

Dutch agency: Glitch in airplane autopilot systems (Update)

June 26 2014, by Toby Sterling

The Netherlands' air safety agency says it has detected a glitch that can cause airplane autopilot systems to respond in a dangerous way when a plane is attempting a steeper than normal landing approach.

In a report published Thursday, the Dutch Safety Board, which investigates disasters and potential accidents, said the glitch in some runway technology systems can cause the autopilot to pull up a plane's nose at the wrong moment during a steep approach, potentially leading to a stall.

The agency has notified airline safety organizations globally of the issue. Its investigation stemmed from a May 2013 incident at Eindhoven Airport, and it examined four similar incidents in Europe and 19 in the United States involving different aircraft, airports and airlines. Agency spokesman Wim van der Weegen said none of the incidents caused a crash.

Approximately 1,500 to 2,000 major runways worldwide use an Instrument Landing System, or ILS.

Describing the problem in more detail, the Dutch agency report said the ILS sends out two radio signals, one to "fly higher" and another to "fly lower," which work together to help planes coming in for a landing center on a downward glide slope of 3 degrees.

The study found that planes coming in at a slope of between 3 and 9



degrees are correctly instructed to fly lower. But if a plane approaches above a slope of 9 degrees, instruments are liable to read a false "reverse" signal instructing them to fly up. When a plane is on autopilot, its nose will pitch up, causing it to lose speed or even stall.

The agency said the essence of its recommendation is that "pilots and other professionals in the aviation sector should be aware of the existence of reversed signals ... and of the response to such signals by the autopilot."

The agency added a warning that it is generally worried that overreliance on autopilots is leading to a reduction in pilots' skills.

© 2014 The Associated Press. All rights reserved.

Citation: Dutch agency: Glitch in airplane autopilot systems (Update) (2014, June 26) retrieved 18 April 2024 from https://phys.org/news/2014-06-dutch-agency-glitch-airplane-autopilot.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.