

# Possible Signals from Lost Jet's Black Boxes Heard

NICK PERRY, Associated Press



Perth, Australia (AP) —

Underwater sounds detected by a ship searching the southern Indian Ocean for the missing Malaysia Airlines jet are consistent with the pings from aircraft black boxes, an Australian official said Monday, dubbing it "a most promising lead" in the monthlong hunt for the vanished plane.

Angus Houston, the head of a joint agency coordinating the search, warned that it could take days to confirm whether the signals picked up by the Australian navy ship Ocean Shield are indeed from the black boxes that belonged to Flight 370, but called the discovery very encouraging.

"Clearly this is a most promising lead, and probably in the search so far, it's probably the best information that we have had," Houston said at a news conference. "We've got a visual indication on a screen and we've also got an audible signal — and the audible signal sounds to me just like an emergency locator beacon."

After a monthlong search for answers filled with dead ends, Monday's news brought fresh hope given that the two black boxes, which contain flight data and cockpit voice recordings, are the key to unraveling exactly what happened to Flight 370 and why.

Malaysian Defense Minister Hishammudin Hussein told reporters that in light of the new information, "We are cautiously hopeful that there will be a positive development in the next few days, if not hours."

There was little time left to locate the devices, which have beacons that emit "pings" so they can be more easily found. The beacons' batteries last only about a month — and Tuesday marks exactly one month since the plane disappeared during

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a flight from Kuala Lumpur, Malaysia, to Beijing with 239 people on board.

The Australian navy's Ocean Shield, which is carrying high-tech sound detectors from the U.S. Navy, picked up two separate signals late Saturday night and early Sunday morning within a remote patch of the Indian Ocean far off the west Australian coast that search crews have been crisscrossing for weeks. The first signal lasted two hours and 20 minutes before it was lost. The ship then turned around and picked up a signal again — this time recording two distinct "pinger returns" that lasted 13 minutes, Houston said.

"Significantly, this would be consistent with transmissions from both the flight data recorder and the cockpit voice recorder," Houston said.

Still, Houston cautioned that it was too early to say the transmissions were coming from the missing jet.

"I would want more confirmation before we say this is it," he said. "Without wreckage, we can't say it's definitely here. We've got to go down and have a look."

The airliner's black boxes normally emit a frequency of 37.5 kilohertz, and the signals picked up by the Ocean Shield were both 33.3 kilohertz, said U.S. Navy Capt. Mark Matthews. But officials contacted the device's manufacturer and were told the frequency of black boxes can drift near the end of their shelf lives.

The Ocean Shield was slowly canvassing a small area trying to find the signal again, though that could take another day, Matthews said.

The ping locator is designed to detect signals at a range of 1.8 kilometers (1.12 miles), meaning it would need to be almost on top of the black boxes to detect them if they were on the ocean floor, which is about 4,500 meters (14,800 feet) deep.

"It's like playing hot and cold when you're searching for something and someone's telling you you're getting warmer and warmer and warmer," he said.

"When you're right on top of it you get a good return."

If they pick up the signal again, the crew will launch an underwater vehicle to investigate, Matthews said. The Bluefin-21 autonomous sub can create a sonar map of the area to chart where the debris may lie on the sea floor. If it maps out a debris field, the crew will replace the sonar system with a camera unit to photograph any wreckage.

But that may prove tricky, given that the sub can only dive to about 4,500 meters (14,800 feet) — the approximate depth of the water. That means the vehicle will be operating to the limits of its capability.

Given the difficulties involved, officials warned the mystery of Flight 370 would still take time to resolve.

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"It could take some days before the information is available to establish whether these detections can be confirmed as being from MH370," Houston said. "In very deep oceanic water, nothing happens fast."

Geoff Dell, discipline leader of accident investigation at Central Queensland University in Australia, said it would be "coincidental in the extreme" for the sounds to have come from anything other than an aircraft's black box.

"If they have a got a legitimate signal, and it's not from one of the other vessels or something, you would have to say they are within a bull's roar," he said.

"There's still a chance that it's a spurious signal that's coming from somewhere else and they are chasing a ghost, but it certainly is encouraging that they've found something to suggest they are in the right spot."

Meanwhile, the British ship HMS Echo, was using sophisticated sound-locating equipment to try to determine whether two separate sounds heard by a Chinese ship about 555 kilometers (345 miles) away from the Ocean Shield were related to the plane. The patrol vessel Haixun 01 detected a brief "pulse signal" on Friday and a second signal on Saturday.

The crew of the Chinese ship reportedly picked up the signals using a sonar device called a hydrophone dangled over the side of a small boat — something experts said was technically possible but extremely unlikely. The equipment aboard the British and Australian ships is dragged slowly behind each vessel over long distances and is considered far more sophisticated.

The search effort was also continuing on the ocean surface Monday. Twelve planes and 14 ships were searching three designated zones, one of which overlaps with the Ocean Shield's underwater search. All of the previous surface searches have found only fishing equipment or other sea trash floating in the water, but have found no debris related to the Malaysian plane.

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Associated Press writers Eileen Ng in Kuala Lumpur, Malaysia, and Rohan Sullivan and Kristen Gelineau in Sydney contributed to this report.

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