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New Radar Station Improves Ocean Data for St. Thomas as Delayed Buoy Replacement Continues

High-frequency radar now enhances maritime data collection, but a key buoy damaged by Hurricane Irma remains unreplaced, with hopes for installation by March 2025

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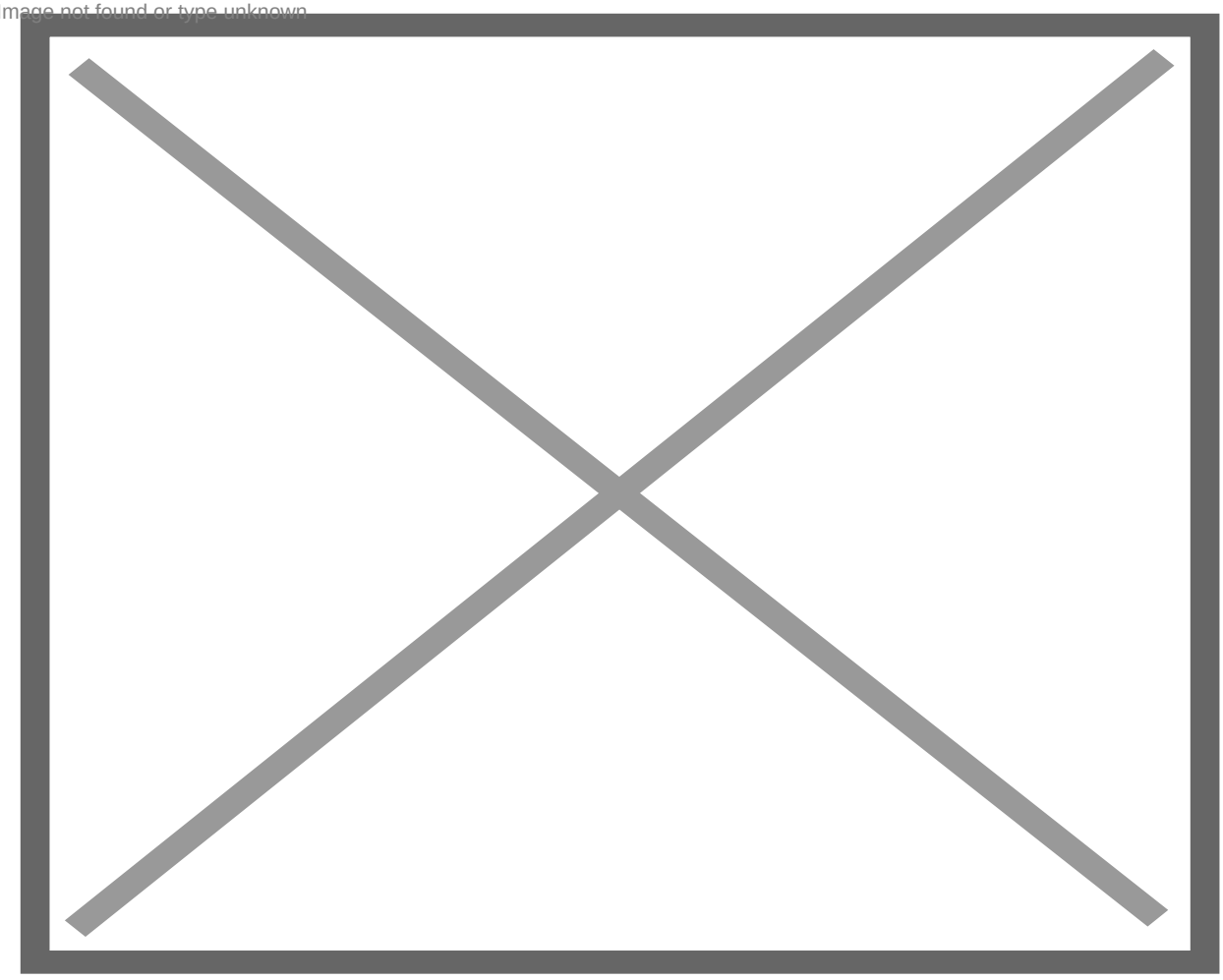

Example of a high frequency radar system (not the system stationed near Water Island)

The local body responsible for observing and tracking ocean and coastal data, OCOVI, held its annual meeting on Saturday to report on its activities for the past year.

A major highlight was the installation of a high-frequency radar station near Water Island, which began delivering data in January of this year. “We were really able to fill the gap between Puerto Rico and the U.S. Virgin Islands for collecting data from St. Thomas, which is really important for

maritime operations,” said Patricia Chardón-Maldonado, Deputy and Technical Director of OCOVI's regional parent body CARICOOS (Caribbean Coastal Ocean Observing System), which is itself funded by the National Oceanic and Atmospheric Administration (NOAA).

Alongside this accomplishment came a setback – the continued absence of an important data collection buoy for St. Thomas. The previous instrument was damaged by Hurricane Irma, but its replacement by the University of Maine continues to be delayed “due to internal issues,” said Ms. Chardón-Maldonado. Nevertheless, it is hoped that the buoy will eventually be installed by March 2025.

Douglas Wilson, OCOVI's Chief Science Officer, spoke about the four ocean gliders that were launched by OCOVI this year. These gliders, part of a network that covers approximately 20,000 square kilometers, collect data on ocean temperature, salinity, and oxygenation. In her presentation, Ms. Chardón-Maldonado discussed the troubling data being reported by the glider network – several weeks of high sea temperatures, approximately two degrees Celsius above baseline.The warmer waters, however, did not lead to any major cyclone formation over the area.

Mr. Wilson noted that a lot of the data collected from the gliders was from east of the U.S. Virgin Islands, which bodes well for the territory's forecasting abilities.

OCOVI has also been advancing scholarship in their area of focus, promoting interest in ocean observing among university students and younger children. Mr. Wilson noted an impending visit to the University of the Virgin Islands glider laboratory by students of the H. Lavity Stoutt Community College in Tortola, British Virgin Islands, along with a pending exhibit at the VI Children's Museum.

These developments feed into the need for OCOVI to build capacity in order to better execute its mission. “We would love to be able to train someone, to be able to keep work on the radar, HF radar sensors and so on, consistent,” said Julio Morell Rodriguez, Executive Director for CARICOOS. Better communication of OCOVI's work and the availability of data is also important, he noted. The distribution of scholarships to university students currently conducting oceanographic research is also part of the organization's efforts to spur interest in, and encourage participation in the field.