The FlexIDS display system provides a fully integrated Controller Working Position (CWP) that can be adapted to the unique requirements of any Air Traffic Control facility. FlexIDS STM information is presented as a component of this industry leading integrated display system, making FlexIDS STM the most highly integrated surface surveillance solution available today.

Built on an architecture that is both modular and scalable, FlexIDS STM provides a state of the art turn key solution that is capable of growing with the needs of any facility.

FlexIDS STM enhances efficiency and safety by providing controllers with vital situational awareness data in low visibility conditions. Customizable “safety nets” ensure that controllers receive an alert when a potentially dangerous situation arises.
AWI's FlexIDS STM offers controllers an effective and efficient system with the most robust safety features available today.

**Powerful Air Traffic Management At Your Fingertips...**

**Modular and Scalable**

**Hardware** - Like any FlexIDS component, FlexIDS STM is designed to operate in either a stand-alone configuration on a single workstation, or in a multi-workstation LAN/WAN environment. Once FlexIDS has been implemented, additional workstations can be installed and configured at any time. For added flexibility, FlexIDS supports all major operating systems and all hardware is available commercially off-the-shelf (COTS).

**Software** - STM is just one of the valuable tools available through the FlexIDS system. When any of these FlexIDS components have been implemented at your facility, additional modules can be added and configured at any time. The unsurpassed versatility of the FlexIDS system provides a practical and profitable method for keeping your facility at the forefront of technology and operational safety.

**STM Tracker** - The optional STMT module available through FlexIDS STM uses multi-sensor tracking to provide a coherent picture of traffic within the aerodrome. Data drawn from various sensors is used to create a “track” of each target or vehicle. While fusing data from overlapping sensors to create these tracks, algorithms running within STMT use an adaptable Kalman filter to eliminate false targets and reflections. This ensures that only the most accurate positional information is presented to controllers.

The STMT module gathers target information such as heading, speed, Figure of Merit, and much more, then merges that data while taking into consideration the attributes of individual sensors. To provide the highest level of accuracy, STMT can incorporate a wide range of sensors with varying accuracy characteristics. When analysing incoming data and creating tracks, the system gives priority consideration to more accurate sensors, or sensors that are more proximate to the target. To enhance continuity, 3D track smoothing and turn detection are also incorporated.

STMT automatically initiates and maintains tracking of all targets in the specified coverage area. Once a track is established, STMT provides track-to-flight plan association based on SSR codes from an external system. The STM user interface also allows controllers to manually link a call sign with an established track.

**Integration**

FlexIDS STM offers complete integration with other airport systems such as flight data, carpological information, and meteorological data. Information from subsystems such as AWOS, EFS, and SWIM can be assimilated into the FlexIDS structure, giving controllers immediate and concise access to vital data. This high level integration is not limited to a handful of airport systems. Any data source that has a definable interface can be integrated into the FlexIDS display system. By uniting multiple airport subsystems into one user-friendly display, FlexIDS combines data from STM with innumerable sources, giving controllers immediate access to vital decision-making information.

Although FlexIDS STM works well as a stand-alone surface surveillance system, interface modules are available for a variety of SSR and PSR systems, including FAA SWIM STDDS and ASTERIX CAT011, giving facilities the capability of adding or replacing positions on an existing SMGCS or ASDE network. Customizable safety protocols make FlexIDS STM a highly effective surface viewer, allowing controllers the greatest possible situational awareness without the need for an additional dedicated system.