

MEMORANDUM OF RECORD

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NTSB Case Number: ERA16LA098

**Subject: Eurocopter France EC130 B4,
N133HN**

Parties: FAA inspector

In an email dated February 4, 2016, FAA Inspector Bruce Schemmel stated the following:

The aircraft was in an approximate 125 KIAS forward flight. The door left passenger door opened with such force as to damage the white plastic stop bracket located aft of the trailing end of the lower door track. Due to the forces of both the door opening inertia and the aerodynamic forces of the forward flight, the lower portion of the door became loose from the lower track and began to rotate outward and upward which then caused separation from the middle track. As the upper portion of the door acted as a hinge point during this rotation upward, the upper trailing corner of the impacted the cowling cover aft of the upper track as the lower portion of the door contacted the damaged rotor blade.

This impact of the blade and door was sufficient to detach the door from the upper track causing a full separation of the door assembly.

Through my examination of the aircraft and rotor blade, which had been removed and placed on a bench nearby, the noted damaged was as follows:

- Rotor blade number 40135 has damage (puncture and gashes) to the lower surface from the leading edge to the trailing edge near parallel to the chord line. The damage is significant and core exposure is evident.
- Lower door track exhibits signs of forced removal of attaching hardware at the trailing edge. Both upper and lower lips of the track within the last 2.5 inches contain radial damage and missing paint. I experienced rough edges along the inside portion of the upper lip along the track through tactile inspection that extended from the halfway point of the track distance.
- Middle door track exhibited similar damage and rough surfaces as described for the lower track.
- The cowling cover located aft and adjacent to the upper door track contains damage that indicates a puncturing impact. This damage appears to have penetrated completely through the strata.
- The plastic door Stop Bracket exhibits damage consistent with an impact. A portion of the structure designed as the actual stopping point for the door assembly is missing.
- In my opinion, the remaining two rotor blades, still installed on the aircraft at the time of my observations, do not exhibit signs of damage related to this incident.