

## Automated Weather Observation Systems (AWOS), Shaunavon, Sask.

### Bringing new levels of safety and accessibility to small community airports.

Following the privatization and rationalization of the air transport industry in Canada, small community airports have struggled for survival. In addition to this challenge, many of these airports are losing aviation weather services due to insufficient or non-existent scheduled air traffic to carry costs.

These reductions in revenues and services do not diminish the importance of small airports to their host communities. Med-evac, small charters and carriers, and local general aviation provide lifelines connecting small communities to larger urban centers.



Shaunavon Airport in Shaunavon, Saskatchewan, Canada is one such airport. In 2004, the Town of Shaunavon assembled funding to add a basic AWOS to the local airport and contracted AXYS Technologies, Inc. of Victoria, BC to install and commission the system.

Prior to having an AWOS installed, the closest weather information available to Shaunavon was in the town of Swift Current; 85 kilometers away "as the crow flies".

This is particularly detrimental to altimeter settings, as barometric pressure variances increase with distance. Without a local altimeter source to provide pilots with accurate altimeter settings, instrument approach minimums must be adjusted upwards. A difference of 200 feet in approach minimums can make the difference between a med-evac flight making it into the airport, or a patient making a longer and potentially life-threatening trip in an ambulance to the next urban center.

AWOS is a vital technology in keeping airports safe and accessible during marginal weather. A basic AWOS (also known as LWIS for Limited Weather Information System) collects current information on wind speed and direction, altimeter setting, temperature and dewpoint. This weather data is updated every ten minutes, and transmitted to pilots and the general public via an automated voice, available on VHF aircraft band or telephone dial up. In addition, this same information can be posted to the airport's website and displayed in real-time in an operations center.

Today, Shaunavon Airport has a new Transport Canada compliant weather station and a new GPS approach that reflects the improved minimums that come from having a local altimeter source. Med-evac, general aviation, and air carrier pilots now have a local weather data source that is accurate, reliable, and available 24/7.

