care, a highly automated system could degrade human performance. With that in mind, we are paying special attention to how people fit into the total picture. The FAA is now in the opening stages of a comprehensive national human factors research and development effort. Working in partnership with NASA, the Defense Department, the aviation industry, and academic institutions, we are looking at human factor issues in all types of aircraft and in air traffic control operations.

As noted in the budget figures, the FAA is also recruiting more and more controllers, and increasingly women are choosing careers in the air traffic control field. In the last few years, each air traffic control class has been near capacity, and averaged 20% women. In 1989, almost 25 percent were women.

Transportation may once have been a 'man's domain', but it is becoming less so. The number of women at the DOT has grown from 18.5 percent in 1983 to 25.2 percent today, an increase of 6.2 percent. That may not seem like much, but it takes a lot of women, 600 as a matter of fact, to move a percentage point in a Department the size of the DOT. Furthermore, almost

10 percent of DOT employees rated GS-13 or above are women, an increase of 4.5% since 1983.

I am very much aware that women work for the same reasons men do: money, job satisfaction, and the fulfillment that comes from a career of value to yourselves and society.

Many of you are here today to enhance your prospects for senior level management. I commend you, and want to urge you forward. I know, too, that many of you are concerned about adequate day care facilities. The day care facility at the FAA headquarters is a big success. It fills an important need for women who, in most cases, are primarily responsible for child care. Right now, we are planning to open two day care facilities at air traffic centers in Oakland and Jacksonville.

Day care programs serve an important need, and will be an important equalizer for working women. This Administration has made a concerted effort to locate and place qualified women in high level government posts. To date, 21 percent of Presidential appointees in Executive Branch departments are women. The number of female commissioned officers on the White House staff is closer to an unprecedented 30 percent. The outreach effort to women managers and executives is being made, and I believe the numbers will continue to grow.

We are proud of our record in women's achievements. I believe they are substantive and lasting, the result of conscientious initiatives to facilitate the advancement of women into non-traditional and high-level positions of responsibility.

In a larger sense, however, it is my hope that the DOT will always have a "big picture" perspective on doing our job with the most talented people available in order to encourage the best and the brightest of either sex to "come aboard" our organization and develop their abilities to the utmost.

Air traffic controllers are the linchpin of the national airspace system that makes modern aviation possible and makes flying safe and efficient. The U.S. air traveler depends on you. On behalf of the Department, let me take this opportunity to thank you for your hard work and commitment to our transportation policies and programs.

In return, I pledge to do all I can to make sure you have the tools necessary to serve the traveling public in the years ahead.

Thank you and God bless you.

# REMARKS PREPARED FOR DELIVERY BY DEPUTY SECRETARY OF TRANSPORTATION ELAINE L. CHAO MERCHANT MARINE MEMORIAL SERVICE WASHINGTON, D.C. MAY 22, 1990

Thank you very much, Warren.

It is good to be among so many friends of the American merchant marine, people who recognize not only its historical significance, but who also recognize its continuing importance to our great nation.

And it is good to know that in many places across the country, thousands of others are joining us in observing National Maritime Day. Some of the events are aboard ship, others on the waterfront, and all of them appropriate settings for this fitting ceremony of respect.

We are here to pay tribute to those who supported our armed forces during wartime by serving aboard merchant vessels. They were the life line of the war effort, bridging the oceans and forging the Allies into a single wartime organization.

They put armies and equipment on hostile territory and kept them there. The merchant fleet delivered the goods that made the difference between victory and defeat. And they paid a dreadful price for what needed to be done.

In 1944, General Eisenhower put it this way, "Every man in the Allied command is quick to express his admiration for the loyalty, courage, and fortitude of the officers and men of the merchant marine. When final victory is ours, no organization will share its credit more deservedly than the merchant marine."

We cannot let their sacrifices be forgotten. The world has changed a great deal in recent months, not to mention during the years since World War II. But America must recognize that our merchant fleet remains vital to our national security today.

During his first first year in office, President Bush signed a new National Sealift Policy stating that "Sealift is essential both to executing this country's forward defense strategy and to maintaining a wartime economy."

To provide adequate sealift capability, the federal government must promote the readiness of the U.S. merchant marine and supporting industries in peacetime.

The President's National Transportation Policy endorses this objective as well. It recognizes the need to reform federal maritime programs to enhance the

American merchant marine's competitive position and sealift capacity.

I expect the Department's review of maritime policy to be completed by June 30th. Legislation may be proposed which serves the best interests of the maritime industry.

That is important business. But today, it is tomorrow's business. Our task, indeed our duty, today is to remember and pay tribute to the merchant seafarers who lost their lives in wartime service; to those who have passed away in intervening years; and most especially, to those who served in World War II and are with us today.

We will not forget their legacy.

Thank you very much.

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# REMARKS PREPARED FOR DELIVERY BY DEPUTY SECRETARY OF TRANSPORTATION ELAINE L. CHAO 39TH ANNUAL MARITIME WEEK LUNCHEON SEATTLE, WASHINGTON MAY 24, 1990

Thank you, Jonathan, for that very nice introduction. I am delighted to be here in Seattle. I was last here in September. It was wonderful weather then and it's wonderful weather today.

I'm also delighted to be in Seattle to join you for the celebration of Maritime Week, the commemoration to honor the many contributions of the maritime industry to this particular region.

As you know, my background is in maritime. As I have gone into other activities at the Department of Transportation, maritime is always an area that carries a very special place in my heart. It is an area that I am very familiar with and also have, again, a great deal of emotion for.

Before I talk to you about maritime, let me talk about another service which is near and dear to my heart as well, and that's the Coast Guard.

Actually, when Admiral Kramek first invited me to be here, I thought that the theme for this year's celebration was the 200th anniversary of the Coast Guard, and I prepared my whole speech about the Coast Guard. I later realized that more of you were also interested in hearing about maritime.

But I think it is still very worthy to talk about the Coast Guard because it is a service that has a multi-faceted tradition and made many contributions to our nation.

I noted with pleasure that many of the events on the schedule here in Seattle area showcase the achievements of this most respected agency within the Department of Transportation. If I could, I'd like to take a few moments to offer my own tribute to the Coast Guard.

As Ruth has already mentioned, many of you know that the Coast Guard's first mission was to collect customs, duties, services and fees. Maritime commerce was a major source of revenue at the beginning of our nation. In 1789 one of the first acts of Congress was to established a trade tariff to pay the bills.

Later, in 1790, Congress authorized construction of 10 "revenue cutters" with 40 officers of the Customs. The Coast Guard is justifiably proud of being the nation's oldest continuously serving seagoing service, predating the Navy by four years. And it is truly a seagoing service.

On an average day, the Coast Guard saves 12 lives, or one life every 91 minutes. During that same average day, they assist another 343 people, save \$3.1 million in property, and complete 143 search and rescue missions.

Every day, the Coast Guard marine safety personnel work 25 oil and hazardous chemical spills and inspect 108 vessels for safety defects.

Every day, the Coast Guard seizes nearly a half-ton of marijuana and cocaine, and helps other agencies confiscate even more. The street value alone of the illicit drugs seized by the Coast Guard on an average day totals \$3.3 million, or \$2,300 every minute.

Twenty five marine casualties are investigated on an average day and more than 8,100 transactions take place on the Coast Guard Marine Safety Information System, the largest system of its kind in the world.

Because of the Coast Guard's "average day," people are saved from the sea, our ocean channels are safely buoyed, vessels are operated safely, smugglers are stopped, incompetent seamen and poor vessels are removed from the sea, and our waterways are cleaner.

This might be an average day, but I think you will agree with me that the Coast Guard's performance is way above average.

What's more, the Coast Guard's mission is continually changing. During the 1970s, concern for the protection of the environment prompted legislation increasing Coast Guard activities in environmental safety and marine environmental response area. Today, the Coast Guard's mission is not only to protect man from the sea, but to protect the sea from man.

Let me talk at this point about what happened in March 1989. Last year, the largest maritime oil spill in the history of the North American continent put the Coast Guard to the test. Ten million gallons of heavy crude went into the waters of Alaska within three hours. As bad as it was, it could have been four times worse if the Coast Guard, working with the Alaskan authorities, other military organizations, and Exxon, had not safely off-loaded 40 million more gallons from the Exxon-Valdez.

The Exxon-Valdez incident was clearly a national catastrophe in terms of the environment, but it also taught us many things.

It precipitated a thorough review of all our pollution contingency plans. One of the best examples is right here in the Northwest. The marine safety officers in Puget Sound and Portland have rewritten their contingency plans, and tested them. The exercise here in Seattle had over 500 participants, based on a worst - case scenario for an oil spill. In Portland, they've also conducted a table top exercise and deployed equipment. This is the kind of thinking ahead that prepares for the future, rather than merely responds to it. I think, in a broader sense, the Exxon Valdez tragedy also pointed out the need for international standards to cope with the risk of oil spills.

As you may know, the Administration submitted a major piece of legislation called the Oil Spill Liability Compensation Bill to Congress last spring and a major element of this bill calls for U.S. ratification of the international protocol.

The 1984 oil spill protocol would create a global liability and compensation system for oil spills occurring in countries that ratify the treaty. It provides for shipowner liability up to about \$78 million per accident and establishes an international fund supported by the oil industry providing up to \$260 million for each spill.

The aim of this international protocol is to guarantee fast and certain compensation to victims of the oil spills and maintain U. S. credibility on international environmental issues.

I know that Washington State law provides for unlimited against polluters and, in fact, your state

attorney has come out against the protocol. Let me say that unlimited liability is a very difficult concept to apply, and too often leads to endless litigation. It can actually be a disincentive for safe and efficient tanker operators.

The Exxon Valdez incident was unusual in that Exxon owned both the tanker and the oil and employed the crew. In fact, we were lucky because Exxon had very deep pockets.

But today, as you may know, half of the world's oil is carried by single-ship owning companies, whose entire assets could be wiped out by a single wreck. In the end, unlimited liability without the protocol may actually increase the danger of the very pollution we are trying to prevent because number one, we would be encouraging creation of more single ship owning companies with limited assets to deal with oil spills, and number 2, -- if there were unlimited liability -- more shipowners unable to obtain marine insurance.

The existence of this international compensation fund as structured by the protocol addresses the very real risks posed by single ship owning companies. The absence of the protocol, and the inability to insure against unlimited liability, could mean even more single

ship companies and would increase the threat of a spill with no assets to clean it up.

If I could also cite at this time another example that we're all aware of, the Amoco Codiz. If you recall, the Amoco Cadiz accident occurred in 1978. Twelve years later, the French, who are not signatories to the protocol, are still trying to sort out the claims and compensation to the victims skimming from that particular spill.

We believe that it is vital to encourage responsible oil and shipping companies to maintain the most seaworthy vessels and have the most responsible and highly trained crews.

The protocols are a major step toward meeting that goal and your support on that particular issue would be very much appreciated.

Let me now shift gears and share some thoughts with you about other issues affecting the maritime industry.

As I'm sure you know, President Bush unveiled his national transportation strategy this past March. This document is not a budgetary document. It does not have numbers in it, and was never intended to have numbers. Rather, this document provides the framework for future transportation decisions and

defines a new relationship between the federal, state and local government and the private sector.

The national transportation strategy makes it very clear that an efficient and competitive transportation system is crucial to our nation's economic health and military preparedness.

Obviously, a primary concern is the decline of the American merchant fleet. The national transportation policy specifically recognizes the need to work toward policy reform in the maritime sector and the importance of removing regulations which restrict U.S. shipping lines, reduce operating flexibility, and prevent effective competition.

The national Sealift Policy signed by President Bush last October emphatically states that sealift is essential, both to executing this country's forward defense strategy and to maintaining a wartime economy.

This is even more crucial in the face of all the remarkable events taking place in the world today. The incredible developments in the Soviet Union and in Eastern Europe point to a new spirit of cooperation instead of the longstanding distrust and military confrontation between NATO and Warsaw Pact forces.

This potential new geographical and geopolitical balance requires a strategic shift in our defense posture. Unless the democratic reforms are reversed by a return of hard line rulers, we are going to see, as we have seen already, significant cut backs of Allied forces and equipment in Europe. Any reduction likely to occur over a period of several years. In the short term, it may enhance revenues of U.S. carriers returning the household goods and autos of military personnel and their families.

In the longer run, however, there may be a reduction of DOT freight revenues for carriers as the volume of military supplies for overseas forces is reduced.

U.S. companies must develop strategies to capitalize on the marketing opportunities emerging in a unified European market in 1992. They should also set their sights on east bloc trade, as these countries gradually divest themselves of state-controlled economies.

As you can see, these developments in Europe are significant, not only for the commercial prospects of the U.S. flag merchant fleet, but also for the sealift capacity to pre-position military forces, because if we are going to cut back on U.S. troop strength in Europe while still emphasizing a strategy based on troop pre-positioning,

reliance on the sealift capacity of the U.S. flag merchant fleet will become even more important.

The National Transportation Policy recognizes this, confirms our commitment to work with the Department of Defense to identify and also meet these new transportation needs, and implement the President's National Sealift Policy.

Last December, a task force was established within the Transportation Department under the leadership of Secretary Sam Skinner. The purpose of the task force is to review U.S. maritime policy and consider all possible alternatives.

Clearly, U.S. flag operators must have greater flexibility to offer efficient and competitive services for world trade. Examples may include flexibility as to trade routes, use of foreign-flag vessels to support U.S.-flag shipping, and competitive acquisition of vessels. This review process is ongoing, and we hope to wrap it up by early summer, with possible legislative proposals. Any new transportation strategy must also encourage shipbuilding, research and application of new technology to help American ships become even more competitive. The need, I believe, has never been stronger.

A considerable change in the size and structure of maritime traffic has taken place during the last two decades. Ships have gotten larger. The number of tankers has doubled. Their tonnage has increased sevenfold. Quick turnaround container ships have evolved. Numerous structures for oil and gas production have been erected in coastal waters. Clearly, the marine traffic flow has become much more complex.

Since 1969, the Maritime Administration has sponsored a cooperative program with the U.S. flag shipping industry to apply leading-edge computer technology to the operations and management of the U.S. fleet.

When the cooperative program first began, most of the companies didn't even have computers. As a result, the early program was revolutionary in that it was largely responsible for bringing about the computerization of the basic functions that our shipping companies perform today, such as cargo documentation, financial control, and container management.

In recent years, there have been many other innovations as well, including development of software modules for all kinds of shipping company operations; satellite communications from ship-to-shore voice and

data communications; electronic data interchange from one company's computer to another's; and extensive use of personal computers, both onboard the vessel and on shore.

We're also seeing, interestingly enough, another major innovation in computer technology for the shipping industry, namely "artificial intelligence." In 1985, MARAD requested proposals for cooperative research projects with the U.S. ship operating industry, emphasizing the application of artificial intelligence for maritime operations. Today, exploratory research has begun in a number of these areas. The Piloting Expert System is an example of the navigational aids developed to improve a pilot's decision-making capacity. This prototype expert system was developed by Rensselaer Polytechnic Institute with MARAD's input.

The system basically gives decision support to masters, mates on watch, and pilots and allows users to refer to or simulate piloting transits before making actual voyages.

With regard to propulsion, in June of last year, American President Lines signed a cooperative agreement with the Maritime Administration to develop an expert system for diesel engine performance diagnosis. The research has focused on the use of artificial intelligence technology to assist ship engineers in diagnosing problems with diesel propulsion engines.

Overall, the system will monitor engine performance, improve reliability and fuel efficiency, and specify maintenance to avoid catastrophic engine failures.

Let me also say that even with all these advances in technology -- this is the part that I want to emphasize -- people still determine the ultimate level of safety. We must continue to address the human aspects of maritime safety. Questions of crew training and appropriate pilot are require ongoing attention.

For me, I believe very strongly that technology is an aid, but it by no means assures safety. Safety still must rely on the human factor.

I think there is reason to be optimistic as we go forward and work together on the difficult challenges facing the U.S. maritime industry.

Let me close by wishing all of you a very happy Maritime Week and for those of you who don't know, May 21st through 28th is also National "Buckle Up America," Week. With Memorial Day approaching and the start of the summer travel season, I've been asked by Secretary Skinner to put a plug in and make sure that

you're all obeying your seat belt laws and buckling up when on the road.

I'm delighted to be here for Maritime Week, and hope to see you again to celebrate another Maritime Week next year.

Thank you very much.