

Stabilizing attitude control for mobility of wing In ground (WIG) craft - a review

ABSTRACT

Wing in ground crafts development have been rapidly advancing in recent years. The current paper reviews the researches and developments of existing stability control system technology's development and enhancement for wing in ground effect crafts. The review is critically intended for the development of the control system for two-seater Dragonfly 2, a hoverwing type craft. The current review will commence with the introduction on the theory behind the in ground effect phenomenon on the crafts, its regulations and the types of wing in ground crafts, their advantages and disadvantages, and their stability and control issues. This paper also discusses the available attitude control system types of wing-in-ground craft (WIG), its experiments, simulations and computational methods done especially on both the longitudinal and lateral motion stability..

Keyword : 2-Seater Hoverwing; Attitude control; Flight control; Wing in ground craft