

# NAAA eNewsletter

## NAAA's 'Agriculture's Air Force' Book Gets Library Love

To mark 100 years of aerial application, Lilly Paxton, Jane Barber-Pitlick's granddaughter, donated a copy of [Agriculture's Air Force: 100 Years of Aerial Application](#) to the Sully Area Library in Odina, South Dakota.

Jane chairs NAAA's Support Committee. Lilly (pictured at right) made this donation with the hope that local residents will learn more about the agricultural aviation industry and be inspired to take an active interest in how agricultural aviation has advanced over the years in sustaining food, fiber and bioenergy in the U.S. Order *Agriculture's Air Force: 100 Years of Aerial Application* for yourself, customers and your local library at [AgAviation.org/book](https://AgAviation.org/book).

## Top 10 Agricultural Aviation Magazine Articles of 2021

From a profile introducing 2021 NAAA President Mark Kimmel to several articles focusing on various aspects of the agricultural aviation industry's 100th anniversary, here are the top 10 digital articles from *Agricultural Aviation's* 2021 issues based on the most viewed articles at [AgAviationMagazine.org](https://AgAviationMagazine.org) and the [Agricultural Aviation Magazine App](#) in 2021.

1. **Century Mark – Winter 2021**  
*Mark Kimmel of Mississippi is NAAA's 2021 President on agricultural aviation's 100th anniversary*
2. **Pulling Together – Spring 2021**  
*2021 NAAA President Mark Kimmel, on pulling together, during and after the pandemic*
3. **Agricultural Aviation from Infancy to Adolescence – Spring 2021**  
*In the dawning days of agricultural aviation, pioneering pilots, researchers and engineers cultivated an invaluable new industry*
4. **The Next 100 Years: If You Can Keep It – Spring 2021**  
*NAAA CEO Andrew Moore, on selflessly pursuing the greater good to be a moral, well-respected industry*
5. **The Watchful Eye and Helping Hands of Matt Hovdenes – Winter 2021**  
*Brian Rau, on 2020 Outstanding Service Award recipient Matt Hovdenes*
6. **Aircraft Boom Propels Agriculture's Air Force – Spring 2021**  
*Between excess warplanes and new aircraft models, ag aviators' aircraft options expanded immensely in the '40s and '50s*
7. **100 Years – Winter 2021**  
*2021 President Mark Kimmel reflects on 100 years of ag aviation*
8. **Introspection – Spring 2021**  
*NAAREF President Matt Hovdenes gets introspective*
9. **Perspective – Summer 2021**  
*President Kimmel puts the aerial application industry's centennial into perspective*
10. **Washington Report – Spring 2021**  
*Unmanned and manned aircraft traffic deconfliction continues to evolve*

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

## Get the Free Agricultural Aviation App

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

## Give the Gift of Agricultural Aviation

Want to go a step further? As NAAA continues to mark the agricultural aviation industry's 100th anniversary in 2022, spread the gospel of the industry to your farmer-customers by giving them a [gift subscription to Agricultural Aviation](#), the official publication of NAAA! NAAA members automatically get a complimentary *Agricultural Aviation* subscription with their membership, but additional subscriptions may be purchased for employees, customers, suppliers and local schools.

## Syngenta Offering Update and Aerial Application Training Sessions in March

2021 was a busy year for the aerial application of fungicides. As we prepare for another busy season in 2022, Syngenta is hosting an update and training session on its products. Join subject matter experts Dr. Tyler Harp, Fungicide Technical Product Lead with Syngenta, and Dr. Brad Fritz, Agricultural Engineer with the USDA Aerial Application Technology Research Unit, College Station, Texas, as they review the 2021 season and discuss application best practices for optimum disease control.

Topics will include:

- Fungicide Review
- Aircraft Setup: Booms and Nozzles
- Swath Width
- Spray Volume Guidance
- Common Aircraft Setup Errors

Two aerial application training sessions are being offered:

**Audience:** [Fixed-Wing Registration](#)

**Date:** Tuesday, March 15

**Time:** 8 a.m. CST

**Audience:** [Helicopter Registration](#)

**Date:** Wednesday, March 16

**Time:** 8 a.m. CST

Upon completion of registration, you will receive an email with personalized login details and an option to save the event to your calendar. The call will require a passcode listed within the email, and you will also receive reminders one week, one day and one hour before the event.

## NAAA and NAAREF Board Meetings Begin Today

The February 2022 NAAA & NAAREF Board and Committee meetings begin today in Fort Worth, Texas, and continue through Saturday evening. Click [here](#) to view a schedule. All meetings are open to NAAA members.

## Meeting Location Details

**Kimpton Harper Hotel**

**714 Main Street**

**Fort Worth, TX 76102**

Click [here](#) for a hotel map.

## Membership Grace Period Ended Feb. 15; Renew Your Membership Today

Thank you for your support as a 2021 member! If you have not yet renewed, your membership grace period ended Feb. 15. Don't miss out on the valuable and exclusive news and information found in the weekly NAAA eNewsletter. Renew for 2022 online or at (202) 546-5722 today.

You can renew [online](#) today or over the phone at (202) 546-5722. As a member of NAAA, you associate with the best and brightest in the agricultural aviation industry and your support is imperative in helping us accomplish our initiatives and celebrate industry milestones. NAAA has spent the past couple of years gearing up to help the industry celebrate 100 years in 2021 and continuing into 2022!

- NAAA developed a 100th anniversary campaign and large public relations effort, including:
  - The long-awaited *Agriculture's Air Force: 100 Years of Aerial Application* book, which is 268 pages and covers 10 decades of industry history (purchase it [here](#)).
  - 100th Anniversary [website](#).
  - 100th Anniversary timeline [online](#) and that you can [purchase](#) for your operation and/or events.
  - **Documentaries:** [2-minute video](#), [8-minute documentary](#) and a comprehensive [19-minute documentary](#).
  - NAAA has helped the industry celebrate the 100th anniversary at [AirVenture 2021](#) in Oshkosh, Wisconsin; the [Aug. 3 centennial celebration](#) in Leesburg, Virginia; ["Innovations in Flight Family Day"](#) at the National Air and Space Museum's Udvar-Hazy Center in Chantilly, Virginia; and the [National Agricultural Aviation Museum events](#) in Jackson, Mississippi.

## Additional important NAAA membership benefits:

- Discounts on NAAA attendee and exhibitor fees for the 2022 Ag Aviation Expo in Knoxville, Tennessee, Dec. 5-8. It is four days packed full of sun, fun, education sessions where you can earn CEUs and tons of networking!
- [Legal services](#) on Federal Transportation Laws to NAAA Operator and Pilot Members.
- NAAA provides proof of distance needed to safely turn an ag aircraft to refute claims made by wind farms, towers and other obstructions. [Read more](#).
- You'll receive the 2022 NAAA Membership Directory in May. It is your one-stop shop where you can find professional members that might be looking for help or offering help and a plethora of qualified allied services in the industry.

- Stay up to date on the latest issues affecting your profession through the NAAA eNewsletter, *Agricultural Aviation* magazine, our social media accounts and exclusive member resources online such as our Media Relations Kit.

NAAA is dedicated to protecting and advancing the needs of the industry by improving the public's perception of the aerial application industry and spearheading the industry's environmental stewardship and safety initiatives.

We appreciate your membership as it will help us continue to fight and win to keep aerial application as an essential service during the current global pandemic and on important issues like unfair user fees and taxes; requiring tower marking requirements; and ensure the safe integration of drones into the national airspace; and advocating that the EPA keeps a healthy inventory of crop protection products for aerial use without unnecessary restrictions. **Your membership helps us better represent your interests.**

## NAAA Comments on Biden Administration's Redefinition of the Clean Water Act's Waters of the U.S.

NAAA submitted **comments** last week on the EPA and Army Corps of Engineers' (Agencies) proposed redefinition of a Waters of the U.S. (WOTUS) within the Clean Water Act. The proposed rule, in essence, reincarnates the 2015 Obama administration's definition of a WOTUS, expanding the definition to include ephemeral waters, or temporary waters with no nexus to navigable waters, thereby adding additional complexity and confusion for aerial applicators grappling with NPDES pesticide general permit requirements.

Some of the detrimental parts of the proposal and **NAAA's response** to those proposals and recommendations to the definition of WOTUS to the Agencies are as follows:

- Since the 2009 decision in *National Cotton Council v. EPA*, aerial applicators nationwide have been subjected to CWA National Pollution Discharge Elimination System (NPDES) permits for any pesticide applications into, over or near WOTUS. Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), pesticides are only approved for use in the U.S. following a rigorous scientific review to ensure that any approved uses do not pose unreasonable risks to humans or the environment, including aquatic ecosystems. NAAA firmly contends NPDES permits are an unnecessary and duplicative regulatory burden for applications of pesticides approved for use under FIFRA. NPDES permit requirements have created additional costs and reporting burdens for aerial applicators, as well as the threat of legal jeopardy from CWA citizen suits for presumed permit violations. The additional liability has prompted several NAAA members to refrain from accepting contracts for services that fall within the NPDES permitted universe. NAAA continues to advocate for legislation that would eliminate CWA permitting for the application of FIFRA-approved pesticides.
- First, the final WOTUS rule should include clear jurisdictional lines and definitions. Aerial applicators, and the farmers and landowners that hire them to perform services critical to agricultural and public health, need a clear rule that will make it practicable in most circumstances for a layperson to discern whether a particular feature is a WOTUS. The proposed rule contains ambiguous and potentially overly expansive definitions that call into question features outside the bounds of CWA jurisdiction/WOTUS, including ephemeral features which only flow in response to a rain event, isolated wet areas, and other waters that are remote from any traditionally jurisdictional waters. In this regard, the CWA's definition of "tributary" as a water feature having the physical indicators of a bed, bank and ordinary high water mark is particularly problematic for aerial applicators, farmers and others in the CWA regulatory community. Unless clarified, the "tributary" definition would erode the CWA's traditional statutory exemptions for farming activities and agricultural stormwater and irrigation water, given that common land features, such as gullies, ephemeral drains and ditches, may often exhibit a bed, bank and ordinary high water mark that meet the definition of tributary.

Additionally, in vast areas of the arid west and southwest, it is common for erosional features, including gullies, rills and other ephemeral features, to display the physical characteristics of a tributary after a single rain event, and they may only contain flowing water a few times of the year. For aerial applicators, the implication that every ditch, gully and ephemeral stream on a farm may be a jurisdictional tributary brings into question whether every farm would require a CWA NPDES permit for aerial spraying. This regulatory uncertainty would hinder timely pesticide applications vital to crop protection and public health and result in farmers and landowners having to hire expensive consultants and environmental engineers to provide determinations on whether ephemeral and erosional features meet the definition of WOTUS.

- A WOTUS definition that leaves substantial room for case-by-case expert determinations of federal jurisdiction would unduly burden the aerial application industry and the farmers and landowners that hire them to perform timely and critical crop protection services. The Agencies should ensure that key terms and concepts are clear and foster consistent and practicable implementation across the U.S. The agriculture sector needs regulatory certainty to continue to produce affordable food, fiber and biofuel relied on by all Americans.
- Ephemeral features, which only carry water temporarily in response to rainfall, serve as natural drains on agricultural land and should be excluded from the revised WOTUS definition. Likewise, agricultural ditches—a ubiquitous component of farmland infrastructure—should be excluded. NAAA also recommends excluding stormwater control features (e.g., roadside ditches), which collect and convey stormwater, as well as manmade features such as irrigation ponds and canals and retention ponds/basins. NAAA also urges the Agencies to consider input offered on exclusions provided by others in the agriculture sector.
- Lastly, let the Supreme Court weigh in before finalizing WOTUS. On Jan. 24, the **U.S. Supreme Court announced** that it would hear arguments in *Sackett, et ux., v. EPA, et al.* This case has the potential to considerably impact the regulatory landscape on this issue. For this reason, NAAA encourages the Agencies to adjust their work schedule so as to not finalize a new WOTUS definition until after an opinion has been issued on this case and the Agencies have had sufficient time to analyze it and incorporate it into a new proposal. Although this may impact the regulatory timeline, it is likely to greatly reduce wasted and duplicated effort on the part of the Agencies and the entire stakeholder community, reduce regulatory uncertainty and significantly increase the chances of the final definition being durable.

Years of rulemaking and court challenges over several administrations have created a great deal of confusion over which waters are subject to federal regulation. Currently, EPA and the U.S. Army Corps of Engineers are interpreting "waters of the United States" (WOTUS)

consistent with the pre-2015 regulatory regime until this 2021 proposal is promulgated. In 2015, the Obama administration's EPA and Army Corps of Engineers (the Corps) finalized a Clean Water Rule to revise the definition of WOTUS. The rule federalized many thousands of minor waters, canals, ditches and other manmade conveyances that are insignificant or likely already protected by state laws. The rule expanded the CWA's reach and federal enforcement to include generally dry or seasonally dry "ephemeral tributaries," neighboring waters "adjacent" to such tributaries, and many other newly jurisdictional flows to be covered by pesticide general permits and other policies. These provisions, as well as citizen suit vulnerabilities, would have required additional consideration by aerial applicators when they accept pesticide application contracts. The Obama rule focused on minor waters and included many manmade, man-altered and natural non-navigable waters and seasonal conveyances that were either not previously jurisdictional under the CWA or were jurisdictional only after a case-by-case determination by the Corps.

On Feb. 28, 2017, President Trump issued an executive order directing the EPA and the Corps to rescind and replace the rule. In late 2018, the Agencies released their joint proposal to replace the WOTUS definition. The 2018 proposed WOTUS definition included more bright lines that would have made it easier for aerial applicators and their landowner customers to determine which water features are WOTUS and thus require CWA permitting, including NPDES permitting for aerial spraying. NAAA has responded with comments to all of these federal actions and will continue to keep you informed of the Biden administration's stab at rewriting the Clean Water Act's definition of a WOTUS.

## House Committee Holds Hearing on 5G Deployment Effects on Safety, NAAA Weighs in with Panel on Safety Concerns

On Feb. 3, the House Subcommittee on Aviation held a hearing entitled "Finding the Right Frequency: 5G Deployment and Aviation Safety." During the hearing, members had the opportunity to hear from the FAA and other aviation interests and discuss the impact that deployment of 5G technologies might have on aviation safety.

Chairman Rick Larsen (D-Wash.) levied criticism against cell service providers for failing to coordinate the rollout of its new 5G service with airlines, the FAA and other stakeholders in the aviation industry. Ranking Member Sam Graves (R-Mo.) accused both the FAA and FCC of playing a waiting game rather than communicating to take care of the issue. The result was a rollout that had many airlines canceling flights over concerns that 5G signals may interfere with plane navigating in low-visibility areas.

The FCC has agreed to pause using 5G technology until the signal strengths and tower locations can be approved by FAA safety measures. Currently, the FAA has other protocols in place to allow the FCC to keep their towers in place but not turned on. These expire on Feb. 25, but FAA Administrator Dickson believes that they will have more up-to-date data by then to clearly outline a plan for 5G.

The 5G transmissions of concern to airlines' GPS equipment is not expected to interfere with GPS systems equipped on ag aircraft due to differences in the technology; however, NAAA used the hearing to bring questions forward to the FAA, via congressional members on the subcommittee, to register concerns with the FAA over its delay in promulgating a rule that was part of the enacted 2018 FAA reauthorization law. The rule requires towers in rural areas between 50 and 200 feet high and 10 feet or less in diameter to be marked or logged into a public database developed by the FAA, or both. With broadband infrastructure moving into rural communities, particularly after the recently enacted infrastructure bill, the presence of towers is expected to grow.

NAAA also registered its [concerns about the Ligado 5G signal](#), not yet online, which is also expected to disrupt GPS signals.

The full hearing can be found [here](#).

## USDA Announces \$1 Billion to Farmers Combating Climate Change, Such as Using Cover Crop, No-Till Practices, Etc.

The Agriculture Department (USDA) recently announced \$1 billion in funding for a program aimed at helping farmers and forest landowners combat climate change by sinking more carbon into the ground. The program, Partnership for Climate Smart Commodities, will use funding from the Commodity Credit Corporation to establish climate pilots across the country—a major step in the Biden administration's push to leverage agriculture as part of the solution on climate change. According to the EPA, the sector contributes about 10% of the country's overall emissions.

The overall goal of the climate pilots is to implement climate-smart conservation practices on working farms and forests (such as no-till, cover crops, rotational grazing, reforestation) and then actually measure and verify the climate benefits of those practices, whether it's sinking carbon into soils, capturing methane or releasing less carbon dioxide into the atmosphere. The third component is to "develop markets and promote the resulting climate-smart commodities," per the USDA's announcement.

The USDA defines a "climate-smart commodity"—a relatively new term—as an "agricultural commodity that is produced using agricultural (farming, ranching or forestry) practices that reduce greenhouse gas emissions or sequester carbon." Climate-smart marketing claims are already starting to pop up on food packages, along with other climate-related claims, such as low-carbon or carbon positive. The department appears to be going down a road of trying to formalize some of these claims so they have legitimacy and so farmers can potentially benefit from premium prices.

Funding will be available in two rounds. The first round, due April 8, will focus on larger projects worth over \$5 million. A second round, due May 27, is for smaller projects that cost \$250,000 to \$5 million. A broad range of entities is eligible to apply, from state and local governments to commodity groups, businesses and tribal governments and nonprofits.

Over the past year NAAA has detailed to the USDA how aerial application is already a commonly used climate-smart farming practice. Using data presented at the 2020 Ag Aviation Expo by Dr. Senarath Dharmasena and data from the 2019 NAAA Operator Survey, NAAA calculated that the efficacy and timeliness of aerial applications protect 27.4 million acres of land from being converted into farmland every year. This protection occurs because of the higher yield benefit of aerial application, which would require additional cropland to make up the yield loss if aerial application was no longer an option. NAAA has also communicated to the agency that aerial application provides four times the productivity of ground rigs for conventional broadcast applications and 30 times the productivity of airblast sprayers for orchard applications. NAAA explained how this superior productivity helps to manage pesticide resistance and increase the efficiency of pesticides. The latest climate change research shows that increasing pesticide efficiency helps farmers adopt reduced tillage systems that can lower carbon dioxide in the atmosphere.

Precision agriculture also increases the efficiency of pesticide applications, and the numerous precision agriculture technologies used in aerial application, including GPS, flow control systems, prescription mapping and onboard weather monitoring, have been explained to the agency.

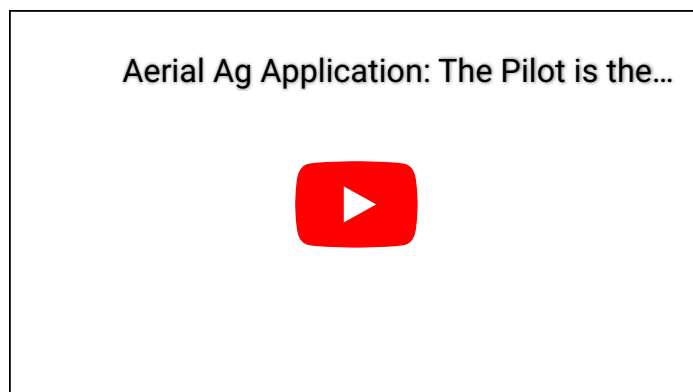
The other big contribution aerial application makes to improving the environment is by seeding cover crops. The cover crops seeded by aerial applicators sequester 1.9 million metric tons of CO<sub>2</sub> annually, which would be the equivalent of removing approximately 412,000 cars with carbon-combustion engines from the roads each year. Climate change research has shown that growing cover crops on an additional 15% of U.S. cropland would further sequester 11.9 million metric tons of CO<sub>2</sub> equivalent annually. NAAA has pointed out to the agency that because aerial application of cover crops can occur while the cash crop is still standing, it offers a significant advantage over ground seeding in terms of establishing a healthy cover crop.

## Arizona Farm Bureau Calls Aerial Applicators Heroes

The Arizona Farm Bureau recently paid homage to ag pilots in its official publication and a video on its website. In an article titled **“Aerial Ag Application: The Pilot is the Hero,”** *Arizona Agriculture* stated, “Serving the agriculture and forestry sectors for 100 years, America’s aerial application industry of piloted aircraft is still the truest means of getting it done big, fast, and right.”

“Aerial application professionals [pilots] are often underappreciated; all they do to prepare, to be licensed, the concerns they face, the technology they use and so much more,” Jack Peterson, the associate director of the Arizona Department of Agriculture’s Environmental and Plant Services Division, told *Arizona Agriculture*. “Knowing all that these applicators must contend with and know, the outdated term of endearment no longer fits. They are not ‘crop dusters,’ they are professional aerial applicators,” he added.

Like the article, the Arizona Farm Bureau’s corresponding video on aerial applicators is replete with industry facts and talking points from NAAA. Watch it below.



## FAA’s GA Survey Data Collection for 2021 Now Underway

The FAA’s annual General Aviation and Part 135 Activity Survey (GA Survey) is officially underway. The survey is for reporting on activity for the calendar year 2021. 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 in the GA Survey, you will receive an email or postcard invitation asking you to complete the survey online. 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.

Please respond to the survey even if you did not fly your aircraft during 2021, sold it or if the aircraft was damaged. If you own three or more aircraft, you can use an abbreviated survey form instead of completing 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 conducting the GA Survey for the FAA, toll-free at 1-800-826-1797 or by email at [infoaviationsurvey@tetratech.com](mailto:infoaviationsurvey@tetratech.com).

## Robinson Helicopter R66 Type Certificate Change Comments Requested

Robinson Helicopter Company (RHC) has applied for a change to the Type Certificate (No. R00015LA) for the Model R66 helicopter. This change incorporates a pressure fueling system in the Model R66 helicopter. The RHC Model R66 helicopter, a derivative of the earlier models of the Model R66, is a part 27 normal category helicopter. It is a single turbine engine helicopter with a four-passenger capacity. It has a maximum gross weight, with no external load, of up to 2,700 pounds depending on the model configuration.

This modification would provide faster, easier and safer refueling when the engine is running and the rotors are turning than the existing fueling system located on the top of the main fuel tank. To view the special conditions or to comment, click [here](#). The comment period ends March 7.

## NAAA Participating in Ag Day on the Mall in March

NAAA will be exhibiting at Ag Day on the Mall to celebrate National Ag Day on March 21-22. The event will take place on the National Mall in Washington, D.C., near the [Smithsonian Metro stop](#) between the Capitol building and the Washington Monument.

Ag Day on the Mall is a celebration of modern agriculture that will feature more than 20 exhibiting associations and companies from grower to applicator groups to ag equipment manufacturers and is being organized by the Association of Equipment Manufacturers. The event will feature hands-on displays of modern equipment and technology for the public to learn how the latest ag equipment, crop inputs, data and technology work together to drive agriculture's tradition of producing more with less. Key policymakers from the executive and legislative branches will be attending the events and exhibits as well.

NAAA is excited to have a Bell OH-58 helicopter and staff from Helicopter Applicators Inc. in Gettysburg, Pennsylvania, at Ag Day on the Mall. Our booth space will also feature a recirculating pump so that attendees can see how aerial application spray nozzles work, as well as the 100th anniversary timeline panels.

Thank you to Glenn Martin for providing the aerial application equipment and to his staff, Joe Stambaugh and Brock Heffner, who will be assisting in the booth space.

## NAAA Participates in Federal Listening Session on Endangered Species Pesticide Issues

NAAA participated in a public listening session on issues related to endangered species and pesticides in late January. The listening session was held by a federal interagency working group (IWG) working on improving the consultation process between the numerous federal agencies involved with ensuring registered pesticides don't harm endangered species, as required by the Endangered Species Act (ESA). The IWG was created under the 2018 Farm Bill and consists of five federal agencies: the White House Council on Environmental Quality, the Department of Agriculture (USDA), the Department of Commerce, the Department of the Interior and the Environmental Protection Agency (EPA). The session was intended for the IWG to hear from public stakeholders interested in improving the ESA consultation process to gather information to develop potential remedies.

NAAA offered public comments on two of the three questions the IWG is seeking perspectives on. The first question was, "How could pesticide mitigation measures for ESA species be adopted and implemented in a timely and effective manner?" NAAA answered the question by reiterating points made to the EPA over the last several years on improving the AgDRIFT modeling process used to assess the risk to endangered species and the environment overall from aerial applications. NAAA stated that all pesticides with an aerial label should require a minimum droplet size of medium, require a maximum boom length of 75% of wingspan for fixed-wing aircraft and 85% of rotor diameter for helicopters, prohibit applications during an inversion, and require a minimum upwind swath displacement of half the swath width on the downwind side of the application site.

AgDRIFT modeling using the Tier 3 model should include these label restrictions, as well as base the model on an application to a standing crop, not bare ground, and a wind speed measurement height appropriate for an aircraft, not a ground rig. A more accurate model of the potential drift from aerial applications will reduce the modeled risk to endangered species, which is currently overinflated due to the use of the inaccurate Tier 1 model in AgDRIFT. If the risk assessments are more accurate in the first place, less mitigation will be needed during the consultation between the federal agencies involved.

The second question that NAAA responded to was, "What are other priority actions the IWG should consider pursuing to improve the pesticide consultation process?" NAAA used its 90-second opportunity to answer this question by informing the IWG about the environmental benefits of using aerial application. NAAA described how the speed, timeliness and lack of disturbance to the crop results in a yield increase from aerial applications compared to other forms of application. This yield increase protects 27.4 million acres of forests and other natural lands from being converted into cropland annually. The cover crops seeded by aerial application reduce 1.9 million metric tons of CO2 equivalent annually. NAAA relayed the importance of aerial application to agriculture, forestry and public health by

providing the number of acres treated annually by air for these types of applications. NAAA concluded by informing the IWG that the aerial application industry provides a value of \$37 billion to the U.S. economy for corn, soybean, wheat, cotton and rice crops alone.

Numerous other organizations and companies also provided public comments during the hearing, including Corteva Agriscience, Oklahoma State University, the American Farm Bureau Federation, CropLife America, Syngenta Crop Protection, the National Pest Management Association, the American Soybean Association, the National Corn Growers Association, the Georgia Cotton Commission, the USDA Forest Service, the Center for Biological Diversity and the American Bird Conservancy. NAAA will continue to monitor the ESA consultation process to ensure that inaccurate risk assessments caused by poor modeling do not threaten the ability to apply pesticides by aerial application.

## Operation S.A.F.E. Analyst Training Opportunities

If you are interested in receiving training toward becoming a NAAREF-approved Operation S.A.F.E. analyst or technician, several opportunities are coming up in 2022. Dr. Dennis Gardisser of WRK of Arkansas will be conducting several Operation S.A.F.E. fly-in clinics over the next few months and has offered anyone interested in becoming an analyst or technician the opportunity to join him at a clinic to assist. You will learn how to operate the flight line and pattern analysis equipment and get real-life experience analyzing patterns from agricultural aircraft.

Dr. Gardisser will be conducting Operation S.A.F.E. clinics at the following locations and dates (subject to change due to weather). Please contact Dr. Gardisser at (501) 676-1762 or [dgardisser@wrkofar.com](mailto:dgardisser@wrkofar.com) for specific details.

- March 22-24; AR (multiple locations)
- March 28-29; Gould, AR
- April 11-15; SD (multiple locations)
- May 11-12; Park Rapids, MN
- May 13-14; Sterling, CO

Click [here](#) to learn more about the Operation S.A.F.E. program. Analyst qualifications can be found [here](#).

## Update Your Information for 2022 Member Directory

Have you moved or changed employers since you renewed your NAAA membership? Allied companies, have you reviewed your company description lately? Ensure your listing in the 2022 NAAA Membership Directory is correct today by logging into your account. If any information has changed, please let us know right away. You can provide your information by:

- Updating your information at [AgAviation.org](https://AgAviation.org). Log in using your username and password and update your information under My Profile.
- Emailing your changes to [information@agaviation.org](mailto:information@agaviation.org).
- Responding to the letter or email that you will receive in a couple of weeks.
- Faxing your changes to (202) 546-5726.
- Calling the NAAA office at (202) 546-5722.

Updated information was due by Jan. 25 to guarantee accurate inclusion in the 2022 NAAA Membership Directory.

## We All Have a Telling History: Use Yours and NAAA's Materials to Broadly Communicate Agricultural Aviation's

*By Andrew Moore, NAAA CEO*

If you are an active citizen in the world of aerial application, don't be a static audience member during this epic centennial event. Take the stage with us and bring out your inner thespian as we enunciate the gospel of agricultural aviation to the public.

History is not just documenting famous or infamous people, times and events. We all have a history—a story to tell about ourselves that can contribute to the next and future generations' betterment. One could also believe that sharing our history is one of the meanings of life—to improve and evolve our world by sharing the key to living a good life and sharing the hazards and obstacles that may hinder such living.

NAAA has reached the climax in the centennial epic of sharing our industry's history to the public, which of course was Aug. 3, 2021. But just because the official centennial anniversary date is behind us doesn't mean all efforts to share the importance of our industry to the public have passed you by. We will be celebrating the centennial of agricultural aviation for an entire year. We continue to reach out to policymakers, our brethren in the fields of agriculture and aviation, to the trade press, to the public and to the national news media. We continue to share our history of improving the cultivation of food, fiber and bioenergy consumed globally and how we've learned from harrowing experiences and evolved technologically to fine-tune our craft, use less product to cover more acres and better care for Mother Earth. We are continuing to use all types of media to educate the public—three different length video documentaries, a comprehensive book of our history, social, print, trade and news media releases and a special website, [AgAviation100.com](https://AgAviation100.com), to share the 10-decade story of ag aviation and we will continue to do so through July of 2022.

If you are an active citizen in the world of aerial application—whether an operator, pilot, crew member, service-parts-equipment provider or related tangentially to the industry in another way—don't be a static audience member during this epic, year-long centennial event. Take the stage with us as we enunciate the gospel of agricultural aviation to the public. Inform your local television stations, newspapers and radio stations about the industry's 100th anniversary, even if it is by simply directing them to [AgAviation100.com](https://AgAviation100.com). On that site, there is a "Get Involved" tab with a draft press release about the 100th that discusses the importance of the industry, its progressive evolution, and

directs readers to [AgAviation100.com](https://www.agaviation100.com) to learn more. Feel free to cater that press release to your own operation and experience and send it to your local news outlets.

You can also brush up on the ag aviation script about the importance of ag aviation, environmental safeguards that are common practice today and other industry talking points on NAAA's media relations kit webpage that may be found [here](#).

The media relations kit also includes suggestions on how to best communicate to the media and public when espousing ag aviation's significance. If you don't feel comfortable communicating directly, no worries. NAAA staff and an assortment of ag aviation ambassadors can be used as understudies and take over that role, but do make sure the public and news media in your area are informed of our centennial milestone to maximize the value of this pivotal once-in-a-lifetime event.

Don't forget, we all have a great story to tell about this industry. Whether it is how one got into the industry; the training to fine-tune ag aircraft and the application equipment; how ag aviation provides to local employment and the local economy; or how after five generations, our technology and experience are such that we produce more per acre, showing that our care for the environment continues to progress—all of these anecdotes are both important and fascinating to public audiences.

It's up to us all to tell the story to continue this industry's remarkable legacy. And again, just because the official anniversary date has occurred, our centennial lasts a year and you can still contribute plenty. Please join the ag aviation cast for this once-in-a-100-year performance that is leading to glowing public reviews and will continue to do so throughout the year.

## 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 has been publishing excerpts from *Agriculture's Air Force* and will continue 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](#).