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## Calculating Aerodynamic & Stability Characteristics for a MALE UAV using USAF Digital DATCOM

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Motivated by the design of a MALE UAV for a military mission. The aerodynamic characteristics for the basic geometry of a UAV (MALE configuration) are calculated using USAF Digital DATCOM. Also, we calculated the aerodynamic characteristics of the UAV with deflected control surface for the same configuration. Furthermore, we estimate the stability and control derivative based on the required mission specification and flight envelope for the suggested design.