

Mechanism to Optimize Landing Distance in Order to Minimize Tyre Wear during Braking

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Abstract : This research was based on developing a mechanism in order to optimize the landing distance. Short distance braking and long distance braking may cause several issues for the aircraft including tyre wearing. The worst case occurs with short distance landing. The issues related to short distance landing were identified after conducting interviews with pilots, aeronautical engineers and technicians. A model was constructed in order to optimize the landing distance. The device started to function at the point where the main wheels of the aircraft touchdown the runway. It was found that implementing this device to the aircraft benefits to optimize the landing distance. This could lead to rectifying several issues occurred due to improper braking distances.

Keywords : aircraft, mechanism, optimize landing distance, runway

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