

Real-Time Information is the Key

Optimum handling of all flights requires precise and efficient scheduling of resources. The quality of scheduling operations is determined by the availability of accurate real-time data and an adequate scheduling horizon. The necessary information is often obtained by monitoring the radio traffic between pilots and air-traffic controllers. This is a personnel intensive practice that places ramp-control and operational staff under great physical and psychological strain.

Continuous Overview

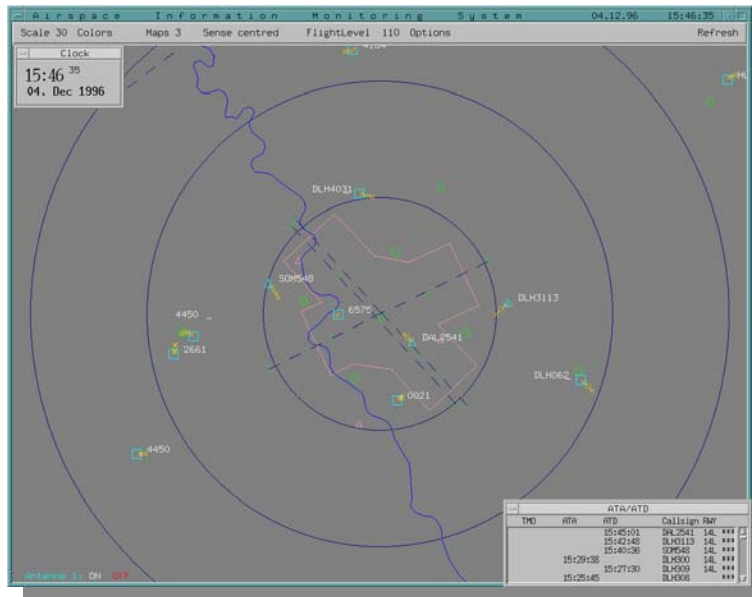
AirIT's **Airspace Monitoring System (AMS)** evaluates data from various sources -- the airport radar, third party radar (e.g., Rannoch, Passur), and OAG, and presents you with an overview of the current airspace situation in the vicinity of the airport. Long before an aircraft lands, **AMS** provides information on a flight event and grants you sufficient lead-time to ensure quick and reliable ground handling of the flight. Due to the automatic capture of takeoffs and landings, **AMS** relieves apron-control personnel of routine tasks, such as monitoring of radio traffic and the manual input of data. The evaluated data is automatically transferred to a central database or a noise monitoring system, ensuring that the connected systems are always updated in a real-time environment.

AMS: Expanding to Meet Growing Information Requirements

Conceived as a modular system solution, **AMS** is ideally suited to meet your current and future requirements in the evaluation and visualization of the airspace situation. In its minimum configuration, **AMS** includes the link-up of a radar antenna to an operator workstation for the display of a synthetic radar image.



At the other end of the configuration spectrum, **AMS** is comprised of a dual-host system for high availability, a receiver module that can serve up to five antennas, including ground radar, operator workstations and the connection to a central database system or noise monitoring system.



By virtue of its modular design, **AMS** can be easily expanded and upgraded, ensuring that it can meet the challenges of increasing air traffic volumes. **AMS** can also be easily modified by the replacement of individual modules to incorporate technical innovations, such as new radio data formats.

Modular and Integration Ready

The ATC or third-party vendors supply the airport with radar data via a serial connection or LAN. One or more receiver modules capture the data, which is then processed for subsequent transfer to the distribution modules that, in turn, transport it to evaluation and output modules. From analysis of the radar data, the evaluation modules determine time related information such as TMO, ATA, and ATD, flight-route information such as STAR, SID, RWY, and even flight paths. Output modules visualize the radar data as a synthetic radar image or simply log all flight events for output to a printer. All output modules can be configured to meet your airport's requirements.

AMS is an integral component of the **AirIT Enterprise Solution**, and together with our **Advanced SITA Message Server (ASIMS)**, serves as a supplier of real-time information to the integrated resource scheduling and information systems.

References

AMS has been successfully installed and is operational at the airports in Berlin, Dresden, Düsseldorf, and Hamburg, Cologne/Bonn, Munich and Stuttgart. It has also been purchased by Northwest Airlines for use at their three major hubs in Minneapolis, Memphis and Detroit.