

Sensis Solutions at Work



At a Glance

Improved air traffic control surveillance
in all weather conditions

Increased airspace capacity

Accuracy: +/- 210 ft.

Coverage: Up to 17,000
ft. asl for 4,800 sq. mi.

Colorado WAM/ADS-B

The Challenge:

During each winter season, Colorado's high country airports experience a dramatic increase in activity when visitors travel via commercial and general aviation aircraft to mountain communities. Peak holiday travel periods produce an even greater amount of ski travel, creating a "traffic jam" in the skies over Colorado. This situation becomes increasingly difficult during periods of inclement weather, resulting in diversions, delays and denied service for aircraft en route to mountain airports that lack radar coverage.

In Colorado's areas of rough and extreme terrain, existing en route radar experiences coverage gaps below 13,000 feet, resulting in procedural-based, one-in/one-out ATC operations during instrument weather conditions. Such mountainous environments make the deployment and operation of traditional gap-filler radars cost-prohibitive. The combination of high-volume traffic and intermittent radar coverage resulted in the need for an accurate surveillance system that would work in a demanding environment.

Sensis Solutions at Work:

To meet this challenge, the Colorado Department of Transportation's Division of Aeronautics selected Sensis to provide Wide Area Multilateration (WAM) and Automatic Dependent Surveillance – Broadcast (ADS-B) for Yampa Valley Regional, Garfield County Regional, Steamboat Springs, and Craig-Moffat County Airports. Sensis WAM

will provide FAA controllers at the Denver Air Route Traffic Control Center with high accuracy, high availability surveillance of the airspace surrounding the four airports in the region. Multilateration sensors will be installed at sites located on the airport and in the surrounding mountains providing long-needed surveillance coverage over the mountainous terrain and in valleys not covered by existing en route radar. Additionally, the ADS-B system will prepare Colorado for the future nationwide ADS-B deployment. Air traffic "radar-like" position information will be displayed on existing air traffic control screens in the Denver Control Center, which provides radar separation for all air traffic in portions of nine western states.

Glenwood Springs, Colorado



WAM/ADS-B

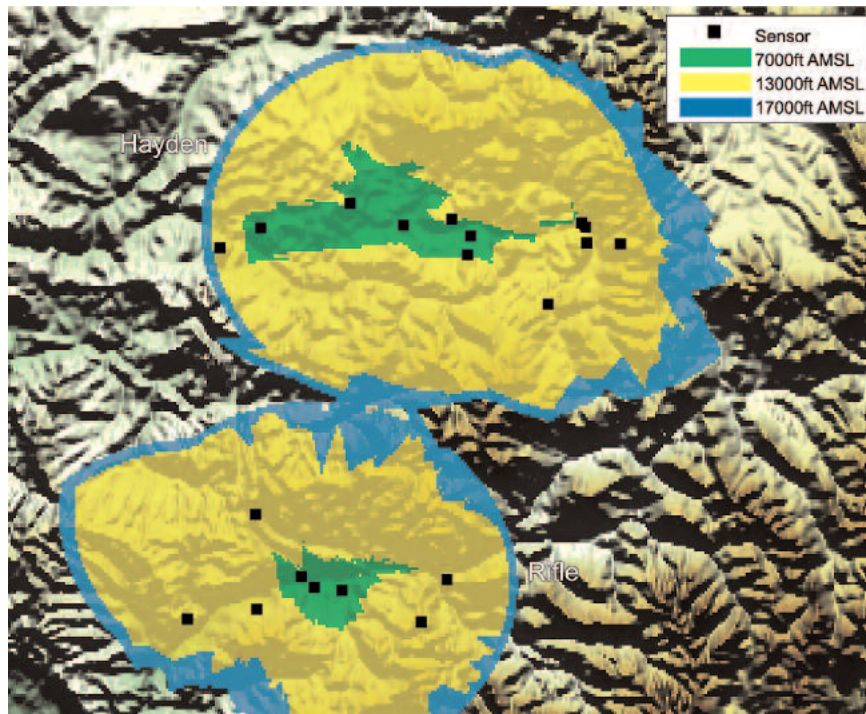


Solution Performance

Feature:	Benefit:
Better accuracy and higher update rate than existing radar systems	Enhanced safety from more precise positional information
Adaptable coverage	Surveillance in challenging environments with no coverage gaps
Low maintenance, low power consumption	Little environmental impact
Tracks all transponder types: Mode S, Mode A/C, ADS-B	Transitions technology from currently equipped aircraft to those of the future

About Sensis:

Sensis multilateration is a reliable and tested surveillance solution that is modernizing aviation surveillance worldwide. Sensis is a leader in WAM, fielding the industry’s first commissioned multilateration system for WAM at Innsbruck, Austria in 2005. In addition to Rifle and Hayden, Colorado, Sensis WAM was selected for Tasmania, Australia; North Sea oil platforms, United Kingdom; Fort St. John and Vancouver, Canada; Juneau, Alaska; Yuma Proving Ground, Arizona; Patuxent River Naval Air Station, Maryland; and Twentynine Palms Marine Corps Air Ground Combat Center, California.



Colorado WAM Coverage Area