2024-2025 PAASS Program Description

The 2024-2025 PAASS will open with a review of the 2024 agricultural aviation accidents. The review will include many suggestions on accident avoidance, including how to avoid mid-air collisions based on recent fatal mid-air accidents. Studying agricultural aviation accidents allows participants to understand how to avoid similar accidents while conducting aerial applications at their own operations. The accident review will lead directly into the human factors segment, which will be on controlled flight into terrain (CFIT) accidents. CFIT continues to be a major accident cause in the aerial application industry, particularly for fatal accidents. CFIT accidents include collisions with wires, towers and guy wires, trees, other objects, and the ground itself.

PAASS will review updated statistics on CFIT accidents and hear from several pilots who have experienced these types of accidents firsthand. The interviews will focus on the factors that led to the accident so that attendees can avoid similar situations. Participates will learn about the true cost of wire strike accidents, which includes not only the repair costs but also the loss of work income while the aircraft is being repaired. The results of an FAA focus group study of agricultural aviators who had had wire strike accidents will also be covered. This study reveals risk factors that contribute to wire strike accidents, including both situational and personal risks. Study participants provide information on actions they could have taken to avoid the collision.

The environmental professionalism segment of the 2024-2025 PAASS program will cover two subjects. The first will be an overview of the USDA-ARS Aerial Application Technology Research Unit's (AATRU) aerial droplet size models to maximize efficacy and mitigate drift. The four versions of the model and how to use them to calibrate an agricultural aircraft for both GPA and droplet size will be covered. The second part of this segment will be a detailed example of how to use EPA's Bulletins Live Two! (BLT) to determine where, when, and what mitigations are needed to protect endangered species when applying pesticides. A scenario will show applicators how to locate the target area on BLT, determine if the application will occur within a pesticide use limitation area (PULA), download the bulletin with required mitigations, and comply with the additional restrictions. The example will include both determining where buffer zones are required and setting up the aircraft for the correct droplet size.

The 2024-2025 PAASS program will also include a security segment that describes a vandalism incident that occurred to an agricultural aircraft. While no serious damage was done, the situation could have been much worse, highlighting the need to remain constantly vigilant to secure your aircraft, chemicals, and other assets. An aviation medical examiner will cover how to avoid medications that can impact flying and how to stay properly rested to avoid fatigue. The role distractions, particularly those related to technology in the cockpit, potentially play in accidents will also be covered. The 2024-2025 PAASS program will conclude with a series of multiple-choice questions asked using polling software to ensure knowledge retention of the material presented by the participants.

2024-2025 PAASS Program Breakdown

The following is a breakdown of the various sections in the 2024-2025 PAASS program with the amount of time spent in each section:

- (90 min.) Preventing CFIT accidents
- (70 min.) Droplet size models and suing EPA's BLT
- (20 min.) Avoiding unsafe medications and reducing fatigue
- (20 min.) Pesticide storage and site security
- (20 min.) Distractions
- (20 min.) Review quiz

For more information on how PAASS provides core competency education, and its use as a continuing education (CE) training for aerial pesticide applicators, see PAASS – CE Information.