

# JTSTB Digests

JTSTB (Japan Transport Safety Board)

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## Digest of Aircraft Accident Analyses For Prevention of Helicopter Accidents

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### 1. Preface

In June, 2013, the Board made an investigation report public about an accident involving a helicopter which made a forced landing in Higashikagawa City, Kagawa Prefecture during its power transmission lines inspection flight in September 2011, and recommended the aircraft operator to give careful considerations and take necessary measures to establish a system to prevent unforeseen events due to movement of embarkation on board, and to enable pilots to perform emergency procedures of aircraft without failure. The Board also made a safety recommendation to the European Aviation Safety Agency (EASA) which controls the airworthiness of the aircraft to make it mandatory to modify electrical equipment and its wiring in the rear hold of the helicopter. The Board also made a recommendation to the EASA on the emergency operations.

In regards to an accident involving a helicopter crashed into a mountain slope in September, 2010 when it was flying for transporting cargo by sling load, the Board made an investigation report public in January, 2013, and made recommendations to the aircraft operator to review its flight operations whether there were non-compliance activities against laws and regulations, to remind all its employees engaged in safety-related works including pilots and mechanics of the importance of observing fundamental safety standards such as minimum safe altitudes, and to review internal contingency communication procedure.

Furthermore, the Board made another investigation report public in September, 2013 about the serious incident of the helicopter of which inside the engine was damaged during transporting an emergency patient in March, 2009, and made safety recommendations to the EASA on the method and amount of application, and precautions for use of the biocides as it was a contributing factor to cause a developing into a heat concentration in the Upper Structure of combustion chamber.

Recent cases under investigation by the Board include an accident in September, 2013 in Gojo City, Nara Prefecture, involving a rescue who has got injured his left index finger while being lifted with a helicopter hoist during the rescue mission, and a serious incident in October, 2013 involving a privately-owned helicopter which took off from Kumamoto Airport, resulted in an air proximity incidents with a nearby hovering Disaster Prevention helicopter near the airport.

In view of these ongoing situation, we present some case studies of accidents involving helicopters investigated by the Board and various statistical data for the prevention of similar accidents.

We ask those concerned to aim for further enhancement in safety assurance, and hope that this digest will be used as teaching materials on various occasions such as safety seminars, and will be able to contribute to the prevention of helicopter accidents.



#### The definition in this digest of “Helicopter accidents and serious incidents”

Among the aircraft accidents and serious incidents for which the former Aircraft and Railway Accidents Investigation Commission and the Board conducted investigations from October, 2001 until October, 2013, accidents and serious incidents (and accidents) involving helicopters.

Some of the accidents and serious incidents referred to in this digest are under investigation, and the figures may change.