

## عنوان مقاله:

A STUDY OF WINGLET AND AERODYNAMIC INTERFERENCES IN 3 D VISCOUS FLOW AROUND A FLYING BOAT IN GROUND EFFECT

## محل انتشار:

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## خلاصه مقاله:

Studying different configurations and deciding about aerodynamic interferences has always been a time consuming and expensive task in the course of aerodynamic design of flight vehicles. Disadvantages multiply when using experimental tools for complicated objects flying close to ground. Large scale CFD simulation is another choice of modest time and expense. In this study, the flow field about a complete flying-boat in ground effect is resolved. The influences of using winglet in ground and out of ground effects are compared and it is shown that ground affects this influence to a large extent. It is also shown that with careful shaping of the body and using a step underneath the body a propulsive force can be produced in vicinity of the ground. However, this causes an increase in drag force in free flight.

## کلمات کلیدی:

WIG, CFD, Ground Effect, Aerodynamics, Parallel Processing

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/28706>

