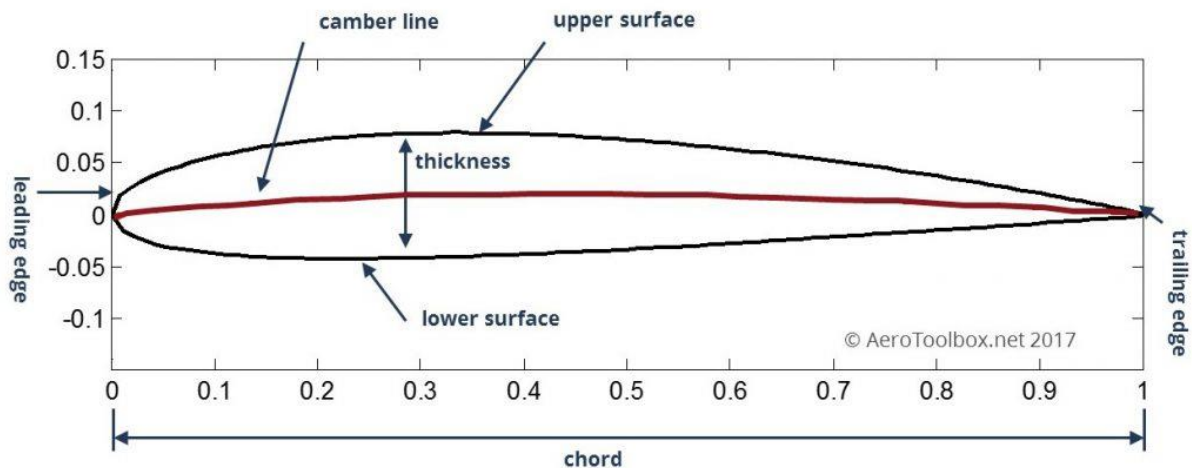


# MODELING AND STRUCTURAL ANALYSIS OF AIRCRAFT WING USING FEM

The aircraft wing, which is responsible for the take-off of the aircraft. Initially running on the runway, the angle of attack is 0 for gaining the momentum to fly. After certain distance covered and momentum gain angle of attack become ( $\theta$ ) and create high pressure and low-pressure areas at the bottom and upper side of the wing. Which helps to the aircraft to lift in the air. This analysis would be focusing on the accidental failures occur due to the engineered defects encountered in aircraft wings. This can be found out by carrying out stress-strain analysis via FEM in Ansys and modelling in solid Edge.



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