

In 2016 the Marine Board and Marine Group activities focused on infrastructure needs from the larger ships crossing the newly expanded Panama Canal. (Photo: U.S. Embassy Panama)

problem statements. Several committees, including Aviation System Planning, Intergovernmental Relations in Aviation, Airfield and Airspace Capacity and Delay, and Light Commercial and General Aviation, held summer meetings in Washington, D.C. The Environmental Impacts of Aviation Committee met in Seattle, Washington, to discuss completed, ongoing, and needed research.

The committees also organized an issue of TR News on key topics in aviation research as the industry begins another century of commercial operations. Topics included workforce management, safety challenges, routine UAS operations in the National Airspace System, and more.2

## MARINE

The Marine Group committees and the Marine Board addressed major themes at the 2016 Annual Meeting, including the impact of larger ships on infrastructure, using data to identify waterways risk, and alternative financing options for waterways infrastructure. Other activities included the following:

■ The Marine Transportation Systems Research and Development Conference, designed to inform federal agencies about research priorities;

- The 16th Biennial National Harbor Safety Committee Conference, which gathered regional harbor safety committees to share best practices and to strengthen partnerships between the U.S. Coast Guard and waterways stakeholders;
- The Marine Board's Spring Meeting in Woods Hole, Massachusetts, which focused on navigation technology and autonomous vessels and marine vehicles: and
- The Marine Board's Fall Meeting in Washington, D.C., which addressed emergency preparedness, response, recovery, resilience, and risk analysis in maritime transportation.

## RAIL

The Rail Group committees supported the following activities:

- An Annual Meeting session on rail line electrification, a technology in use for almost 100 years but now regaining favor as railroads seek to improve freight capacity and passenger rail speeds;
- The Joint Rail Conference on Railroad Engineering Technology, held in Columbia, South Carolina, with the theme, "Railroads: Progress Toward a Safe, Sustainable Future":
- The Joint Meeting of the Rail Group and the Freight Rail Transportation Committee at the University of Illinois at Urbana-Champaign, including a tour of one of the most advanced university rail research laboratories in the United States: and
- An Annual Meeting workshop that discussed the shipment of crude oil by rail, the shale oil and



Admiral Thad W. Allen, U.S. Coast Guard (retired). delivered the keynote address at the Marine Board's fall meeting in Washington,



The Rail Group and Freight Rail Transportation Committee toured the 3,500-square foot Research and Innovation Laboratory, part of the Rail Transportation and Engineering Center at the University of Illinois at Urbana-Champaign. (Photo: UIUC RailTEC)

<sup>&</sup>lt;sup>2</sup> www.trb.org/Publications/Blurbs/175073.aspx.