ACAS Xu Flight Test 2

Purpose
• Develop next generation of detect and avoid (DAA) hardware for UAS
• Demonstrate system behavior integrated on prototype avionics and UAS

Benefits of ACAS Xu Over Current System
• Collision Avoidance against cooperative and noncooperative intruders
• Horizontal and vertical maneuvers against multiple intruders
• Resolution advisory (RA) logic accounts for sensor quality and ownship performance limitations

Test Duration
• June 13—August 10, 2017: 10 to 12 flights (~150 encounters)

Tech Transfer
• Advance ACAS Xu Minimum Operational Performance Standards (MOPS) development

Project Benefit
• Continued collaboration with the FAA
• Mature DAA technologies

Primary Partners
- General Atomics Aeronautical Systems
- Honeywell

ACAS Xu Remain Well Clear (RWC) Alerts and Maneuver Guidance
• Horizontal maneuvers
• Pilot-in-the-loop

ACAS Xu Resolution Advisory (RA) Alerts and Maneuver Guidance
• Horizontal/vertical maneuvers
• Auto-response with pilot override
• RA logic accounts for sensor quality and ownship performance limitations
• ACAS processors are representative production units (Honeywell and ACSS)