Aviation Safety: An Overview

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EDITORIAL

Aviation Safety is the study and application of risk management in aviation. This encompasses research into preventing aviation accidents and incidents, as well as education of air transport personnel, passengers, and the general public, as well as aircraft and aviation infrastructure design.

There is a lot of regulation and control in the aviation sector. Rather than unintended mishaps, aviation security focuses on protecting air travellers, planes, and infrastructure from purposeful injury or disruption. The aviation industry is heavily regulated and controlled. Rather than unintentional mishaps, aviation security focuses on preventing intentional injury or interruption to air travellers, planes, and infrastructure. From 2002 to 2011, there were 0.6 fatal accidents per million flights worldwide, 0.4 per million hours flown, 22.0 fatalities per million flights, or 12.7 per cent of all flights.

Air travel grew from 310 million passengers in 1970 to 3,696 million in 2016, with 823 million in the United States and 488 million in China. There were 19 fatal incidents involving civil airliners carrying more than 14 passengers in 2016, resulting in 325 fatalities, making it the second safest year on record after 2015, which had 16 accidents, and 2013, which had 265 fatalities. For planes weighing more than 5.7 tonnes.

In 2017, ten deadly aeroplane crashes occurred, killing 44 occupants and 35 people on the ground, making 2017 the safest year in commercial aviation history, both in terms of fatal accidents and fatalities. Since 1970, fatal accidents per million flights have dropped 12 times, from 6.35 to 0.51, while fatalities per trillion revenue passenger kilometre (RPK) have dropped 81 percent.

Pilot in Command mistake is the primary cause. Better aircraft design, engineering, and maintenance, as well as the evolution of navigation aids and safety rules and procedures, have all enhanced safety.

The first two statistics are based on typical travels for respective modes of transportation, therefore they can’t be used to compare hazards associated with different modes of transportation in a specific ”from A to B” journey. For instance, data show that a typical flight from Los Angeles to New York carries a higher risk factor than a typical vehicle trip from home to work.

Because the journey will take much longer, the overall risk associated with travelling by vehicle will be higher than travelling by air, even if each individual hour of automobile travel will be less risky than an hour of flight.

As a result, it’s critical to place each data in its right perspective. When it comes to determining the hazards connected with a specific long-distance journey from one city to another, the third statistic is the most appropriate, indicating that air travel is the safest mode of long-distance transit.

Between 2000 and 2010, the number of deaths per passenger mile on commercial aeroplanes in the United States was around 0.2 per 10 billion passenger miles. [nineteen] [20] a Driving had a rate of 150 per 10 billion vehicle miles in 2000, which was 750 times greater per mile than flying on a commercial airliner.

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