



# The Foundation for BVLOS Operations

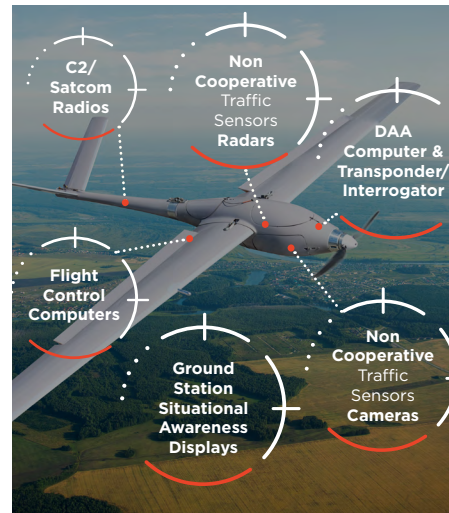
## ACAS X ONBOARD PROCESSOR

### CHALLENGE

#### IMAGINE A WORLD WHERE THERE ARE ZERO AIRCRAFT COLLISIONS

The FAA has consistently stated that UAVs must be able to detect and avoid cooperative aircraft (those utilizing transponders to broadcast their location) as well as noncooperative traffic (aircraft not broadcasting their location). Although the number of non-cooperative aircraft continue to decrease, it is still a safety concern that must be addressed. Combining noncooperative aircraft detection with a cooperative surveillance and collision avoidance system, adds a more robust set of avoidance options for safer BVLOS operations and is available in pre-certified units today.

#### COMPONENTS OF DAA



#### ACAS X Processor

MXV Combined Mode S Transponder with ADS-B In/Out and Interrogator

### EXPECTED IMPACTS

#### Urban Air Mobility

UAM creates additional opportunities for passenger mobility and could increase the capacity, efficiency, and scope of an urban transportation system in congested cities all over the world at a lower cost, while significantly reducing CO2 emissions from the transportation sector.

#### Advanced Air Mobility

AAM creates a safe, automated, equitable and climate-friendly air transportation system for passengers and cargo.

#### Larger Commercial UAS

Performing long linear infrastructure inspection and long range or heavy payload operations in the National Airspace System (NAS), once routine BVLOS operations are commonplace these aircraft will provide significant cost savings, eliminating the safety hazards associated with crewed flights or ground inspection of remote assets.

#### Smaller Commercial UAS

Performing localized inspection, package delivery and other missions, these aircraft will reduce the time, cost and energy consumption required to perform many tasks, but require the ability to routinely operate BVLOS without individual flight waivers.

### SOLUTION | ACAS X PROCESSOR

Combining noncooperative aircraft detection with a cooperative surveillance and collision avoidance system adds a more robust set of avoidance options for safer BVLOS operations and is available in pre-certified units today.

The ACAS X Processor is a low SWaP-C solution which easily integrates with other 3rd party technologies such as radar, visual or acoustic noncooperative traffic sensors, Remote ID, autopilots, GPS, C2 links, and UTM solutions making this the most robust, FAA-certifiable collision avoidance system available for integration and testing today.

### RESULTS

Sagetech's ACAS X Processor has been integrated and tested on multiple aircraft platforms. With Sagetech's TSO-approved MXS ADS-B transponder paired with the ACAS X sensor fusion and collision avoidance system or developmental combined Interrogator/Transponder, these integrations provide a complete DAA air risk mitigation solution.

### NEXT STEPS

Our team can assist you with proven situational awareness solutions designed for any aircraft size and weight. **We are a fast, efficient, cost-effective solution.**