# ResultsPositive and HP ALM SaaS accelerate supporting the delivery of global air traffic

ResultsPositive Rapid Start Consulting Services

**Aireon**

*" ResultsPositive's Rapid Start Approach enabled our team to work with ALM quickly and efficiently. "*

Andy Hoag, System Engineer, Aireon

## SOLUTIONS

HP ALM SaaS

## INDUSTRY

Aviation

### ResultsPositive Customer Case Study:

*Aireon improves requirements traceability, time-to-market, and reduces software complexity with ResultsPositive's Rapid Start Program*

### Objectives

- Increase requirements engineering discipline
- Centralize system of record for requirements

### Approach

Implement the HP Application Lifecycle Management (ALM) SaaS solution with ResultsPositive's Rapid Start services to achieve maturity in Aireon's requirements engineering, accelerate time-to-market, and improve control of software changes.

### Improvements

- Advanced traceability and test coverage analysis reporting
- Predictable regression testing coverage
- Revised change request and enhancement

### Aireon Business Goals

- 100% global air traffic surveillance and monitoring
- Customers are able to fly more direct routes and avoid inclement weather
- Improved data sharing
- Enhanced safety for the flying public

Aireon is deploying a global, satellite-based air traffic surveillance system in 2018. For the first time ever, aviation stakeholders will have air traffic surveillance over oceanic, polar and remote regions. Aireon will harness next generation aviation surveillance technologies and extend them globally to significantly improve efficiency, enhance safety, reduce emissions and provide cost saving benefits to the entire industry and flying public.

Realizing the importance of choosing a best-in-class requirements and testing software platform, Aireon selected ResultsPositive (resultspositive.com) as their solution integrator and advisor to implement HP's Application Lifecycle Management (ALM) on SaaS. ResultsPositive, an HP Platinum Partner, worked closely with Aireon in their transition to HP ALM with solutions designed to accelerate the delivery and security of their pioneering ADS-B software.

## Aireon Technology

Formed in 2012, Aireon is working to extend air traffic surveillance and monitoring across the entire planet with the first-ever global satellite-based ADS-B system. Currently ADS-B technology is deployed over high air-traffic areas

**resultspositive**
Business Technology Solutions

across North America, Australia, and Europe. However, gaps in land-based ADS-B coverage exist over polar regions, mountains, and certain parts of the world's oceans as a result of geographic obstructions. These gaps present challenges that can only be fully overcome with a space-based deployment of the same technology.

To combat the gaps in coverage today, Aireon is committed to leveraging Iridium NEXT, a constellation of 66 cross-linked Low Earth Orbit (LEO) satellites. The ADS-B equipped satellites will relay signals in real-time from the equipped traveling aircraft to Air Traffic Controllers on the ground. The expected benefits of this new technology include:

- Providing Air Traffic Controllers with global, real-time, visibility, and highly accurate data across the world. Global coverage will also be achieved with space-based deployment.
- The optimization of flight paths and altitudes on a global scale, creating efficiencies in fuel economy, and increasing safety.

## Managing Requirements

Aireon's team identified thousands of system requirements to achieve their goal of the world's first-ever space-based ADS-B program. "ADS-B equipped aircraft use Global Navigation Satellite System (GNSS) positioning to broadcast location. This technology works great with land-based receivers, but there is limited coverage in oceanic and remote regions of the world," said an Aireon System Engineer. "Requirements management is key to system development. We must adhere to a strict and rigorous engineering process focused on safety and quality."

With thousands of requirements and a distributed team of engineers working on the proprietary payload technology for the 66 Iridium NEXT satellites, Aireon chose HP ALM for its feature-rich set of requirements management and traceability functionality. "We needed a centralized system of record to manage all of our requirements to control traceability, system changes, and test coverage," said Aireon. Aireon evaluated other software vendors, but ultimately chose HP ALM on SaaS for ease of deployment and the infusion of discipline into requirements engineering with traceability and test coverage analysis.

## Rapid Start ALM SaaS

ResultsPositive was enlisted by Aireon to accelerate adoption of HP ALM through its Rapid Start delivery program. Pioneering the Rapid Start program for Quality Center and ALM, the team quickly went to work with Aireon to fully enable the core engineering team on the platform. The focus areas of the Rapid Start engagement included:

- Training the Aireon team on the core modules of HP ALM, including: requirements management, test planning, test execution, defect management, project planning & reporting, and dashboard analysis.
- Enablement and customization of ALM projects as required for end-to-end traceability within ALM

"ResultsPositive's Rapid Start Approach enabled our team on ALM within days," says Aireon. "Our engineering team is focused on requirements quality and traceability analysis - the Rapid Start program put us on the fast-track to getting this implemented."