

EMIRATES AIRLINES

Ensuring Airport A380 readiness using **AeroTURN Pro**



(left) Mohan Sharma, Manager Operations Planning & Optimization and Ray Mahmoudi, Flight Operations Engineer at Emirates Airline presenting an AeroTURN Pro simulation of the Airbus A380 at Birmingham International Airport (UK). (right) The Emirates Airbus A380

Emirates Airlines, based in the Gulf State of the United Arab Emirates and headquartered in Dubai, **celebrated 25 years** of operation in 2010. From a small beginning with 2 aircraft in 1985, the company now has operations spanning 5 continents with 151 aircraft in service and 200 more on order.

Being the largest international operator of the Airbus A380 'Super-Jumbo', Emirates' Flight Operations team is responsible for evaluating airports worldwide to receive the A380. They are required to perform simulation studies on aircraft movements within these airports, utilising a digital layout of each as the base mapping. Flight Operations carry out these simulations using Transoft Solutions' AeroTURN Pro as the application software. AeroTURN Pro was selected by Emirates after a careful assessment of proprietary systems on the market, and in consideration of functionality, market reputation and penetration, and not least, local technical support.

The Flight Operations team travels around the globe, visiting airport authorities and working with each to generate studies of aircraft maneuver simulations. Staff travel with laptop computers hosting AeroTURN Pro. Emirates has several licences of AeroTURN Pro in use, and is looking to increase the deployment of the technology in 2011 as part of a developing requirement to study other types of aircraft such as the new A350 passenger aircraft and future airplane developments that could impact airport compatibility.

This overall capability has enabled Flight Operations engineers to identify potential problems with airport infrastructure when considering the acquisition of new destinations. Engineers have identified issues such as infringements on minimum clearances from landing gear to edge of taxiway fillets, wingtip obstacle clearance, and manoeuvring capability in very narrow taxiways and runways. AeroTURN Pro has therefore proven its value prior to aircraft actually being flown to these new destinations.

Emirates has found AeroTURN Pro easy to use, but at the same time highly functional. The Flight Operations team are supported by Transoft Solutions and its Middle East Partner InfraCAD, who provide training and ongoing technical support.

Feedback from Emirates on their day-to-day use of the system is helping the development team at Transoft Solutions to study and implement new and improved functionality.

Emirates' Daniel Wong, Vice President of Flight Operations Performance, considers AeroTURN Pro to have added considerable technical benefit to the day-to-day responsibilities and tasks allocated to his team. "The application of this software was and continues to be critical to the introduction of the A380 at airports which originally felt they could not handle such a large aircraft. AeroTURN Pro enables visual simulations that have assisted better understanding of the aircraft's capability. We are now applying this application expertise on smaller aircraft types to support risk mitigation studies at airports to ensure ground manoeuvring clearances".



Daniel Wong, Vice President of Flight Operations Performance