

Optimum Flight Altitude

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Abstract : As per current scenario, commercial aircrafts have been very well functioning with higher efficiency, but there is something that affects it. Every aircraft runs with the combustion produced by mixture of fuel and air. For example: A flight to travel from Mumbai to Kolkata it takes 2h: 30 min and from Kolkata to Mumbai it takes 2h: 45 min. It happens due to head and tail wind. Due to head wind air craft travels faster than its usual velocity and it takes 2h: 30 min to reach to Kolkata, while it takes 2h;45min vis versa. This lag in time is caused due to head wind that increases the drag and reduces the relative velocity of the plane. So in order to reduce this wastage of fuel there is an optimal flight altitude at which the head and tail wind action is reduced compared to the present scenario.

Keywords : drag, head wind, tail wind, aircraft

Conference Title : ICAAA 2015 : International Conference on Applied Aerodynamics and Aeromechanics

Conference Location : London, United Kingdom

Conference Dates : January 19-20, 2015