

**Preliminary Report**  
**ZK-HLL helicopter impacted water whilst conducting ship borne**  
**fishing operation**  
**2 October 2011**

**Abstract**

At 2300 hours Universal Time Coordination on 2 October 2011 a Robinson R44 Raven helicopter, ZK-HLL, was being operated from a purse seine fishing vessel approximately 155 nautical miles south west of Tokelau. The helicopter, with two occupants on board, reported returning to the fishing vessel due to a mechanical issue. Whilst returning the helicopter descended, struck the sea and rapidly sank. The passenger, the captain of the vessel, quickly surfaced followed a short time later by the unconscious pilot. Attempts to revive the pilot were unsuccessful.

As the accident occurred in international waters, responsibility to conduct an investigation into this accident fell to the Civil Aviation Authority of New Zealand as the State of Registry for the helicopter.

**Factual Information**

The purpose of the flight was to allow the passenger to observe a potential catch of tuna and to coordinate with a chase boat and the vessel in the deploying of the fishing net.

The helicopter was being operated at approximately 700 feet above the sea and had carried out three circuits above the school of tuna. The pilot reported to the passenger that they would need to return to the vessel due to a mechanical fault with the helicopter. The passenger had advised the vessel, which was approximately quarter of a nautical mile away of their intention to return. One further orbit was carried out over the school of tuna.

The passenger had then asked the pilot what the fault was and had been advised that there was an issue with the helicopter governor. The passenger, along with witnesses aboard the vessel, reported that the aircraft began a steep descent towards the sea subsequently impacting in a nose-up-tail-down attitude followed by it rolling onto its right hand side.

Although the aircraft became quickly submerged, the passenger was able to rapidly egress from the left side of the helicopter. The pilot surfaced a short time after but did not survive despite attempts to revive him.

## **Injuries to persons**

Initial autopsy reports indicate that the pilot died as a result of drowning.

## **Pilot information**

The pilot, a Mexican national, does not hold any aviation documents issued by the Civil Aviation Authority of New Zealand however, it would appear that documents have been issued by the Director of Civil Aviation of Mexico. A Pilot's Logbook was recovered from the pilot's personal effects which showed a total time of 906.7 hours with 197 hours conducted in the previous 90 days. 197 hours had been recorded on type.

## **Weather conditions**

Prevailing conditions were reported to be calm with a surface swell. Eye witness reports indicate that at the time of the impact the helicopter would have had a tailwind coming from the aft left quarter.

## **Wreckage and impact information**

The helicopter was fitted with "pop-out" floats but these were not activated. The helicopter sank immediately and is unrecoverable.

## **Ongoing investigation activities**

The investigation is continuing and will include examination of:

- The aircraft's maintenance history following a recent refurbishment;
- Toxicology post mortem report;
- The pilot's training and experience;
- Aviation documents issued by CAA in Mexico;
- Role of the Operator and nature of the operation;
- Prevailing weather conditions at the time;
- Possible human factors that might have influenced the pilot's decision making.

If any person has information which may assist with the investigation of this accident then they may contact the Civil Aviation Authority of New Zealand at [isi@caa.govt.nz](mailto:isi@caa.govt.nz) CAA accident investigations are conducted in accordance with ICAO guidelines. The sole objective of such investigations is the prevention of accidents by determining the contributing factors or causes and then implementing appropriate preventive measures - in other words restoring safety margins to provide an acceptable level of risk.

The focus of CAA safety investigations is to establish the causes of the accident on the balance of probability. Accident investigations do not always identify one dominant or 'proximate' cause. Often, an aviation accident is the last event in a chain of several events or factors, each of which may contribute to a greater or lesser degree, to the final outcome.

*The sole objective of the investigation of an accident or incident shall be the **prevention** of accidents and incidents. It is **not** the purpose of this activity to **apportion blame or liability**.*