Committee on Resources

Subcommittee on Fisheries Conservation, Wildlife and Oceans

Statement

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on behalf of the
American Association of Port Authorities
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Good morning. I am Rick Larrabee, Deputy Director of Port Commerce for the Port Authority of New York and New Jersey, and I am here today representing the American Association of Port Authorities (AAPA). Founded in 1912, AAPA is an association of

160 public port authorities in the United States, Canada, Latin America and the Caribbean. In addition, the association represents almost 300 sustaining and associate members, firms and individuals with an interest in the seaports of the Western Hemisphere. My testimony today reflects the views of AAPA's United States delegation.

AAPA port members are public entities, divisions or agents of State and local government mandated by law to serve public purposes. Essentially, we are public agencies charged with developing port facilities and facilities of commerce and toward that end have invested billions of dollars of public funds. In 1970, trade represented only 13 percent of

U.S. GDP. By 1996, trade had grown to account for 30 percent of GDP, about $2.3 trillion. More than 11 million U.S. jobs now depend on exports--1.5 million more than just four years ago. Significantly, wages for export-related jobs are 13 to 17 percent higher than non-trade-related jobs in the economy.

The success of U.S. international trade depends on a viable and safe navigation system. In fact, in the next twenty years international trade, of which 95% by volume enters through the nation's ports, is expected to double. Without modern navigational tools, the United States cannot move cargo that is important to the U.S. economy safely and efficiently through ports. In addition, with an increase in the number of larger,

deep draft vessels, the United States cannot afford to compromise safety or threaten the environment. For all of these reasons, providing adequate resources for the National Oceanic and Atmospheric Administration's National Ocean Service is not a matter of choice but of *necessity.*

That also is the view of the Marine Navigation Safety Coalition, a coalition of over

40 industry groups representing various aspects of the nation's Marine Transportation System, including marine pilots, maritime exchanges, cargo and vessel owners, rail and terminal operators, and ports. The Coalition came together four years ago to promote the maritime community point of view regarding the importance of funding NOAA's navigation services programs as authorized under the Hydrographic Services Improvement Act.

AAPA has consistently advocated for increased funding for NOAA navigation services including mapping and charting, tides and currents and Physical Oceanographic and Real-Time Systems (PORTS). Providing adequate resources to maintain modern and accurate navigation aids must be a national priority because these programs provide critical environmental protection and safety tools for the entire maritime industry and also enhance the efficiency of international trade.

Today mariners transiting U.S. waters are forced, in many situations, to rely on out-dated navigational charts and tidal predictions produced by the National Oceanic and Atmospheric Administration (NOAA). A large percentage of depths shown on NOAA charts are based on surveys that were conducted over 50 years ago. In fact, a number of deep draft ships that travel through U.S. waters are relying on charts with depths that were determined by the use of lead lines prior to World War II. Over the past ten years or more, NOAA has been forced to withdraw tide and current predictions for several major ports, including the Port of New York and

New Jersey, due to insufficient and outdated information. When the tide and current charts were pulled in my port in 1991, it was explained that the charts were at variance with reality by as much as 128 percent. The San Francisco chart also was withdrawn in 1991 and more are expected to be pulled since 50 percent of them are based on observations over 50 years old.

To help me illustrate how valuable updated and real-time information is to mariners, I brought with me some posterboards. The two Los Angeles-Long Beach charts (18751) show conditions before and after a recent project that involved extensive fill to construct Pier 400 and the conversion of a deep draft anchorage area to a shallow water habitat. The "Before" chart is the 35th Ed. Jan 8, 1994. The "After" Chart is the current edition, the 39th Ed. Oct. 17, 1998. Features of the two boards are:

> Depths in the Main Channel are much deeper on the 1998 Ed.
>
> The new Terminal Island Channel has been dredged.
>
> The Commercial Anchorage just inside the San Pedro Breakwater is now a shallow water habitat; it formerly had depths of 38-43 feet.

The entrance chart for the Chesapeake Bay, National Ocean Service Chart 12221, shows the changes that occurred between 1991 and 1998. The "Before" chart is the 59th Ed., May 25, 1991 and the "After" chart is the 70th Ed., Sept. 12, 1998. Changes that occurred between the editions include:

A Deep Water Route Traffic Separation Scheme was added.

New soundings from NOS surveys were added in the Deep Water Route Traffic Separation Scheme.

New soundings from NOS surveys were added in the area between the two traffic Schemes.

Numerous wrecks and obstructions were added/deleted/revised in these areas.

Buoys marking the Deep Water Route Traffic Separation Scheme were added.

The area of the Deep Water Route Traffic Separation Scheme is a natural channel, not a dredged channel. Knowledge of depths in the area is critical for bringing drafts of 50 feet into the harbor.

Ships routinely pass within a few feet of the bottom when entering and transiting our nation's coastal and inland waterways. A single impediment such as an uncharted rock, an old concrete buoy block, or the fluke of an abandoned anchor has the potential to puncture the hull of a ship. The environmental damage from such an accident can be measured in billions of dollars. As someone who led the double hull tanker initiative, Mr. Chairman, you understand the importance of safeguarding against groundings and other navigation accidents.

Compounding these problems is the rapid growth of traffic on U.S. waters. Waterborne commerce has tripled since 1947. The U.S. Department of Transportation projects that it will triple again over the next three decades. The number of recreational boaters has nearly doubled since 1970, crowding already overflowing harbors. Economies of scale have driven the shipping industry toward investing in larger ships. They are carrying more oil and hazardous materials than ever before. To ensure the safe transportation of oil and hazardous cargo in channels and harbors, which in many cases were not designed for these new larger ships, accurate charts, surveys, and tide and currents are absolutely necessary.

Electronic Nautical Charts (ENC) are the new standard for safe navigation of vessels and are the base ingredient or visual backdrop for collision avoidance systems such as the Electronic Chart Display and Information System (ECDIS) and the United States Coast Guard proposed Automated Identification System (AIS). These complimentary systems are designed to prevent accidents and spills by alerting the mariner of a potential grounding in enough time for the mariner to take corrective action. Creating an ENC is not simply a matter of converting the paper chart data to an electronic format since most of the chart data was collected using positioning methods that predate GPS. NOAA is recollecting position-critical data using geodesy and aerial imagery on critical chart features such as petroleum docks, ferry terminals and aids to navigation to enable mariners to safely navigate these vessels in constricted waterways and in times of limited visibility. However, funding for this effort was not provided in FY2000 to support the ENC effort. Current law requires double-hulls on petroleum tankers, but the new larger container vessels, bulk ships and cruise ships can carry significant amounts of fuel, hazardous cargo and thousands of people. By funding proactive programs such as the ENC's, the Federal government contributes toward preventing accidents rather than the funds to clean up.

At present, some 33,000 square miles of U.S. waters are considered critical to commercial navigation and need to be resurveyed using modern full-bottom coverage technology. NOAA estimates that only 65 of the 1,000 charts needed for U.S. waters have been updated. Current funding would support updating only 200 more charts. At current funding levels, NOAA estimates that it would require more than 20 years to complete surveys of these critical areas. It is essential that the Federal government commits the funds

necessary to survey, or re-survey the remaining 33,000 square nautical miles of critical survey area and eliminate the backlog.

In addition, NOAA has developed the Physical Oceanographic Real-Time System (PORTS). With accurate, real-time information and modern forecasts, newer deeper-draft ships can safely adjust loads to use available draft margins. PORTS allows ships--berthed or under way--to access real-time data from a variety of instruments that measure currents, winds and waves, water levels (tides), depths, temperatures, and salinity. Despite the success of this program in enhancing safety and improving the efficiency of vessel movements and international trade, PORTS has only been available to a small number of ports. Those fortunate few are paying for its operation, maintenance and, in some instances its installation.

The data available from PORTS enables much more accurate tide and current predictions, thus reducing travel delays and increasing traffic-handling capabilities. Many of this country's export products are price-sensitive commodities. Because shipping contracts can hinge on a few tenths of a cent per bushel of grain or ton of coal, transportation costs can be the deciding factor for foreign buyers choosing between American or foreign bulk products. Maximizing the use of channel depths is an important factor in the efficiency of waterborne commerce. PORTS systems are also instrumental in preventing and responding to spills of hazardous materials and oil, predicting coastal floods and conducting scientific research. The success of PORTS in Tampa Bay, Florida, New York-New Jersey, San Francisco and Houston is fueling support for the establishment of these systems at other harbors around the country. And I can tell you that the support for the real-time system in our harbor is very enthusiastic, as is evidenced by the willingness of the parties to cover operation and maintenance costs when NOS threatened to pull the system.

In the Port of New York and New Jersey, PORTS and Electronic Nautical Charts are key elements in a larger, more integrated system that is being developed by public and private entities. It is called PINS or the Port Information Network System. My agency has been working with pilots, carriers, the Coast Guard, the Maritime Association of the Port of New York and New Jersey and many others to develop the kind of port information and data delivery system that would more efficiently manage vessel traffic in the harbor. With PORTS and ENC's as a component, PINS would provide real-time data on the status of the anchorages, channels and berths for arriving vessels. However, uncertainty as to adequate Federal funding for PORTS and the mapping and charting program from year to year has contributed creating doubts about the prospects for PINS. More problematic are liability issues including how the transmission of Federal data through PINS can be accomplished while maintaining Federal quality assurance. These issues are frustrating the cooperative planning effort of recent years.

Private entities, such as the Sandy Hook Pilots, believe a PINS system is necessary to safely accommodate current vessel traffic in the port and an absolute imperative for anticipated growth in the port, which we conservatively project will be a doubling of cargo in a matter of ten years' time. (I hasten to note that that level of trade growth is anticipated in major ports throughout the country, pointing to the importance of improved navigation services nationwide.) Many are on board to launch a New York/New Jersey PINS program, however until the concerns regarding liability and Federal navigation program funding are resolved our initiative will be stymied.

Without PORTS, true depth, rise in tide and on-site wind and channel current information is not readily available. Furthermore, as trade and vessel operations increase, harbors that do not have this system will have trouble handling the increasing volume of traffic at the same level of safety as they do today. It has become clear that at a number of ports, the PORTS program is no longer an enhancement but a necessity for many groups, including but not limited to pilots, vessel operators, shippers, the U.S. Coast Guard and port

authorities. With no other tool to accurately monitor these conditions, significant safety and environmental risks could result.

There is another important contribution that PORTS makes to safeguarding the coastal environment. On July 5th, an accident occurred in which a tugboat towing an oil barge punctured a hole in the hull of the barge, thus causing an oil spill in the Narragansett Bay. Less than two weeks prior, Rhode Island celebrated the installation of PORTS in the Narragansett Bay area and it's a good thing the system was in place. With PORTS up and running, Rhode Island's Department of Environmental Management worked with NOAA and other agencies to contain the oil spill by predicting how the slick would move as a result of the current, wind and tides. PORTS has been instrumental in minimizing the environmental impact from this accident and, no doubt, saved a great deal in clean up costs.

Unfortunately, in FY 2000, the basic tides and currents program was level funded. In addition, PORTS was not given the $2.75 million included in the President's budget request--the minimum amount necessary for NOAA to maintain this critical navigation program. This year, the Administration requested and, I am very pleased to say, the House approved a

$2.8 million increase to the base for PORTS. Earlier this spring Commerce-Justice-State Appropriations Subcommittee chairman Harold Rogers and his colleagues approved a reprogramming request that enables NOS to continue support for existing PORTS systems during the current year. This first-time support by Chairman Rogers' subcommittee is as significant as it is welcome. The consistent support of this committee no doubt helped make that possible. However this does not go far enough to meet the growing demands of the program. Without sufficient funding, there is a danger that the program will end, instead of meeting the needs of the national Marine Transportation System and users throughout the country. PORTS must receive a stronger financial commitment from the Administration and Congress to ensure a nationally viable program. We urge you to continue your push for the necessary funds in FY 2001 to guarantee that NOAA can continue to provide the quality assurance and infrastructure necessary to keep existing PORTS in operation and enable other harbors to install PORTS.

Conclusion

Overall, the goal of the Hydrographic Services Improvement Act of 1998 was to focus attention on improving the infrastructure of the nation's navigation systems. The Act was to provide the framework for catching up with the survey backlog and to modernize navigation operations. Though it authorized significant funding to improve NOAA's navigation services, the Administration has never requested, nor has Congress approved, these higher funding levels. While the law authorized annual appropriations of $22.5 million for the tide and current program which includes PORTS and $99 million for mapping and charting, hydrographic surveys and geodesy for fiscal year 2000, these programs have yet to receive full authorization. For example, the tides and currents program has been appropriated only about half of what is authorized. Despite the good intentions of the Act, and this Committee's leadership, NOAA has not received the level of funding nor the support it needs.

Another aspect of the Act was the wise decision to maintain the current role of the NOAA Corps regarding the operation of NOAA vessels. I believe the Act strikes an appropriate balance between making use of private sector services and maintaining the Federal government's expertise and capabilities. It is absolutely essential that the United States continue to stand behind the data that is given to port authorities, mariners and researchers and to be able to do that the government must itself have the knowledge that comes with maintaining a hands-on role from one generation to the next.

The recently released Marine Transportation System (MTS) Report, *An Assessment of the U.S. Marine Transportation System,* identifies the greatest safety concern among stakeholders as the "availability of timely, accurate, and reliable navigation information." Without this essential information, there is an increased probability that maritime accidents, taking a substantial toll on the industry and the environment, will occur. Accidents can result in loss of life and cargo, damage to species and sensitive ecosystems, shutdowns of ports and fisheries, and rising insurance premiums. It must be a Federal priority to maintain our nation's waterways, to provide the necessary tools to allow mariners to do their job, and to facilitate the commerce that provides significant economic benefits to our nation.

Thank you again for this opportunity to testify today.

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