

World premiere at Klagenfurt Airport! Lightning of approach corridor now monitored by radio

Safer landings in Carinthia !

A combination of new high-performance LED beacons with a lifetime in excess of 100.000 hours, their redundant deployment in the approach corridor, and for the first time the monitoring of their proper function by Adcon radios – are the corner stones of this project, installed by Adcon’s Austrian distribution partner, Schubert Elektroanlagen. Twentytwo remote LED beacons now guide pilots of even large cruisers safely to the Klagenfurt landing strip. The Adcon system monitors the performance of the lights (on/off) and in addition the A840 Telemetry Gateway was integrated into the airports SCADA system.



„Almost 500.000 passengers, an increase of 55% over 2003, enjoyed the services of Klagenfurt Airport in 2004,“ says Ernst Steiner, the airport’s managing director. Thanks to a large increase in international destinations that are now directly linked to Klagenfurt, like London, Rome, Frankfurt, Hamburg, Hannover, Cologne and Berlin, this trend is likely to continue.

“Despite the excellent avionics built into today’s aircraft, pilots still rank their eyes as instrument of choice when landing,“ says Steiner. „The clear visibility of exposed objects is therefore of crucial importance.“ But the reliability of the 22 lights installed for this purpose – basically large floodlights on high towers in the airport’s approach corridor – were no longer fit for the task. Installed over a wide area, partially difficult to access, the functionality of the lights was hard to control. Frequently outages of single lights went undiscovered for several days.



To the left a set of redundant LED flares as they are now installed on every mast, like on the one to the right.

2005 saw the deployment of an innovative couple of devices: Adcon RTU's, connected to a redundant set of beacons, no longer equipped with conventional lamps, but with high-performance LED's, the lifetime of which is 10 times longer (100.000 hours) than the one of standard lamps. 18 locator beacons with 50 cd candle power are permanently activated, while 4 blinker beacons with 2000 cd candle power mark particularly hazardous sites.

Connected to Adcon A733 addWAVE RTUs the proper operation of these 22 beacons and the charge state of the integrated battery packs is transmitted in freely definable intervals. While both RTUs and beacons are by default fed by mains current, the integrated rechargeable batteries allow continuous operation of the RTUs even in case of blackouts. Whichever malfunction occurs it will immediately be reported to the A840 Telemetry Gateway, which is directly linked to the SCADA system of the tower's control room.

The performance of the system lives up to the clients expectations. "All tests have been completed to our best satisfaction. Let the long nights come!", says Richard Drechsler, civil engineer at „Electro Buero Pruckmair“, airport expert and designer of this project.

DI Richard Drechsler
EBP Electro Buero Pruckmair / Austria

„We were searching and comparing for quite some time various systems to monitor the locator and the blinker beacons. At the end the Adcon system proved to be the best technology for the job.

After evaluating the project with Schubert Elektroanlagen, Dept. Water/Telemetry, as the executing contractor, we were convinced from the very beginning that the system would perform well – now that everything is operational let's say it's even performing very well!"