AeroTrac NextGen incorporates a reliable and redundant architecture, providing fail-safe backup modes for high-system availability and uninterrupted service. All applications operate under Commercial-Off-the-Shelf (COTS) multitasking operating systems using an enhanced Human Machine Interface (HMI) with graphical displays that incorporate Eurocontrol recommendations.

Field-Proven
For over 40 years, Telephonics Corporation has provided the expertise and advanced systems required for safe and efficient Communication, Navigation, Surveillance (CNS) and Air Traffic Management (ATM). From the planning stages to turnkey installation, Telephonics can assist in providing technical support and system solutions to ensure smooth, secure and effectual air traffic flow at airports and control centers around the world.

Fully Scalable
AeroTrac NextGen utilizes a modular design that can be expanded and modified to fulfill new CNS/ATM requirements as they emerge as part of the global transformation of air traffic. The system is fully scalable in capacity and control sectors and may be applied to a wide range of applications including:

- Enroute control
- Approach/tower control
- Area control centers

Telephonics incorporates field-proven functions into AeroTrac NextGen’s Air Traffic Control (ATC) automation system, creating an innovative HMI and other supporting tools that adjust easily to customer practices under International Civil Aviation Organization (ICAO) and Eurocontrol standards. The system follows NextGen and SESAR development and complies to the ICAO Aviation System Block Upgrades approach.

Surveillance Data Processing System
Our Surveillance Data Processing (SDP) system includes Telephonics’ advanced multi-radar tracking. The system receives and processes data from multiple sensor components and data links including Primary Surveillance Radar (PSR), Secondary Surveillance Radar (SSR), Automatic Dependent Surveillance-Broadcast/Contract (ADS-B/C) target reports, Mode S, weather radar and Wide Area Multilateration (WAM).
The field-proven SDP can simultaneously process data, optimize radar accuracies and provide seamless radar tracking, resulting in a customized integrated air surveillance picture.

Telephonics’ SDP is designed for low maintenance, providing automated sensor registration adjustments and is scalable to handle the largest sensor and target capacities. The system provides automatic correlation between flight data, sensor data, radar data and seamless integration of ADS-B/WAM to provide a smooth transition between radar and non-radar coverage areas.

Flight Data Processing System

The AeroTrac NextGen Flight Data Processing (FDP) system is based on a modern, open architecture with client/server design, to provide accurate and timely flight data to controllers. With the help of real-time database management technology, the AeroTrac NextGen FDP provides online and flexible adaptation data cutover, fast system startup and prompt flight data recovery.

The FDP accepts various inputs to generate and maintain an accurate 4D trajectory model for enhanced conflict prediction, conflict probes and flow management. With built-in search engines, the FDP can readily retrieve and output flight information for analysis, statistics and/or billing purposes.

For additional information, contact Telephonics at 631.755.7000 or visit www.telephonics.com.