



# The Delaware River and Bay Authority

## NEWS RELEASE

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For Immediate Release

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### **New Communication Technology Tested Aboard Cape May – Lewes Ferry vessel**

*Cape May, NJ* – For the second consecutive year, Johns Hopkins University Applied Physics Laboratory (JHU/APL) researchers traveled aboard a Cape May – Lewes Ferry vessel to test new high frequency communications that relies on wireless optical frequencies. The testing took place over four days in late April. JHU/APL is affiliated with Johns Hopkins University but is a separate research facility.

“Our research lab is working on developing optical communication technologies that can work over long distances between a moving platform and a static one,” said Juan Juarez, JHU/APL’s technical lead for the project. “The ferry provided us with a unique test range that is low cost, close to home, and provides us with motion and long lines of sight that we cannot get back at the lab. We appreciate the cooperation and assistance of the Cape May – Lewes Ferry and their employees who went above and beyond to facilitate our field tests.”

The goal is to advance the capabilities of a wireless optical communications systems. The multi-disciplinary, highly coordinated effort includes teams with expertise in mechanical, electrical and systems engineering, as well as software development and optical communications.

Because communications over lower frequencies such as radio waves are increasingly cluttered and have limited data throughputs, JHU/APL researchers have been testing wireless optical communications equipment since 2006. Aboard the ferry vessels, JHU/APL researchers were able test the equipment on a moving vehicle in a marine environment to a stationary site at the Lewes Ferry Terminal. The test hopes to develop a compact free-space optical communications system that can provide high bandwidth and long distance communications between moving platforms.

“We’re pleased that we could assist the researchers at the Johns Hopkins Applied Physics Laboratory with their efforts,” said Heath Gehrke, Director of Ferry Operations. “This isn’t the first time our ferry service has aided research. The University of Delaware has installed the automated ocean and weather monitoring system, Seakeeper 1000, aboard our vessels to collect water quality data, atmospheric conditions and other information as our ferry vessels cross the mouth of the Delaware Bay. We proud of our contributions to the scientific community.”

Gehrke also noted that the Cape May – Lewes Ferry hosted a drone ‘Do Tank’ that demonstrated the effectiveness of drone technology in disaster relief efforts. JHU/APL’s first field test on the ferry took place in September 2016.

#### **About the Cape May-Lewes Ferry**

The Cape May – Lewes Ferry is owned and operated by the Delaware River and Bay Authority, a bi-state governmental agency created by Compact in 1962. The Ferry is open year-round and has carried more than 45 million passengers since its inception on July 1, 1964. In 2016, the ferry service, which connects Victorian Cape May, New Jersey, and historic Lewes, Delaware, transported approximately 275,000 vehicles and nearly 1 million passengers. For schedule, rates and other program information, please visit the ferry’s website at [www.CMLF.com](http://www.CMLF.com), or call toll free, 800-643-3779. Like us on Facebook or follow us on Twitter @CMLFerry.