June 1, 2023

NAAA eNewsletter

Supreme Court Decision Limits the Types of Wetlands Considered Waters of the U.S. and With It the Scope of Clean Water Act Enforcement

Last week the Supreme Court of the United States (SCOTUS) ruled that wetlands are only considered Waters of the U.S. (WOTUS) and under the enforcement provision of the Clean Water Act (CWA) when it is "a relatively permeable body of water connected to traditional interstate navigable waters"—and that the wetland "has a continuous surface connection with that water, making it difficult to determine where the 'water' ends and the 'wetland' begins."

The Supreme Court case in particular dealt with the Sackett family in Priest Lake, Idaho, who were told by the EPA and Army Corps of Engineers officials 16 years ago that their residential lot was on a protected wetland and hence they could not build a residence there. They were threatened with daily fines unless they applied for a federal permit. Instead, the Sacketts sued the government. A previous decision by the 9th U.S. Circuit Court of Appeals ruled in favor of the government, but last week's decision reverses the lower court, and the **Supreme Court unanimously ruled that "The wetlands on the Sacketts' property are distinguishable from any possibly covered waters."** The court was split 5-4 on the court's new "test," which stated that only wetlands with a continuous surface connection to a body of water are covered by the law.

This decision has national implications for agriculture, development and the Biden administration's recently promulgated WOTUS rule that includes small bodies of water, including those on private land and farms, if they had a "significant nexus" to navigable waterways as waters of the U.S. and under Clean Water Act regulations. That definition included tributaries, adjacent wetlands and streams, and even ephemeral waters, such as dry tributary beds, if they alone or in combination with similarly situated water significantly affected the chemical, physical or biological integrity of protected waterways.

NAAA was part of an effort to prevent the administration from developing its WOTUS definition until after the Supreme Court's decision on the Sackett case. Legal experts believe the SCOTUS ruling, such as Justice Alito's opinion language that "we hold that the CWA extends to only those 'wetlands with a continuous surface connection to bodies that are 'waters of the United States' in their own right,' so that they are 'indistinguishable' from those waters," will trim the jurisdiction of the EPA to regulate waters under the Clean Water Act to interstate and navigable waters and immediately adjacent wetlands. And that it will be a return to the traditional understanding of what Congress passed in the early 1970s. The Clean Water Act of 1972 gave the EPA the authority to regulate navigable waters in the United States. The decision will mitigate the area of waters that require NPDES pesticide general permits under the CWA—a duplicative and unnecessary regulation due to FIFRA rules and regulations already testing for the safety of pesticides to water and many other environmental criteria before being approved for use.

Report Illegal Drone Applications

NAAA receives constant reports from commercial manned and unmanned aerial application businesses about drone application work that is being conducted outside of the law. NAAA has been told that unregistered drone activities, in addition to allegations that label directions, including required gallons of carrier per acre, active ingredient measurements per acre and boom length limits, are being violated. Professional commercial applicators that apply by air—either as part of a farming business or a separate aerial application business—must be licensed.

A small drone that weighs less than 55 pounds can be flown for work or business if the operator becomes an FAA-certified drone pilot under Federal Aviation Regulations, Part 107. Those requirements, including registering one's drone, may be found **here**.

To operate a drone over 55 pounds, an operator must follow the requirements under 49 U.S.C. 44807, which can be found **here**.

An aerial application—whether manned or unmanned—conducted by a farmer or commercial applicator must also have an agricultural aviation operator certificate under 14 CFR Part 137. Those requirements may be found **here**.

In addition, an aerial applicator, whether manned or unmanned, making a commercial application must be licensed as a professional commercial applicator in the state(s) in which they are operating. A list of the state pesticide enforcement agencies that license commercial applicators may be found **here**. Most states are treating drone applications the same as manned aerial applications, which means drone operators must follow all label instructions in the aerial section of the label, including droplet size, application height and boom length.

Enforcement against an individual or persons violating these provisions can be taken by reporting violations to the state pesticide enforcement officials, found **here**, or the FAA's Flight Standards District Offices, found **here**.

FAA's GA Survey Data Collection for 2022 Entering Final Stretch: Please Participate if Invited

The FAA's annual General Aviation and Part 135 Activity Survey (GA Survey) is entering the final stretch. There are still a few weeks to go, and we need everyone who is invited to participate. If you are selected to participate in the GA Survey, you will receive an email or postcard invitation asking you to complete the survey online. Please participate in the survey if asked!

The survey is for collecting aviation activity for the calendar year 2022. The GA Survey is the only source of information available that provides reliable data on the GA fleet, including the number of aircraft and hours flown. The data is used by the FAA, other government agencies and the aviation industry for a variety of things, including assessing safety and understanding the economic impact of aviation.

The GA Survey is especially critical to the agricultural aviation industry. NAAA uses the results of the GA Survey, in conjunction with NTSB accident numbers, to calculate an overall accident rate and a fatal accident rate for Part 137 operations. This allows NAAA to track and document the safety of the agricultural aviation industry and provide evidence to the FAA and NTSB that PAASS and other safety programs are working to reduce Part 137 accidents. This is especially helpful in the event additional regulations may be proposed.

Participation in the GA Survey is voluntary, but the agricultural aviation industry needs your input if you are selected to participate. For those who chose not to complete the survey online, a mail survey is sent that includes a postage-paid return envelope. The information is confidential and will only be used for statistical purposes; it will not be published or released in any form that would reveal an individual participant. It only takes 10 to 15 minutes to complete the survey.

If you are contacted, please respond to the survey even if you did not fly your aircraft during 2022, sold it, or if the aircraft was damaged. If you own three or more aircraft, there is an abbreviated survey form you can use instead of needing to complete a survey for each aircraft.

About 30% of the total number of GA aircraft are surveyed every year, so you may be asked to participate two or more years in a row. If you have questions, please contact Tetra Tech, the independent research firm that conducts the GA Survey for the FAA, toll-free at 1-800-826-1797 or by email at **infoaviationsurvey@tetratech.com**. Results from prior surveys can be found **here**.

FieldWatch Expands SeedFieldCheck to 3 New States

FieldWatch Inc., a non-profit company that promotes improved communication and stewardship among crop producers, beekeepers and pesticide applicators, has expanded its SeedFieldCheck registry into three new states for the 2023 growing season. With this year's expansion into Minnesota, Ohio and Wisconsin, it is now available in eight states.

SeedFieldCheck integrates into the existing FieldWatch crop and apiary registry and enables seed companies to communicate the location and presence of seed field workers more effectively to pesticide applicators. In 2020, FieldWatch launched the SeedFieldCheck pilot program in Iowa in partnership with the Iowa Seed Association and Iowa Agricultural Aviation Association. In 2021, the SeedFieldCheck registry added four more states: Indiana, Illinois, Michigan and Nebraska. Positive feedback from aerial applicators and seed companies prompted FieldWatch to continue expanding SeedFieldCheck into new states.

"FieldWatch is proud to be a trusted partner in facilitating communication across agriculture," FieldWatch CEO Bob Walters said. "Following SeedFieldCheck's successful pilot launch in Iowa, we're excited for even more member states to benefit from our innovative mapping tools."

SeedFieldCheck enables seed companies to register the locations of their field crews daily. Field managers mark registered fields as "planned" or "occupied" to alert pesticide applicators when there will be crews in the area. The information is available in near real-time, allowing seed companies the ability to edit and update plans quickly, replacing the endless circulation of emails and paper or electronic maps to targeted applicators.

The FieldWatch registries include DriftWatch Specialty Crop Site Registry, BeeCheck Apiary Registry, CropCheck Row Crop Registry and FieldCheck. These free mapping tools can be easily integrated into many technology platforms used in agriculture and enable crop producers, beekeepers and pesticide applicators to work together to protect field workers, specialty crops and apiaries. Learn more about SeedFieldCheck at **fieldwatch.com/seedfieldcheckinfo**.

FieldWatch currently operates registries in 24 states, including Arkansas, California, Colorado, Delaware, Illinois, Indiana, Iowa, Kansas, Maryland, Michigan, Minnesota, Missouri, Montana, Nebraska, New Jersey, New Mexico, North Carolina, Ohio, Pennsylvania, South Dakota, Tennessee, Virginia, West Virginia and Wisconsin. It also has registries in the District of Columbia and the Canadian province of Saskatchewan.

Additional Details

- A more detailed flyer explaining how SeedFieldCheck's seed field worker notification system works is available **here**.
- Aerial applicators must have a free applicator account with FieldWatch to see field locations. To create an account, visit **driftwatch.org/signup#applicator**.
- For more information about FieldWatch or its online registries, DriftWatch, BeeCheck, CropCheck, FieldCheck and SeedFieldCheck, visit **fieldwatch.com**.

2023 NAAA Award Nominations Due Sept. 8

Use NAAA's online awards form to submit a 2023 Award nomination!

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

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 NAAA 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 this summer.

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.

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 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.

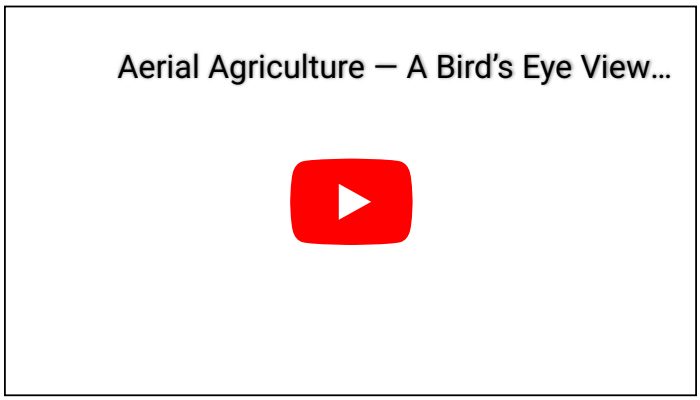
Go Deeper

Learn more about the application process for the 2023 Charles Stokes Memorial Turbine Training Scholarship at **agaviation.org/turbinescholarship**.

NAAA Discusses Manned and Unmanned Ag Aircraft on Business of Agriculture Podcast

NAAA CEO Andrew Moore joined member Bill Reynolds and Taranis's Mike DiPaola as guests on ***The Business of Agriculture Podcast*** hosted by Damian Mason last week. Reynolds is the president and CEO of Leading Edge Aerial Technologies. DiPaola is the chief commercial officer at Taranis, which uses high-resolution aerial imagery to generate AI-powered crop intelligence. Damian Mason is a farmer, businessman, speaker, author, podcaster and consultant. Damian has appeared on television and radio and can also be found on SiriusXM Radio – Laugh USA. He was NAAA's speaker for its 2020 Ag Aviation Expo Kickoff Breakfast. The panel was assembled to discuss the future of manned and unmanned aircraft in the aerial application sector.

Released May 22, the name of the episode is "Aerial Agriculture—A Bird's Eye View of Drones, Manned Aircraft & Tomorrow." Throughout the nearly hourlong episode, Mason and his guests covered several topics, including if manned ag pilots are fearful of being replaced by drones, the regulatory environment for UAS operations, advances in the efficacy of manned and unmanned aerial application equipment, the financial aspects of drone spraying, and more.



Here are selected excerpts, along with timestamps you can skip to in the episode to hear more:

(9:26) Moore, on whether there is a threat of drones replacing manned ag aircraft: "I don't think it's a threat. I think that it's complimentary."

(11:00) Reynolds, on the aerial application niche that drones fill: "Just those specialty locations where I'd like to think we've saved some lives already in some of the areas that are using unmanned aircraft. The rates per acre is really the key to this. A lot of the rates in California are 15 gallons per acre, and a drone's only carrying 5 gallons or 10 gallons at the most. So you're just never going to get the job done. So there's no question the manned aircraft must stay; they will probably be here for my lifetime and maybe my kids' lifetimes. But

those specialty areas that are dangerous or very difficult to get to, [a drone is] absolutely the perfect solution. Trimming up edges of fields, near power lines—just eliminate that from the manned task and make everything safer. It's just a terrific tool."

(19:37) Moore, on the challenges of safely integrating unmanned aircraft into the national airspace: "You probably have 1 ½ million registered drones out there, 1 to 1 ½ million registered drones with the FAA. And you add another 600,000 manned aircraft—you have to have a safe airspace in which to operate. And one of the things that we've been pushing is to ensure always that an unmanned aircraft must give right of way to a manned aircraft. So whether that's technology—having some sort of sense-and-avoid technology that requires that ... that's fine. We don't need someone to actually visually observe as long as it's certified equipment by the FAA that shows that that sense-and-avoid equipment can actually sense and avoid a manned aircraft. So that's something we're pushing along with our other colleagues in … the manned aviation space."

(28:13) Reynolds, on the need for drones to always give the right of way to manned aircraft, especially when manned and unmanned aircraft operations are occurring in the same low-altitude airspace: "I can only speak to the agricultural side of this and applications, and integrating these unmanned aircraft into the national airspace is a very high priority, and is the primary focus on every COA that's submitted to the FAA. We are operating down below 80 feet no matter what we do. So we are mixed up with the Air Tractors and Thrushes and helicopters, and we absolutely agree with giving way to the manned aircraft. We have landed numerous times, and we communicate with aerial applicators that we're going to be out in certain areas, and we file NOTAMs. So we cover the rules, and we back-check ourselves, and it has worked out well. We've never had any close incursion of any kind because of that."

(35:10) Moore, on the evolution and integration of technologies in the aerial application sector: "I foresee, just like you mentioned the see-and-spray from [John] Deer, that you'll have Mike's technology going out [and] doing the initial reconnaissance and shortly thereafter, all that data is being fed to the broader fields; to our manned aerial applicators; into those tight areas to Bill's drones to make those applications. … Definitely, before we celebrate the bicentennial of aerial application, that's going to be happening."

(43:08) Reynolds, on whether buying a drone to conduct spray missions makes sense money-wise: "If I'm gonna spend money to get more yield, how much do I have to spend, and what yield will I lose or gain? I guess that's always the balance in agriculture. So, the investment into unmanned aircraft to get operational is not that tremendous. Typically contractors or people that are using unmanned aircraft are getting a revenue offset back within the first 12 months."

Where to Watch or Listen to the Full Podcast Episode

Watch the May 22 episode of *The Business of Agriculture Podcast* in the video above or wherever you get your podcasts. The video version is also on **Acres TV**, and the audio version of the episode is available on **SoundCloud**.

NAAA Urges EPA to Reject Settlement Adding More Redundancy to NPDES Pesticide General Permit

As NAAA **recently reported**, the EPA is considering a proposed settlement agreement to end a lawsuit brought by the Center for Biological Diversity that alleges the National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit (PGP) reissued by the EPA in 2021 does not comply with the Endangered Species Act (ESA). The proposed settlement requires the EPA to conduct risk assessments for federally threatened and endangered species and their critical habitat for the 2026 PGP update.

In **comments sent to the EPA** on the proposed settlement, NAAA recommended the EPA oppose the settlement because it just adds one more layer of redundancy to an already redundant requirement. All of the pesticides that could be applied under the PGP already require a new registration or registration review that includes risk assessments for ESA species and habitats. Adding the requirement to the PGP only slows the process down and offers no additional safety to threatened and endangered species.

The PGP itself is redundant for the exact same reason—all pesticides that can be applied to areas covered under the PGP have already undergone risk assessment to ensure that they do not cause harm to the environment or people when used according to label instructions. NAAA will continue to work toward eliminating this overly burdensome rule.

U.S. Helicopter Safety Team Schedules Webinar June 7 Focusing on Bird Strikes

The United States Helicopter Safety Team (USHST) will host a webinar June 7 about how pilots can better protect themselves and their passengers from bird strikes and what to do if they occur. The free webinar will begin at 1 p.m. ET. Register **here**.

Bird strikes have been in the news lately because airliners have had several such strikes in recent weeks. Bird strikes, however, are a recurring issue throughout the aviation community, especially among helicopters because rotary-wing pilots tend to fly them at lower levels than other aircraft.

The FAA published a Special Airworthiness Information Bulletin (SAIB) on Sept. 13, 2021, to provide the helicopter community with some strategies to avoid bird strikes. FAA rotorcraft section manager Jorge Castillo will discuss the SAIB during the webinar. He will be joined by Richard Dolbeer, wildlife consultant to the USDA, who will discuss bird migration. A review of bird strike accidents will follow that.

As is typical of many USHST webinars, the event will begin with a 10-minute overview of helicopter accident statistics to illustrate why safety is a paramount priority with the government-industry USHST. Pat Niven of Chevron and Mark Colburn, a retired Dallas police officer,

will follow with a 20-minute overview of USHST helicopter safety enhancement Unmanned Aircraft Systems (drones) in High-Risk Environments. In certain situations, using a drone may provide a lower-risk alternative when compared to a traditionally piloted helicopter, such as transmission and distribution line inspections. The bird strike discussion will then begin.

If helicopter community members have questions or want the bird strike seminar to cover a particular topic, please let the USHST know through its general email at **safety@ushst.org** or contact the organization's communications specialists, Dan Sweet from the Helicopter Association International at **dan.sweet@rotor.org**, or Gene Trainor from the FAA at **eugene.trainor@faa.gov**.

Exhibitor Details for the 2023 Ag Aviation Expo: Booth Sales for Aircraft & Large Booth Space Now Open

Join us for the 2023 Ag Aviation Expo in **Palm Springs, California**, Dec. 4-7. In addition to attending the NAAA Ag Aviation Expo, Palm Springs is full of great restaurants, bars, fun activities, and terrific weather! You can visit the Palm Springs Air Museum, enjoy an off road or BMW driving experience, play golf, visit museums and even gamble at a casino close to the convention center. The area offers many hiking trails and top-notch spas.

Booth Sales for Aircraft & Large Booth Space Now Open: If you plan to bring an aircraft, need a 20'x20'+ island booth, a 10'x30'+ inline booth or plan to be a Diamond or Platinum Sponsor, please contact **Lindsay Barber** ASAP. To ensure the best placement on the trade show floor, we appreciate knowing about aircraft and large booth spaces by the end of April.

The NAAA Trade Show will take place Dec. 5, 12 p.m.-5:30 p.m. and Dec. 6, 10 a.m.-4 p.m. Review the **NAAA Exhibitor Prospectus** and **exhibitor webpage** for further details, pricing and dates. The full schedule of events is available **here**.

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.

NAAA, National Pesticide Stakeholder Groups Meet with Biden Administration USDA and EPA Leaders on Endangered Species Issues

As pressure from environmental activists and federal court decisions has led the Biden administration toward more concrete endangered species protections within its pesticide policies, USDA and EPA administration leaders held a meeting attended by national agricultural and pesticide-user groups to hear their thoughts and concerns. NAAA took part in the May meeting, which was led by the following Biden administration environmental appointees:

- **Robert Bonnie**, USDA Under Secretary for Farm Production and Conservation.
- **Jake Li**, EPA Deputy Assistant Administrator for Pesticide Programs, Office of Chemical Safety and Pollution Prevention.
- **Rod Snyder**, EPA Senior Advisor for Agriculture to the Administrator.

One administration pesticide policy dealing with endangered species protections is requiring filter strips between cropland and endangered species habitat. Pesticide stakeholders raised concerns about the amount of land this could potentially remove from production and the astronomical costs associated with neutralizing such land. NAAA CEO Andrew Moore *(pictured at right)* stated to the administration officials that the label is the law and applicators must ensure that they follow the label; however, it is nearly impossible for a farmer leasing from a landowner, or a commercial applicator to know and ensure that a filter strip is in place.

Moore also emphasized to administration officials that any imposed buffer zones should be wind directional since the law of physics prevents drift from traveling upwind, and commercial applicators, such as aerial applicators, have on-board meteorological equipment that can read wind direction in real time to avoid applying when air movement is moving downwind to a sensitive area.

NAAA will continue to keep the membership aware of these federal pesticide policies.

Pictured at top: ***From L-R, Robert Bonnie (USDA), Jake Li and Rod Snyder (EPA)***

NAAA Submits Comments Opposing Changes to Application Exclusion Zone

Last month NAAA submitted comments to the EPA opposing its reconsideration of the application exclusion zone (AEZ). NAAA **previously reported** on these proposed changes to the AEZ in April. The AEZ is part of the 2015 Worker Protection Standard (WPS) revision and has gone through several iterations since first being proposed by the EPA under the Obama administration. Its initial iteration extended the AEZ to areas outside of the agricultural establishment on which the application is being made and to easements on the establishment. Shortly thereafter, political pressure resulted in the AEZ being altered in a more reasonable manner for agricultural interests. Unfortunately, this latest version mostly reverts back to the original AEZ rule due to court rulings in the Northeast brought forth by nongovernmental organizations.

Again, NAAA's comments opposed extending the AEZ to areas outside the agricultural establishment on which the application is being made and to easements on the establishment. In both cases, neither the applicator nor the grower can control the movement of people, allowing them to prevent an application from occurring.

NAAA also suggested that the EPA allow an application to resume once the applicator determines it is safe to do so, not just when the person leaves the AEZ. The AEZ is essentially a circular, 100-foot buffer zone that moves with the ag aircraft, so NAAA again recommended the AEZ be based on wind direction stating to the EPA that a person within the AEZ but off the agricultural establishment and upwind of the application is not at risk from drift due to the laws of physics.

Finally, NAAA reminded the EPA that the AEZ rule is completely redundant and unnecessarily burdensome. Pesticide labels and existing WPS rules already prohibit applicators from exposing anyone, be it a worker on the establishment or a bystander passing by on a road, to direct spray or spray drift. Adding an additional level of bureaucracy does not offer any additional benefits and can be used by activists to stop applications.

NAAA's final comments on the reconsideration of the AEZ are available **here**.

NAAA Working to Protect Aerial Applications of Carbaryl and Methomyl

Last month NAAA submitted comments to the EPA on the National Marine Fisheries Service's (NMFS) biological opinion (BiOp) on carbaryl and methomyl. A BiOp is part of the pesticide registration review process involving the consultation between the EPA and the NMFS (it can also include the Fish and Wildlife Service depending on the species involved) to ensure the pesticide undergoing registration review does not cause harm to endangered species or their habitat.

The BiOp discussed using buffer zones next to water bodies for both aerial and ground application. NAAA once again recommended the buffers zones be wind-directional so that they could be sprayed in their entirety when the wind was blowing away from the water body. NAAA also noted that the EPA itself suggested the use of wind-directional buffer zones in their recently released proposed interim decision **(PID) for carbaryl**.

Unfortunately, the BiOp also referenced a proposal to ban all aerial applications of carbaryl except for grasshopper control. This proposal was not in the PID, so NAAA inquired as to where it was made. The EPA referred NAAA to an appendix in a draft evaluation that was released at the same time as the PID which indicated this proposal came from carbaryl registrants. Regardless, NAAA objected to this restriction, pointing out that pest resistance and unusually wet weather can both result in an increased need for aerial application of carbaryl. NAAA also cautioned the EPA against similar proposed restrictions on the aerial application of methomyl, which recently went through a **PID revision**.

NAAA also reminded the EPA that all of the risk assessments being used to justify buffer zones and restrict usage of aerial application are based on the erroneous Tier 1 model in AgDRIFT. The next step in the process is for NMFS to consider the comments before issuing their final BiOp. NAAA will continue to monitor the registration review for both carbaryl and methomyl and fight for aerial application to remain an option for growers.

NAAA's full comments on the carbaryl and methomyl BiOp can be read **here**.

NAAA Member Tim Bonnell Jr. Authors New Book on 'Aerial Application Insurance Fundamentals'

NAAA member Tim Bonnell Jr. has written a brand-new book designed to help aerial applicators understand the complexities of aerial application insurance.

Aerial Application Insurance Fundamentals: A Concise Guide for Aerial Application Operations is a practical reference for navigating the key fundamentals of property and casualty insurance for aerial application operators. Readers will learn how aerial application insurance is unique from other areas of insurance, what affects aircraft insurance rates, how to read an aircraft insurance policy, and how an aircraft insurance underwriter determines premiums.

One of Bonnell's goals in writing the book was to help readers better understand key exposures and insurance solutions that an aerial application operation will face. "Aerial application insurance is complex, and there isn't a comprehensive resource available for aerial applicators to learn more about their insurance exposures and coverages. This book was written to give aerial application insurance buyers as much pertinent information about aerial application insurance in as concise a manner as possible," he said.

Bonnell is the president and CEO of Aeris Insurance Solutions and a second-generation aviation insurance broker. He is also a longtime contributor to *Agricultural Aviation* who has written numerous insurance-themed articles for the magazine on the NAAA Insurance Committee's behalf.

More information about Bonnell's book can be found at **aerisinsurance.com/book**. It can be purchased in print and as an eBook on **Amazon.com**.

FAA Issues Airworthiness Directive for Ag Cats with TPE331 Engines

The FAA has issued an airworthiness directive (AD) for Ag Cat G-164A and G-164B aircraft that have a Honeywell TPE331 series engine installed. This AD requires the installation of a secondary retention feature (bolt, washer and safety wire) between the aircraft's propeller pitch control (PPC) linkage and the engine's PPC assembly to prevent loosening and possible detachment.

This AD is effective June 21, 2023, and requires compliance prior to June 21, 2024. Honeywell issued a **letter** detailing how to install the secondary retention feature in 2011 *(see photo below)*.

NAAA previously reported on this issue in **June 2022** and **October 2021**.

View the full AD **here**.

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.

Ag Aviation Expo Sponsorships Available: Boost Your Company's Brand!

Join us for the **2023 Ag Aviation Expo** in Palm Springs Dec. 4-7. **Sponsorship sales** are open for this year's convention. Branding at the Ag Aviation Expo is a great opportunity to get your message in front of the agricultural aviation industry and reach a targeted and nationwide audience of aerial applicators in North America—an audience responsible for applying 28% of crop protection products to commercial cropland in the U.S.

Get your company name in front of the expected 1,500-plus operators, ag pilots and other attendees directly related to the agricultural aviation industry through an Ag Aviation Expo sponsorship.

Six reasons why you should be a sponsor at the 2023 NAAA Ag Aviation Expo:

1. A targeted audience will see your company's name and/or logo.
2. Sponsorship enhances your company's credibility and rapport.
3. You will gain brand awareness and recognition.
4. You will generate new sales and/or leads and potential business partnerships.
5. You can drive attendees to your booth and message through your sponsorship.
6. According to a post-convention survey, 75% of aerial applicators stated that they would be "very likely" to use the products and services of a company that sponsors an event at the Ag Aviation Expo. View **sponsorship opportunities here**.

By becoming a sponsor, attendees will:

- Remember your company, services and products.
- See you as a supporter of the ag aviation industry.
- Recognize your brand.
- See you as a partner and industry visionary.
- Hold you above others in purchasing decisions.

For more information, contact **Lindsay Barber** by email or phone at (202) 546-5722.

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.

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**.