PROFESSIONAL AERIAL APPLICATORS' SUPPORT SYSTEM

PROGRAM OVERVIEW

The Professional Aerial Applicator Support System (PAASS) was instituted by NAAREF in 1996. A yearly education program like no other, PAASS is created and presented by ag pilots. New content on relevant topics each year covers key safety and drift mitigation issues important to flying, modern agriculture and crop protection. The conscious decision to educate rather than regulate inspired PAASS, hence the motto: **"Upon the performance of each rests the fate of all."**

OBJECTIVE

Reduce the number of aviation accidents and drift incidents associated with the aerial application of fertilizers and crop protection products.

MEANS TO ACHIEVE THE OBJECTIVE

The NAAREF Board members believe that this objective will be best achieved by providing advanced educational opportunities for all pilots and pilot-operators active in the industry. Specifically, the intent is to develop educational programs that will enhance the commercial aerial applicator profession by improving the understanding of human factors, enhancing critical Aeronautical Decision-Making skills, and inducing positive behavioral change.

PAASS HISTORY

Three issues affecting the aerial application industry's future emerged in the mid-1990s: new and improved aerial application technologies; expanding urban encroachment of rural farmlands; and a demand by the general public for "a risk free environment, including safer, more environmentally friendly" crop protection products. Industry leaders seized the opportunity to shape their own future and, in 1996, established the PAASS program to overcome these challenges. The Louisiana AAA hosted the first presentation in January 1998.

Given a choice, most people will choose self-education over government regulation. NAAA and NAAREF pioneered this voluntary educational program—PAASS—and attracted supporters from all segments of related industries and levels of government. The National Coalition On Drift Minimization agreed to endorse industry training efforts that focus on reducing drift. EPA officials prefer educational programs in lieu of regulations to minimize drift, but have stipulated that the industry must be able to demonstrate the effectiveness of these programs. Rather than imposing additional regulations the FAA, with its 10-year goal to reduce aviation fatalities by 80 percent in 2007, developed a partnership with NAAA to meet this objective through the PAASS program.

Industry professionals recognized that the pilot is the common link between accidents and drift incidents. This concept is key to understanding PAASS. So the program was designed as a pilot support system to provide educational opportunities aimed at improving aeronautical decision making skills. However, for PAASS to become a meaningful, flexible, in-the-field support system, everyone must participate. All interest groups—Operators and Pilots, Insurance and Service Providers, Aircraft and Equipment Manufacturers, Federal and State Agencies, Chemical Companies, Academic Institutions, and State Agricultural Aviation Associations—must be involved.

PAASS BENEFITS

The conscious decision to educate rather than regulate inspired PAASS. This educational program enhances the aerial applicator's profession by improving critical aeronautical decision-making skills, resulting in fewer drift incidents and aircraft accidents. Along with these benefits, we realized the program's complete worth as we struggled through the days and weeks following September 11, 2001.

For the first time in our country's history, agricultural aviation became a focus for national security authorities. The federal government ground-stopped agricultural aviation three times out of fear and misunderstanding. As the industry's most efficient means of communication and education, PAASS became an essential element in arguments to get back into the air. All the way from the White House, through the National Security Council, into the CIA, the FBI headquarters and its field offices, the Office of Homeland Security and out into local law enforcement agencies, agricultural aviation took on a critical role in our nation's operational security plan. In the eyes of the federal government, PAASS gave credibility to the industry's ability to educate its members about this new terrorist threat. Ultimately, we convinced officials at the highest national security levels that agricultural aviators should, and must, go back to work.

Before 9/11, PAASS was already providing valuable benefit to operator and pilot participants because eminent allied industry members recognized its importance. Every insurance underwriter (USAIG, Phoenix Aviation Underwriters and AIG); principal crop protection product manufacturers (Syngenta, BASF and Dow Agro Sciences, for example); and agriculture-related national associations, such as CropLife America and American Association of Pesticide Control Officials (AAPCO), all knew PAASS as agricultural aviation's premier educational program.

Your insurance policy underwriters see the significant safety aspects of PAASS, and they provide direct program funding or policy discount consideration as well as PAASS committee membership. Many of the brokers and agents donate their own time and money. Through these insurance companies, PAASS directly affects your company's bottom line. Allied companies like Syngenta provide members to the NAAREF board and in-kind support for the PAASS Train-The-Trainer events. So you get a more professional presentation. AAPCO members from Michigan and Texas, for example, participate in PAASS program module development. As subject matter experts and acknowledged industry authorities, their contributions are the essence of the program's technical aspects. And you get accurate, up-to-date decision-making information.

As a one-of-a-kind program in commercial aviation, PAASS is highly regarded by EPA, FAA, many FSDOs, USDA, most State Agriculture Departments and some universities. Their involvement in, and understanding of, the PAASS Program is vital because they increase our visibility and enhance our reputation. EPA and NAAREF are developing a 7-year cooperative agreement for EPA's financial support.

FAA has funded an educational module for each of the past four years. Almost every State Ag Department gives continuing education (CEU) credit to PAASS participants. Many FSDOs grant Wings Program safety seminar credit. Two State Universities and a State Aeronautics Department make a PAASS donation for their State AAA host. Another university lends its extension engineering expertise. This goodwill and endorsement ensures that the program comes to you in the first place. Their financial support keeps down your individual cost.

Perhaps one of the most important benefits of the PAASS program will be something that doesn't even happen. On a crisp morning in late spring, a pilot will be surveying his first field of the day as he thinks about his new technique. Last year he was a "wheels in the crop" applicator because he thought this minimized drift potential. In the precision application discussions, he learned that flying too low could actually increase drift potential because flight control surface movement could produce unintended air movement in the shallow space between aircraft and crop canopy. Besides that, a low application height tends to decrease effective swath width and could cause streaking. So this year he's moved his application height to take better advantage of his aircraft's size and performance. His drift potential went down, his effective swath width went up; he's doing a better job for his customers and his bottom line even improved. In a different state on a hot summer afternoon, another pilot will be in a hard, tight turnaround pulling for all he's worth to out-turn that light bar and get back onto the field. He'll subconsciously flash back to that PAASS aerodynamic stall discussion and relax the pressure on the stick ever so slightly. Without realizing what happened, he'll finish that load and the rest of the day, and go home that night. And this program will be worth every hour, every year, every dollar that it took to produce.

Finally, each PAASS participant, and every agricultural aviation industry member, profits from these obvious benefits: improved public relations and environmental stewardship. At the same time, we have come full circle and met our original objective: education rather than regulation.