

ETS-Liberty Science Center Collaboration Sets Sail

[Back to InfoLine](#)

It was a dark and stormy day.

Suddenly, a vision of the future took shape.

That was the consensus when representatives of Liberty Science Center, the New Jersey Education Association, ETS and the United States Coast Guard, along with Canadian museum and science center directors, spent a recent windy and rainy afternoon learning about Hudson River geology from the deck of [USCGC Katherine Walker](#).

The Walker — a 175-foot Keeper Class cutter whose home port is in Bayonne, N.J. — maintains more than 300 floating aids to navigation in New York Harbor, Long Island Sound, the Hudson and East rivers, and the waters along the Connecticut, New York and New Jersey coastlines.

Through an arrangement with the Liberty Science Center in Jersey City, the cutter also serves as a unique learning platform from which scientists and students can observe and study the harbor and adjacent waterways.



LEARNING ABOUT VESSEL TECHNOLOGY: Lt. Amy Florentino, captain of the USCGC Katherine Walker,



HUDSON HISTORY: Frank-Oliver Nitsche of Columbia University's Lamont-Doherty Earth Observatory describes the geological history of the Hudson River aboard the USCGC Katherine Walker.



EXPLORING THE NEW YORK HARBOR: Ernie Price, Director of External Relations, and Jeff Osowski, Vice President Learning and Teaching for the Liberty Science Center, aboard the USCGC Katherine Walker.

On Nov. 6, ETS and Prudential will jointly sponsor a symposium at the Liberty Science Center to discuss ways to encourage students to pursue science, technology, engineering and mathematics (STEM) disciplines and careers. President Kurt Landgraf and Assistant U.S. Secretary of Education Lauren Maddox will speak at the event. Maddox will substitute for U.S. Secretary of Education Margaret Spellings.

The symposium will also launch an ETS-sponsored program to enhance science teaching and learning for New Jersey students. It will use the center's online resources and make nontraditional learning experiences available through the center's outreach program and many relationships similar to the one it enjoys with the Coast Guard.

On that recent afternoon, the Walker's captain, Lt. Amy Florentino, and Frank-Oliver Nitsche, a research scientist at Columbia University's Lamont-Doherty Earth Observatory, demonstrated how they could inspire students to consider STEM studies and careers — by turning a ship's bridge and New York Harbor into a classroom.

"This is the vision at the heart of our collaboration with ETS," says Jeff Osowski, Liberty Science Center's Vice President of Learning and Teaching. "It's to make STEM studies and careers real to students by demonstrating how they can apply what they learn in a meaningful and even exciting way."

Florentino showed guests how the crew steers the Walker, commissioned in 1997, without benefit of a traditional ship's wheel. The crew maneuvered the vessel almost as if they were playing a computer game — using joysticks and an interactive chart of the harbor on LCD monitors. At one point, the crew entered the cutter's position off of the Statue of Liberty into a computer. Using the cutter's global positioning system and rotating propulsion units, the computer kept the Walker within 10 feet of that position despite a stiff wind and passing ship traffic.

Using the Manhattan skyline as a background, and a series of ancient and modern maps as a guide, Nitsche explained the geological history of the harbor and its influence on the development of New York City over the past three centuries.

"One afternoon on the water demonstrated the tremendous value of our collaboration with Liberty Science Center on the STEM initiative," says Ernest Price, Director of External Relations in Communications & Public Affairs. "In one afternoon, we saw how our relationship with the Liberty Science Center could provide an inspirational classroom for the region's students and extend our efforts to encourage and inspire students across international borders."

POSTED: November 1, 2007

[Back to InfoLine](#)