NAAA eNewsletter

NAAA CEO Discusses Ag Aviation on American Ag Today

NAAA CEO Andrew Moore discussed agricultural aviation on yesterday's episode of the *American Ag Today* podcast. During his conversation with host Jesse Allen, Moore discussed technological innovations in the agricultural aviation industry over its 101-year history, the advantages of aerial application over other application methods, and several other topics.

"You're able to treat four to five times the amount of land than any other form of application, and when you're looking at pest pressure whether it's [an] insect, whether it's a fungus, whether it's a weed—the faster you get to it, the better the yield harvest will be for that farmer," Moore said.

He also talked about aerial application's role in combating weed resistance. "When you're dealing with weed resistance now with a lot of the herbicides, you have to get to that weed when it's at a certain size. Once it grows to a certain length or maturity, it's much more difficult to eradicate," Moore explained. "It might be seeding and spreading, so aerial application can get to that crop disease, whatever it is, much faster than and at that pest's more-vulnerable point to eradicate it."

Allen asked what the agricultural aviation industry is doing to improve efficacy and mitigate drift. Moore cited a litany of technologies and techniques aerial applicators use, including 100% adoption of GPS systems for precise accuracy and the use of smokers and onboard meteorological measurement systems, which track wind speed direction, barometric pressure, humidity and other conditions in real-time and feed that data into the GPS unit for even greater accuracy, which is especially handy for treating the edges of fields. The industry has also made tremendous strides in improving the aircraft spray system's setup over the past 30-plus years.

Allen brought up using unmanned aircraft for spraying. "We do have a few members that are using drones for application," Moore said. "It's still very small. They are small for the most part—they're slow and small—but I think they have a niche. They can go to areas we wouldn't go to because they're too maybe cramped with obstacles and an aircraft couldn't get in there. But right now, in terms of treating the scope that we treat, 127 million acres out of 347 million acres ... the [unmanned] fleet is just way too small and slow to come close to being able to treat that."

Moore estimated that spray drones only make up a quarter of 1% of the industry. That could change as technologies and regulations change, he added.

Allen also inquired about regulations or other pertinent issues NAAA is working on. "We work with the agencies to make sure products are registered and let them know about our technological advances, and also let them know that without aerial application and the judicious use of pesticides, we have to remember that there'd be far more land that would be used for farming, and that could take away endangered and threatened species habitat, it could take away carbon-sequestering forests, it could take away water filtering wetlands," Moore said.

"We consider ourselves climate-smart agriculture," he continued. "We're seeding cover crops. That's a huge issue now at the end of the season, where we're putting out cover crops over the cash crop.... We consider ourselves really part of the solution, and we need to make sure that the regulatory agencies take that into account."

Listen to the full podcast interview **here** or wherever you get your podcasts. *American Ag Today* is a production of the American Ag Radio Network. The "Talking Ag Aviation" episode debuted Thursday, Sept. 28. A condensed version of Moore's interview will air Monday, Oct. 3, on *American Ag Today* on SiriusXM Rural Radio 147.

NAAA Comments to EPA to Ensure Reregistration of Key Pesticides, Such as OPs, Remain Available for Aerial Use

Last week NAAA submitted **comments to the EPA** on a petition to revoke all food tolerances and cancel registrations for what the petitioners claim are harmful organophosphate uses. The petition was submitted by numerous worker and environmental activist groups and covers 15 individual organophosphates currently going through the registration review process. The petition is in response to the EPA delaying the deadlines for finishing the registration reviews for the organophosphates. The petitioners claim this is unacceptable due to their belief that organophosphates poison people.

The petition mentions aerial application several times, claiming it represents the highest risk of drift to bystanders and that mixers and loaders supporting aerial applications cannot be adequately protected. Because the risk assessments the petitioners refer to were conducted using the Tier 1 AgDRIFT model, NAAA reminded the EPA about the inaccuracies of this model and once again implored them to begin using the Tier 3 model with realistic assumptions as detailed years ago by NAAA in a separate letter to the agency which has included numerous follow-up meetings. NAAA also made suggestions on PPE and engineering controls that would reduce the risk to mixers and loaders. In addition to our comments, NAAA signed on to **a letter from a coalition of agricultural groups**—including the Agricultural Retailers Association,

American Soybean Association, American Sugarbeet Growers Association and the California Specialty Crops Council—objecting to the petition.

The week prior, NAAA submitted comments on the Biological Evaluation (BE) for sulfoxaflor. A BE is the first step in the registration review process aimed at protecting endangered species. The BE for sulfoxaflor was also based on the use of the Tier 1 model in AgDRIFT, so NAAA commented on using Tier 3 again as well as once again promoting that the buffer zones the EPA is proposing should be wind directional. One of the mitigation options mentioned in response to the BE was to ban aerial application of sulfoxaflor on crops where aerial application is not used frequently. NAAA reminded the EPA that aerial application may not be a normal option for certain crops and pesticides but can become a critical option during pest outbreaks or when weather restricts other application platforms.

Earlier in September NAAA commented on the proposed interim decisions (PID) for tebuconazole and triadimefon/triadimenol. These PIDs were encouraging as they both acknowledged progress being made in regard to the EPA shifting to the Tier 3 AgDRIFT model with realistic assumptions. The PID for triadimefon/triadimenol proposed a maximum wind speed of 10 mph for aerial applications, which NAAA objected to, citing numerous recent PIDs that have allowed aerial applications in wind speeds up to 15 mph.

NAAA continuously monitors pesticide registration review activities and comments as needed to ensure aerial application remains on the labels.

EPA's Pesticide Registration Review Deadline (Oct. 1): Status Update and Plans for Remaining Work

The Federal Insecticide, Fungicide, and Rodenticide Act's (FIFRA) pesticide registration review deadline is Oct. 1, per the statute's 15year reregistration schedule. Pesticides without finalized review as of this deadline can remain on the market and be used according to the product label. The EPA will continue to review all remaining pesticide cases in the meantime.

In the past 15 years, the EPA has:

- Completed 685 draft risk assessments (94% of the total number of cases), evaluating the potential for human health and ecological effects of a pesticide.
- Completed 633 proposed interim decisions or proposed final decisions (87% of the total number of cases), which present the EPA's responses to public comment on draft risk assessments and which propose label mitigations and/or restrictions so that a pesticide product can continue to be used safely.
- Issued 431 interim decisions (60% of the total number of cases), which explained any changes to what had been proposed, responded to significant public comments and required registrants to submit any product label amendments needed to protect human health and the environment.
- Issued 151 final decisions (21% of the total number of cases), which document any changes to what had been proposed, respond to significant public comments, and require registrants to submit any product label amendments needed to protect human health and the environment.
- Of the 582 interim or final decisions, 140 cases resulted in cancellations of some or all uses (19% of the total number of cases).

Of the 726 total cases, 461 are conventional agricultural pesticides. Conventional pesticides are generally produced synthetically and are used to prevent, mitigate, kill or repel any pest. They may also act as a plant growth regulator, desiccant, defoliant or nitrogen stabilizer. For conventional pesticide cases, the EPA has:

- Completed 99% of the draft risk assessments, completed more than 90% of the proposed interim decisions and issued more than 80% of the final or interim decisions.
- Canceled some or all uses in 25% of cases with final or interim decisions.
- Required human health and/or ecological risk mitigation for nearly 70% of cases for which the EPA completed interim or final decisions.
- Required new or additional personal protective equipment requirements and/or engineering controls for 98% of cases where the EPA required mitigations to protect human health.
- Required application rate reductions in 60% of cases, changes to restricted entry intervals in 30% of cases and use cancellations in 20% of cases where the EPA required mitigations to protect human health.
- Instituted requirements to reduce pesticide drift for 80% of cases where the EPA required mitigations to protect from ecological risks.
- Set requirements to reduce pesticide runoff, such as no-spray buffer zones, vegetative filter strips and/or application rate reductions for more than 20% of cases where the EPA required mitigations to protect from ecological risks.

Of the 726 total cases, 265 are nonconventional pesticides (140 antimicrobial pesticides and 125 biopesticides). Antimicrobial pesticides are intended to disinfect, sanitize, reduce or mitigate growth or development of microbiological organisms, or prevent contamination caused by bacteria, viruses, fungi, protozoa, algae or slime. Biopesticides are pesticides derived from natural materials like animals, plants, bacteria and certain minerals. For these cases, the EPA has:

- Completed final or interim decisions for 71% of antimicrobial cases.
- Canceled some or all uses in more than 30% of antimicrobial cases with interim or final decisions.
- Finalized human health and/or ecological risk mitigation for nearly 30% of antimicrobial cases with interim or final decisions.
- Increased personal protective equipment requirements and/or engineering controls for more than 65% of antimicrobial cases where the EPA required mitigations to protect human health.
- Completed final or interim decisions for 98% of biopesticide cases.

While the EPA has completed final or interim decisions for all but 144 of the 726 total pesticide cases, the agency has been delayed in its ability to issue many final decisions. According to the EPA, delays are due to receiving data from registrants, a lack of resources to respond to ongoing and increasing litigation, and the scientific complexity associated with many of the pesticides yet to go through the registration review process. As further described below, the EPA also must comply with the Endangered Species Act (ESA) and Endocrine

Disruptor Screening Program (EDSP) obligations and complete cumulative risk assessments before its registration review work can be finalized.

Background

In 2007, an amendment to FIFRA formalized a requirement that the EPA review each registered pesticide every 15 years to determine whether pesticides continue to meet the standard for registration—that they do not present unreasonable adverse effects on human health or the environment. This amendment set the first registration review deadline as Oct. 1, 2022. During the registration review process, the EPA has completed work plans, draft risk assessments, proposed interim decisions/proposed decisions and interim decisions/final decisions. Throughout this process, the EPA makes its information, assessments and supporting material for each case available to the public through each case's docket at www.regulations.gov. There are 726 conventional, biopesticide and antimicrobial pesticide cases that were registered before Oct. 1, 2007.

In order to complete the registration review for a pesticide and issue a final decision, the EPA must complete an ESA listed-species assessment and any necessary ESA consultation with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the Services). For each pesticide ingredient, the entire FIFRA and ESA process typically takes no less than four years and sometimes over 12 years. To minimize the time needed to complete this process, the EPA has taken significant steps to fundamentally improve how it fulfills ESA obligations in its pesticide work. The EPA's work plan, **Balancing Wildlife Protection and Responsible Pesticide Use**, describes new approaches to come into compliance with ESA.

As part of implementing the work plan, the EPA expects to release a work plan update in November 2022 explaining how it will adopt early mitigation for ESA species as part of registration review decisions. Even though early mitigation does not mean that the EPA has fully met its ESA obligations for a pesticide, it should contribute meaningfully to meeting those obligations and facilitate future ESA reviews. The EPA will also host a public webinar to explain the update and other ongoing ESA efforts, including ESA pilot projects described in the work plan. More information on this event is forthcoming.

The EPA's registration review final decisions have also taken into account EDSP screening, consistent with the Federal Food, Drug, and Cosmetic Act § 408(p). The EPA is required to screen and test certain substances to determine whether they may have an effect in humans that is similar to an effect produced by a naturally occurring estrogen or other endocrine effects. The EPA plans to issue a draft Endocrine Disruptor Screening Program White Paper for public comment. This white paper will address the EPA's use of new approach methodologies (NAMs) that may serve as alternatives to a vertebrate animal test and other in vitro assays. The availability of NAMs in EDSP, along with recent updates to internal EDSP standard operating procedures, represents an important next step in the EPA's efforts to rebuild this program. The current Tier 1 methods used for screening chemicals for endocrine disruption are expensive, require extensive staff time and use laboratory animals. These new approach methods will allow the agency to screen chemicals more efficiently and ultimately provide better data.

Finally, the EPA must complete cumulative pesticide risk assessments as part of the registration review process where necessary. A cumulative risk assessment evaluates the potential for people to be exposed to more than one pesticide at a time from a group that shares an identified common mechanism of toxicity. A common mechanism of toxicity is identified when two or more chemicals or other substances cause common toxic effects by the same process. The EPA's cumulative risk assessments approximate people's actual exposures and potential risks resulting from current uses of pesticides in different parts of the country. To develop these assessments, the EPA considers potential exposures from food, drinking water and residential sources.

AD proposed for GE 601 and H 80 Series Engines

The FAA proposes to adopt a new airworthiness directive (AD) for certain GE Aviation M601D-11, M601E-11, M601E-11A, M601E-11AS, M601E-11S, M601F, H75-100, H75-200, H80, H80-100, H80-200, H85-100 and H85-200 model turboprop engines. This proposed AD was prompted by reports of cracks in dilution tube weld areas of the combustion chamber outer liner. This proposed AD would require initial and repetitive borescope inspections of the dilution tube weld areas of the combustion chamber outer liner and, depending on the results of the inspections, replacement of the combustion chamber outer liner with a part eligible for installation.

If adopted as proposed, action would be required at the next 300-hour engine inspection or within 25 flight hours (FHs) after the effective date of the AD, whichever occurs later, and thereafter at intervals not to exceed 300 FHs.

Comments on this proposed AD are due by Nov. 14, 2022. To read the complete AD or submit a comment, click here.

Beware of Fraudulent Email with Ag Aviation Expo Name

NAAA received notification that scammers have sent an email to several members offering attendee lists to the Ag Aviation Expo. THIS EMAIL IS SPAM AND NOT AFFILIATED WITH NAAA; PLEASE DELETE IT. NAAA does not email members to offer lists of any kind.

If you are unsure if an email is legitimately from NAAA, please feel free to email information@agaviation.org for clarification.

Any message from NAAA will come directly from information@agaviation.org, naaaexpo@agaviation.org or a staff member's email address.

There are several reports of entities trying to scam people by having them give money toward fraudulent efforts. Do not fall victim to one of these scams.

Pre-Register for the Ag Aviation Expo to Avoid Long Lines On-site

We urge you to pre-register before Nov. 4 for the 2022 Ag Aviation Expo, which saves you \$75 per person. Pre-registration helps us to have accurate food, beverages and seating counts at our events. **Attendee registration** and **booth sales** are open for the NAAA Expo in Knoxville Dec. 5-8! You'll hear from Captain Scott Kelly, the history-making NASA astronaut who spent one year in space, at the Monday **Kickoff Breakfast**. Tuesday's **General Session** features Dr. Stan Musick and Michelle Miller, the Farm Babe.

If you're looking to grow your business, find a job or sell a product or service in the aerial application industry, the 2022 Ag Aviation Expo is the place for you! Our expo has everything from a world-class trade show floor featuring aircraft and helicopters to education sessions, expert speakers and many networking opportunities!

Getting to Knoxville

Knoxville is located at the intersection of I-75 and I-40, just a day's drive from more than half of the U.S. McGhee Tyson Airport (TYS) offers more than 20 direct flights. Flying your own aircraft? Check out Knoxville Downtown Island Airport (DKX).

As you search your airfare options into Knoxville for the Ag Aviation Expo, visit NAAA's Transportation Discount webpage at **AgAviation.org/transportation** and explore tickets on American, Delta and United Airlines.

Knoxville is centrally located for those in the eastern U.S. who would like to drive. Contact your **hotel** for parking details. Book your hotel room **online**.

- Atlanta, GA: 192 miles
- Birmingham, AL: 252 miles
- Charlotte, NC: 215 miles
- Cincinnati, OH: 248 miles
- Louisville, KY: 238 miles
- Memphis, TN: 388 miles
- Nashville, TN: 178 miles
- Raleigh, NC: 333 miles
- Richmond, VA: 420 miles

Low-Time Pilot Registration

If you are an ag pilot with less than five years of experience or are interested in becoming an ag pilot, we are offering a special price to attend the NAAA Ag Aviation Expo for pilots like you. Further details are available **here** (scroll down to the Low-Time Pilot Registration section).

Details for the 2022 Ag Aviation Expo

- Dates: Dec. 5-8, 2022
- Location: Knoxville Convention Center
- Kickoff Breakfast Speaker: Captain Scott Kelly, first astronaut to complete a year-in-space mission.
- General Session Speakers: Dr. Stan Musick & Michelle Miller
- Schedule of Events: See the current, tentative schedule here.
- Hotel: Details here.
- Attendee Registration: Now open!
- Exhibitor Booth Sales Information
- Sponsorship Opportunities: Sponsorships are now available. View the opportunities here. Please email Lindsay if you would like to secure a sponsorship from last year or would like to be contacted about 2022 opportunities! We have sponsorships available for all budget sizes.
- Auction Donations: Thank you to Pratt & Whitney Canada for donating a PT6-34AG engine to this year's NAAA Live
 Auction. While we are still a few 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 & NAAREF Board Meetings Kick Off Next Week

The October 2022 NAAA & NAAREF Board and Committee meetings will take place Oct. 7-8 in Oklahoma City, Oklahoma. Some meetings begin Thursday, Oct. 6, and PAASS Train the Trainer will take place Oct. 5-6. **Click here** to view a schedule.

Please note: All board books will now be provided electronically. Board and Committee members will receive a link and directions to download the electronic board book approximately one week before the meetings. The board book can be downloaded to your computer, tablet or you can print your committee items.

All meetings are open to NAAA members. If you are not a board or committee member but you're interested in attending, please contact **Lindsay Barber** for more details.

Hotel Details

Skirvin Hilton Oklahoma City One Park Avenue Oklahoma City, OK 73102 Hotel Phone: (405) 272-3040

Dusty Dowd, Veteran Aerial Applicator Extraordinaire, Wins Silver Unlimited Class Event at Reno Air Races

On Sept. 18, NAAA member Dusty Dowd won the Silver Unlimited class event at the Reno Air Races in Nevada. Dowd, who recently retired after a lengthy career as an aerial applicator in Syracuse, Kansas, remains an active air racer.

The last time he competed at the Reno Air Races was in 2016, when he also took first place in the Silver Unlimited class. The Unlimited class consists of WWII fighter planes. This year Dowd raced in a 1943 P-51-A Mustang. It is one of only two P-51-A planes still flying in the world, with Dowd's P-51-A being the oldest one.

Dowd bested seven other Mustangs in the Silver Unlimited final, which had a race speed of 340 mph. He flew in two heats beforehand to qualify for the Silver Unlimited final race. Dowd won the first one last Thursday. He let up a bit in last Saturday's second heat since he had already qualified for the finals.

After being an aerial applicator for 52 years, Dowd admits that his experience and comfort flying at low altitudes gave him a decisive leg up on his racing counterparts. "Of the people I flew against, it's almost not fair because those guys are all corporate pilots and airline pilots," he said. "They're used to flying high and I'm used to flying low, so it's natural for me, but it's not for them. I think it's probably a lot more stressful for them than me."

Dowd went to his first air race when he was seven years old in Fulton, New York, and has been hooked ever since. Last week was Dowd's 16th time competing at the Reno Air Races, in fact. He raced for 13 consecutive years from 1979 to 1991 before returning in 2015 and '16 and again this year.

Dowd wishes to extend special thanks to Craig Bair of Bair Aviation in Sisseton, South Dakota, who served as his crew chief, and sponsor Garold Kurtz of Kurtz Rural Aviation in Mound City, Missouri, whose financial support helped cover Dowd's expenses for the Reno Air Races. "It's a massive team effort to overcome the logistics to get an unlimited airplane to Reno," Dowd said. "Many friends and competitors enabled us to get to the race and keep racing once we were there."

For next year's Reno Air Races, Dowd intends to race in his Yak-11, his winning plane at the 2016 races. Dowd flew the Yakovlev Yak-11 at 376 mph during his winning sprint around the race course in '16. Next year he anticipates flying the Yak at 400 mph.

Operator Ike Brunetti and Mississippi AAA Host EPA's Office of Pesticide Programs at Shelby Air Service

On Aug. 31, NAAA member Ike Brunetti and the Mississippi Agricultural Aviation Association (MAAA) hosted a group of EPA officials from the Office of Pesticide Programs at Shelby Air Service in Shelby, Mississippi. The site visit was one of the EPA delegation's stops on an agricultural tour through the Mississippi Delta region.

A number of high-ranking agency officials attended the EPA fly-in, including Ed Messina, the director of the EPA's Office of Pesticide Programs, and Rodney Snyder, the senior agriculture advisor to the EPA Administrator. Representing MAAA along with Brunetti and JT Davis, who flies for Shelby Air Service, were fellow aerial applicators Chuck Travis (MAAA's president), Lyle Malloy (MAAA's vice president), Glenn Holloway Jr. (MAAA's NAAA board representative), Glenn Holloway III (MAAA's secretary), and Steve Brown who, like Brunetti, is a member of MAAA's Executive Committee. Officials from other ag groups were also on hand. Roughly 25 people attended the aerial application demo event in all.

Mississippi. He followed that up with spray passes from a boom length reduced to 50% of the wingspan to demonstrate the corresponding reduction in swath width.

A great Q&A session took place over lunch, which MAAA provided. MAAA's officers also took advantage of the opportunity to press the EPA, once again, to update the AgDRIFT model it uses to estimate the risk of drift from aerial applications. Instead of relying on AgDRIFT's simplified Tier 1 model, which uses outdated assumptions about how aerial applications are made, the aerial applicators encouraged agency officials to use the Tier 3 model, with its more realistic and label-enforceable assumptions.

The opportunity to interact with aerial applicators at a state-of-the-art aerial application operation was an invaluable experience for the EPA delegation. NAAA commends Shelby Air Service's Ike Brunetti for providing the venue and MAAA for hosting the EPA fly-in.

NAAA Addresses FAA-Industry Safety Partnership, GAJSC, on Ag Aviation Accidents

NAAA staff addressed the General Aviation Joint Safety Committee (GAJSC) on Sept. 20, per an invitation from the industry-government safety initiative to discuss 2022 ag aviation accidents. NAAA gave details on the 44 ag aviation accidents, including nine fatalities, that the industry has suffered this year, along with the preliminary reasons for the accidents. Those reasons ranged from power loss in five instances to trees, towers and wires being hit by aircraft in nine cases. NAAA discussed the continuing decline in ag accidents per 100,000 hours flown since 1999 due to industry educational efforts. NAAA also reiterated the importance of the FAA promulgating tower marking/logging rules and the expansion of its educational program next year with C-PAASS—Certified Professional Aerial Application Safety Steward.

The joint safety committee's members offered insightful ideas, including accessing WireAware[™] wire-strike avoidance technology. The transmission line display and alerting system pulls from obstacle databases that contain about 700,000 miles of power lines for the U.S. In addition, GAJSC members asked about research leading to the cause of fatal ag aviation accidents to better direct research efforts on safety equipment.

The GAJSC, launched in 1997, is a public-private partnership working to improve general aviation safety by reducing the GA fatal accident rate. The committee analyzes aviation safety data to identify emerging issues and develop mitigation strategies to address and prioritize safety issues. Participants include the Federal Aviation Administration (FAA) and industry stakeholders, including pilot organizations, flight instructors, mechanics, builders and manufacturers.

Robinson Tail Rotor Blade AD Superseded

The FAA is superseding Airworthiness Directive (AD) 2021-19-08, which applied to certain Robinson Helicopter Company (Robinson) Model R44 and R44 II helicopters. AD 2021-19-08 required checking each tail rotor blade (blade) for any crack and removing any cracked blade from service.

Since the FAA issued AD 2021-19-08, it was determined that an additional model helicopter and additional blades are affected by the unsafe condition. This AD requires the same actions as AD 2021-19-08 and adds certain Robinson Model R66 helicopters and additional part-numbered and serial-numbered blades to the applicability.

The complete AD is available **here**. It goes into effect Oct. 20. Action is required before further flight after the effective date of this AD and thereafter before each flight.

Proposed AD Supersedes Continental Engines Oil Filter Adapter Gasket AD

The FAA proposes to supersede Airworthiness Directive (AD) 2022-04-04, which applies to certain Continental Aerospace Technologies Inc. (Continental) C-125, C145, IO-360, IO-470, IO-550, O-300, O-470, TSIO-360 and TSIO-520 series model reciprocating engines and certain Continental Motors IO-520 series model reciprocating engines with a certain oil filter adapter installed.

Since the FAA issued AD 2022-04-04, the FAA determined that the reciprocating engines identified in the applicability of AD 2022-04-04 are incorrect. This proposed AD would require replacing the fiber gasket with the copper gasket or the stainless steel embedded within the polytetrafluoroethylene gasket (stainless steel PTFE gasket). This proposed AD would also revise the applicability to add and remove certain reciprocating engine models. In addition, it would update the required actions to add an additional part-numbered stainless steel PTFE gasket as a replacement part and revise the special flight permit paragraph to expand the limitations.

To view the complete proposal or to comment, click here. Comments are due by Oct. 31.

New NAAA Membership Video Shows Why You Should Renew Your Membership for 2023

Thank you for your support of NAAA as a 2022 member. NAAA delivers remarkable value that benefits your bottom line, provides the crop input tools you need, enhances the industry's safety and professionalism through substantive educational programming and offers

excellent business networking opportunities. Please **renew your NAAA membership** for 2023. Watch our new video below, where you'll hear from your fellow members why membership is essential to your business.

NAAA continues to passionately advocate on behalf of ag aviation and raise awareness about its benefits to the public and national policymakers, which we capitalized on across policy and all media channels during the **100th anniversary** of the industry.

This positive coverage of the industry and its importance to global food, fiber and bioenergy production comes at a crucial time as NAAA fights to preserve the aerial use of pesticides that are being targeted for cancellation or unnecessary and burdensome restrictions under current EPA leadership. It takes your membership resources to save these aerial uses and positively represent the industry before the public.

As the industry moves into its second century, NAAA and NAAREF have developed a way to augment industry advancement of safety and application accuracy while showing your customers, regulators, insurers, pesticide manufacturers, and the public the professional nature of the industry. Our new **Certified-Professional Aerial Applicator Safety Steward (C-PAASS)** program, launching in 2023, will fill that very role for those that want to participate. We know education works to reduce accidents and drift occurrences based on PAASS program stats. Since the first PAASS season in 1998-1999, the ag aviation accident rate (number of accidents per 100,000 hours flown) has dropped nearly 26%, and the fatal accident rate has fallen 10%.

The impetus for developing C-PAASS was to expand and gain recognition for maximizing professionalism by ultimately receiving additional benefits for being certified, such as insurance discounts and more flexibility pertaining to pesticide label language and for ag pilots to market to their customers that they have undergone additional training and development to best ensure that they can provide high-quality service.

Please make it a priority to **renew your NAAA membership**—the payoff far exceeds what you will spend in dues in the form of effective advocacy that reduces regulation and taxes affecting your aerial application business. Trade association membership dues are tax deductible.

EPA Likely to Miss Oct. 1 Registration Review Deadline, Litigation Could Follow

The EPA must complete the second 15-year registration review process required by the Food Quality Protection Act by Oct. 1. The EPA will not meet this deadline since Endangered Species Act consultations and endocrine disruptor assessments are not included in interim registration review decisions. Some environmental activist nongovernmental organizations are expected to file suit shortly after this deadline, asking the EPA to vacate the registration of products that have not completed the registration review.

Litigation is expected to be a lengthy process, but there is a risk of future product loss. NAAA is working with the Pesticide Policy Coalition, grower groups and the EPA to mitigate the risk of litigation and explore a possible legislative solution this Congress. We will continue to keep you updated on the status of these efforts.

OMB to Review 'Interim' WOTUS Definition

The EPA and Army Corps of Engineers have sent to the White House for pre-publication review their final, interim definition of WOTUS. According to the White House Office of Management and Budget's (OMB) website, OMB received the final Revised Definition of "Waters of the United States" (WOTUS) on Sept. 12. The agencies originally aimed to finalize the rule by the end of August. OMB review is designed to take about 90 days, but this time can vary depending on the rule.

The EPA and the Corps proposed their "interim" WOTUS definition in November 2021. The proposed rule interprets WOTUS to mean the waters defined by a collection of Corps and EPA regulations referred to as the "1986 regulations," with amendments to reflect the agencies' interpretation of the statutory limits on the scope of WOTUS as informed by Supreme Court decisions, including Rapanos v. United States.

Some Republican lawmakers earlier this year urged the agencies to pause their efforts until after the Supreme Court rules in Sackett v. EPA. The Supreme Court's decision to hear Sackett v. EPA this fall will potentially shape the EPA's rulemaking, implementation and breadth of its authority under the Clean Water Act (CWA). The Sacketts are a pair of Idaho landowners seeking to narrow the scope of the

CWA, especially as it applies to wetlands. They are urging the Supreme Court to adopt their proposed two-step framework for determining CWA jurisdiction, which would abandon the "significant nexus" test. Oral arguments for Sackett v. EPA are scheduled to happen on Oct. 3. Despite this litigation, the EPA has said it plans to propose a "revised" definition of WOTUS in November 2023.

National Academies of Sciences Report Confirms Negative Impact Ligado Networks' Plan Will Have on GPS

Back in **January**, NAAA participated in an aviation briefing for the National Academy of Sciences, Engineering, and Medicine (NASEM) committee responsible for conducting the independent technical review of the Federal Communications Commission's (FCC) decision to authorize Ligado Networks to develop a network in the L-band radio spectrum. Agricultural aviation was used as a case study on how Ligado's proposed network will negatively impact non-certified GPS receivers.

Earlier this month NASEM issued its report on Ligado's planned operations in the L-band. NASEM confirmed the FCC's 2020 decision will create significant risks of harmful interference to GPS-dependent aircraft safety systems used by essential air operators when operating within close proximity to Ligado towers, validating the concerns raised by the FAA and the aviation industry. The report also found that the proposed solutions to potential interference to GPS caused by Ligado's network are not feasible in terms of either timeliness or cost-effectiveness.

NAAA is pleased with NASEM's findings, which were also supported by U.S. Sens. Jim Inhofe and Jack Reed, the ranking member and chairman of the Senate Armed Services Committee, respectively. Their support comes shortly after they led a group of their colleagues in sending a letter to the FCC urging them to reconsider granting Ligado Networks' request. NAAA will continue to support all efforts urging the FCC to reconsider granting the license request of Ligado Networks.

FAA Pushes Back Requirement for Drone Remote Identification

As reported in the March 31, 2022 NAAA eNewsletter, new drones manufactured on or after Sept. 16 would have been required to be capable of transmitting their geospatial and timestamped identification (RID). This date has been pushed back to Dec. 16, 2022. The FAA recognized that its approval of *ASTM Standard Practice for Remote ID Means of Compliance* on Aug. 11 left little time for drone manufacturers to comply. The date all drones must start transmitting RID remains the same: Sept. 16, 2023.

RID is a method to obtain information from an operating drone, such as an identifying number, by anyone with a personal electronic device, like a smartphone, that receives Wi-Fi or Bluetooth signals. That identifying number can then be given to law enforcement and regulatory agencies that can use it to identify the owner/operator to investigate complaints.

A limited number of apps are becoming available that claim to be able to perform this function. Apps such as "Remote ID," an FAA remote ID scanner, are available in the Google Play Store. Wi-Fi signals are currently used to track drones for operational control, and some information from them may be available before Sept. 16, 2023. NAAA has not tested these apps. These apps may become more numerous now that the means of compliance **has been published**.

NAAA continues to push for safety measures such as RID and ADS-B technology to assist with safely integrating drones into the national airspace.

NAAA Comments on University of California at Berkeley's Drone Petition for Relief from FAA Safety Requirements

Earlier this month, NAAA submitted comments to the FAA on the University of California at Berkeley's petition for relief from specific safety requirements within Federal Aviation Regulations (FARs) 14 CFR Part 91 to operate a heavy drone weighing over 55 pounds (lbs.) up to 630 pounds in rural and remote areas to collect gravitational measurements. Drones heavier than 55 pounds do not operate under FAR Part 107—regulations for commercial drones under that weight—as such, they are required to request relief from the FAA to be exempt from certain parts of the FARs to operate. NAAA's comments opposed the University of California's request for exemptions dealing with safe altitudes, fuel requirements and maintenance. NAAA maintains that the requirements for heavy drones outside of FAR Part 107 should be similar to those of manned aircraft.

Supporting documents in the petition indicate that the drone will be operated in airspace that has "controlled access." Controlled access is not defined, and NAAA found it necessary to comment that without the issuance of a temporary flight restriction (TFR), the national airspace is open to other aircraft. Airspace in rural and remote areas is often used by manned agricultural aircraft.

UC Berkeley's request for relief may be viewed **here**. NAAA's comments may be viewed **here**. While FAA requests for relief have become routine, NAAA continues to comment against parts of the requests due to its belief that it makes the airspace less safe for manned aircraft and the general public.

Dawning of a New Age at NAAA

NAAA is excited to announce the hiring of Dawn Tullis as the association's new program associate. Before joining the National Agricultural Aviation Association, Dawn worked as a membership and conference coordinator at the International Association of Suicide Prevention. Her work ranged from supporting that group's 75 chapters and managing their database management to co-leading registration and

vendor communications for significant conferences. She will use her experience in fundraising, customer service, volunteer coordination, membership retention and meeting management to help us with our NAAA programs and the launch of C-PAASS.

Dawn, originally from Orlando, Florida, lives in Virginia with her son, Jakari, and three dogs (Nico, Buddy and Mr. Chubs). She enjoys traveling, eating good food, yoga, exploring national and state parks and spending time with her family. Please join us in welcoming Dawn Tullis to the NAAA staff.

2022 Ag Aviation Golf Tournament Oct. 15-16

NAAA members are invited to join your Arkansas brethren for a fun weekend of golf and fellowship Oct. 15-16. The **Red Apple Inn and Country Club** in Heber Springs, Arkansas, is hosting the **2022 Ag Aviation Golf Tournament**.

The \$175 entry fee covers two rounds of golf, happy hour and dinner at the Red Apple Inn and Country Club on Saturday evening. (A dinner-only fee of \$45 is available for non-golfers.) The tournament starts at 8 a.m. Saturday, Oct. 15, with a two-person scramble format. The final round tees off Sunday, Oct. 16, with a shotgun start at 8 a.m.

Inn rooms and two-bedroom condos are available at the Red Apple Inn for \$150 and \$235/night, respectively. Call the Red Apple Inn at 1-800-733-2775 and use the reservation code "AG AVIATION" to reserve your room.

To register for the 2022 Ag Aviation Golf Tournament, please complete the **player registration form** and mail it with a check payable to "Ag Aviation Golf Tournament" to:

Brenda Watts 120 Norris Lane Watson, AR 71674 (870) 377-5241

Sponsorship opportunities are also available, including placing your name on a tee box or banner. Please refer to the **sponsorship** registration form for more information.

A small group of Arkansas aerial applicators organizes the annual golf tournament. Each year the organizers donate the tournament's proceeds to a different organization of their choosing. Proceeds from the 2022 tournament will be donated to St. Jude Hospital. For more information, please contact the 2022 Ag Aviation Golf Tournament organizers. Contact information for members of the tournament committee is available **here**.

NAAA Membership Renewal Open for 2023

Thank you for your support of NAAA as a 2022 member. We hope and request to have your continued support by **renewing your NAAA membership** for 2023. NAAA continues to passionately advocate on behalf of ag aviation and raise awareness about its benefits to the public and national policymakers, which we capitalized on across policy and all media channels during the 100th anniversary of the industry. The public relations campaign promoting the **100th anniversary** delivered positive and far-reaching media coverage about the agricultural aviation industry that netted nearly 200 media mentions nationwide to highly circulated news outlets with a potential audience reach of 400 million consumers.

This positive coverage of the industry and its importance to global food, fiber and bioenergy production comes at a crucial time as NAAA fights to preserve the aerial use of pesticides targeted for cancellation or unnecessary and burdensome restrictions under current EPA leadership. It takes your membership resources to save these aerial uses and positively represent the industry before the public.

As the industry moves into its second century, NAAA and NAAREF have developed a way to augment industry advancement of safety and application accuracy while showing your customers, regulators, insurers, pesticide manufacturers and the public the professional nature of the industry. Our new **Certified-Professional Aerial Applicator Safety Steward (C-PAASS)** program, launching in 2023, will fill that very role for those who want to participate. We know education works to reduce accidents and drift occurrences based on PAASS Program stats. Since the first PAASS season in 1998-1999, the ag aviation accident rate (number of accidents per 100,000 hours flown) has dropped nearly 26%, and the fatal accident rate has fallen 10%.

The impetus for developing C-PAASS was to expand and gain recognition for maximizing professionalism by ultimately receiving additional benefits for being certified, such as insurance discounts and more flexibility pertaining to pesticide label language, and for ag pilots to market to their customers that they have undergone additional training and development to best ensure that they can provide high-quality service.

Please make it a priority to renew your NAAA membership—the payoff far exceeds what you will spend in dues in the form of effective advocacy that reduces regulation and taxes affecting your aerial application business. Trade association membership dues are tax deductible.

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.