**FROM CONCEPT TO CLIMBOUT**

**The development of a unique glider flight simulator.**

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The Glider flight Simulator is a computer interfaced, mechanically active platform, conceptualised by the author. It was co-developed by his technical team in the School of Electrical and Electronic Engineering and involves students by way of offering final year projects focused on the software interfacing aspects.

Its directive is to be useful as a real flight training aid. Currently the simulator is driven by the popular and widely accepted “Condor” Glider flight simulator package but will later interface with other software packages such as X Plane. Uniquely it incorporates an active ground simulation, coined the “Rumble roller”. This unusual feature induces many of the pilot felt flight sensations associated with arrival and departure, making it a very useful tool for economically teaching the fundamentals of take off, circuit planning and landing. These aspects are commonly the most laborious and expensive components of flight training. Due to the ability to easily modify the dynamics of the motion components, it is also a very useful tool for developing general soaring and cross country flying techniques.

There is currently no known glider simulator that has the capabilities and functionality of this platform, making it unique at this point in time. The simulator is used as a front line advertising tool for the school and is a prime example of how technicians, given the opportunity, can creatively contribute to their schools success.

The flight simulator will be available for inspection and flight experience during the conference.