CUSTOMER SUCCESS STORIES

BACKGROUND

Harris operates the largest air traffic control surveillance network in the world for the FAA. Harris's network of 650+ radio stations communicate directly with commercial and general aviation aircraft in the US. This data is combined and processed with data from over 425 FAA radar systems and is used by FAA Air Traffic Controllers to manage US air space. The data is also sent back to aircraft so that they are aware of other air traffic around them.

SOLUTION

Working with Appareo, Harris set out to build a low-cost ground-based sensor that is designed to track low-flying UAS. The data that is collected can either be used locally by the UAS pilot or sent over Ethernet, CDMA or a GSM network where it is processed and provided to remote pilots who are operating UAS beyond visual line of sight. It can also be used by pilots of manned aircraft when they are operating in environments where UAS may be present.

OPPORTUNITY

As the number of UAS taking to the skies increases, so does the importance of knowing where they are so that all users of US airspace, both manned and unmanned, can share it safely. Harris's existing network of 650+ radios was designed to track manned aircraft and generally does not detect aircraft flying lower than several hundred feet. When deciding how to track unmanned aircraft it was apparent that they needed to take a new approach.

OUTCOME

The resulting product, called the ADS-B Xtend™, has been successful in lowering the detection of manned and unmanned aircraft down to 50 feet or lower for aircraft operating near it. When deployed along pipelines, railroad tracks, and farm fields it enables commercial UAS operators to solve real-world problems while maintaining airspace safety.