

29 March 2007

Intermediate report

During an evacuation mission of an oilrig on the North Sea with a Eurocopter AS 332L2 search and rescue helicopter on 21 November 2006, on the way back to the mainland, at 3,000 feet the N1 RPM of engine #1 fluctuated while its temperature rose. At the same time the temperature of engine #2 decreased. The crew tried to identify which engine had problems but did not succeed. The decision was made to descend to 1,000 feet. During descent cyclic control problems developed. The control problems increased rapidly, whereupon the crew decided to ditch the helicopter into the North Sea. All thirteen passengers and four crew members evacuated the aircraft safely. The helicopter was equipped with two automatic inflatable life rafts. These life rafts were not inflated. A small life raft ('air droppable') that was carried in the cabin was inflated by the cabin crew. Two occupants succeeded in climbing in the raft, all others remained in the water. All occupants were wearing survival suits and were rescued within 1 hour 15 minutes.

During the ongoing investigation, the deployment of the life raft stowed in the left-hand sponson was tested. The test revealed that the life raft could not be deployed by means of the normal activating mechanisms. Detailed investigation showed deficiencies in the design and maintenance procedures of the activating mechanism. Eurocopter, Bristow, the French BEA, the AAIB UK and the Dutch CAA were notified.

Eurocopter responded by announcing the issue of a Service Bulletin for improvement and stated that the AS 332L2 is the only type that is equipped with this life raft activating mechanism. The Safety Board did not extend its investigation to other helicopter types. The Service Bulletin has not yet been published.

Based on these findings the Dutch Safety Board asks the certifying authority for the Eurocopter products, the European Aviation Safety Agency, to take the following actions in order that:

- Operators check the proper functioning of the life raft activating mechanism on the AS 332L2 Eurocopter helicopters equipped with sponson mounted life rafts within two months after publication of this message.
- Eurocopter improves the design of the sponson mounted life raft activating systems to assure proper deployment.
- Eurocopter improves the maintenance procedures of the sponson mounted life raft activating systems as needed.