

NAAA eNewsletter

NAAA Visits Corteva Headquarters to Discuss Aerial Application Technologies and Pesticide Registrations for Aerial Applications

NAAA visited Corteva, the global crop protection product manufacturer, at its headquarters in Indianapolis, Indiana, earlier this week. The meeting's focus was to continue to work together to help facilitate the registration of pesticide products manufactured by the company for aerial use by using more realistic industry data—much of which NAAA collects about the ag aviation industry via its surveys—and more realistic aerial application variables within Tier 3 of the AgDRIFT atmospheric model on drift, which more accurately reflects the application conditions of acres treated by air today.

The discussion also included the aerial application industry's constant embrace of new technologies and the new software development concept identified as site-specific risk assessment, which would allow environmental conditions at an application site (nearby waterbodies, endangered species, etc.), and the application equipment used (nozzle, boom width, pressure, etc.) to be inputted. The output would be either additional protections needed for the applicator to implement to protect a sensitive area, or perhaps grant leeway to the applicator, such as allowing the application to take place in wind speeds more than existing limitations.

Corteva has been a generous supporter of NAAA throughout the years and the company's evolution, whether it be sponsoring our educational program, PAASS, educational events at the annual Ag Aviation Expo or the Expo's closing Excellence in Ag Aviation Banquet.

Later in the week, NAAA will meet with representatives at Bayer CropScience's corporate headquarters and the crop protection data company Kynetec in St. Louis, Missouri.

Pictured at top from left to right:

- Travis Bui—Corteva Regulatory Manager
- Tami Jones-Jefferson—Corteva North America Regulatory Leader
- Morgan Bohlander—Corteva Portfolio Marketing Lead, U.S. Range & Pasture
- Reuben Baris—Corteva Regulatory Policy Leader
- Damon Reabe—NAAA Government Relations Committee Chairman, Board Member and Wisconsin aerial application operator of Dairyland Aviation
- Damon Palmer—Corteva Marketing Leader – U.S. Specialties (Non-Crop)
- Andrew Moore—NAAA CEO
- Dr. Scott Bretthauer—NAAA Director of Policy, Education and Safety
- Elisha Modisett-Kemp—Corteva State Affairs Leader

Aerial Applicator Michael Cruce Discusses the Advantages of Aerial Application in New Syngenta Video

Fungicides Flying High: The Speed a...



Watch Michael Cruce, the president of the Illinois Agricultural Aviation Association, discuss the benefits of aerial fungicide spraying and how aerial application in general improves crop yields for farmers in a new Syngenta video titled, **["Fungicides Flying High: The Speed and Precision of Aerial Application."](#)**

Cruce operates Cruce Agricultural Aviation in Marquette Heights, Illinois. As he explains in the video, "We have a short window, especially in the Midwest, to apply these fungicides, and the airplanes, we can cover a lot of ground in a short amount of time. So, the timing of the applications is critical sometimes. We can cover quite a few acres in day, so we have the advantage of getting there, getting it done, and getting back and on to the next grower."

Cruce also notes that aerial application does not cause soil compaction or disturb the crop since ag aircraft apply products from above the crop canopy rather than within it. Watch the full video above.

A companion article on NAAREF's Operation S.A.F.E. calibration clinics is scheduled to go live on Syngenta's [Thrive website](#) in May. The article originally appeared in *Thrive's* recently retired print magazine in its first quarter 2023 issue, the print magazine's final edition.

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. Secondly, 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.

Nominations Open for 2023 NAAA Awards!

Do you have a rising pilot within your ranks? Do you admire certain NAAA members for their outstanding service to the industry or their community? The aerial application industry is filled with exceptional people who go above and beyond the call of duty, often with little fanfare. Make someone's day or year by nominating them for a 2023 NAAA Award.

NAAA's online submission form is the fastest and simplest way to nominate someone in just a few clicks, but a printable PDF version of the awards nomination form is also available. The following submission methods are available at AgAviation.org/awards.

- **2023 Awards Nomination Online Submission Form** (recommended)

- **2023 Award Nomination Form** (print version)

Completed entries using the PDF form may be emailed or faxed to NAAA at information@agaviation.org or (202) 546-5726 (fax).

There are nine NAAA Award categories and one NAAREF Award. The nomination deadline is Sept. 8, but early nominations are encouraged. The longer you wait, the busier you'll get as the summer season approaches.

Nine recipients received NAAA Awards in 2022. Who will be among this year's awardees? Nominations are due by Sept. 8.

NAAA Award Categories

Agrinaut Award: Honors an agricultural aircraft operator, operating organization or allied member company that has made an outstanding contribution in the field of ag aircraft operations. The achievement cited shall have contributed to the "state-of-the-art" for the benefit of the agricultural aircraft industry as a whole.

Allied Industry Individual Award: Recognizes an NAAA member or staff and/or an allied industry individual who has significantly contributed their efforts for the benefit of the allied industry and the aerial application industry. *(Presented by the NAAA Allied Industry Committee.)*

Delta Air Lines "Puffer" Award: Recognizes an individual who has made an outstanding contribution to the design of agricultural aircraft and/or related equipment.

Evans-Christopher Operation S.A.F.E. Award: Recognizes individuals or entities that have made outstanding contributions to the Operation S.A.F.E. program. *(Presented by NAAREF.)*

John Robert Horne Memorial Award: Honors a pilot with five or fewer years of experience in the agricultural aviation industry who has an exemplary safety record and has contributed to safety in ag aviation. ***This award no longer has carryover nominations from year to year; a new nomination must be submitted every year.***

Larsen-Miller Community Service Award: Recognizes outstanding contributions by a member to his or her community.

Opal and Bill Binnion Memorial Award: Acknowledges those who contribute to NAAA in its efforts to educate the public about aerial application.

Richard "Dick" Reade Memorial Award: Recognizes outstanding contributions by an allied industry member and their company.

William O. Marsh Safety Award: Recognizes significant achievements in safety, safety education or an outstanding operational safety program.

Zoren and Joan O'Brien Memorial Outstanding Service Award: Awards outstanding service to the commercial agricultural aviation industry or to its association.

The 2023 NAAA Award recipients will be honored at the Excellence in Ag Aviation Banquet Dec. 7 in Palm Springs, California.

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.

In January, 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.

Rate: \$159/night

Room block deadline: Nov. 9

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 demonstrable 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 amicus 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.

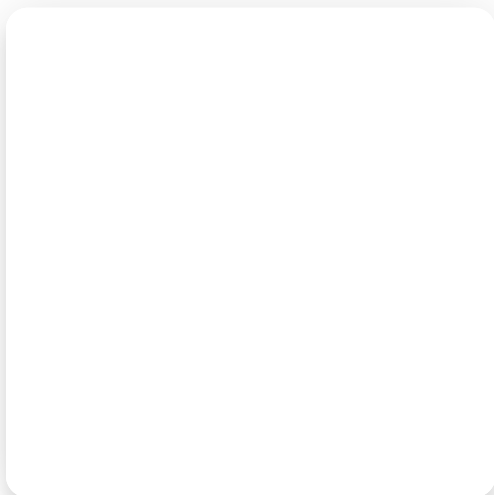
Damon also touched on the parallels between the Experimental Aircraft Association’s general member interest and the aerial application industry. “Our industry was really started by modifying aircraft literally in people’s garages,” he said. “Most of the technology that’s available in aerial application 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 seeding research at the 2023 NAAA Ag Aviation Expo in December.



NAAA Receives Best of NAMA Award for 100th Anniversary Website

NAAA recently received the National Agri-Marketing Association's Best of NAMA Regional Merit Award for the association's [100th anniversary aerial application website](#) in NAMA's "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.

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](#).