

ADELAIDE BRANCH INCORPORATED IN SA IN 1984

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## <u>LECTURE</u>

## Tuesday 5<sup>th</sup> November 2013 6:45pm for 7:00pm start



Location: UniSA, Building MM1-05, University Boulevard, Mawson Lakes, SA 5095 (see map)

## Mr. Gerhard Waibel, Glider Design Engineer

## Design aspects of modern composite gliders

**Speaker:** Gerhard Waibel of Germany was born 1938. He conducted his first solo flight on 8 August 1955. In 1958 he matriculated at Darmstadt Technical University where he joined the famous Akaflieg student group. During a student exchange at Sheffield, England in 1962, Wolf Lemke and he agreed to design the D 36 Open Class sailplane. With the help of Heiko Friess and Klaus Weise this glider was built and later modified by fellow student Klaus Holighaus. In 1964, Gerhard managed to win the German Nationals with the D 36 glider.

Immediately after finishing his studies, Gerhard joined the German glider manufacturer Alexander Schleicher GmbH & Co working with the famous designer Rudolf Kaiser. The ASW 12 was not only Schleicher's first FRP-design but it was also one of the very first fibreglass gliders on the market. It was followed by a long list of other competition sailplanes. Most of them were highly successful indeed.

Gerhard retired at the age of 65 in 2003 after 39 years of service. However, he is still working as a consultant to Schleicher and he is also a leading member of the CONCORDIA design team. The CONCORDIA glider features a glide ratio of 75:1 and an unprecedented aspect ratio as well as an extremely wide range of wing loadings. It is currently the world's highest performing sailplane.

**Synopsis:** The scope of the lecture will briefly introduce the developmental steps from wooden gliders to today's high tech composite aircraft and will focus on the leading edge technology aspect of glider design in particular the CONCORDIA glider design.



**ASW 20 on finals** 

ASW 28D

Free and all welcome. See attached map for directions.

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