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VSA ANNUAL MEETING - 11 August 2018

UPDATE OF FLIGHT SIMULATOR ACTIVITY IN VICTORIA

There are presently four simulator projects within Victoria - three are established and functioning while another one is in development.

Simulator design and development is a complex and challenging task and we are fortunate to have a deal of expertise within the VSA membership. Flight simulators have great potential but also present technical challenges as well as implementation issues. In particular how will students and instructors accept these ground trainers as an alternative to in flight training ?

GCV Benalla

Enthusiasts from within the GCV have worked for the past nine years to develop an effective and realistic flight simulator based around an IS28 fuselage. This unit is being used both for ab-initio students as well as training of Instructors.

In addition, GCV members have been consulted to install similar simulators at Lake Keepit GC and overseas, in Chile. The GCV software design and electronics is also to be used as the basis for a new GFA 'fixed base' simulator now under development (see below).

The GCV welcomes visitors from other VSA clubs to come and fly in their simulator at any time but do call the GCV office first to make arrangements. (Tel. 03 54 361 516)



VSA Portable Simulator

Some years ago the GFA commissioned Tom Wilksch, Adelaide University GC to build a portable unit for use at marketing events such as Air Shows and Gliding club open days.

This unit proved popular although somewhat fragile after being transported to various inter-state events. Given the extensive maintenance required after each show it fell into disuse until the VSA purchased it from the GFA (for the nominal sum of \$1).

The simulator was subsequently refurbished by VSA members in GCV as well as John Styles while he was responsible for GFA marketing. This unit continues to be used, most recently for a GCV display at Winton motor racing circuit and an Open Day by Southern Riverina GC.

Tom Wilksch meanwhile has designed and built several more gliding simulators.

This simulator is available for use by VSA clubs and to book it call either Vivienne Drew, GCV (mobile 0428 583 746) or Roger Krueger, Melbourne GC



Winton Raceway – May 2018



Southern Riverina GC – July 2018



VSA Virtual Reality Simulator

As requested by Club Presidents at the 2016 annual meeting, the VSA investigated opportunities to acquire a portable training simulator for country clubs, who cannot travel to use the GCV simulator. In 2017 we awarded a contract to Tom Wilksch in Adelaide for construction of a Visual Reality based simulator mounted in a small road trailer.



The VR unit was delivered a few months ago and has impressed everyone who has flown it with the level of realism and all-round viewing that it offers. The current VR software does have some limitations and development is planned to incorporate the VR version of CONDOR once this becomes available.

Roger Krueger, Melbourne GC (mobile 0400 686 960) is managing the simulator and it is available for flight training and occasional publicity events to aviation minded members of the public. It must be supervised by experienced Instructors and it is definitely not suitable for being used by children and young adults at public events.



GFA 'Fixed Base' Prototype Development for Bacchus Marsh

The GFA have committed to development of a standard design for training simulators which can be built for gliding clubs across Australia. Initially the concept was to use a design already implemented in many clubs across France but this proved too complex to replicate.

Instead the design will be based upon the software and electronics developed for the GCV simulator at Benalla. There will be a purpose built 2-seat cockpit which overcomes the lack of second hand glider fuselages.

A local VSA project team has been established including:

- Alby James, GCV responsible for design and construction of the electronics,
- Ian Kerton, Melbourne GC who recently retired from work as a design engineer responsible for development of RAAF simulators,
- Chris Trewerne, Beaufort GC an experienced fabricator of composite components, and
- Roger Krueger, Melbourne GC who is project coordinator.

The GFA are partially funding the prototype which is to be installed at Bacchus Marsh. Design concepts have been finalised and construction is expected to commence in coming months.

Ian Grant

VSA President