

The SuperAWOS

New automatic weather observing station

The SuperAWOS is a new generation system, designed by airfield owners and pilots, to provide air traffic with weather parameters, surface visibility and flight information

One of the biggest problems that pilots of small craft face is the lack of up-to-date weather and flight information when approaching small and unmanned airfields. There are a variety of solutions to deal with this, the most popular of which is to have automated equipment reporting the weather and flight information thus giving 24 hour information without human interaction. While this is largely seen as the right approach (short of having the airfield permanently manned) there have been problems with poor equipment performance, a substantial increase in costs for the airport and unnecessary radio traffic. These problems have caused earlier versions of the Automatic Weather Observing Station (AWOS) to be seen as unwieldy or too costly.

Now a new generation of airfield AWOS is available from Potomac Aviation based in the USA providing pilots only with necessary weather and flight information. The SuperAWOS, as the station is known, has been designed by airfield owners and pilots to deal with the current shortfalls of standard AWOS systems.

The US Federal Aviation Authority (FAA) has understood the benefits and allows the SuperAWOS stations to be procured using grants which can sometimes cover up to 95 percent of the station costs.

The SuperAWOS uses a Biral HSS VPF-710 visibility sensor to automatically determine the surface visibility and is fully approved by the FAA.

The system maintains full performance accountability as any changes in settings or controls are emailed to Potomac Aviation for monitoring and logging on official FAA forms which can be checked by FAA officials at any time from the comfort of their offices.

The SuperAWOS can save airfields thousands of dollars as the number of times FAA service technicians need to visit to perform regular servicing and maintenance can be kept to an absolute minimum.

One of the features of the system is that instead of having to switch radio frequencies to receive this automated weather and flight information, as

required with existing AWOS systems, it uses the airfield's existing frequency and automatically adapts the information according to the amount of radio traffic.

Biral have been working closely with Potomac Aviation for the last few years to integrate the Biral HSS VPF-710 visibility sensor into the SuperUnicom, the forerunner of the SuperAWOS. This has involved not only getting all of the data functions automated, archived and converted to voice signals but also to fully utilise the sensor capabilities to reduce maintenance intervals. The sensor is able to automatically test and monitor all of the important functions needed to ensure that proper visibility measurements are being made and reported. In the unlikely event that any of the visibility parameters fall outside of the predefined thresholds set by Biral an error is automatically reported and appropriate measures are taken to ensure that flight safety is not compromised.

These measures include issuing an appropriate notice to users and emailing a report to maintenance support at Potomac Aviation so that corrective action can be taken quickly and the situation logged appropriately.

The level of detail and dedication that has gone into the SuperAWOS is clear to see. For example, up-to-the minute weather reports, traffic information, FAA service reports and calibration certificates can be easily viewed and printed from a computer terminal. The SuperAWOS also gives voice guided instructions to the operator during calibration and servicing procedures.

Even if a check on the station's operational status is interrupted for any reason the SuperAWOS will automatically switch back to the previous settings after a short time. As all operations are logged the user is quite likely to be contacted by Potomac Aviation asking if assistance is needed.

With this level of support an owner of a SuperAWOS can always rely on assistance to keep the station in perfect operational status.

For further information on the SuperAWOS please contact Biral.



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To see live online weather updates from SuperAWOS check out the links under Relevant Web Sites.

Relevant Web Sites

www.superawos.com

www.potomac-airfield.com

these links are also available

from our own web site

www.biral.com/newsletter