



## Safety recommendation no. 524

<b>Date of the publication</b>	19.10.2017
<b>Number of the final report</b>	2296
<b>Safety deficit</b>	<p>During the descent phase of an Airbus A319-111, the change of reference of the target speed, from MACH to kt, was not performed and the aircraft's speed progressively increased until it reached the maximum permitted operating speed VMO. The pilot reacted by pulling sharply on the side stick, inducing a load factor of 2.33 g. Three of the four cabin crew members were thrown to the floor and one of them suffered a serious injury to the left ankle.</p> <p>The OVERSPEED PREVENTION and OVERSPEED RECOVERY procedures recommend maintaining the automated functions and allowing the overspeed protection to perform its function, even at the risk of exceeding the VMO limit. For a pilot, the concept of a "limit" is usually perceived as an absolute maximum which must not be exceeded; conditioned by this concept of danger, his first reflex may be to seek to avoid it.</p> <p>The overspeed prevention and overspeed recovery procedures are not categorised as memory items, i.e. those which must be applied without referring to paper documentation. In both cases, flight situations are very dynamic, or even critical, and applying such procedures according to the "read and do" principle should be excluded.</p>
<b>Safety recommendation</b>	<p>The European Aviation Safety Agency (EASA) should ensure that consideration is given by the manufacturer with a view to increasing awareness of, and training in, overspeed situations for flight crews of Airbus A320 series aircraft.</p>
<b>Addressees</b>	<p>EASA Europäische Agentur für Flugsicherheit; EASA Europäische Agentur für Flugsicherheit</p>
<b>Stage of the implementation</b>	<p>Partially implemented. Final answer from the EASA on 26.03.2019:</p> <p>The review of the procedures concluded that the current Airbus Flight Techniques Manual provides adequate techniques to prevent and to recover from the VMO/MMO overspeed situations in level flight and in descent also considering the presence of vertical wind shear.</p> <p>In addition, Airbus has provided awareness and training recommendations on the high energy state (including VMO/MMO) through the Operators Training Transmission 999.0012/17.</p> <p>These training recommendations are embedded in the Acceptable Means of Compliance (AMC) and Guidance Material (GM) to subparagraphs ORO.FC.220 and 330 of Commission Regulation (EU) No 965/2012.</p> <p>Finally, recommendations on overspeed prevention and recovery</p>

were presented during the Airbus Flight Safety Conference in 2018.

---

**Investigation report concerning  
the safety recommendation**

Rapport final

---