

NAAA eNewsletter

House Passes FAA Reauthorization with Many Low Altitude Manned Aviation Safety and Competition Provisions Advocated by NAAA

Last week the House overwhelmingly passed a major aviation policy bill to reauthorize the Federal Aviation Administration for the next five years. NAAA's considerable advocacy efforts resulted in the legislation's inclusion of safety and competition provisions directing the FAA to protect low altitude manned aircraft from drones; augmenting funding for general aviation airports (\$103 billion in aviation funding over the next five years); and preventing the privatization of air traffic control.

Proactive advocacy on NAAA's part resulted in the introduced bill including language that would amend section 49 U.S.C. § 44807, which is the section that provides the FAA to all certain exemptions to allow drones over 55 pounds to operate in low-altitude airspace. The amending language states that "Nothing in this subsection shall be construed to give an unmanned aircraft operating pursuant to this section the right of way over a manned aircraft." The introduced bill was still void of low-altitude manned aircraft safety provisions from drones operating beyond visual line of site. As a result, NAAA enlisted the support of Congressman Bruce Westerman (R-AR) and Rick Crawford (R-AR) to introduce an amendment to that section directing the FAA to "ensure the safety of manned aircraft operating in the national airspace system." Thanks to Congressman Sam Graves (R-MO), chairman of the House Transportation and Infrastructure Committee that has jurisdiction over the bill, the amendment was unanimously accepted resulting in its inclusion in the bill. These two provisions should eliminate the FAA from allowing drones to operate without detect and avoid equipment and not providing right-of-way to manned aircraft in all circumstances, or else face a serious legal challenge. NAAA thanks Congressmen Sam Graves, Westerman, and Crawford and the Arkansas Agricultural Aviation Association for their help.

As tends to be the case when aviation policy is debated in Congress, there were attempts to amend the bill to privatize air traffic control, which results in the levying of user-fees for aircraft. NAAA worked with a coalition of other general aviation organizations to defeat the amendment.

Although NAAA advocated to include provisions in the bill to ensure rural towers—whether meteorological evaluation towers (MET) or communications towers—between 50-200 feet and 10 feet in diameter are marked and logged into an FAA database, the Goliath communications industry quashed efforts that they require to both mark and log. Committee staff informed NAAA that the bill would not have passed had the communications industry had to do both. However, there is a provision in the bill to push the FAA to promulgate the language from the 2018 FAA reauthorization enacted bill that requires MET and other towers to be both marked and logged and communication towers to do one or the other. The language states if the FAA has not promulgated the tower rule within one-year of the bill's enactment, it must "submit an annual report to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate on the status of such rulemaking, including—(1) the reasons [it] failed to issue the rulemaking; and (2) a list of fatal aircraft accidents associated with unmarked towers that have occurred over the 5 years previous to the date of submission of the report."

The bill will also address aviation workforce shortages and will maintain the U.S.'s position as "the gold standard in aviation," stated Chairman Sam Graves.

The next FAA reauthorization step is Senate consideration. NAAA is working on ascertaining similar amendments on manned aviation safety from drones in the Senate bill. The FAA's current authority to operate will expire at the end of September if the bill isn't enacted beforehand. All of that means it's likely that an extension for the FAA bill will be needed. NAAA will keep you posted on this important issue.

NAAA Advocates Farm Bill Inclusion of Exempting NPDES Permits for Pesticide Applicators and Other Key Regulatory Relief Provisions

The Pesticide Policy Coalition (PPC) held two briefings for congressional staff this week to highlight the coalition's farm bill priorities, which include NAAA's policy priorities of NPDES permit relief and state pesticide preemption. During the briefings, Andrew Moore discussed the impacts of unnecessary, costly and duplicative NPDES permits on aerial and other pesticide applicators. He highlighted the impacts on both crop protection and vector control, stressing the potential public health impacts on communities. The briefings were offered to staff legislative aids to congresspersons and senators of their respective Agriculture Committees.

NAAA CEO Andrew Moore briefs congressional staff on Farm Bill priorities of the aerial application industry.

Other PPC farm bill priorities include strengthening the role of USDA's Office of Pesticide Management Policy and the Endangered Species Act Interagency Working Group, federal pesticide label preemption, trade, and supporting the use of precision agriculture and adjuvants in farm conservation programs.

AirVenture Oshkosh 2023: Mother Nature Can't Hold Back a Celebration of Aviation Excellence

AirVenture 2023 kicked off on Monday in Oshkosh, Wis. despite wildfire smoke moving in and out of the area, potential record-setting high temperatures for the week and storms. AirVenture is expected to host 650,000+ visitors from 90+ countries and 10,000 aircraft arriving at Wittman Regional Airport throughout the week.

NAAA's Lindsay Barber attended and met with NAAA members and to see the aircraft, including NASA's Super Guppy, Boeing's Dreamlifter, several military aircraft and warbirds vintage military aircraft.

Many NAAA members are exhibiting at AirVenture this week, including AIG, AssuredPartners, Covington Aircraft Engines, Falcon Insurance Agency, Hartzell Propeller, Lift Aviation, Stor-Loc, Pratt & Whitney Canada and RAPCO, just to name a few. Several other members were also in attendance including Beverly Berry of Eagle Vistas, Doug Davidson of Davidson Solid Rock Insurance, Frank Kimmel of Kimmel Aviation Insurance Agency and Starr Insurance representatives.

If you're interested in attending, AirVenture is taking place until Sunday, July 30. Educate yourself at 1,000+ forums/workshops, enjoy daily airshows and catch up with new and old friends. If you are a member of EAA, you receive discounts for admission to the event. Learn more at www.eaa.org/airventure. Don't forget to stop by and say 'hi' to the NAAA member allied **exhibitors** above (and others) if you're in Oshkosh and thank them for their support of the association and the aerial application industry!

NAAA's Lindsay Barber (second from left) with Pratt & Whitney's Natanael Vaz (far left), Anne-Marie Aliastas (middle), Mike Lee & Ryan Densham (far right).

Covington Aircraft Engine's Robert Craymer, who is NAAA's Propulsion NAAA Board Member.

AIG's Mary Beth Schwaegel and Jayme Scifres.

AssuredPartner's John Wright.

TAE Aerospace's Bruce Hubler, who is also the Oregon NAAA Board Member.

NASA's Super Guppy is a large, wide-bodied cargo aircraft, with a unique hinged nose, that is used for hauling large cargo components.

The Boeing Dreamlifter is a 747-400, the world's largest cargo hold aircraft and was modified extensively from the Boeing 747-400 airliner. There are four Dreamlifters built and in service today. They are primarily used to transport Boeing aircraft parts between the U.S., Italy, and Japan.

Grant Lane of Lane Aviation in Rosenberg, Texas, Passes

The agricultural aviation industry lost one of its titans with the passing of Grant Lane on July 12. Grant was the longtime president and CEO of Lane Aviation Inc., which was founded in 1945 by Grant's father and uncle, George and Milton Lane, respectively.

Grant Lane took a hands-on approach with his customers. As the first company to become an Air Tractor dealer in 1974, Grant and Lane Aviation had a seemingly ubiquitous presence at state, regional, national and international ag aviation conferences. "At Lane Aviation, we take great pride in providing the absolute best products and services in the industry," Grant declared in a note to customers on Lane Aviation's website, which included this pledge: "I make it a point to work personally with every client to ensure they leave satisfied to the fullest extent."

Grant put those words into action often. After Grant was named the co-recipient of NAAA's 2011 Larsen-Miller Community Service Award, in a piece written for *Agricultural Aviation's* January/February 2012 issue, Sun Valley Dusting Company owner/operator Pat Kornegay described Grant as the "ever-present Air Tractor dealer who is always there at the state, national or international conventions with a warm smile and a firm handshake." Kornegay continued:

He is also known to many of us as the guy who has shown up on our airstrip in the middle of a hot season, stepped out of his late model Baron in a starched, clean shirt and jeans, broke out the tools and dived into changing a fuel control unit or starter generator that he had brought with him. After putting us back in the air quickly, and with the ever-present smile and handshake, he hops back in his airplane and disappears over the horizon.

Lane Aviation celebrated its 75th anniversary in 2020, and Grant received numerous accolades of his own over the years. Together, Grant and his father, George Lane, received NAAA's prestigious Agrinaut Award in 2006 for Lane Aviation's creation in the 1970s of the Lane Brake, a major breakthrough in pump fan brake technology.

Grant Lane headed over the horizon for the final time on July 12. Among the numerous relatives Grant is survived by are his brother, Mark Lane, Lane Aviation's chief pilot, and his son, Logan Lane, Lane Aviation's vice president.

The staff, board and members of NAAA extend their deepest condolences to the Lane family and Grant's extended Lane Aviation family in their time of grief. Per Grant's wishes, there will not be any funeral services, but Lane Aviation will host a celebration of Grant's life sometime in the fall.

In lieu of flowers, the Lane family is requesting donations be made to your local blood bank or to the PAASS Program in Grant Lane's name. Donations to PAASS may be made [online here](#) or by mailing to:

National Agricultural Aviation Association
1440 Duke Street
Alexandria, VA 22314

NAAA Ag Aviation Expo Attendee Registration Opens August 1

We look forward to seeing you at the 2023 NAAA Ag Aviation Expo in Palm Springs, CA, Dec 4-7, a new convention destination for the Ag Aviation Expo. [Attendee registration opens August 1](#) for the annual convention. Exhibitors can purchase booth space [here](#).

Take a peek at the [floor plan](#) to view the companies that will be represented in Palm Springs. Many additional companies will purchase booth space between now and the start of the Ag Aviation Expo; check back often as the list of exhibitors increases.

In a city that has 350 days of sunshine and winter temperatures averaging in the 70s during the day, you can bet on great weather during the 2023 Ag Aviation Expo. In addition to attending the Ag Aviation Expo, visit the Palm Springs Air Museum, enjoy an off-road or BMW driving experience, play golf, visit museums, or try your luck at a casino close to the convention center. The area offers many hiking trails and top-notch spas.

Whether you are a veteran operator, a fledging ag pilot, or an allied supplier to the ag aviation industry, you won't find a better venue than Palm Springs and the Ag Aviation Expo to help you achieve your professional goals and business objectives.

Details for the 2023 Ag Aviation Expo

- **Dates:** Dec. 4-7, 2023
- **Location:** Palm Springs Convention Center and Renaissance (the two facilities are attached)
- **Kickoff Breakfast Speaker:** **Burt Rutan**, Aerospace Legend
- **Schedule of Events:** See the current, tentative schedule [here](#).
- **Hotel:** [Details here](#).
- **Attendee Registration:** Opens in August 1 [here](#).
- **Exhibitor Booth Sales:** Booth Sales Open [here](#).
- **Sponsorship Opportunities:** View the sponsorships opportunities [here](#). We have sponsorships available for all budget sizes. Please email [Lindsay](#) if you would like to secure a sponsorship from last year or be contacted about 2023 opportunities!
- **Auction Donations:** Thank you to Pratt & Whitney Canada for donating a PT6-34AG to this year's NAAA Live Auction. Please consider [making a donation](#) for the Live and Silent Auction. The earlier you inform us of your auction donation, the more advertising you will receive on the NAAA website and in NAAA publications. Support the aerial application industry by donating an item today. Email [Lauren](#) with your donation details.

NAAA Taking Every Opportunity to Press FAA on Safe UAS Integration

Last week, NAAA submitted comments on two Petitions for Exemption to the Federal Aviation Administration (FAA). These petitions, both from Uncrewed Aircraft System (UAS) light show companies, were seeking relief from portions of the [14 CFR Part 48](#) requirements for registration and marking of small UAS. The basis for each company's claim is financial, as they have thousands of UAS in inventory that require individual marking, registration and (every three years) reregistration.

One petition was merely seeking an alternative process to renew all their previously registered/marked UAS at once (think a spreadsheet of registration numbers). The other petition sought to apply for a single registration number for their entire swarm of UAS, though it was not clear how they would achieve this through the specific sections of the CFR they requested exemption from.

NAAA commented against the concept of a single registration number being used for an entire UAS swarm but in favor of the FAA providing an alternative method for standard reregistrations to be applied for in a batch format to relieve unnecessary administrative overhead within both the private sector and the FAA itself. However, NAAA also used these comments as a platform to continue imparting the importance of UAS safety to the FAA. An excerpt, included in both comments, is copied below:

NAAA has a shared goal with the FAA of enhancing aviation safety, not abating it. As incremental changes are continually made with precedent-setting exemptions to 14 CFR regarding UAS, NAAA grows increasingly concerned of the hazard posed for crewed aircraft. Alone, exemptions such as this

may not seem significantly impactful. However, put together in the broader context, it appears that the FAA has found itself on a path toward prioritizing the integration of UAS into the NAS over the safety of crewed aviation.

NAAA would like to reiterate to the FAA its position that the safety of crewed aircraft should always be prioritized, and that UAS should always give the right-of-way to crewed aircraft. Regarding beyond visual line-of-sight (BVLOS) operations, NAAA also reiterates to the FAA that detect and avoid (DAA) systems should be certified and that shielded operations, as prescribed by the UAS BVLOS Aviation Rulemaking Committee (ARC), should not be permitted in any environments or under any circumstances. NAAA has continually urged the FAA to prioritize safety regarding these matters, most recently in a 2022 letter regarding the UAS BVLOS ARC Final Report and again in a 2023 comment on Docket FAA-2023-1256 regarding BVLOS operations.

You can view the petitions, as well as NAAA's comments on them, at the links below:

- [FAA-2022-1737 – NAAA's Comments](#)
- [FAA-2023-0471 – NAAA's Comments](#)

NAAA Responds to FAA Part 137 Certification Changes for UAS, Highlighting Safety and Competitive Concerns

This week, in coordination with industry stakeholders, NAAA issued a letter to Federal Aviation Administration (FAA) Acting Administrator Polly Trottenberg regarding changes to the Part 137 certification process for Uncrewed Aircraft Systems (UAS) operators outlined in [FAA Notice 8900.659](#). This notice was issued June 13 and was summarized in the [June 22, 2023 NAAA eNewsletter](#).

In the letter, NAAA addressed the changes and expressed concern over FAA policy that may impact the safety of its crewed aircraft pilots who share this airspace and competitive concerns favoring new UAS businesses entering the aerial application industry over veteran crewed and UAS aircraft businesses.

The notice relaxes the requirement for FAA-administered [§ 137.19\(e\) Knowledge and Skills tests](#), allowing for new UAS applicants to self-administer the test. It also completely relieves the FAA of any required regular surveillance for UAS operators. The FAA justified these changes by deeming UAS operations as "lower risk" than other operations. NAAA pressed for clarity on how this risk assessment was made and to whom the "lower risk" is in reference. Citing specific NTSB accident reports, NAAA asserted that crewed Part 137 operators and pilots are a clear risk bearer of uncrewed Part 137 operations. Further, the unique nature of already busy airspace in agricultural areas during key application windows heightens the need for UAS operators entering this airspace to have rigorous FAA-verified competency to safely operate there.

The notice details a new streamlined process for Part 137 UAS applicants to receive their operating certificate through a central office via email. NAAA expressed concern that this separate centralized approach for UAS may prove to further alienate crewed and uncrewed Part 137 operators, as they would deal with distinctly different FAA officials and oversight, even if treating adjacent fields. NAAA stressed that as airspace becomes concentrated with interacting crewed and uncrewed Part 137 operations, FAA safety coordination becomes more and more important.

There were also distinctly positive changes in the notice, in which NAAA commended the FAA. A minimum of a third-class medical will be required for UAS operators, something NAAA has pushed for across all commercial UAS operations for years. UAS operators will also have a new requirement to generate operations manuals and training programs. Regarding the shift to a UAS central office, it is hoped that the relief FSDOs will get through these changes will subsequently expedite processing for crewed and mixed (crewed/uncrewed) Part 137 applicants.

NAAA will report updates on this matter, including the associated update of [Advisory Circular \(AC\) 137-1](#), when it is made available.

You can [read the letter in its entirety here](#).

NAAA Hires Associate Director of Meetings & Marketing

NAAA is excited to announce the hiring of Lauren Henretty, CMP, as the association's new Associate Director of Meetings & Marketing. Lauren brings 20 years of experience working for associations in the education, meetings and management space. She most recently worked as associate director and education program planner for the Pediatric Pharmacy Association. Lauren will use her experience to help in the planning and execution of the Ag Aviation Expo, board meetings, other industry events and NAAA marketing initiatives.

Lauren is a graduate of the University of Pittsburgh and lives with her husband and daughter in southern Maryland. Please help us in welcoming Lauren to the NAAA staff.

Moore's Aerial Applicators Makes Cover of Two N.C. Pubs

Moore's Aerial Applicators owner/operator Mike Rivenbark had the good fortune of being the cover story subject of not one but two North Carolina publications recently. Agricultural aviation in general benefited from the positive press, with both articles focusing on the

advantages of treating crops via aerial application.

Moore's Aerial Applicators' ag planes appeared on the cover of the Summer 2023 issue of *Home Grown*, an advertising supplement to *The Sampson Independent*, a newspaper in Clinton, North Carolina, where Rivenbark's operation is based. Moore's AT-502XP also graced the cover of *Farming Matters*, a Dublin County, North Carolina, publication.

Rivenbark and his company were featured under the headlines "Agricultural Aviation technology: When timing and cost are of the essence" in *Farming Matters* and "Agricultural from the air: Moore's Aerial Applicators of Clinton treats crops from up top" in *Home Grown*.

Moore's Aerial Applicators' territory in eastern North Carolina is home to a lot of small farms, which means, "We can spray three acres up to 3,000 acres" in any given job, Rivenbark told *Home Grown*. Blueberries are one of Rivenbark's main crops. His operation treats about 5,000 acres of blueberries, spraying those fields about seven times a year. Rivenbark also flies his AT-502XP to Nebraska for a few weeks each summer, where he'll cover about 20,000 acres over a two-week span. Larger planes, such as the 502XP, can average 150 to 200 acres an hour, whereas smaller ag planes average 75 to 100 acres an hour, *Home Grown* reported.

Even though Duplin County is mainly rural, not everyone who lives there understands what aerial applicators do or the care and professionalism ag pilots exercise when they are plying their trade. As *Farming Matters* put it, Rivenbark is an "eager educator," whether he's educating a farmer about the advantages of aerial application or clearing up misperceptions non-farming residents may have. One time a woman posted a video on social media of one of Rivenbark's planes spraying a squash field next to her yard. In the recording, she accused Moore's Aerial Applicators of killing some bushes in her yard. As Rivenbark recounted, he called the upset neighbor and explained what he had been spraying and how it wasn't possible for anything he was spraying to kill her bushes. "She took the video down, but he asked her permission to post it himself because he thought it was a good educational opportunity," *Farming Matters* wrote.

NAAA commends Rivenbark for being an agricultural aviation ambassador to his customers and community and for the positive coverage he garnered thanks to his amiable advocacy.

Summer 2023 Issue of Agricultural Aviation Now Online!

The Summer 2023 issue of *Agricultural Aviation* is available [online](#) and in the Agricultural Aviation Magazine App. Prominent stories include an examination of UAS business considerations featuring ag aviation businesses that have incorporated a drone into their operations, bringing migrant labor into operations, and much more!

Featured content in the Summer 2023 issue includes:

- **UAS Aerial Application Business Considerations**
Early adopting aerial applicators are complementing their manned aircraft fleet with ag drones
- **UAS Insurance Options**
A primer on UAS insurance options
- **Bringing in Migrant Labor to Help at Your Operation**
The process of bringing in migrant labor to assist with ag aviation work is complex and time-consuming, so it is important to fully understand the process and begin early to ensure you have migrant workers at your operation when you need them
- **Strike Gold at the 2023 Ag Aviation Expo in Palm Springs This December**
Join NAAA at the 2023 Ag Aviation Expo in Palm Springs, California, Dec. 4-7
- **A Winning Combination**
NAAA's aerobatics scholarship with trainer Greg Koontz is enhancing ag pilots' safety
- **Enhancing Rainfall with Electrostatically Charged Water Droplets**
Clouds seeded with electrostatically charged water droplets increased rainfall 20%-30% over unseeded clouds, trials found
- **5 Predictions on the Future of the Aerial Application Industry**
NAAA President Craig Craft peers into his crystal ball

Back issues are available in *Agricultural Aviation's* [Issue Library](#).

Get the Free Agricultural Aviation App

If you haven't installed the free Agricultural Aviation Magazine App on your smartphone or tablet, you are missing out on a great way to tap into a library's worth of *Agricultural Aviation* issues in the palm of your hand. Download the Agricultural Aviation Magazine App and see how easy it is to use. The app is compatible with all [Apple](#), [Google](#) and [Amazon](#) mobile devices and can be downloaded from their respective app stores by searching "Agricultural Aviation Magazine." Enable push notifications to be alerted when new digital editions are published and to receive occasional notifications about pertinent articles.

Ready to Become an Operation S.A.F.E. Analyst? Attend Training – September 2023

WRK of Arkansas will be conducting an **Operation S.A.F.E.** Analyst training course Sept. 5-8. The training will take place at WRK facilities at 153 92nd W, Lonoke, Arkansas. Two packed days of classroom instruction will be followed by a student-led pattern testing clinic at the Carlisle Municipal Airport, Carlisle, Arkansas.

This training will be appropriate for anyone who wants to become an **Operation S.A.F.E. Analyst or Technician**. It will also be a good refresher for anyone wanting an update on the latest analysis equipment and ag aviation research. If you need to be recertified as an analyst or a technician, this training will also cover that. All graduates will have their names submitted to NAAREF for approval as either an analyst or a technician.

With the growth of **C-PAASS**, the demand for Operation S.A.F.E. is expected to increase dramatically. WRK's Operation S.A.F.E. Analyst training is your opportunity to learn how to operate the flight line collection setup, the analysis equipment and software, and gain knowledge on how to interpret ag aircraft application patterns and make recommendations. More information on the training will be forthcoming. If you are interested in attending, contact Dennis Gardisser at (501) 676-1762 or dgardisser@icloud.com.

NAAA Represents Agricultural Aviation Industry Before Key Congressional Members at Tarkio, Missouri Air Show

On July 9, NAAA made what has become an annual sojourn to the 17th Wingnuts Flying Circus air show in Tarkio, Missouri. The air show is primarily organized by U.S. Rep. Sam Graves (R-Mo.), chair of the U.S. House of Representatives Committee on Transportation. As part of the annual air show, a town hall meeting on general aviation issues is hosted by Congressman Graves consisting of national leaders of general aviation organizations and congresspersons involved in transportation issues.

This year was no different, and NAAA CEO Andrew Moore participated in the townhall representing issues facing the agricultural aviation industry to the half a dozen key congressional members in attendance that serve on the House Transportation & Infrastructure Committee—four of which either chair or serve as the ranking members of its subcommittees. With the FAA reauthorization bill scheduled for consideration on the House floor next week, Moore pleaded to the legislators and audience for further protections in the bill to protect low-altitude, manned aircraft pilots operating in that airspace. Moore emphasized the \$37 billion a year value to corn, soybeans, wheat, cotton and rice production in the U.S. alone due to yield gain from aerial application that also results in the preservation of 27.4 million acres of land—an area roughly the size of Tennessee (or 62% of the size of Missouri). As such, Moore stated directly to the federal legislators, “I plead to the congressional members here—many if not all of which have farmers that rely on aerial application services—to ensure that the House of Representatives FAA reauthorization bill includes marking and location-logging requirements for rural towers 10 feet in diameter or less and between 50 to 200 feet. And that drones must give right-of-way to manned aircraft. This is an imperative safety issue.”

The townhall panel included: U.S. Rep. Sam Graves (R-Mo.); U.S. Rep. Rick Crawford (R-AR); U.S. Rep. Troy Niels (R-Texas); U.S. Rep. Sharice Davids (D-Kan.); U.S. Rep. David Rouzer (R-N.C.); U.S. Rep. Garrett Graves (R-La.); Former FAA Acting Administrator Dan Ewell; AOPA President Mark Baker; International Council of Air Shows President John Cudahy; NBAA President Ed Bolen; GAMA President Pete Bunce; AUVSI President Brian Wynn; EAA President Jack Pelton; NATCA Central Regional Vice President Aaron Merrick; HAI President Jim Viola; Reliable Robotics President Robert Rose; and NAAA CEO Andrew D. Moore.

Once again and for the 17th time, the Wingnuts Flying Circus event brought together general aviation pilots, aviation industry leaders and government officials to share mutual passions for flying. At last year's show local agricultural aviation operator Adam Meyerkorth participated in the Wingnuts Flying Circus air show, which demonstrated and promoted ag aviation's importance and **centennial**.

U.S. Congressman Sam Graves (R-Mo.), chairman of the House Transportation Committee, jests with NAAA CEO Andrew Moore at the Wingnuts Flying Circus air show GA townhall meeting in Tarkio, Missouri.

Apply for 'Ag Wings of Tomorrow' Scholarship by Aug. 31

From seeking a mentor to finding the funds for training, the road to becoming an ag pilot is fraught with obstacles, but having \$5,000 in seed money certainly helps. Thanks to the generous support of BASF and Thrush Aircraft, \$20,000 in aid is available through the **2023 NAAA “Ag Wings of Tomorrow” Scholarship Program** to assist four aspiring ag pilots in their journey.

The goal of NAAA's “Ag Wings of Tomorrow” Scholarship Program is to strengthen the aerial application industry by helping operator members bring new pilots into the profession and help fund their training. Applicants must be sponsored by an NAAA Operator member. Scholarship recipients may use the proceeds for flight training or aviation or ag-related coursework at a university, college, community college or other institution of higher learning. A stipend for a trainee in an NAAA Operator-sponsored apprentice program is also permissible. The scholarship program is administered by NAAA and funded by educational grants from BASF and Thrush.

This year, NAAA will award up to four scholarships valued at \$5,000 each. Investing in aspiring ag aviators is a win-win for NAAA Operator members and individuals seeking training funds to support their pursuit of becoming a professional ag pilot.

How to Apply

To be considered for the 2023 scholarship, along with completing the two-part application, every applicant must submit:

- **A letter of recommendation** from the NAAA Operator member sponsoring the applicant.
- **An essay of 250 words or less** explaining why the applicant wants to pursue a career in agricultural aviation and how they would use NAAA's “Ag Wings of Tomorrow” Scholarship to further their education and training.
- **A one-page résumé or list of activities** detailing all agricultural and aviation experiences, education and training.

Last year NAAA awarded \$5,000 scholarships to Ross Edwards of Sherwood, Arkansas; Tommy Koebel of Geneva, Illinois; Drew Kroepelin of Highmore, South Dakota; and Adam Jacobs of Graymont, Illinois (pictured above with his sponsor, Scott Petersen, at left, of Pontiac Flying LLC). NAAA will announce the recipients of the 2023 “Ag Wings of Tomorrow” Scholarships in December at the Ag Aviation Expo in Palm Springs, California.

Application Process

To learn more about the 2023 NAAA “Ag Wings of Tomorrow” Scholarship, review the [application instructions and checklist](#).

Applicants must apply using NAAA's [online application](#). The applicant will fill out ALL applicant and sponsor information. The NAAA Operator Sponsor must write a letter of recommendation on behalf of the applicant. Upload all required material noted in the Application Checklist and any additional supporting documentation using the Ag Wings of Tomorrow Scholarship's [online application portal](#).

A link to the scholarship application portal can also be found at AgAviation.org/scholarship.

Please contact NAAA at (202) 546-5722 or information@agaviation.org for clarification about any of the application requirements.

While the applicant must be sponsored by an NAAA Operator member, NAAA membership is not a prerequisite for applying for the scholarship. Still, becoming an NAAA Associate member is an excellent way for candidates to learn more about the industry and augment their training.

The deadline to apply for the 2023 “Ag Wings of Tomorrow” Scholarship is Aug. 31.

Restrictions

With the introduction of the new [Charles Stokes Memorial Turbine Training Scholarship](#) this year, applicants may only apply for one NAAA pilot-training scholarship per year. They can apply for the NAAA “Ag Wings of Tomorrow” Scholarship or the Charles Stokes Memorial Turbine Training Scholarship, *but not both in the same year*.

NAAA Operator members may only sponsor one NAAA “Ag Wings of Tomorrow” Scholarship applicant a year. They can also sponsor a Charles Stokes Memorial Turbine Training Scholarship applicant in the same year, but the applicants cannot be the same person applying for both scholarships in the same year.

Two \$3,000 scholarships are available for turbine training to eligible NAAA Operator and Pilot members applying for the [2023 Charles Stokes Memorial Turbine Training Scholarship](#).

Turbine Training Funds Available Through Charles Stokes Memorial Turbine Training Scholarship

Two \$3,000 scholarships are available to eligible NAAA Operator and Pilot members for turbine transition training through the newly created Charles Stokes Memorial Turbine Training Scholarship. The new NAAA scholarship program is funded by a generous educational grant from Jim Mills of Turbines Inc., who established the scholarship in memory of Charles Stokes (*pictured at right*). It is administered by NAAA.

The new turbine transition scholarship will be awarded starting this year. Here's what you need to know about the 2023 Charles Stokes Memorial Turbine Training Scholarship.

Key Details

Purpose: The Charles Stokes Memorial Turbine Training Scholarship was created to provide training funds to agricultural pilots with a minimum of 150 hours of ag time for use at a turbine transition course or program. The scholarship must be used for turbine flight training at a qualified flight school or turbine training facility.

Amount: The 2023 Charles Stokes Memorial Turbine Training Scholarship Program will award up to two one-year, \$3,000 scholarships to deserving, qualified ag pilots participating in a flight training program focused on turbine transition training. All funds are in U.S. dollars.

Eligibility: Applicants must:

- Have a minimum of 150 hours of ag time.
- Be a Pilot, Affiliated Operator or Operator member of NAAA.
- Be sponsored by an NAAA Operator member in the Operator dues category who will write a letter of recommendation on their behalf. (*Operator applicants may not sponsor themselves; another NAAA Operator member would need to sponsor them.*)

How to Apply: Applicants must apply using NAAA's online application process. A link to the online application is available [here](#).

Deadline: Aug. 31, 2023

Restrictions:

- Applicants may only apply for one NAAA pilot-training scholarship a year—*either* the Charles Stokes Memorial Turbine Training Scholarship *or* the NAAA “Ag Wings of Tomorrow” Scholarship, *but not both in the same year*.
- NAAA Operator members may only sponsor one Charles Stokes Memorial Turbine Training Scholarship annually. They can sponsor an NAAA “Ag Wings of Tomorrow” Scholarship applicant in the same year, but the applicants can't be the same person applying for both scholarships.

Go Deeper

Learn more about the application process for the 2023 Charles Stokes Memorial Turbine Training Scholarship [here](#).

Apply for C-PAASS 2023—Certified-Professional Aerial Applicator Safety Steward

If you've recently participated in a 2022 and/or 2023 Operation S.A.F.E. Fly-In and you're receiving this eNewsletter because you are an NAAA member, you have completed two of four requirements to apply for C-PAASS certification for 2023.

Apply for **C-PAASS certification** today, which is offered on an annual basis to individual ag pilots, both operator and non-operator. As the first year for C-PAASS, its requirements are based entirely upon education and professional opportunities already available:

1. **Annual PAASS Attendance for three (3) years**
 - 2020-2021 season, AND
 - 2021-2022 season, AND
 - 2022-2023 season
2. **Biennial Operation S.A.F.E. Participation**
 - 2022 season, AND/OR
 - 2023 season
3. **Annual Membership in NAAA**
 - 2023
4. **Annual Membership in a State/Regional agricultural aviation association**
 - 2023

To submit a 2023 C-PAASS application:

1. Check your eligibility at education.agaviation.org/cpaass.
 - You will need to log in using your NAAA username/password. Contact information@agaviation.org if you need assistance.
2. If eligible, scroll to the bottom of the page and locate the **2023 C-PAASS Application** tile. Hover over it and click the green **Register (Free!)** button.
3. You will be prompted to attest to your completion of each of the requirements and directed to upload documentation of your 2023 membership in a State/Regional agricultural aviation association. NAAA Staff will be automatically notified to review your application once this documentation is submitted.
4. Your application will be reviewed within three (3) business days.
5. If your application is accepted, you will be provided a link to pay the certification fee (currently \$100) and obtain your digital certificate.

Aerial applicators, now more than ever, operate in an environment of competing interests. An ever-increasing demand for timely and effective applications is challenged by factors such as added regulatory burden, rising insurance costs and stiffer pesticide label language, just to name a few. The agricultural aviation industry is rising to these challenges and, in character, has moved to advance education, rather than regulation, as the path forward.

NAAA and NAAREF jointly launched the Certified-Professional Aerial Applicator Safety Steward (C-PAASS) program earlier this year to serve as the industry's flagship certification and as a roadmap for the pursuit of the best educational opportunities currently available. This voluntary program allows those aerial applicators who strive to constantly educate themselves to better their safety and application quality to be recognized for their efforts. Secondly, the certification can signal to customers, regulators and others outside the industry their commitment to professionalism.

Apply for C-PAASS certification today! Utilize it to inform regulatory officials and insurance agents and to market to your customers that you have undergone additional training and development to ensure you can provide the highest quality service.

Has Your Aircraft Been Pattern Tested Yet? There Are Tools to Help

If you have not attended or scheduled an Operation S.A.F.E. Fly-In for this season yet, the time is becoming short in many parts of the country.

NAAREF recommends having your pattern assessed, at minimum, every other year or when major changes are made. This is vitally important to ensuring your aircraft is ready to make effective applications this season. Accordingly, NAAA has included biennial Operation S.A.F.E. participation as a core component of its **C-PAASS** professional aerial applicator certification.

If you are unable to attend one of these events, as an NAAA member, you have alternative options.

Earlier this year, NAAA **announced the release of DropFlight**, an iPhone/iPad app that allows extremely fast scanning and analysis of water-sensitive spray cards, all on your Apple mobile devices. This tool, created in part by an aerial applicator, is targeted specifically for aerial applicators to use in assessing spray pattern uniformity, effective swath width and droplet size across the swath.

Download DropFlight from the App Store

Use NAAA member code: NAAA23

Another option for conducting your own spray pattern testing is to use AccuPatt, the same desktop (Windows/MacOS) software that Operation S.A.F.E. analysts use. Originally developed to run the string testing systems you may have seen at a fly-in, AccuPatt has grown to include spray-card-analysis functionality that can be used independently to perform spray-card-only pattern testing. Now, it is being offered to NAAA members for use in their own operation at no cost. A flatbed scanner is required to digitize the spray cards for analysis.

Download AccuPatt for Windows/MacOS

Consult the **User Manual** to get up and running

To further reduce friction in getting your spray pattern testing underway, DropFlight is also offering all the needed **testing gear**. Available as a **convenient kit** or by the piece, DropFlight's card mounting system makes it simple to lay out cards uniformly and in the correct orientation to the wind. This testing gear will work with DropFlight and AccuPatt and is the fastest and most convenient way to acquire all the equipment you need to conduct your own pattern testing.

As always, if you consult with a **NAAREF-recognized Operation S.A.F.E. analyst** about your pattern testing data, they can report this to NAAREF as participation in Operation S.A.F.E. NAAA members will receive an official letter of participation and credit toward C-PAASS certification.

Makeup PAASS Programs Now Available for 2021, 2022 and 2023 – Get C-PAASS Certified Today!

The impact of the PAASS Program on reducing the number of agricultural aviation accidents and drift incidents is proven—26% reductions in both categories since the program first hit the stage. In an effort to present the program's life-saving curriculum to those who may have missed it, the National Agricultural Aviation Research and Education Foundation (NAAREF) has leveraged the NAAA Education Center to host recorded webinars of the PAASS Program from 2021, 2022 and 2023.

If you want to be C-PAASS-certified for the 2023 season but missed one of these three PAASS Programs, this is your opportunity to fulfill that requirement and complete your C-PAASS application. If you missed the 2023 PAASS Program, it is now available for credit for \$850. Starting July 1, its fee will increase to \$1,700. The 2021 and 2022 programs are each now available for credit for \$1,700.

NAAA members also have the option to purchase one year of unlimited access to not-for-credit versions of PAASS for \$120. The not-for-credit versions of the 2021 and 2022 programs are available now, and the 2023 program will be available starting July 1. More than just a review for yourself, educate your ground crew or other stakeholders to impress upon them the importance of safety and environmental professionalism in your operation. The \$120 option will not give you official credit for PAASS attendance and will not count toward C-PAASS.

The best way to experience PAASS is a live program at your state/regional agricultural aviation convention. However, situations occur that may prevent this from happening. By offering these online options to make up PAASS, everyone can benefit from the wealth of information presented and help move the needle in preventing ag aviation accidents.

Click here to view all archived PAASS Programs.

Important Call for GPS Data to Protect Manned Ag Aircraft from Drones

In 2022, an FAA advisory committee weighted with drone interests from Amazon, Google and other unmanned corporate interests suggested that the agency promulgate rules that drones operating beyond visual line of sight be permitted to:

- Increase their weight to 1,320 pounds
- Not equip with ADS-B identification technology
- Not give the right of way to manned aircraft when operating in rural, low-altitude airspace because they claimed there are no other users of this airspace.

As an ag aviator, you know these requests to be patently unsafe and based on false premises. As such, we call on you to help us collect information on ag aircraft's use of the low-altitude airspace. NAAA is working with and supports Mississippi State University's (MSU) Raspet Flight Research Laboratory and its continuing research on safe operational distances between low-altitude, manned aircraft and drones. The study's objectives are to:

1. Identify Ag Aircraft Operational Trends
2. Develop Ag Aircraft Operational Model
3. Validate Model through Observation/Collection of Empirical Data
4. Inform/Educate UAS Operators
5. Promote Safety in all Low-Altitude Ag Environments

Your voluntary participation in this study is critical to achieving these objectives. NAAA encourages you to donate your GPS flight log data to participate in this timely research. Logs from any year(s) are welcome and will be washed of any identifying information prior to use.

Many of you have previously contributed during the first stage of data collection from 2017 to 2020 when NAAA members donated 49,180 flight logs from 20 states. The second stage of the study began in 2021 and seeks to additionally include aircraft make and model info. These details are important, as the airspace modeling will be impacted by aircraft types differently, such as fixed-wing versus helicopter operations.

More GPS flight log data is needed to continue this study. Because of the diverse growing areas and unique geographical challenges experienced by aerial applicators, it is imperative that as many states and regions as possible are represented. This will ultimately help facilitate the safe integration of unmanned aircraft into these different airspaces.

As a reminder, NAAA and Raspet have agreed that all submitted information will remain confidential, and all GPS flight logs will be stripped of any personally identifying information before any research is conducted using the data.

There are several methods available to submit your data:

1. Request a secure upload link for larger uploads OR email directly to Madison Dixon, Research Director.
Email: mdixon@raspet.msstate.edu
2. Mail a flash drive or other storage device to the address below. (The device will be immediately mailed back once data is received if a return address is provided):

Address:

Attn: Madison Dixon
Raspet Flight Research Lab – Bldg. 2
114 Airport Rd.
Starkville, MS 39759

NAAA Releases Book of the Century! Buy It Today

NAAA has released the book of the century—a century of agricultural aviation, that is.

One hundred years ago, an aerial crop dusting experiment spawned the birth of the agricultural aviation industry. To commemorate agricultural aviation's 100th anniversary, NAAA is pleased to present ***Agriculture's Air Force: 100 Years of Aerial Application***.

Agriculture's Air Force provides a new, updated account of aerial application's history, 35 years after Mabry Anderson's masterpiece, *Low & Slow: An Insider's History of Agricultural Aviation*, was published. NAAA's meticulously sourced book is based on a collective history of the agricultural aviation industry based on material from *Agricultural Aviation* magazine, *AgAir Update*, *Low & Slow* and other resources.

Beginning with ***Agricultural Aviation's Spring 2021 issue***, NAAA published excerpts from *Agriculture's Air Force* and continued to do so through the ***Fall 2021 issue***. Those stories are just a small slice of what's in the 268-page hardback edition, however. The complete book contains so much more.

Agriculture's Air Force delves into the intersection of agriculture and aviation. It chronicles the agricultural aviation industry's growth from its infancy in 1921 through the boom times after World War II and on to today's modern era of high-tech aerial application.

The finished hardback book has been years in the making but well worth the effort. "This is a significant piece of work covering not just the industry's history, but its essence," NAAA CEO Andrew Moore said. "We are proud of it and believe it will make a lasting contribution to the industry."

The story of agricultural aviation is much like the broader story of aviation: It is mostly punctuated with interesting smaller moments sandwiched between milestone developments. Aerial application is also the story of technological leaps and bounds.

Agriculture's Air Force covers five eras spanning more than 10 decades. In addition, it features 34 Spotlight pieces focused on significant individuals, organizations, trends, technologies and topics related to aerial application.

Agriculture's Air Force: 100 Years of Aerial Application may well be NAAA's most enduring 100th anniversary initiative. One thing's for sure: It is no textbook. The commemorative book is written from a fresh perspective that is entertaining and enlightening. Readers will come away with a new appreciation for agricultural aviation as a profession and the dedicated individuals who propel it forward.

Order Your Copy of Agriculture's Air Force Today!

Agriculture's Air Force retails for \$45, excluding shipping. Order it from [AgAir Update's Online Store](#).