



AFTS is a state-of-the-art COTS track management system that easily connects sensors together to provide a reliable, robust, real-time Single Integrated Picture using *true* multi-sensor fusion

## Advanced Fusion and Tracking System (AFTS)<sup>TM</sup>

State-of-the-art COTS track management system

### The AFTS<sup>TM</sup> difference

- True multi-sensor fusion
- Real-time information  
Real-time tracking enables operators to make time-critical decisions
- Single Integrated Picture (SIP)  
Information from a wide variety of mobile and fixed sensors produces a unified tactical view of the airspace
- Tracking clarity  
Exceptional track picture clarity in the most challenging environments
- Runs on Commercial-Off-The-Shelf (COTS) hardware
- User-friendly  
Easily adapts to multiple mission configurations
- Product options  
AFTS products are scaled for large and small networks

### Integrated solution

Ultra understands that reliable and synchronized management of information on the battlefield is mission critical. That is why AFTS combines ease-of-use, seamless sensor integration and high performance real-time tracking in a single solution.

The AFTS open architecture provides a wide variety of sensor interfaces and can easily be customized in the field to meet customer needs. Combined with a data link processor, this robust solution receives, forwards and displays tactical information from multiple inputs.

### Decision confidence

Key decision makers need real-time, high quality track information to support situational awareness and time-critical targeting.

To provide a high-performance tracking component in the AFTS products, Ultra partnered with Numerica Corporation, a world leader in network-centric tracking and data fusion.

The AFTS solution is capable of handling complex tracking environments, including closely spaced objects, highly maneuvering aircraft and dense clutter. It easily and seamlessly integrates both measurements and tracks from multiple sensors into a

SIP, resulting in unsurpassed track completeness, clarity and accuracy delivered in real time.

The field-tested, adaptable and user-friendly AFTS solution inspires decision confidence. And decision confidence saves lives.

U.S. Army, Air Force and Marine units rely on the AFTS solution in both test range and forward-deployed environments around the world.

### Flexible user interface

The AFTS product is accessible from any system that can run a standard Web browser. Operators can use AFTS software stand-alone or from within the TacViewC2<sup>TM</sup> interface; Ultra's mission-oriented real-time tactical display.

As many as 10,000 real-time tracks may be viewed on a TacViewC2 moving map. It is easy to record and playback scenarios, view raw plot data, monitor a sensor's status and filter the track display based on operator criteria.



# AFTS family of products

Ultra offers scalable AFTS products to suit your needs in both U.S. and export-approved versions. Operator and maintenance training is available. The AFTS software has a built-in user-friendly help system.

Options:

- Rugged rack-mount hardware available
- Ballistic object tracking may be added to AFTS Regional, Theater and Global product offerings

Product	Sensor capacity	Server rack space required
AFTS Mobile	4	1U*
AFTS Regional	15	1U
AFTS Theater	30	2U
AFTS Global	31+	3U+

\*Also available on the Range Guardian, a portable 3U CompactPCI® computer

## AFTS specifications

### Input support

#### Common data format

- All ARSR radar types (ARSR-1D, 1E, 2, 3, 4 etc.)
- ASTERIX
- ASR-7, 8, 9 and 11
- CD1
- CD2/CD2A
- CD2C
- ECGP
- NATS
- RES
- SDO
- SGF
- 9-bit digital format

#### Specific sensors

- AN/MPQ-64 Sentinel
- AN/TPN-31 ATNAVICs
- AN/TPS-59
- AN/TPS-75
- AR327
- GIRAFFE
- LSTAR
- Sensis multilateration system
- WATCHMAN

#### Other types

- Sensis SIU
- Sunhillo SGU
- Other custom inputs

### Output support

#### Displays

- TacViewC2 software
- ASTERIX
- Air Defense Systems Integrator (ADSI)® (v14 and v15)
- Google Earth (KML)



### Hardware requirements

The AFTS software runs on COTS x86 hardware consisting of:

- Quad core system(s) with 16 GB of RAM
- Red Hat Enterprise Linux version 5 operating system
- Standard 19" rackmountable hardware (rugged hardware variants available)



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