Sonardyne Helps Recovering Airbus Flight Recorder From Black Sea

Sonardyne was recently called-upon in a race to recover the flight recorders from a crashed Airbus A320. The Armavia airliner was lost with 113 lives on a flight between Yerevan and Sochi on the Black Sea coast at the beginning of May. It disappeared into water over 2,000 ft deep where the vital Ã¢â‚¬Ëœblack boxÃ¢â‚¬â„¢ flight recorders proved impossible to locate visually. Strong currents and heavy sediment had quickly covered the wreckage removing all traces of the flight recorders.

The Russian State Scientific Centre, YMG (Yuzhmoregeologiya) had the job of locating the flight recorders and turned to Sonardyne. It supplied a ROV-Homer which enables underwater vehicles to home into the signals transmitted from beacons attached to divers, seabed equipment, or in this particular case, flight data recorders. The device was fitted to the search teamÃ¢â‚¬â„¢s own RT-1000 ROV, which had been designed and built by YMG. The light work/observation class vehicle is rated to 1,000 metres and was equipped with three video-cameras, six lights and a hydraulic manipulator. The ROV Homer system consists of an ROV mounted range and direction unit and PC control software. Once the pilot has selected the target he wishes to 'home' into, the ROV unit begins interrogating the designated beacon to determine its range and direction. The information is communicated back to the surface, via the ROV's umbilical, and is displayed on the user's PC. It indicates the range to the target and in which direction to turn in order to fly the ROV directly towards the selected beacon. With the Sonardyne ROV-Homer fitted to the Russian-built ROV, the first black box was found quickly on the first day as its approximate location was already known. The second black box was recovered the next day despite being buried in sediment without any traces being visible on the seabed. Recovery took place the day after enabling the entire operation to be completed in four days and within the deadline.