

CASE STUDY: TARS

TCOM PERSISTENT SEA SURVEILLANCE SYSTEM IMPROVES MARITIME SECURITY IN SOUTHEAST REGION NEAR FLORIDA AND THE CARIBBEAN



THE CHALLENGE

In the 1980's, smugglers and drug traffickers often crossed the border from Mexico into the U.S. using small, low-flying aircraft that were difficult to detect using conventional ground-based radar. The U.S. Coast Guard and Customs Service faced a difficult challenge of interdicting illegal flights along the U.S. – Mexico border, the Florida Straits and parts of the Caribbean. While the U.S. military used technology focused on tracking high-altitude, high-speed incursions of our borders, in fear of Soviet bombers, the surface smugglers and drug traffickers' tactics of flying low and slow proved to be evasive to existing surveillance systems. U.S. Coast Guard and Customs Service needed an elevated surveillance solution capable of keeping round-the-clock watch over vast stretches of maritime domain.

THE SOLUTION

Authorities first implemented the Tethered Aerostat Radar System (TARS) in the southeast region near Florida and the Caribbean, which utilized tethered aerostat systems that carried advanced radar payloads to provide the U.S. Coast Guard with persistent, long-range surveillance to identify and interdict surface vessels and low-flying aircraft. To monitor the inland border, U.S. Customs Service implemented a TARS aerostat first at Fort Huachuca, Arizona. After a successful initial deployment, TARS expanded its operational sites to include additional locations along the Southwest border in Texas, New Mexico, Arizona and Louisiana in addition to the sites in Florida and Puerto Rico.

Initially, TARS deployed aerostats built by another manufacturer, but due to excessive helium leakage, these craft were unable to maintain an operational altitude for the expected duration. As a result, the U.S. Government turned to trusted partner TCOM, the global leader in reliable persistent surveillance solutions to deliver 71M strategic class aerostat systems that could outlast and outperform all competitors. By the early 1990's, TARS relied heavily on TCOM's 71M LASS (Low-Altitude Surveillance System) aerostats with AN/TPS-63 surveillance radar payloads. With a maximum altitude of 15,000 feet (4,600 m), and surveillance radar range of 370 km (200 nm), TCOM's 71M tethered aerostats provided U.S. Coast Guard and Customs authorities with the range and reliability they needed to enforce border security.

THE RESULT

The TARS program had a significant positive impact on the nation's drug interdiction program. The continuous presence of TCOM aerostat systems along the southern U.S. land and maritime borders has consistently deterred airborne and surface smugglers, and has provided authorities with real-time actionable intelligence needed to take decisive action. Recently, U.S. Customs and Border Protection (CBP) Office of Air and Marine Operations officially assumed management of the TARS program, and the results have been equally successful. As essential assets in the TARS program, TCOM aerostats continue to serve as steadfast sentinels, keeping citizens safe, and our nation's border under constant guard.

QUICK FACTS:

- ▶ The United States Coast Guard and Customs Service faced the difficult challenge of intercepting drug traffickers entering by air across the U.S. – Mexico border
- ▶ Authorities turned to TCOM and the Tethered Aerostat Radar System (TARS) Program
- ▶ TARS utilized aerostat surveillance systems with advanced radar payloads that provided persistent long-range surveillance
- ▶ TCOM's 71M LASS (Low-Altitude Surveillance System) was selected as the aerostat system of choice for the TARS program
- ▶ The 71M aerostats have an operational altitude of 15,000 feet (4,600 m) and a surveillance range of 370 km (200 nm)
- ▶ TARS successfully supported the nation's drug interdiction program by providing authorities with actionable intelligence on low-flying aircraft along the southwest border of the U.S. and Mexico, the Straits of Florida and the Caribbean