The intensified underwater search for MH370



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Background

At the request of the Malaysian Government, Australia is leading the search for missing Malaysia Airlines Flight MH370. All the available data indicates the aircraft entered the sea close to a long but narrow arc of the southern Indian Ocean.

The underwater search is a complex operation that will involve a range of vessels, equipment and expertise to cover 60,000 square kilometres of ocean floor—roughly the size of Tasmania.

The intensified underwater search

The Australian Transport Safety Bureau (ATSB) is coordinating the continuous underwater search phase for MH370. It is expected to take up to 12 months to complete a search area of up to 60,000 square kilometres. The aim of the search is to locate the aircraft and any crucial evidence (such as aircraft debris and flight recorders) to assist with the Malaysian investigation.

As part of the search, the ATSB will contract experts to localise, positively identify and map the debris field of MH370—which is a Boeing 777 aircraft—using specialist equipment.

The ATSB will use data obtained from a comprehensive bathymetric survey of the search area to identify and prioritise areas of the search zone. The bathymetric survey – currently underway – will essentially provide a map of the search zone, charting the contours, depths and hardness of the ocean floor. (The ATSB factsheet *Mapping the ocean floor—bathymetric survey* provides greater detail on the survey operations).

Search equipment

The equipment used during the underwater search will be capable of mapping and photographing any aircraft debris and operating at depths of at least 6,000 m. It will likely include:

- a towed sonar
- » an Autonomous Underwater Vehicle with mounted sonar
- >> optical imaging equipment with sufficient resolution to identify the aircraft or a debris field from the aircraft.

The equipment will be deployed from a vessel(s) capable of operating in the search area for up to 12 months.

Contracted services

The ATSB will contract the services of a specialist organisation (preferably a prime contractor), to conduct the underwater search. The contractor will provide the expertise, equipment and vessel(s) to search the 60,000 square kilometre search zone, identified as being the most probable location of the missing aircraft. The vessel(s) being utilised by the prime contractor may also be coordinated, in consultation with the ATSB, with other vessel(s) also undertaking search activities in the search zone on behalf of other countries.

More information

The following ATSB factsheets, available at www.atsb.gov.au/mh370 help explain the steps involved for the underwater search:

Considerations on defining the search area which provides detailed information on how the search area was determined.

Mapping the ocean floor—bathymetric survey, which provides more information about how the ATSB will prepare for the search.