NAAA eNewsletter

NAAA and Jim Mills of Turbines Inc. Establish Charles Stokes Memorial Turbine Training Scholarship

NAAA is pleased to announce that 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 brand-new NAAA scholarship program came to fruition thanks to a generous educational grant from Jim Mills of Turbines Inc., who established the scholarship in memory of Charles Stokes (*pictured above*). 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 at agaviation.org/turbinescholarship.

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 at **agaviation.org/turbinescholarship**.

Texas Court Issues Injunction Prohibiting Biden Administration's WOTUS Definition in Texas and Idaho

A U.S. District Court judge of the Southern Texas District Court in Galveston issued an injunction preventing the Biden administration's controversial new rule that redefines Waters of the United States (WOTUS) under the Clean Water Act from going into effect in Idaho and Texas. However, the ruling stated that other courts should determine WOTUS's legality across the nation.

Congress put in statute in 1972 that clean water law applied to the waters of the United States and left it to federal agencies to define them. The new Biden WOTUS rule covers more waterways, wetlands and even ephemeral waters that may be dry land most of the year. The definition written during the Trump era was narrower and overturned by a federal court in 2021. An earlier WOTUS definition by the Obama administration was also tied up in court and never took effect.

Last month, the states of Texas and Idaho, along with 18 trade associations, challenged the Biden WOTUS expansion in federal

court. The judge issuing the injunction said the two states persuasively argued WOTUS is a threat to their sovereign rights and may cause irreparable harm. He noted Idaho and Texas could expect "unrecoverable resources—money and otherwise" by complying with a rule unlikely to withstand judicial scrutiny.

The Supreme Court is currently considering the Sackett case, which pits the rights of a private property owner against the EPA's authority

to regulate an adjoining lake. Many analysts believe this ruling could restrict the EPA's authority and invalidate the Biden WOTUS rule. The judge's ruling did not agree with the trade associations' call for WOTUS to be invalidated nationwide.

NAAA Seeking State/Regional Association Candidates for 2024 Leadership Training Program

After a combined 15 members received intensive leadership training through two Syngenta-sponsored programs last month, NAAA is pleased to announce that 15 more members will get to experience the in-depth professional development provided by NAAA and Syngenta next year at the 2024 Leadership Training Program.

Next year's Leadership Training Program will be held Feb. 14-17, 2024, and coincide with NAAA's Spring Board Meeting in Alexandria, Virginia. The purpose of the intensive four-day program is to develop strong, knowledgeable leaders to serve the agricultural aviation industry. Participants are trained on how to clearly communicate the important roles aerial application plays in the production of the country's agricultural products to the public, media and government.

NAAA sincerely appreciates Syngenta's continued generosity and longstanding commitment to teaching members how to advocate for agricultural aviation more effectively and serve more confidently as leaders of their state and national ag aviation associations. Syngenta has sponsored NAAA's Leadership Training Program since its start in 1995.

How to Apply for the Leadership Training Program

The Leadership Training Program is an exciting and worthwhile opportunity. If you would like to be considered for the 2024 Leadership Training Program, contact your state or regional association executive director. NAAA's state/regional agricultural aviation association partners can only nominate one candidate for the 2024 Leadership Training Program. Applications must be submitted by June 15.

Criteria for Qualification

- Industry Involvement: Leadership Training Program candidate must be involved in an agricultural aviation business or a related allied industry organization as deemed appropriate by the nominating state/regional AAA.
- Leadership Involvement: Leadership Training Program candidate must have leadership experience developed from past
 involvement in regional or state industry associations, community service involvement, and/or school or professional organizations.
- Industry Future: Leadership Training Program candidate must indicate intent of future involvement in the ag aviation industry.
- NAAA Membership: Leadership Training Program candidate must be a member of the appropriate state/regional agricultural aviation association and NAAA—both in 2023 and 2024.

Congrats to NAAA's 2023 Leadership Training Grads!

More than 350 members have benefited from Syngenta's leadership development teachings since 1995, over the course of 26 leadership classes, including this year's graduates, pictured below.

NAAA's 2023 Leadership Training Program graduates, including from L-R Curtis Meister (Wisconsin), Flynn Baker (Nebraska), Brandt Bottoms (Arkansas), Amy May (Nebraska), Landunn Koyle (Idaho), Cody Murphree (Texas), Justin Staas (California), Robert Ching (Michigan), Travis McPherson (North Dakota), Jacob Henson (New Mexico/Texas) and Bart Alexander (Louisiana).

Tammy Lucas (Texas), Janet French (Arkansas), Cameron Hendrickson (Illinois) and Colton Adcock (Oklahoma) represented NAAA at Syngenta's Leadership At Its Best program Feb. 20-24.

NAAA Ag Aviation Expo Hotel Room Block Open

The NAAA hotel room block is now open for the 2023 Ag Aviation Expo in Palm Springs, California, Dec. 4-7. The Ag Aviation Expo will provide you with networking, education and fun in a great city full of restaurants and bars, nightlife, shopping and attractions. It is important for attendees to stay in the NAAA room block. We get the best hotel room rates for our attendees, and if the NAAA hotel block is not filled, we cannot offer great rates for future years!

We have rooms available at three hotels; view the map below showing the hotels' locations or view them **here**. You can learn more about Palm Springs **here**.

Renaissance (connected to the convention center)

Reservations: Book your room **online here** or call 1-800-468-3571 and identify National Agricultural Aviation Association Convention for the discounted room rate.

Hilton (two blocks from the convention center)

Reservations: Book your room online here or call 1-800-216-1952 and identify group code: NAA

Rate: \$154/night + taxes

Room block deadline: Nov. 10

Cancellation: Should you need to cancel your reservation, please contact the hotel three weeks prior to arrival or by Nov. 10 to avoid a late cancellation penalty equivalent to the first night's room deposit.

Hyatt (five blocks – a half mile from the convention center)

The Hyatt is located on the main road of Palm Springs—N. Palm Canyon Drive—where there are dozens of restaurants, bars, boutiques and shops. *Transportation will be provided in the morning and late afternoon/evening.*

Reservations: Book your room **online here** (if you get to a screen where it asks you to select hotel, please select Hyatt Palm Springs) or call 1-877-803-7534 and identify group code: G-NA12

Rate: \$149/night + taxes

Room block deadline: Nov. 10

Cancellation: Should you need to cancel your reservation, please contact the hotel three weeks prior to arrival or by Nov. 10 to avoid a late cancellation penalty equivalent to the first night's room deposit.

NOTE: No one from (or on behalf of) any of the hotels or NAAA will contact you to book a hotel room. NAAA recommends that you make your own hotel reservations using the information we provide. Do not book a room with any company that calls you directly.

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.
- Exhibitor Booth Sales: Details here for large booth sales that open in late March and 10'x10' and 10'x20' booth sales that open on July 13. Please email Lindsay Barber if you would like to secure a large booth space (any booth size 10'x30' or larger).
- **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. While we are still several months away from the Ag Aviation Expo, we are already accepting donations 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 Lindsay with your donation details.

2023 Support Scholarship Contest Entries Due Sept. 15

The **2023 Support Scholarship Contest** deadline is Sept. 15. The NAAA Support Committee will award a \$2,000 scholarship as top prize, and Covington Aircraft Engines has generously agreed to sponsor a \$1,000 scholarship.

The theme for this year's contest is **"What role does ag aviation play in producing a local commodity?"** The 2023 Support Scholarship Contest is open to any individual sponsored by an NAAA member. The scholarship is not restricted to individuals pursuing a "flying career" and can be used toward any educational pursuit beyond high school (at any age).

Any educational pursuit beyond high school (at any age) is eligible. Entrants must be a senior in high school or registered in higher education by the fall semester of 2023. The competition is open to anyone sponsored by an NAAA member. Previous winners are not eligible to compete. Submissions must be an essay of at least 1,500 words or a 5-minute multimedia presentation. Submissions are now entered **online**. More information about eligibility requirements, contest guidelines and sample essays from past scholarship recipients is available **here**.

NAAA, State/National Ag Organizations Supported Texas Supreme Court Reversing Egregious Appeals Court Decision Pertaining to Unsubstantiated Drift Claims

NAAA joined several state and national agricultural associations in the summer of 2021 **filing a legal brief** urging the Texas Supreme Court to hear a drift case where an egregious decision rendered by the state's 11th Court of Appeals provided relief to claimants alleging

drift without using recognized methods of investigation establishing that drift occurred. On March 3, the Texas Supreme Court reversed the 11th Court of Appeals' decision and ruled in favor of the applicator.

The case, *Robert Cox Et Al. v. Helena Chemical*, the plaintiffs asserted that an aerial herbicide application traveled dozens of miles in an erratic pattern causing yield damage to distant crops. The plaintiffs' experts could not explain the physics of how the herbicide moved such great distances nor how herbicide was found in less than 2% of the 111 fields tested. The trial court granted the defendant's motion to strike the plaintiffs' experts' opinion due to their unscientific and unreliable nature. Later, the 11th Court of Appeals reversed the decision, finding for the plaintiff. The Court of Appeals' decision undermined Texas law, which requires demonstratable proof of actual exposure and industry protocols for proper investigation and providing scientific evidence linking the exposure to the application, hence, earlier this month, the Texas Supreme Court reversed the Appeals Court decision and held for the defendant.

According to an analysis from the legal firm **Faegre Drinker LLP**, the Texas Supreme Court upheld and clarified its prior precedent in holding that:

"[T]he ultimate issue . . . in a toxic tort case . . . is always specific causation—whether the defendant's product caused the plaintiff's injury." *Bostic v. Georgia-Pacific Corp.*, 439 S.W.3d 332, 351 (Tex. 2014). It is important to emphasize at the outset that the plaintiffs' injury here is not "damage" to cotton plants, such as wilted leaves. Instead, the injury for which the plaintiffs seek recovery is a financial one—decreased revenue from a reduced yield of cotton at harvest. It is therefore not enough for the plaintiffs to show that drifting herbicides reached their plants and "damaged" them in some way. Instead, they must show that Helena's application of Sendero caused their plants to yield less cotton at harvest.

To satisfy this burden, the court held that it is not enough to merely claim that any exposure can harm the crop. In other words, visual symptoms in response to alleged exposure is insufficient. Instead, a plaintiff must show what amount of the alleged pesticide reached the crop, and whether that amount would substantially contribute to the claimed lost crop yields. In doing so, "there must be reliable evidence ruling out other plausible alternative causes." The Court also noted that, at least in this case, lay opinions of the farmers themselves was not sufficient; expert testimony was required.

Additionally, in dealing with plaintiff's burden of showing "whether it [was] the defendant's product," the Court noted that positive test samples showing the active ingredient may not carry the day if there is evidence of multiple products containing the same active ingredient being used in the geographic vicinity.

In summary, the Cox decision reinforced that traditional causation determinations applied in cases alleging yield loss to a crop from alleged exposure to pesticides, and that plaintiffs would be required to meet their burdens with reliable and admissible expert testimony based on sufficient evidence and data."

In the summer of 2021 NAAA joined the Agricultural Retailers Association, CropLife America, the Southern Crop Production Association, the Texas Agricultural Aviation Association and the Texas Ag Industries Association in filing an amici curiae brief in support of granting Helena Chemical Co.'s petition for the Texas Supreme Court to review the case, which they of course did, and reverse the Appeals Court decision.

EAA Podcast Hosts Eat Up Wis. Operator Damon Reabe's Aerial Application Insights

Wisconsin operator Damon Reabe had an enlightening conversation with the hosts of *EAA's The Green Dot* podcast about the aerial application profession in an episode well worth listening to and sharing. In the March 9 episode, the third-generation aerial applicator discussed the history of his family's business, the aircraft and technology behind aerial application, the length of time and amount of training it takes to become a productive ag pilot, and his role working with NAAA and the EPA on pesticide policy issues.

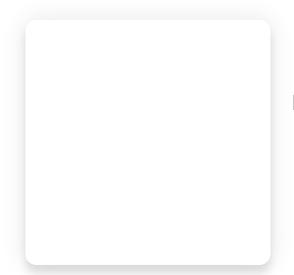
Damon also touched on the parallels between the Experimental Aircraft Association's general member interest and the aerial application industry. "Our industry was really started by modifying aircraft literally in people's garages," he said. "Most of the technology that's available in aerial application equipment today was literally designed and developed by an aerial applicator to make their job better. So, I just think there's just a lot of parallels between the two entities."

EAA's The Green Dot podcast is aimed at people who fly for the love of it or are simply fascinated by the world of flight. Fascination is an apt description of how the podcast's co-hosts, Hal Bryan and Chris Henry, responded to everything they learned from Damon about the art and science of aerial application and the vital role aerial applicators fill for farmers.

Toward the end of their interview, Bryan proclaimed that he and his co-host were "enthusiastically ignorant—I don't mind saying that on our behalf about this. This is just an aspect of aviation that's fascinating and we have respect for, but what we just know so little about. So we're glad to stand in for an audience who also may not know very much about it."

In response, Damon remarked, "You know, the audience that's listening to this has a lot of aviation knowledge and probably would find all this information to be the world's best-kept secret. But frankly, it's that way in all of agriculture. Large-scale commercial production agriculture that's feeding the world has endless stories about every aspect of the management of creating that commodity. So, it's really what I consider the world's best-kept secret: modern agriculture."

Listen to Damon's episode of EAA's The Green Dot below or wherever you get your podcasts.



EAA's The Green Dot — Aerial Ap

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USDA-ARS Research Engineer Dan Martin Discusses His Aerial Application Cloud Seeding Research

Throughout history, just about the only thing frustrated farmers and ag pilots have been able to do during protracted stretches of dry weather is cross their fingers and pray for rain. Someday in the not-too-distant future, aerial applicators may be able to do something more concrete to foster rainfall. Dan Martin, an agricultural research engineer at the USDA-ARS's Aerial Application Technology Research Unit's facility in College Station, Texas, has been at the forefront of an innovative new form of electrostatic "cloud seeding."

Dr. Martin recently discussed his research project using an ag aircraft to send charged water droplets into clouds to foster rainfall in drought-stricken regions with The National Weather Desk. The National Weather Desk (TNWD), an arm of Sinclair Broadcast Group, disseminates content collected from Sinclair's meteorologists across the country.

TNWD posted a short excerpt of Martin's interview as a **Facebook reel** and the extended version on **YouTube**. In the longer interview, Martin discusses:

- Applying an electrostatic charge to water droplets to seed clouds. (0:00)
- How successful this method has been. (05:45)
- What local residents think about it. (10:07)

Watch the full interview below to hear Martin discuss this innovative method of aerial application at length. Martin plans to present his cloud seeing research at the 2023 NAAA Ag Aviation Expo in December.

Electrified Clouds to Relieve Drought

NAAA Receives Best of NAMA Award for 100th Anniversary Website

NAAA is pleased to announce that it has received the National Agri-Marketing Association's Best of NAMA Regional Merit Award for the **100th aerial application anniversary website** in its "Website Directed to Consumers" category for Region Five, which includes Southeastern, Carolinas/Virginia and Midsouth states.

The Best of NAMA honors the best in agricultural marketing communications. Companies and agencies submit their work for this competition, which evaluates creative marketing communications and public relations initiatives in agriculture. Awards are given in 63

categories, and NAMA received 1,082 entries in six regions this year.

In 2019, NAAA was honored with a NAMA merit award for its ad campaign, "Find an Aerial Applicator."

Entries are judged by industry professionals at a regional level for possible advancement to the national competition. The 100th anniversary website will now advance to the national competition, which will be presented at the Agri-Marketing Conference in St. Louis on April 26.

UPDATE: Airworthiness Directive Affecting Continental Engines

On March 15, the FAA issued Airworthiness Directive AD 2023-05-16, which supersedes AD 2023-04-08, as a final rule with a request for comments. The NAAA eNewsletter previously reported on the original AD earlier this month.

For affected engines, this AD continues to require inspection of the crankshaft assembly for proper installation of the counterweight retaining rings in the counterweight groove and, depending on the results of the inspection, corrective actions if improper installation was found.

Since the FAA issued the original AD, operators notified the FAA, and Continental confirmed, that certain affected model reciprocating engines were not included in the AD applicability. AD 2023-05-16 expands this applicability, differing from that listed in the Continental Mandatory Service Bulletin **MSB23-01A**.

Check the new AD to see if your engine/crankshaft is affected.

NAAA Targets Ag Retailers, Farmers with Spring '23 Ad Buys in National Ag Publications

NAAA's ad campaign promoting the benefits of aerial application to farmers and ag retailers is back and in full swing for the 2023 season. A March 6 ad in AgWeb AM kicked off a nine-week email advertising run in one of Farm Journal Media's largest newsletters. On the print side, NAAA is running ads in *The Scoop* (formerly known as *AgPro*) and *Top Producer* magazine.

AgWeb AM reaches 140,000 mostly grower subscribers.

NAAA's digital ads will continue to run in AgWeb AM's Monday editions for eight more weeks, concluding with AgWeb AM's May 1 issue. AgWeb AM provides ag news, market and weather information each morning to an audience of 140,000 mostly grower subscribers.

The half-page ad in *The Scoop's* March 2023 issue will be followed by a half-page ad in *Top Producer's* March/April 2023 issue. *The Scoop* delivers business solutions to 20,000 farmer advisers, including agricultural retailers/dealers, independent crop consultants, custom applicators, professional farm managers, extension services and fertilizer, pesticide, seed and equipment manufacturers.

Top Producer reaches large farmers. Readers must have 1,000-plus acres of corn or soybeans or 1,000-plus acres of wheat, cotton or other grains to qualify for a subscription. The 105,000 farm executives who read *Top Producer* purchase nearly 80% of all farm inputs.

As always, NAAA's print and email ads feature the tagline "Aerial Application: Above All Other Forms of Crop Care" and promote how aerial application is by far the fastest, most versatile and economical way to aid farmers in producing greater crop yields. Additionally, this year's campaign includes messaging that alludes to the industry's 100th anniversary. A secondary tagline in the new digital ads that alternates with the primary tagline declares: "Aerial Application: Heightened Crop Care Since 1921." Centennial-oriented messaging was also worked into the new print ads.

The calls to action direct readers to find an aerial applicator near them using NAAA's "Find an Aerial Applicator" database of NAAA member operators.

NAAA has been promoting aerial application services through national ads in agricultural trade media for six years, dating back to 2017. Last year NAAA advertised in the AgWebAM, the CropLife News newsletter and *The Scoop* again. In earlier years, the "Above All Other Forms of Crop Care" ad campaign has appeared in *The Scoop* (2021), *AgPro* (2020), *CropLife* magazine (2017 and '19) and *Farm Journal* magazine (2018). NAAA has been advertising in AgWeb AM's weekday morning e-newsletter since 2018.

Update Your 'Find an Aerial Applicator' Listing

This ad campaign, along with the "Find an Aerial Applicator" database, is a service NAAA provides to operator members to help promote their businesses.

NAAA's search tool can be found at **AgAviation.org/findapplicator** or on any page of NAAA's website by clicking on the "**Find Aerial Applicator**" link in the upper right-hand corner.

The "Find an Aerial Applicator" lookup tool gives NAAA Operator, Affiliated Operator and Lifetime Operator members the option of promoting their services to farmers and other potential customers by listing their company in NAAA's narrowly tailored public database. The database only provides enough information to give farmers, municipalities and others who may need the services of an aerial applicator a mechanism to locate and contact the NAAA operators nearest to them. Search results return the name of the company, the business number on file, the operator's city and state, and the aerial application operation's website, if there is one.

To ensure your information is up to date, you can log in to **AgAviation.org** and, once logged in, you can update your listing with a logo, edit your listing or opt-out of the database. Operator, Affiliated Operator and Lifetime Operator members are free to opt-out or opt back in at any time. If you need assistance with updating your information, please contact the NAAA office at (202) 546-5722 or **information@agaviation.org**.

NAAA Comments to EPA on Aerial Application Issues in Several Pesticide Registration Review Proposed Decisions

On March 8, NAAA submitted comments to the EPA on four proposed interim decisions (PID) for DCNA, etofenprox, norflurazon, and thiophanate-methyl and carbendazim. A PID is the second step in the pesticide registration review process, preceded by risk assessments and followed by the final interim decision and an endangered species review. These four PIDs incorporate new mitigation strategies from the EPA's recent **endangered species workplan update** that are intended to reduce the time and effort required during the endangered species review process.

The PIDs for norflurazon and thiophanate-methyl and carbendazim retained aerial application on the label and included drift mitigation language acceptable to the aerial application industry. It allows aerial applications in winds up to 15 mph, requiring a boom shortened to 65% of wingspan or 75% of rotor diameter for helicopters as well as and an increase from ½ to ¾ swath displacement when wind speeds are above 10 mph. A medium or larger droplet spectrum is required and applications during inversions are prohibited. These proposed drift mitigations have been seen on many PIDs over the last several years. NAAA commented to the EPA that we agreed with the proposed drift mitigations.

Unfortunately, these same two PIDs also included a proposal to require non-wind-directional buffer zones adjacent to aquatic habitats and conservation areas when making aerial applications. NAAA opposed this proposal, and instead suggested the buffer zones be based on wind direction, referencing USDA's support of wind directional buffers and showing USDA research supporting these conditional buffers. NAAA reminded the EPA that they themselves recommended the use of wind-directional buffer zones to protect endangered species in their recent endangered species protection workplan update.

The PID for DCNA proposed banning aerial applications because of risks of concern from drift to bystanders and the environment. The EPA further justified the ban by stating that aerial applications are not common. NAAA opposed the ban, stating the risks of concern from drift are based on the use of the Tier 1 model in AgDRIFT which uses outdated and faulty assumptions to inaccurately model the drift from aerial applications. NAAA also reminded the EPA that while aerial application might not be a common method to apply DCNA now, the continued threat of pesticide resistance and the outbreak of new pests could change the demand for aerial applications.

The PID for etofenprox had a proposed drift mitigation of minimum height restrictions of 100 feet for fixed-wing aircraft and 75 feet for helicopters when making ultra-low volume aerial applications for wide-area mosquito control, which NAAA did not oppose.

NAAA will be monitoring the pesticide registration review process and commenting in favor of aerial applications for all products that can be applied by ag aircraft. Despite some of the proposals in these recent PIDs, recent meetings between NAAA and the EPA have proven that we are making substantial progress toward getting the EPA to use the more accurate Tier 3 model in AgDRIFT and make all buffer zones wind-directional.

NAAA Comments to FAA Requesting Additional Safety Requirements Protecting Manned Ag Aircraft for Perimeter Patrol Drone

On March 3, NAAA submitted comments to the FAA on the proposed airworthiness criteria for the **Asylon DroneSentry Model ASY02C+** unmanned aircraft (UA). This DroneSentry is a 19-pound multi-rotor UA measuring 49 x 49 x 12 inches marketed for beyond visual line of sight (BVLOS) perimeter security patrols. Notably, up to five of these UAs could be operated by a single remote pilot. This use has the potential to put the UA in areas manned aircraft are operating in, with the added risk associated with a single pilot monitoring the combined airspace of up to five UAs simultaneously.

NAAA's comments focused on ensuring a safe low-altitude airspace, and included an assertion that a commercial pilot's license should be required to operate such UA. NAAA maintains that the airworthiness requirements for commercially utilized UA should be similar to those of manned aircraft. Regarding collision avoidance specifically, NAAA stressed that the UA must be able to detect a manned aircraft and that manned aircraft pilots be able to see or detect the UA. Further, any collision avoidance equipment working toward approval should be operationally tested, specifically around manned agricultural aircraft.

The FAA's proposed airworthiness criteria can be viewed here. NAAA's comments may be viewed here.

NAAA continues to promote pilot safety as the primary objective as UA are integrated with the national airspace.

It's Here! Application Now Open for C-PAASS 2023—Certified-Professional Aerial Applicator Safety Steward

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 have jointly launched the Certified-Professional Aerial Applicator Safety Steward (C-PAASS) program 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. Secondarily, the certification can signal to customers, regulators and others outside the industry their commitment to professionalism.

C-PAASS certification 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 SAFE 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 https://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.

This is only the beginning. As NAAA develops its own Learning Management System (LMS), new on-demand courses and content will be incorporated into C-PAASS. A wide variety of topics will eventually be included in the LMS, including those covered in 14 CFR Part 137 knowledge and skills and those on how to properly set up agricultural aircraft to make on-target applications.

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.

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.