

A new idea in airplane structure inspired by human creation

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Abstract

A plane crash is one of the most tragic accidents that kills many people every year around the world. The first guess of many people - after rejecting terrorism and hijacking - about the disappearance of a plane is that it was caused by a catastrophic technical defect. To prevent a plane crash, we can get ideas from human creation to build an airplane to reduce the catastrophe.

Keywords: airplane, new idea, human creation

1. Introduction

Really, why, despite the development of the aviation industry and their equipping, we still hear the news of the plane crash or its disappearance in the news of Iran and the world. In a situation where technical defects for aircraft have been drastically reduced, what could be the reason for this high number of plane crashes? Some of the reasons for the crash are as follows:

- **Aircraft pilot error:** As aircraft become more advanced, they are less likely to crash due to technical factors. For this reason, pilot error alone is involved in half of all crashes. Aircraft internal systems have become much more complex and require more management. But since pilots have to work with these complex systems at all stages, there is a possibility that they are wrong. So when the pilot makes a big mistake, there is no room for compensation. In ۲۰۰۹, for example, an Airbus A۳۲۰ collided with a flock of geese in the air and was affected by the flight direction, but the pilot, with his experience,

managed to land it in the Hudson River. All 100 people on board were rescued by the two pilots.

- **Technical problems:** Technical problems cause 20% of air crashes. However, flight technologies have made significant progress compared to the past. Aircraft engines are more reliable than they were decades ago. In 1989, technical problems with the aircraft engine number one (left) left pilots unaware of which engine had failed. They then decided to turn off engine number two (right hand). As a result, the plane crashed and 27 people were killed.
- **Weather conditions:** Weather conditions are responsible for 10% of plane crashes in the world. Although today's aircraft are equipped with a gyroscopic compass, satellite navigation, and weather information from the ground, they still slip during storms, snow, and fog. The pilot of Airlines Flight decided in December 2000 to land in a blizzard. The plane crashed on the runway and collided with several vehicles, killing a child. One of the catastrophes happened in 1988. In that case, the plane could not take off from Munich airport due to bad weather conditions. 23 people lost their lives in that incident.
- **Aircraft sabotage:** Aircraft sabotage is only the cause of 10% of plane crashes in the world. Sabotage is next to lightning in terms of the cause of the fall. But the problem is that the saboteurs know their job well and their actions are quickly published in the media. The hijacking, which took place in Jordan in 1970, led to a complete rethinking of flight safety. In that incident, three planes exploded simultaneously in front of the media. Although security measures have increased, we still see saboteurs on the plane.
- **Other types of human error:** The remaining low percentage is related to other types of human error. For example, people involved in the flight process, from fueling to carrying, can cause a human error. Sometimes airport staff make mistakes by working long shifts or even night shifts. For example, the removal of the aircraft wiper in 1990 due to the loosening of the screw caused minor accidents.

This idea can be used in aircraft construction to increase flight safety.

۲. A new idea in the aviation industry

In the construction of the aircraft structure, a space can be considered for passengers to sit and the outer space, which is the outer skeleton of the aircraft, and between these two spaces, water or any other fluid that is better placed, as if the baby is in the water in its mother's womb. .

My previous idea was to put a spring and a damper between these two spaces.

۳. References

[۱] The following site: (Persian)

<https://setare.com>