



Press Release

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New technology helps Coast Guard pin point emergency signals Recent case demonstrates new capability

BOSTON - Recent radio upgrades on a falcon jet at Air Station Cape Cod Mass., enable crews to rapidly locate the exact source of emergency signals, as seen during a recent search.

The HU-25 falcon jet equipped with the new gear launched Sept. 7 after the air station was notified of an Emergency Position Indicating Radio Beacon (EPIRB) emitting a distress signal from a boat near Jonesport, Maine. Coast Guard aircraft respond to EPIRB distress signals by following instrument guidance towards the radio beacon provided by direction finding equipment.

During the air station's first operational test of the new 430 Direction Finding (DF) system, the aircraft locked onto the EPIRB's signal from 72 miles away and obtained its location.

A 25-foot response boat from Station Jonesport determined that the boat was safely moored and the EPIRB was sending a false alarm.

"This new system saves us valuable response time, allowing us to receive more accurate guidance and acquire weaker signals," said Lt. j.g. Adam Young, a pilot at Air Station Cape Cod.

The HU-25 Falcon jet is one of only three aircraft in the Coast Guard with the new 430 DF system.

There are two types of EPIRB's, the original model that supplies only azimuth guidance and a newer device, a 406 EPIRB, that is registered to a specific user and can provide coordinates for the activated device's position.

When a boater's 406 EPIRB emits a distress signal, the beacon's position is transmitted via satellite to the U.S. Mission Control Center in Maryland where it is then passed to the appropriate rescue coordination center. The rescue coordination

center in turn passes the position to the aircraft.

"The notification process usually only takes a few minutes, but those few minutes can be vital when factors such as cold water or injuries come into play," said Lt. Michael Nalli, a search and rescue coordinator at the First Coast Guard District.

With the new system, the Falcon not only obtains real-time data for a quicker response, it also obtains a more exact location.

The position the EPIRB passes to the satellite may be off by as much as three miles. But when the Falcon picks up the EPIRB's signal, it can usually pin-point the location.

"Mariners' widespread use of the 406 EPIRB has significantly reduced search time and unnecessary asset use," said Young. "Now if all mariners use a 406 EPIRB with the capabilities of the 430 DF system, we have the potential to take the search out of search and rescue."

Editor's Note: Photos available [here](#).

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