NAAA eNewsletter

Chlorpyrifos Makes a Comeback - NAAA Stands Ready to Keep Aerial Application on the Label

A recent decision by the 8th Circuit Court of Appeals overturned **EPA's 2021 ban of chlorpyrifos** applications on all food crops. While the exact date chlorpyrifos might be reinstated is unknown, the decision is being hailed as major victory for agriculture. It offers growers who relied on chlorpyrifos for years a chance to reclaim a critical insecticide. It also sets a precedent for what EPA can and cannot do when it comes to following sound science when making decisions about pesticide registration and re-registrations.

The 8th circuit court ruled that the EPA failed to follow the conclusions from their own scientists who found that there were safe uses for chlorpyrifos on numerous crops including soybeans, wheat, sugar beets, and cherries. EPA scientists determined these crops all had high benefits from chlorpyrifos applications. EPA's scientists found options to safely use chlorpyrifos on these crops, but the EPA disregarded their findings and ignored these safe options. The ruling vacates EPA's cancelation of chlorpyrifos tolerances and restores agricultural uses of chlorpyrifos. EPA could appeal the decisions, which casts uncertainty on whether it will be available for the 2024 growing season. The 8th Circuit Court of Appeals includes the states of Arkansas, Iowa, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

NAAA has commented numerous times to EPA on how chlorpyrifos can be safely applied by air. Now that it's use will be reinstated for agriculture, NAAA will continue to work to ensure growers can utilize aerial applications of chlorpyrifos to ensure timely, accurate applications for controlling insect pests.

EPA Approves Final Revised Restricted Use Pesticide Applicator Certification Plans

On November 2nd, the EPA announced the final approval of 67 updated plans for certifying applicators of Restricted Use Pesticides (RUPs). All 50 states, 5 territories, 6 federal agencies, 6 tribes, and the District of Columbia (certifying authorities) worked with EPA to complete the plan approval process. The approved plans comply with the 2017 Certification of Pesticide Applicators (CPA) final rule, which established stronger standards for people who apply restricted-use pesticides (RUPs), including aerial applicators.

The 2017 CPA rule mandated that certifying authorities with existing RUP certification plans submit proposed modifications to comply with these new standards to EPA for approval by November 4, 2023. Requirements in the rule included the following:

- More comprehensive training programs or an exam for certifying RUP applicators.
- New specialized categories for certain types of applications, one being aerial. This means all aerial applicators throughout the U.S.
 must have training/testing specifically designed for aerial application. With PAASS, Operation S.A.F.E. and C-PAASS curriculum
 available for states to use in this capacity, NAAA is urging these programs' use for this purpose.
- Set the minimum age to 18 for RUP applicators (16 for on family farms if under supervision of certified applicator).
- Requires safety training in a language they can understand for noncertified applicators working under the direction of a certified applicator.
- · Stipulates that certifications are valid for a maximum of five years.

This will affect the state pesticide certification process for all aerial applicators as states, tribes, territories, and federal agencies begin implementing their plans. Copies of EPA approved RUP certifications plans can be found on the **Certification Plan and Reporting Database (CPARD)**. For more information on the requirements for RUP applicators, visit EPA's **Certification Standards for Pesticide Applicators website**. If you want to reach out to your state's pesticide lead agency to find out more details on implementation plans, you can find the appropriate contact **here**. NAAA will continue working to ensure certifying authorities are aware of existing aerial application education opportunities including PAASS, Operation S.A.F.E. and C-PAASS.

Proposed Multi-UAS Night Spraying Operations without Visual Observers; NAAA Responds

On November 2, NAAA submitted comments to the Federal Aviation Administration (FAA) regarding a recently published **petition** by **Hylio, Inc.** (Hylio) for exemption from 14 CFR Parts 61, 91 and 137 to conduct spraying operations with its AG-230 Uncrewed Aircraft System (UAS). The **AG-230** is an 8-gallon capacity octocopter marketed by Hylio to produce up to a 35 ft swath width and treat up to 50 acres per hour at 1 GPA. Specifically, Hylio petitioned for relief to operate up to 3 UAS under one operator, each weighing over 55 pounds, during night, and without visual observers (VOs), within visual line of sight (VLOS) of the pilot in command (PIC).

While much of the petition was written to match relief in previously granted exemptions for other operators, it also uniquely requests to conduct self-titled advanced operations (at night, multi-ship and without a VO) simultaneously, in any combination. The petition offered no justification for why the relief should be granted. Instead, the petition repeatedly states:

"THE COMPANY believes that an equivalent level of safety will can be achieved by following additional protocols. The proprietary manuals outline these protocols and should provide the support necessary to grant the exemption and demonstrate how an equivalent level of safety is achieved."

Overall, NAAA commented in opposition to the operations as proposed by the petitioner. Of specific concern was the proposed multi-ship (swarm) operation without VOs. NAAA did not find sufficient evidence that a single PIC would be able to maintain vigilance, in accordance with §91.113(b), to see and avoid other aircraft. Because crewed ag aircraft will share the Part 137 airspace, they are the most likely risk-bearers of this reduction in safety.

For night operations, the petitioner plans to utilize strobe lighting visible for 3 statute miles. NAAA requested that the equipped strobe lighting be required to be on for all (night and day) operations as an additional means for collision mitigation.

NAAA also reminded the FAA of the unique gravity of dispensing economic poisons, and questioned whether a single PIC can fulfill his/her §137.37 duty (to not dispense in creation of a hazard) while tasked with operating 3 aircraft, potentially at night and without VOs.

In the petitioner's Benefit to Public Interest section, they tout that "UAS may be used in the event that there is no other way to safely spray a certain land area. This will reduce the chance of manned aircraft attempting to spray certain dangerous areas." NAAA agrees with this; UAS can allow operators to keep crewed aircraft out of the most dangerous fields. However, they then state "UAS allow for methods of precision spraying that are not possible with manned aircraft." NAAA took great issue with this statement, citing the distinct lack of efficacy data available to support it and referencing a letter sent by NAAA to EPA on this subject in 2020, previously reported in this newsletter.

You can view NAAA's comments here.

NAAA Ag Aviation Expo Room Block Closes Today; Register for Wire Avoidance Course and NAAREF Fundraiser

NAAA is excited to host our annual convention in Palm Springs, CA Dec. 4-7. The **NAAA room block** closes today; rooms are still available at the Hilton and Hyatt. Contact **Lauren Henretty** with any reservation questions or challenges.

In addition to attendee registration, please also register for the following events:

- 1. Flying in the Wire and Obstruction Environment Course, which is acclaimed by professional airplane and helicopter operators world-wide. It gives low-altitude aviators the essential skills needed to safely operate an aircraft in wire and obstruction environments. This course is for both aircraft and helicopter pilots. Learn how to identify signs of wires and why ag aviators hit wires they already knew were there. This course may very well save your life—don't miss it. \$150 per person; 8-hour course; register online.
- 2. Pitch Perfect for PAASS is a karaoke fundraising event for NAAREF's PAASS program. You do not need to sing to attend this fun fundraiser! This is a terrific social event with the added benefit of raising money for NAAREF and PAASS and the lifesaving and environmental stewardship benefits those entities achieve. Join us Sunday, Dec. 3 at 7 p.m. \$110 donation to NAAREF per person; register online.
- 3. Support Committee's Monday Cooking Demonstration & Wine Pairing with the chef of the Palm Springs Convention Center. Event RSVP is required to **Cathy Ellett**.

While pre-registration has ended, we still urge you to **register for the Ag Aviation Expo** in advance of attending to help us reduce lines at the registration desk and have accurate food/beverage counts, especially if you're attending the **Kickoff Breakfast** to hear from Burt Rutan, Aerospace entrepreneur and Virgin Galactic spacecraft designer.

We look forward to seeing you in December for networking, education, CEUs and a really good time!

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
- General Session Speakers: Ed Messina & Terry Kippley & Turn Smart Safety Session
- Schedule of Events: See the current schedule here.
- Hotel: Details here.
- Attendee Registration: Open here.
- Exhibitor Booth Sales: Booth Sales Open here.
- Sponsorship Opportunities: We still have a few sponsorships left, which can be viewed here. Please email Lindsay if you would like to secure a sponsorship.
- Auction Donations: Thank you to Pratt & Whitney Canada for donating a PT6-34AG engine and Air Tractor for donating a custom
 Can Am to this year's NAAA Live Auction. In addition to their generous engine donation, Pratt & Whitney Canada will also have an
 additional surprise donation at the NAAA Live Auction to celebrate their 60th anniversary of the PT6 family of engines and for
 reaching nearly 1 billion hours flown since the company was founded in 1928. Please consider making a donation for the Live
 and Silent Auction. Support the aerial application industry by donating an item today. Email Lauren with your donation details.

Many Auction Items Up for Bid at NAAA Live Auction; Letter of Credit Required for PT6A-34AG Engine

Thank you to the many companies that support ag pilots and their operations, as well as the industry, through donating items for the **Live and Silent Auctions** at the NAAA Ag Aviation Expo. The money raised from these items supports NAAA programs. To donate an item to the live or silent auction contact, **Lauren Henretty**.

Join us for the Live Auction & Reception on Tuesday, Dec. 5, at 5:30 p.m. at the Palm Springs Convention Center. All are welcome to enjoy the auction, and food and beverages sponsored by Syngenta. The Silent Auction bidding will be open Tuesday and Wednesday during NAAA Trade Show hours; there is no electronic bidding this year.

Pratt & Whitney Canada Engine Details

Thank you to Pratt & Whitney Canada for its generous donation of a brand-new PT6A-34AG turboprop engine. The engine is valued at \$658,000. The engine build specification is 1334, used on the Air Tractor, Thrush and Turbine Conversions STC. The winning bidder is required to pay \$20,000 down on-site, and the remainder of payment is due within 30 days. Please provide a letter of credit from a financial institution to **Deana Kissinger**.

In addition to their generous engine donation, Pratt & Whitney will also have an additional surprise donation at the NAAA Live Auction to celebrate their 60th anniversary of the PT6 family of engines and for reaching nearly 1 billion hours flown since the company was founded in 1928.

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
- General Session Speakers: Ed Messina & Terry Kippley & Turn Smart Safety Session
- Schedule of Events: See the current, tentative schedule here.
- Hotel: Details here.
- Attendee Registration: Now Open here.
- Exhibitor Booth Sales: Booth Sales Open here.
- 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.
- Auction Donations: Thank you to Pratt & Whitney Canada for donating a PT6-34AG engine and Air Tractor for donating a custom
 Can Am to this year's NAAA Live Auction. In addition to their generous engine donation, Pratt & Whitney Canada will also have an
 additional surprise donation at the NAAA Live Auction to celebrate their 60th anniversary of the PT6 family of engines and for
 reaching nearly 1 billion hours flown since the company was founded in 1928. Please consider making a donation for the Live
 and Silent Auction. Support the aerial application industry by donating an item today. Email Lauren with your donation details.

NAAA Support Committee Events at the Ag Aviation Expo

We look forward to seeing you at the 2023 NAAA Ag Aviation Expo in Palm Springs, CA, Dec. 4-7. The NAAA Support Committee has organized several fun events at the Ag Aviation Expo for spouses/significant others, family members and office crew.

2023 Ag Aviation Expo Support Committee Events

Monday, Dec. 4: Food & Wine Tasting (RSVP required) 11:30 a.m.-1:30 p.m.

Enjoy a food and wine pairing cooking demonstration from the chef of the Palm Springs Convention Center. Meet other women in the industry and enjoy a great light lunch and new wines. RSVP required for event to Cathy Ellett at **catellett@gmail.com**. Sponsored by GarrCo Products Inc., Star-Flex, Thrush and Chem-Man.

Wednesday, Dec. 6: Athena Project Presentation (no RSVP required) 9:45-11:45 a.m.

Attend the Wednesday Athena Project presentation titled, "Five Blades to Propel your Health and Wellness," which will cover nutrition and hydration, physical, mental and environmental health, as well as relationships. The program is written by the Athena presenters and committee members for office bookkeepers, working loaders, operators, pilots and family members. The program covers information that is beneficial to anyone working in the industry and family members. Attend this session, whether you're a spouse, office crew or family member, to gain inspiration, encouragement, and advice on better ways to serve our industry. All are invited and no RSVP is required. Sponsored by Chuck Holzwarth Flying Service.

Wednesday, Dec. 6: NAAREF Relationship Drift (no RSVP required) 4-6 p.m.

The Relationship Drift Session will look at how personal relationships affect pilot decision making and safety. Men and women should attend this session together, including couples and office crew. This is similar in format to the popular Compaass Rose program, but instead of better facilitating relations between inexperienced pilots and more experienced operators, the new session is designed to

facilitate relations between operators/pilots and their spouses or significant others and office crew. All are invited! Sponsored by Rotorcraft Repair & Manufacturing

Support NAAA by Renewing Your Membership for 2024

Thank you for your support of NAAA as a 2023 member. We request your continued support by **renewing your NAAA** membership for 2024. While you have been busy aiding farmers to produce a safe, affordable, and abundant supply of food, fiber, and bioenergy, NAAA has been busy making sure low altitude airspace is safe for your aerial application business to operate, as well as ensuring that you have the pesticide products you need to do your job.

In 2024, NAAA will focus on external communications about the benefits of aerial application and hiring ag pilots to handle spraying work. One great example of our public relations, that will benefit your business, will be NAAA contributing articles and ads throughout 2024 in Farm Journal's publications promoting aerial application services and how their readers can directly search the location of your aerial application business to a potential circulation of 150,000 ag retailer, crop consultants and farmers throughout the U.S.!

Several of NAAA's services conducted on your behalf, include:

- The launch of C-PAASS, our professional certification program for aerial applicators that take additional steps to augment their
 professionalism through education and testing, positioning themselves to be recognized and rewarded by their insurance
 providers, pesticide manufacturers, and customers.
- Submitting no fewer than 270 comments since 2017 to the EPA to keep aerial applications on pesticide labels enabling you to keep a deep inventory of pesticide tools without unnecessary and burdensome restrictions.
- Passage of the House FAA Reauthorization bill directing FAA to broaden protections ensuring the safety of manned aircraft from
 drones operating beyond visual line of site in addition to those drones operating under Part 107 and those above 55 pounds.
- Actively advocating to Congress for Farm Bill inclusion of exempting NPDES Permits for pesticide applicators and other key
 unnecessary, burdensome, and duplicative regulatory relief provisions, in addition to continuing substantive USDA research for
 developing safer, more efficient aerial application technologies.
- NAAA's "Aerial Application: Above All Forms of Crop Care" ad campaign and accompanying web search tool identifying member businesses is widely circulated to hundreds of thousands of potential aerial application users.
- Development of a health care insurance policy in 2024 for NAAA members to purchase for their families and business at competitive rates.

You will also continue to receive ongoing benefits, such as legal consultation on federal aviation laws, discounts for attending or exhibiting at the Ag Aviation Expo, staying connected to members through the print and online NAAA Membership Directory and receiving Association publications and eNewsletters, social media briefings and substantive web content at **AgAviation.org**.

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 and trade association membership dues are tax deductible.

Apply for C-PAASS 2023 by December 11

Join the growing number of ag pilots who are committed to enhancing safety, environmental stewardship, and application efficacy in the agricultural aviation industry.

The deadline to become 2023 **C-PAASS certified** is Dec. 11; count yourself among those committed to being the best of the best in the industry. C-PAASS 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 S.A.F.E. 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 education.agaviation.org/cpaass.

- You will need to log in using your NAAA username/password. Contact information@agaviation.org if you need assistance.
- 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.

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 jointly launched the Certified-Professional Aerial Applicator Safety Steward (C-PAASS) program earlier this year 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.

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.

FBI-DHS Announce Hamas-Israel War Has Increased Threat of Terrorist Attacks on U.S. Soil; Make Sure Your Operation in Secure

In a Fly Safe Message **emailed** on Monday morning, NAAA alerted the industry that the Department of Homeland Security (DHS) and Federal Bureau of Investigation (FBI) released a public service announcement to highlight potential terrorist threats in the United States in response to the war in the Middle East. While the level of skill required to operate an agricultural aircraft makes it unlikely that it would be used by terrorists, the aerial application industry must nevertheless remain alert to any and all potential threats. Hostile actors may be interested in large quantities of fuel or chemicals instead of aircraft.

There are numerous ways to increase the security at your operation. A common and effective solution used by many operators is a video camera system. You can customize the number and location of the cameras, monitor them via the internet, and record footage. Many have the ability to alert you should they detect movement. Don't forget the simple things either, such as locking all building and vehicle doors and securing your chemicals and fuel. See NAAA's Ag Aviation Security webpage for more information, including the Airfield Watch Brochure and an article on hidden cutoff switches.

Don't be complacent with security procedures at your ag operation. You may think that because your operation is in a very rural area there's no possible way someone would consider your site, but that's exactly why they might choose your operation. Remain vigilant at all times.

Casey Novak Fatally Injured in Eleventh Fatal Accident of 2023

On October 24, 2023, Casey Novak was fatally injured in the 11th fatal accident of 2023 season. Casey was born on July 5, 1973, in Natchez, MS and was 50 years old when he passed away. The members and staff of NAAA offer their deepest condolences to his family and friends.

Casey served in the U.S. Army overseas and was a resident of Natchez, MS. He was the owner and operator of Ferriday Flying Service in Ferriday, LA, and a member of both NAAA and LAAA. In addition to his love of aviation, Casey also enjoyed hunting, shooting, and spending time with his family. Casey is survived by his wife, their sons, his father, two brothers, two sisters, and numerous nieces and nephews.

Casey's memorial service was held on October 30, 2023, in Natchez, MS. In lieu of flowers Casey's family is requesting that donations be made to the Casey Novak Memorial Scholarship Foundation through UMB of Natchez (203 S Commerce Street, Natchez, MS 39120; 601-445-7011) or **Hoofbeats and Pawprints Rescue of Natchez**. You can read Casey's full obituary and sign the virtual guest book **here**. Please keep Casey's family and friends in your prayers.

Proposed AD for GE M601 Engines

The Federal Aviation Administration (FAA) is proposing to supersede Airworthiness Directive (AD) 2021-13-07 (dated June 14, 2021) which applies to several GE Aviation Czech s.r.o. M601 turboprop engines. The original AD was based on the European Union Aviation

Safety Agency (EASA) AD 2021-0125-E, and required recalculating the life of critical parts and replacing a certain compressor case.

Since the original AD was issued, the manufacturer published the airworthiness limitations section (ALS) of the existing engine maintenance manual, which includes the calculations for the life of critical parts addressed by the original AD. EASA revised AD 2021-0125-E and issued AD 2021-0125R1 (dated January 30, 2023) to limit the applicability and remove the requirements that have been incorporated into the ALS.

The FAA's proposed superseding AD would continue to require replacement of a certain compressor case and include an additional part number as an option for replacement and would limit the applicability as specified in EASA 2021-0125R1. The FAA will be addressing the actions specified in the ALS concurrently in a separate AD action.

Comments on this proposed AD are due December 11, 2023.

Beware of Media Companies That May Not Portray Your Operation of the Ag Aviation Industry in Positive Light

In 2011, a **cover story** in *Agricultural Aviation* magazine highlighted the harmful impacts reality television can have on the ag aviation industry. The article written by Jason Colquhoun, a veteran photographer/filmmaker turned ag pilot, explained how easy it is for production companies to manipulate footage to portray anything in a bad light.

Although this article was written twelve years ago, it still rings true today. NAAA has been informed that a film production company **Serendipitous Films** has been contacting various ag pilots to be filmed for a "dirty jobs" type of television show.

NAAA is circulating **this article** again as a reminder that television production crews have their own spin on how they want to portray the industry. As such, bringing forth the article will remind the industry to be aware of the risks involved with being the subject of a reality TV program. The scripted and artificial drama that comes along with reality TV is not something that can benefit your operation or the industry. While NAAA wants to expose more of the public to the ag aviation industry, the tone, perpetuated stereotypes, and conflict-oriented focus of reality TV overshadow any positive message or publicity.

Things in our industry that make television producers salivate, such as accidents, injuries, chemical spills, or issues with drift, are already very serious issues that do not need to be sensationalized for entertainment.

NAAA encourages all members to consider the warnings in **this article** and be extremely guarded if you are approached by a production company about taking part in a reality TV series. The thrill of seeing yourself on TV is far outweighed by the harm Hollywood has the power to inflict on your business and the ag aviation industry with a few simple editing techniques.

This is also a reminder that what you post on social media – even in private groups – can easily be shared by others. Don't film while you are spraying. No matter what image is taken, what is said or recorded, files can be manipulated. Everyone has a camera, everyone has editing software and now with multiple social media outlets, anyone can post anything, and it can go viral in hours. You've probably heard the saying "if you wouldn't want your mother to see it, then don't post it!" If you don't want regulators to see your photos or videos, then don't post it.

If you have questions, concerns or are approached about participating in a reality TV program, please contact NAAA's **Lindsay Barber** at (202) 546-5722.

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:

- 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