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**Connecticut Maritime Association**

**"The Future of Marine Safety: Leadership, Innovation, and Cooperation"**

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Amenities:

[Extemporaneous acknowledgement of Norman Webster, Duncan Smith, and Dan Frost.]

It's probably none of my business . . . and maybe I shouldn't offer unsolicited advice . . . but it seems to me that the Connecticut Maritime Association could use some help raising its public profile. After all, that's one of my published goals—raising the visibility of what we do for America—so encouraging others to do likewise seems consistent. Maybe we could start by changing your name.

Don't get me wrong. I admire understatement and restraint, but CMA takes these virtues to an extreme. The name Connecticut Maritime Association sounds like a local conference of marina managers or harbor masters.

Calling this distinguished gathering of international ship operators the Connecticut Maritime Association is like calling the Summer Olympic Games the Sydney Invitational Track Meet . . . or calling the United Nations the East River Cooperative Society.

You need to come up with something that starts with "World" or "Universal" or "Global." "Intergalactic" would even suggest some future vision. Also, the rule says "Millennium" has to fit somewhere.

Seriously, I am delighted to be here today with a group of leaders who are more interested in substance than style—and to talk with you about how the United States Coast Guard approaches the leadership challenge of promoting further advances in marine safety over the next generation.

Truly our challenge must be constant progress, not holding on to some level we describe as "adequate" for the moment.

Introduction:

In the middle of the nineteenth century, an alarming number of boiler explosions on Mississippi River steamboats prompted calls for the federal government to require steamboats to adopt new safety technology in the form of pressure relief valves.

Despite the number of fatalities caused by these preventable equipment casualties, there was stiff resistance to the idea of federal intervention. "We don't need any new laws," said one mid-western senator. "Americans are quite capable of looking after their own safety without any help from Washington. If passengers have concerns about the steamboats they're riding, they can check the boilers for pressure relief valves themselves. We can get along just fine without having Uncle Sam hold our hands." [Quotation marks for intonation only--not a direct historical quotation.]

That *laissez faire* argument did not prevail in the 1800's, and the Steamboat Inspection Service—an antecedent service of the Coast Guard—soon found itself in the business of sparing passengers the inconvenience of checking pressure relief valves as part of their routine boarding procedures.

The argument holds even less water today, when the complexity of shipboard systems makes it impossible for passengers to saunter down to the control booth and conduct any sort of informed examination of the bewildering array of technological wonders on display. And the argument is even less persuasive when we consider that the marine safety threats of greatest concern to the public are present on all classes of commercial ships, not just on passenger vessels.

The fundamental issue in the U.S. Coast Guard's marine safety mission is trust. The American public has made it clear through the political process that it is unwilling to accept the human, environmental, and economic consequences of major marine transportation casualties. Accordingly, they have placed their trust in the Coast Guard to look after their safety when they board passenger vessels and to look after their environment when any vessel plies our waters.

Similarly, the marine industry has made it clear, through its notable cooperation with our prevention initiatives—especially in the eleven years since the *Exxon Valdez* spill—that it trusts the Coast Guard to exercise the larger public's trust reasonably. You trust us to get to the bottom line, to use limited resources in the most productive way, and to emphasize necessary and practical risk management measures over symbolic and bureaucratic ones.

We are honored by that trust and strive to earn it every day.

The latest affirmation of that trust occurred earlier this month when the U. S. Supreme Court upheld Intertanko's challenge to some state regulations affecting tank vessels in Puget Sound. The Coast Guard entered the case on Intertanko's side because the case raised important issues with respect to the Coast Guard's authority to conduct an effective marine safety program at the national level. It was an effort that took more than four years since preemption is invariably a sensitive issue.

The court's ruling was a victory for federal leadership in marine transportation, but it was not a victory over anybody. The states are not adversaries, but partners with whom we share the common goal of keeping oil out of the water. We did not argue that the bar should not be raised—only that the bar remain level as it rises and that the Coast Guard remain the keeper of the leveling devices.

Welcome though it was, the Supreme Court's decision did not occasion any popping of champagne corks at Coast Guard Headquarters. Quite the contrary. We received news of the judgment as a reminder of the responsibility that accompanies the public trust in us, particularly the responsibility to confer with states and industry alike as we work together to increase safety.

Just as the United States Coast Guard has demonstrated leadership in working with other maritime nations to establish and enforce international standards and to implement ISM/STCW, it is now even more clearly incumbent on us to exercise leadership in working with the states. The ruling is a call for continued leadership that will sustain the momentum to continuously improved safety and environmental protection.

*Prinsendam*: marine safety through Leadership, Innovation, and Cooperation.

My purpose today is to give a flavor of our leadership intentions for the next twenty years by looking back to a great sea rescue that took place twenty years ago when our cutter and helicopter crews helped evacuate a stricken passenger ship. This twenty year old sea story affords important insights into the future direction of the Coast Guard's marine safety and environmental protection program.

Everybody who was in the Coast Guard on October 4, 1980, remembers the case of the *Prinsendam* vividly. When we received the first distress message at one in the morning, *Prinsendam* had an excellent chance of becoming a maritime disaster of historic proportions. A fire was raging in the engine room of a passenger ship in the middle of the Gulf of Alaska. The ship had lost all power, water pressure, and fire fighting capabilities. More than 500 people were preparing to evacuate into open lifeboats. Most of the passengers were elderly; many were infirm. Help was hours away. The weather was beginning to deteriorate. The situation was dire.

The Coast Guard had a C-130 and an H-3 helicopter in the air within ten minutes. Three cutters rushed to the scene. U.S. Air Force and Canadian Forces units responded. So did several merchant ships, including a supertanker named the *Williamsburg*, which proved itself indispensable both as a stable platform for helicopters and a refuge for people lifted from the lifeboats. The coordinated efforts of all these rescuers succeeded in bringing every passenger and crew member to safety within twenty four hours.

The owners considered salvaging the ship and briefly brought her under tow with the hope of fighting the fire in sheltered waters, but the futility of the effort soon became apparent. The fire spread downward. The ship took on a starboard list as water entered through the many blown out portholes. The list increased, the flames spread, and the period of roll grew more extended. The flames were finally extinguished only when the ship sank below the surface and settled on the bottom in 1800 feet of water.

It is remarkable that this case was concluded with no injuries or fatalities, but I'm not here to talk about rescue heroics. There's an important story behind those heroics, and that story gives the *Prinsendam* greater relevance today because it teaches important lessons about the future of marine safety.

How does the total loss of a cruise ship twenty years ago instruct us today? As Paul Harvey would say, "You know about the rescue. In a moment you'll know . . . the rest of the story."

*Prinsendam* was still a fairly new ship when it caught fire. When Holland America Lines had the ship built seven years earlier, it had properly ensured that *Prinsendam* conformed to the latest IMO fire protection standards, standards that were essentially identical to U.S. regulations.

Those standards incorporated the best fire protection technology of the day. They were designed to minimize the risk of a fire by minimizing combustibles and ignition sources. But if a fire did occur, the ship was built so that a fire would spread to adjacent compartments only at a controlled and specified rate—even if there were no intervention from the crew or installed fire fighting systems.

During the rescue operation, the Coast Guard's chief fire protection engineer was on the phone to the Rescue Coordination Center throughout the rescue operation. He held the ship's design plans in one hand and the fire protection standards in the other. Knowing where the fire started, he was able to predict with a surprising degree of detail and accuracy how long it would take for the fire to spread from compartment to compartment.

This specific knowledge of how fire protection standards would apply to the *Prinsendam* gave the rescuers the confidence to conduct the evacuation without an excessive urgency that could have endangered either our rescue personnel or the passengers and crew of the *Prinsendam*.

It may seem odd to think of the complete immolation and sinking of a ship as a success story, but in one respect the *Prinsendam* was a spectacular success. It burned exactly as designed. Lives were saved because fire protection standards existed, because those standards were explained to the rescue coordinators, and because the ship performed according to the specifications.

Those standards were the twentieth century equivalent of those pressure relief valves on Mississippi River steamboats. Not one passenger boarding the *Prinsendam* thought to ask if the ship was built to prevent the rapid spread of a fire. Every single one of them trusted that ship would be safe. And the reason the ship was safe—safe enough to keep the passengers alive—was that three powerful forces were at work long before the ship set sail from Juneau.

Those three forces are leadership, innovation, and cooperation.

The first of these is leadership. One of our motivational writers has said that, "A leader is one who sees more than others see, who sees farther than others see, and sees before they do." That vision is the essence of leadership in marine safety.

The lives on the *Prinsendam* were actually saved in the 1960's when visionary leaders saw the need to protect passengers against fires like the one that broke out in 1980. By

addressing the issue years before the *Prinsendam*'s high pressure fuel supply line began to leak, they gave the rescue crews a chance.

We have the same obligation today to see more, to see farther, and to see sooner. Since we're on the subject of cruise ships, let's consider the safety and environmental implications of the mega-ships now on the drawing boards.

Just as the *Prinsendam* was designed both to reduce the likelihood of a fire and also to ameliorate the consequences of fires that aren't prevented, we need to think about the safety of the huge numbers of people who will be aboard these ships. Even if the probabilities against catastrophic failure can be brought to the six-sigma level, we simply cannot wait until these masses of humanity are aboard to think about the logistics of evacuating them. I can tell you right now that the Coast Guard doesn't have the platforms to do the job, but we're going to have to figure something out. And sooner rather than later. Our organizational requirement to focus even more on the prevention/compliance end of the prevention/compliance/response model has never been more keen.

CMA is not an association of cruise ship operators, but my message applies across the entire spectrum of marine safety and environmental protection issues. The public is trusting us to identify and address today the issues that affect their safety, health, and environment tomorrow. When they finally become aware of a problem, they expect that we will have seen it coming and acted early to protect their interests.

Which brings me to the second force: innovation, specifically technological innovation.

What would have happened if marine safety leaders in the 60's had foreseen the danger to the *Prinsendam* but prepared for it simply by piling on more of the existing safety measures: more fire extinguishers, bigger installed CO<sub>2</sub> systems, more lifeboats, and fewer combustibles? Those measures would not have been equal to the emergency that arose that night in the Gulf of Alaska—and people would have died. Instead, they came up with innovative technological measures that approached the problem from a new direction.

The array of challenges we anticipate facing over the next generation will call for even greater innovation. As safety problems evolve, they reach a point at which doing more of what worked before no longer makes sense. New risks—and complexities associated with existing risks—call for new strategies. We want to avoid extrapolating current regulations, current standards, and current practices until they snap.

When we contemplate the anticipated doubling or tripling of global maritime trade over the next twenty years, it quickly becomes clear that the safety challenges associated with that increased volume will not be addressed simply by reviewing and updating whatever regulations and procedures are now on the books.

We need innovative approaches both to the problems we anticipate and to the ones that catch us by surprise. Consider the issue of preventing the introduction of non-indigenous species by means of ballast water management.

We could try to tackle this problem head-on through a heavy regulatory regime—and congratulate ourselves for aggressive leadership along the way. But it's clear to me that we need to give the market a chance to come up with a better idea.

On January 1<sup>st</sup>, 2002, I have to submit a report to Congress on how well our voluntary ballast water management guidelines are working. I sincerely hope that I can report excellent compliance and strong potential for the success of a voluntary program. I do not want to lock us into procedures that will soon thereafter be rendered obsolete by the development of better technological solutions.

Let's all commit to that development sooner. To return to the Intertanko Supreme Court decision for a moment, we can all see the parallels of many states discussing mandatory regimes for non-indigenous species control. Let's stay ahead of the curve on this issue.

The problems we face require leadership and innovation. And they require cooperation.

The standards in place when the *Prinsendam* was built were the result of cooperative agreements to implement innovations that were enabled by visionary leadership.

The United States has seen a steady decline over the past ten years in the number of major oil spills, the ratio of oil spilt to oil transported, and every other key measurement of the success of our pollution prevention efforts. As we have watched those pollution measurements trend ever closer to the x-axis, we have been careful to acknowledge that safety improvements are the result of all stakeholders doing what lies within their power to prevent pollution and casualties.

The logical thought process must ask, "What's our next challenge?" Equal attention to bunkers? What's the next step on our continuing effort to induce safety and protect the environment?

As we watched the smooth implementation the ISM code two years ago, we understood the initiative undertaken by responsible ship owners all over the world to make this safety improvement possible. I have also been encouraged by the voluntary participation in our Prevention Through People program, which seeks to address human factors in safety. And we just held a conference among all the presidents of our maritime colleges to work the STCW issue. The level of cooperation evident both in mandatory and voluntary safety initiatives bodes well for continued progress.

Leadership, innovation, and cooperation are the forces that kept the *Prinsendam* from being compared to the *Titanic*. They are at work now to continue improving maritime safety. And they are the forces that will allow us to fulfill the trust placed in us to provide safety for the next generation.

#### Conclusion:

The Coast Guard recently produced a videotape showing the greatest rescues of the twentieth century. *Prinsendam* gets the attention it deserves, but nowhere does the video offer the least hint of the role played by leadership, innovation, and cooperation in

preventing the loss of life. It was portrayed as a miracle response action, which it was—but there are no photos of our fire safety engineer talking on the phone . . . no action shots of international delegates agreeing on SOLAS 1974 standards . . . no dramatic re-enactments of architects designing ships to comply with those standards.

It's a fact of life that responding to disasters is always more dramatic than preventing them. But it's also a fact of life that we need to devote our best energies now to preventing the safety and environmental problems we can see taking shape on the horizon.

At the IMO Assembly last November, I challenged Secretary General O'Neill to lead us all toward improved passenger vessel safety and solid progress in ballast water management. I'm pleased to see we're going to discuss both thoroughly.

As I said at the outset, marine safety is a matter of trust. The public is trusting us to exercise leadership, innovation, and cooperation to look out for their interests. We owe that public our very best effort. I look forward to continuing to work with you to fulfill that trust.

Thank you very much.

