



Australian Government

Joint Agency Coordination Centre

MH370 Operational Search Update

29 October 2014

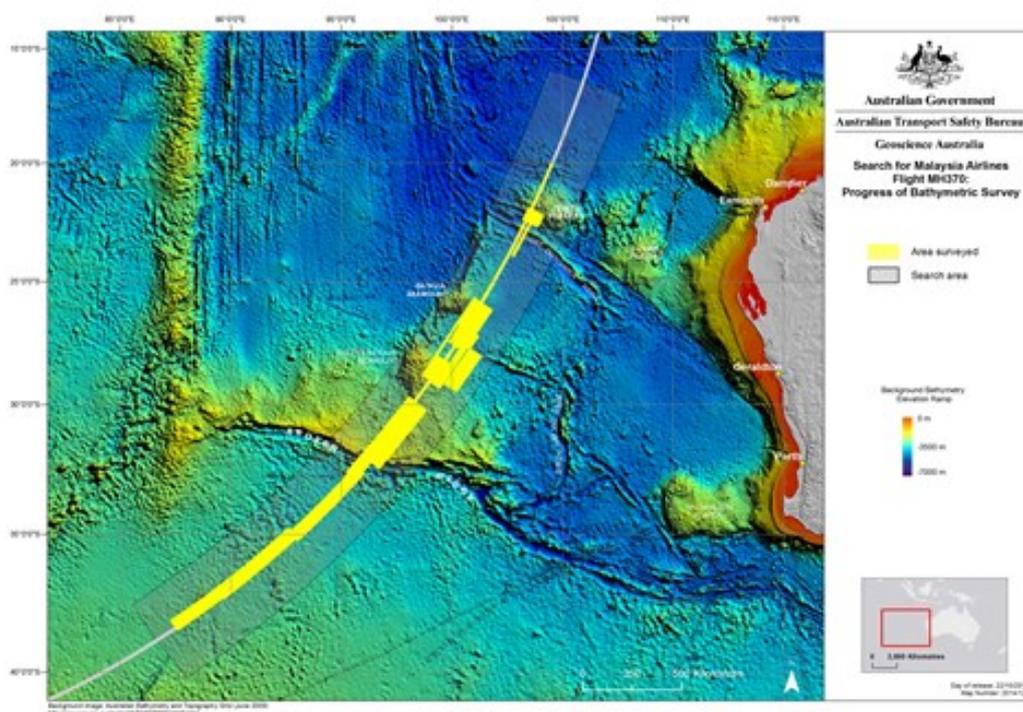
This operational report has been developed to provide regular updates on the progress of the search effort for MH370. Our work will continue to be thorough and methodical, so sometimes weekly progress may seem slow. Please be assured that work is continuing and is aimed at finding MH370 as quickly as possible.

Vessels involved in the search are being jointly funded by Malaysia and Australia. *Fugro Discovery* and *Fugro Equator* are Fugro Survey Pty Ltd vessels, and *GO Phoenix* has equipment and experts provided by Phoenix International.

With the commencement of the underwater search phase, there has been much talk about ‘the search recommencing’. It is important to note that the search for missing Malaysia Airlines flight MH370 in the southern Indian Ocean has been continuous since March 2014. Whether it was aircraft scouring the surface of the ocean for floating debris or a ship conducting bathymetric survey operations, the effort has not stopped.

Bathymetric survey

This week the current bathymetric survey work was completed.



With sufficient area having been surveyed for the underwater search to take place, *Fugro Equator* completed the assignment on 26 October. The survey vessels used multibeam sonar to gather data from the seafloor. That data was analysed and mapped by experts at Geoscience Australia, providing knowledge of the terrain that was essential for the underwater search.

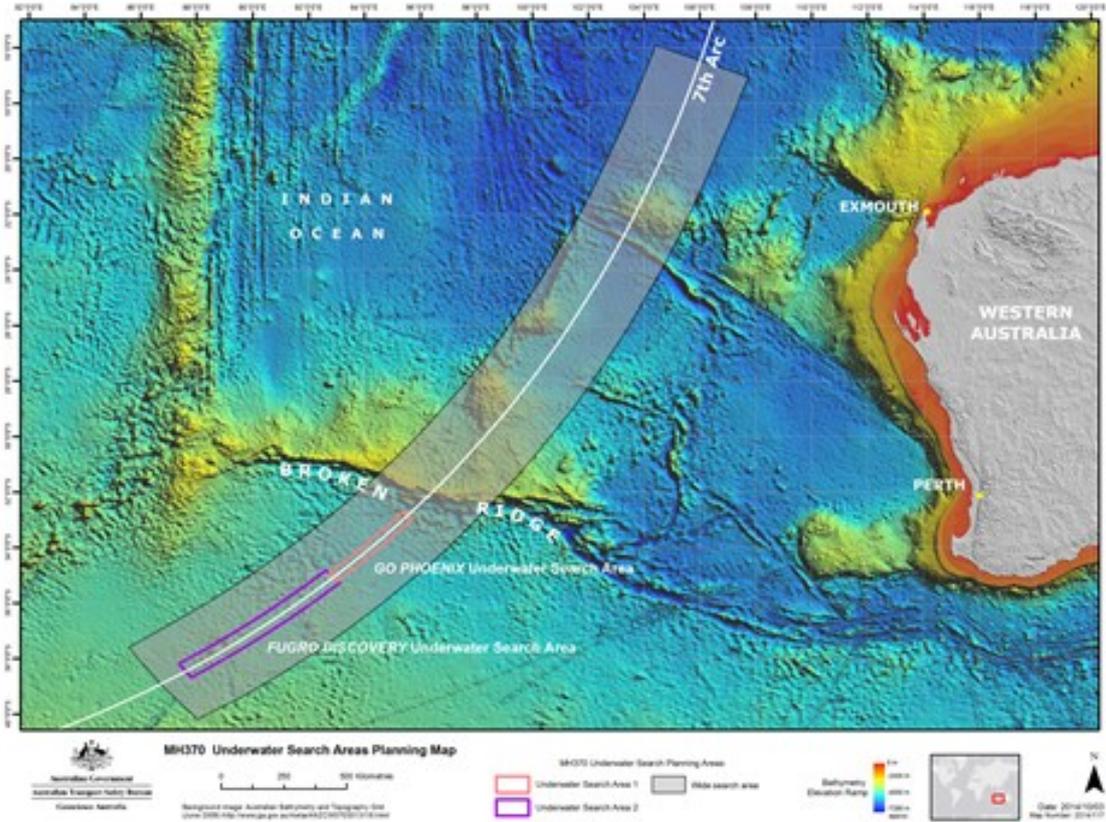
The seafloor in the search area had never previously been mapped in detail. Before the sidescan sonar work to locate MH370 could begin, it was necessary to conduct a bathymetric survey to ensure that the equipment could be operated safely. The survey vessel *Fugro Equator* and the Chinese survey vessel *Zhu Khezhen* collaborated on survey operations, until *Zhu Khezhen* completed her assignment on 20 September and returned to China.

Over 150,000 square kilometres of the wide search area have been analysed and mapped. If it proves necessary, bathymetric survey operations may recommence in the future.

Ship movements

Fugro Equator completed bathymetric survey operations on 26 October and commenced passage to Fremantle. It is expected to arrive in Fremantle around 31 October for mobilisation as the third underwater search vessel. This process will involve reconfiguring the vessel to accommodate a deep tow vehicle identical to that currently in use by *Fugro Discovery*.

Underwater search



Over 2,500 square kilometres of the seafloor have been searched so far.

In addition to locating the aircraft, the underwater search aims to identify any crucial evidence (such as aircraft wreckage and flight recorders) to assist with the Malaysian investigation. The ATSB has

utilised the data from the bathymetric survey work to prepare the initial plan for the underwater search, to be followed and referred to by all parties involved. The plan includes search timings, methods, procedures, safety precautions and search areas. The initial search areas have been allocated to the different vessels with the aim of positively identifying and mapping the debris field of MH370.

Ship movements

GO Phoenix has departed Fremantle after resupply and is expected to recommence operations in the search area by 2 November.

Fugro Discovery arrived in the underwater search area on 22 October and initiated deployment of the towfish and conducted a series of tests that day. On 23 October, search operations commenced.

Weather

Weather conditions in the southern Indian Ocean begin to improve significantly during October and the impact of weather on operations is expected to reduce. This trend continues to improve over the summer months before conditions begin to worsen again in May.

Search priorities

The complexities surrounding the search are immense. It involves vast areas of the Indian Ocean with only limited known data and aircraft flight information. While it is impossible to determine with certainty where the aircraft may have entered the water, the available data and analysis indicate that the most likely location lies close to a long but narrow arc in the southern Indian Ocean (where the aircraft last communicated with a ground station through a satellite). This is where the aircraft is assessed to have run out of fuel.

Complex and ground-breaking technical analysis of the limited satellite communications data and aircraft flight information has been developed and refined since the disappearance of MH370. That work has concentrated on determining the area on the seventh arc that the aircraft was most likely to have reached, enabling a prioritised search effort.

Work continues with refinements to the analysis of the satellite communication system messages. This ongoing effort may result in changes to the prioritisation and location of search activity within the current search area along the seventh arc.

The ATSB continues to receive messages from members of the public who have found material washed up on the Australian coastline and think it may be wreckage or debris from MH370. The ATSB reviews all of this correspondence carefully, but drift modelling undertaken by the Australian Maritime Safety Authority has suggested that if there were any floating debris, it is far more likely to have travelled west, away from the coastline of Australia. It is possible that some materials may have drifted to the coastline of Indonesia and an alert was issued to Indonesia in August requesting that the authorities be alerted to any possible debris from the aircraft.

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