

DEPARTMENT OF AUTOMOTIVE AND AERONAUTICAL ENGINEERING

Curiosities of Civil Aviation Scientifically Explained for Passengers – Insight and Entertainment

Task for a Project

Background

In advanced regions of the world, flying has become a matter of course, making aviation an ever-growing industry. Although aviation is an almost essential part of our lives, the general public still often lacks a fundamental understanding of the physical and operational characteristics of aviation. In reality, despite the high complexity of aviation, efforts are being made to ensure a pleasant and thus smooth flight for the paying passenger, which denies many people an insight behind the facade of aircraft and aviation-specific processes. Aviation is so close to us, yet so far away.

Task

The task is inspired by the article "The 31 biggest secrets of air travel" published in "The Telegraph" on 2017-09-09. The investigation should deal with the following aspects:

- Aerodynamic Lift
- Winglets
- Aircraft Windows
- Lightning Strikes
- Cabin Doors
- Cabin Air
- Mobile Devices
- Oxygen Masks
- Engine Failure
- Fuel Dumping
- Aircraft Structure and Materials
- Fatigue in the Cockpit
- Autonomous Flight

The report has to be written in English based on German or international standards on report writing.