



# SPRAY DRONE

END USER CONFERENCE

MARCH 23-26



MOBILE CONVENTION CENTER  
Mobile, AL



## **2025 Spray Drone End User Conference-Sponsor and Vendor List**

**March 23-26. Mobile Convention Center, AL**

### **Diamond**

Agri Spray Drones (booth 11, and booth 1 in the south hall)

DJI Agriculture (booth 16)

Nutrien (booth 10)

Pegasus Robotics (booth 2)

Rantizo (booth 17)

### **Platinum**

Agremo (booth 9)

Bayer CropScience (no booth)

Central UAS Technologies (formally known as Leading Edge, booth 19)

EAVision (booth 12)

Futurology (booth 15)

GarrCo (booth 5)

Huida (booth 4)

Pix4D (booth 20)

Raptor Dynamic (booth 3)

UAPASTF (Spray Drone Task Force, booth 18)

### **Gold**

Bestway Ag (booth 34)

Flying Acres Ag (no booth)

Geoloom (booth 21)

U-PASS (booth 22)

**Silver**

American Spray Drone Coalition (ASDC, booth 6)

Agritec (booth 7)

Apexx Enterprises (booth 8)

Application Insight (booth 23)

Chem-Man (booth 24)

Drone Cone (booth 25)

Flightline Assurance (booth 13)

Frontier Precision (booth 26)

Oxford Lasers (booth 27)

Precision Laboratories (booth 14)

Quantum Autonomous Services (booth 28)

Redbird Sparrow Ag (booth 29)

Southern Irrigation (booth 30)

Southern Drone Ops (booth 33)

VT Insurance (booth 31)

Wind-Fall (booth 32)

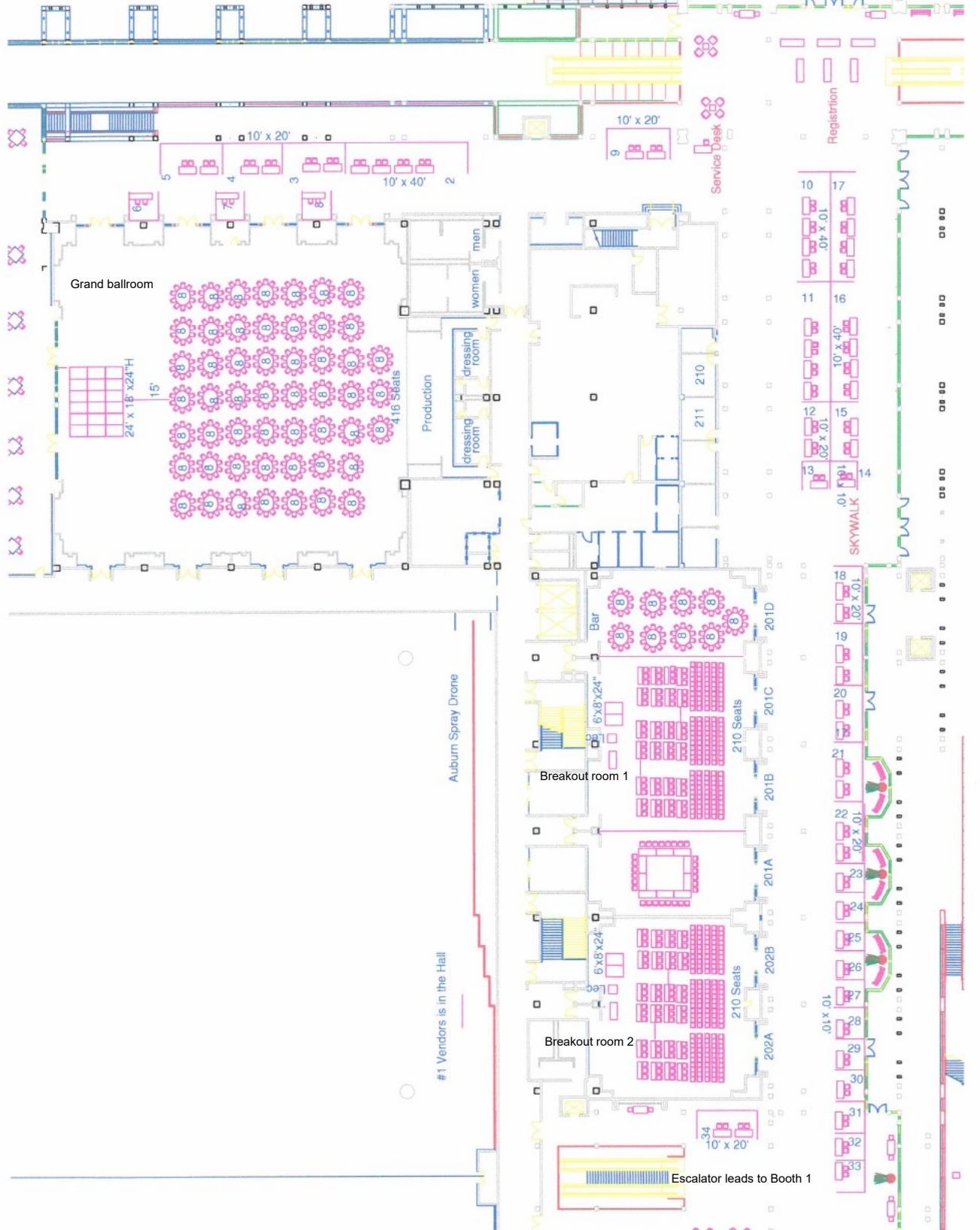
**Bronze (do not have booth)**

Ethox

MSU Agricultural Autonomy Institute

Red Cowbird

The Inspired Collective



Grand ballroom

24' x 18' x 24" H  
15'

5  
4  
3  
2  
10' x 40'  
10' x 20'

416 Seats

Production

dressing room  
dressing room

women  
men

Auburn Spray Drone

#1 Vendors is in the Hall

Breakout room 1

Breakout room 2

Bar

6' x 8' x 24"

6' x 8' x 24"

Escalator leads to Booth 1

Service Desk

Registration

SKYWALK

10' x 40'

10' x 20'

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# Final Program-2025 Spray Drone End User Conference

Mobile Convention Center. 1 S Water St, Mobile, AL 36602

March 23<sup>rd</sup>-26<sup>th</sup>, 2025. All times in US Central Time (UTC -5:00)

## March 23<sup>rd</sup>

**9am-5pm: Conference registration (outside grand ballroom)**

### General Session 1

**Location: Grand ballroom**

**12:30pm: Welcome.** *Steve Li (Extension Professor. Alabama Cooperative Extension System and Auburn University)*

**12:40pm-1:20pm: Empowering Rural America: The Future of the US Ag Drone Industry.** *Taylor Moreland (President and CEO, Agri Spray drone)*

**Description:** Taylor Moreland and his company Agri Spray Drones have been at the forefront of the US agriculture drone industry since 2020, with a mission of Empowering Rural America with New Opportunities and New Technology. Spray drone technology has been transformative for the next generation of US farmers, but 2024 showed the fragility of the supply chain and the geopolitical hurdles it faces. Join Taylor as he showcases the impact of the spray drone industry over the past few years and the efforts ASD is taking to solidify the longevity of this technology into the future.

**1:20pm-2:00pm: Introduction to Integrated Vegetation Management (IVM) and Importance of Adjuvants in Drone Applications.** *Chris Blodgett. (Southeast Sales Territory Manager. Nutrien).*

**Description:** Presentation will focus on introducing Industrial Vegetation Management practices for site specifics (non-agricultural settings) and goals. Along with looking at the importance of choosing and using adjuvants in our drone application programs.

**2:00pm-2:15pm: Spray Drones 101: What Every Farmer Needs to Know Before Making the Switch.** *Valerii Lakovenko (Co-Founder & Managing Partner, Futurology / DroneUA)*

**Description:** From a novel concept to an essential tool in modern farming, spray drones have revolutionized agriculture, making it more efficient, sustainable, and attractive to the next generation of farmers. Valerii Lakovenko, a pioneer in agri-drones and a UN FAO drone expert, shares the journey of drone sprayers—from experimental technology to large-scale adoption—highlighting how they save water, reduce chemical use, and increase yields. Drawing from global success stories, including Ukraine’s rapid drone adoption and U.S. market trends, this session will explore how drone technology is not just changing how we farm but also bringing innovation and youth back to agriculture while pollution would include spills and other poorly stored chemical that seeps into the ground.

**2:15pm-2:30pm: EAVision: A Decade of Dedication to Agricultural Plant Protection Drones.**

*Dalei Song (CEO, Chief Technology Officer, EAVision Technologies)*

**Description:** Founded in the United States and flourishing in China, EAVision has spent 10 years pioneering advanced agricultural drone technologies. With a commitment to innovation, we proudly serve the agricultural communities of both China and the United States, empowering farmers with cutting-edge solutions for crop protection and sustainable farming practices.

**2:30pm-3:00pm: Coffee Break, Networking and Exhibitor Visit**

**3:00pm-3:40pm: How You Can Make 2025 Your Best Season Yet.** *Mariah Scott (CEO, Rantizo),*

*Zachary Hanner (Agronomy Operations Lead, Rantizo)*

**Description:** Spray season is hectic, and you can't afford to slow down. Now is the time to get ahead of the 2025 season. Learn from our experience operating four regional spray hubs and managing the largest network of spray drone operators in the nation, as we provide practical advice and examples to help you to fly more acres and deliver better service. We will show you how to maximize in-field efficiency with the right drone for the job, the right field access set up, and the latest FAA exemptions. We'll also introduce you to software that can save you time and help you manage your spray business, plus provide case studies on new uses for spray drones to help you achieve your best season yet.

**3:40pm-3:55pm: Innovate. Cultivate. Elevate.** *Calvin Cai (Vice president and Head of North America. Huida Tech)*

**Description:** Agricultural technology is revolutionizing how we grow, harvest, and sustain our world. Innovate, Cultivate, Elevate, through cutting-edge innovation, we empower farmers, boost efficiency, and elevate agriculture to new heights, paving the way for a smarter, greener, and more sustainable future

**3:55pm-4:35pm: Raptor Dynamics Unveiled: Revolutionizing Agriculture with Innovation and Service.** *Roy Farrer (Chief of Operations, Raptor Dynamic)*

**Description:** Raptor Dynamics is excited to announce our expansion to America, bringing a new direct selling model tailored for farmers and applicators. Our mission is to provide the best drones, unparalleled service, and competitive pricing to our valued customers. Join us in revolutionizing agricultural technology and elevating farming operations to new heights.

**4:35pm-4:50pm: Optimizing Adjuvant Selection and Unlocking the Benefits of Biological Products.** *John Garr (President, GarrCo Products)*

**Description:** Choosing the right adjuvant is essential for maximizing the efficiency of your spray applications. The proper selection enhances tank mixing, minimizes drift, improves deposition and retention, and ultimately increases the cost-effectiveness of the spray. Furthermore, incorporating biologicals can deliver substantial benefits, such as increased yields, improved plant health, and a

stronger return on investment. By thoughtfully considering adjuvants and biologicals, you can unlock the full potential of your agricultural practices.

**4:50pm-5:05pm: Agremo for Crop Monitoring, field analytics, and variable prescription maps.**

*Luka Zivkovic (Head of Sales, Agremo)*

**Description:** Agremo is a precision ag application designed to improve crop scouting operations and help farmers get precise data about crop performance and health. It uses AI and aerial imagery to provide easy-to-understand data such as stand counts, weed zones, plant health, elevation maps, damaged plants, etc.

**5:30-8pm. Welcome Reception (sponsored by Rantizo)**

**Location: Grand ballroom foyer**

**Chair:** *Rick Jordan (Operations Manager, CNY Drone Services)*

**Description:** Please enjoy complimentary beverages and food. Have fun with fellow drone operators and new spray drone super friends from all over the country. Trivia questions will be asked in the 1<sup>st</sup> Spray Drone Quiz Bowl and the top team will be able to win prizes (hosted by Rick Jordan). More door prizes will be drawn among conference attendees.

**March 24<sup>th</sup>**

**7:30am-8:30am: Prayer Breakfast and Networking**

**Chair:** *Preston Cave (Owner, Pac Aerial Applications), Bryan Hammis (Owner and PIC, Flying Acres Ag)*

**Location: Grand ballroom**

**General Session 2**

**Location: Grand ballroom**

**8:30am-9am: Pesticide Regulatory Updates and Implications for Drone Applicators.** *Sarah Hovinga (Regulatory Policy Analyst, Digital Farming. Bayer Cropscience)*

**Description:** A broad overview will be presented with respect to major regulatory updates around application of pesticides with drones. Focus will be given to progress around off-site movement/drift, operator exposure, crop residue, and best practices activities as well as stakeholder engagement in these areas.

**9am-9:30am: The National Agricultural Aviation Association (NAAA): The Umbrella Group for All Aerial Applicators.** *Andrew Moore (CEO, National Agricultural Aviation Association)*

**Description:** NAAA CEO Andrew Moore returns to discuss the many services provided by NAAA promoting the fiscal health and professionalism of aerial applicators, whether crewed or uncrewed. Last year NAAA established a UAS Committee, it made significant advancements with EPA in ensuring aerial labels for pesticides and with FAA in marking and logging towers. Moore will discuss this and more.

**9:30am-10am: Navigating Political Turbulence for Spray Drones in America.** *Eric Ringer and Jeff Clack (President and VP, American Spray Drone Coalition)*

**Description:** In this session we'll provide an overview of the various efforts to ban Chinese made drones and components and an update on the current state of DJI's challenges with US customs. Most importantly, we'll talk about how these issues impact end users, how end users can make their voices heard, and how we build a future where American agriculture leads the world in technological innovation, economic prosperity, and sustainable practice.

**10am-10:30am: Coffee Break, Networking and Exhibitor Visit**

**Breakout Session 1: Complete Field Solutions for Drone Work**

**Location: Grand ballroom**

**Chair and Co-Chair:** *Rick Jordan (Operations Manager, CNY Drone Services), Bryan Hammis (Owner and PIC, Flying Acres Ag)*

**10:30am-11am: Presentation of Various Rigs and Setups.** *Rhyan Syester (Owner, Veteran Drone Services)*

**Description:** An overview of drone rigs commonly used for agricultural, industrial, and environmental applications, including setup processes and real-world examples.

**11am-11:30am: Auxiliary Items.** *Cody Garrison (Director of Sales, Apexx Drone Solutions), Jordan Wade (Director of Operations, Apexx Drone Solutions)*

**Description:** A discussion of essential auxiliary tools, including pumps, generators, and other equipment that enhance drone operations, as well as best practices for integrating these tools into workflows.

**11:30am-12pm: Geographic Adaptations.** *Hayden Crum and Kamden Crum (Co-Owners, Midwest Air LLC)*

**Description:** Explore how different geographic areas and field types influence equipment choices and operational strategies for drone applications. Hayden and Kamden Crum will share insights on adapting rigs and setups for varying terrains and environmental conditions to maximize efficiency and effectiveness.

## **Breakout Session 2: Spray Drone Research**

**Location: Breakout room 1**

**Chair and Co-Chair:** *Steve Li (Extension Professor. Alabama Cooperative Extension System and Auburn University), Keaton Lyons (Owner, Lyon Sight Ag Solutions)*

**10:30am-11am: Effective Swath Width – It May Be Shorter Than You Think.** *Jason Deveau (Application technology specialist, Ontario Ministry of Agriculture, Food and Rural Affairs)*

**Description:** Several protocols have been proposed for visualizing RPAS spray deposits and converting that information into an effective swath width. But are any of these methods appropriate for real-world applications? Tar spot in corn has revealed fungicide striping patterns from all aerial application systems, and it prompted us to explore how canopies affect swath width.

**11am-11:30am: Measuring the Effect of Adjuvants on Droplet Spectrum in Drone Applications.** *Ulisses Antuniassi (Professor, Sao Paulo State University, Brazil)*

**Description:** The objective is to describe and discuss the effect of adjuvants on the droplet spectrum generated by different devices in the simulation of drone spraying applications using a high-speed wind tunnel. Hydraulic and rotary nozzles used in drones were installed in a wind tunnel equipped with a Sympatec Helos particle analyzer. Pure water and several spray solutions were sprayed, the first being the dilution of a SC formulation fungicide in water, and the others containing this fungicide in tank mix with adjuvants (modified vegetable oil, guar-based polymer and surfactants), all adjusted label rates. Spray volume was adjusted to 10 L/ha. The volume median diameter, the percentage by volume composed of droplets smaller than 100 µm and the relative spam data were generated. The results showed that there was interference from the adjuvants according to each type of droplet generator (tips with and without air induction and the rotating nozzle). The performance of the hydraulic and rotating nozzles was different depending on the different adjuvants, just as the nozzles with and without air induction reacted differently to the presence of the various adjuvant technologies. The droplet classes observed when spraying with rotary nozzles were different from those indicated by the manufacturer.

**11:30-12:00pm: Latest findings in deposition aid evaluation and droplet spectrum quantification with rotary atomizers.** *Steve Li (Extension Professor. Alabama Cooperative Extension System and Auburn University)*

**Description:** Many drone operators are interested in increasing spray deposition and protecting spray quality when it is windy. Choosing proper droplet size is also critical to pesticide efficacy and canopy penetration. Latest field study results will be shared to elucidate adjuvant effect on spray deposition and canopy penetration. Droplet spectrum data will also be reviewed to help drone operators understand how droplet size change with corresponding controller setting, and the important interaction of drop size x flow rate.

## **Breakout Session 3: Launching a Drone Spraying Business**

**Location: Breakout room 2**

**Chair and Co-Chair:** *Keaton Lyons (Owner, Lyon Sight Ag Solutions), Kurt Beckley (Owner, Altitude Agri Services)*

**10:30am-11am: Navigating FAA Regulations: Steps to Securing a Part 137 Agricultural Drone Certificate.** *Kelly Neubecker (President, UASolutions Group, LLC)*

**Description:** This presentation outlines the steps to obtain a 14 CFR Part 137 Agricultural Operating Certificate for drone operations. First, pilots must secure a Part 107 Remote Pilot License, a third-class medical certificate, and register their drones, including reserving N-numbers. Next, they must file a Section 44807 Petition for Exemption, providing detailed operational and personnel information. Finally, with the exemption approved, applicants can submit the 8710-3 application for the Part 137 Certificate, completing the process.

**11am-11:30am: Breaking Into the Spray Drone Industry: Key Steps to Start Your Business.** *Chase Plummer (Northeast Key account manager, Agri Spray Drones), Trey Stephens (Product Knowledge Specialist, Agri Spray Drones)*

**Description:** Starting a spray drone business involves key steps such as selecting the right drone and accessories, securing insurance, and understanding the needs of your target market. Building strong relationships with suppliers and clients is crucial, as is maintaining equipment for consistent performance. Focus on delivering reliable, high-quality services to establish your reputation in the competitive agricultural industry.

**11:30-12:00pm: Taking Flight: Insights and Challenges in Starting a Spray Drone Business (panel discussion)**

**Panelists:** *Kelly Neubecker (President, UASolutions Group, LLC), Chase Plummer (Northeast Key account manager, Agri Spray Drones), Trey Stephens (Product Knowledge Specialist, Agri Spray Drones), Nathan Sare (Logistics and Warehouse manager, Agri Spray Drones), Elijah Poehlman (Repair and Service Lead, Agri Spray Drones), Alex Ryan (Director of Regulations, Agri Spray Drones)*

**Description:** This panel brings together experts and entrepreneurs to discuss the key steps, challenges, and opportunities in launching a spray drone business. Topics include navigating FAA regulations, selecting the right equipment, and building a sustainable business model. Gain practical advice and industry insights to help you successfully enter the growing field of drone-based agricultural services.

**12pm-1:30pm: Lunch (Sponsored by Agri Spray Drones)**

**Location:** Grand ballroom

**Lunch Presentations:**

**12:30pm-12:45pm: Supporting Operator Safety in Drone Pesticide Applications.** *Jennifer Thomasen (Group Leader, Occupational and Residential Exposure, Bayer Cropscience)*

**Description:** Operator safety is crucial in drone pesticide applications to reduce exposure to chemicals. Proper training, protective gear, and adherence to safety protocols minimize accidents

and ensure safe handling during loading, operation, and maintenance of drones. Recent publications as well as end-user 2024 survey data will be highlighted, and how the pesticide industry is using this information to inform future regulations and promoting safe use with spray drones.

**12:45pm-1pm: Pesticide Application with Drones - Job Steps Survey to Inform Industry and Regulators About User Safety.** *Eric Bruce (Consultant, Unmanned Aerial Pesticide Application System Task Force)*

**Description:** UAPASTF is undertaking an effort to conduct a job steps survey for pesticide applications using drones. Such survey is aimed as an exploratory work to support a further global effort in collaboration with regulators. Overall goal is to understand actual work practices and conditions to inform industry and regulators about worker safety.

#### **Breakout Session 4: FAA Regulatory Requirements**

**Location: Grand ballroom**

**Chair and Co-Chair:** *Joel Jones (Commercial UAV Instructor, Orange Coast College CA), Jackson McKenzie, Drone pilot, Aurora Co-op)*

**1:30pm-2pm: A Deep Dive into an Exemption's Conditions and Limitations.** *Ryan Smith (Aviation Safety Inspector, AFS-750 GA and Commercial UAS Branch, Federal Aviation Administration), Jonathan Rupprecht, Esq. (Commercial Pilot (ASEL/AMEL) & Flight Instructor (CFI/CFII), Rupprecht Law, P.A)*

**Description:** A line-by-line study of the Conditions and Limitations within the Exemption and how to be in compliance.

**2pm-2:30pm: Operation Near Public Airports and Helipads.** *Joel Jones (Commercial UAV Instructor, Orange Coast College CA)*

**Description:** The Blank COA attached to the Exemption prohibits operations near public airport, with a cryptic path to gain authorization. This presentation will demystify the process of acquiring an ATO COA allowing for operations up to airport property.

**2:30pm-3pm: Q&A for the Regulatory Session.**

**Panelists:** *Ryan Smith (Aviation Safety Inspector, AFS-750 GA and Commercial UAS Branch, Federal Aviation Administration), Jonathan Rupprecht, Esq. (Commercial Pilot (ASEL/AMEL) & Flight Instructor (CFI/CFII), Rupprecht Law, P.A), Joel Jones (Commercial UAV Instructor, Orange Coast College CA), Richard Ham (Senior Director and faculty, University of Arkansas)*

**Description:** Answer all questions from all sub-sessions.

#### **Breakout Session 5: Spray Drone Research**

## **Location: Breakout room 1**

**Chair and Co-Chair:** *Steve Li (Extension Professor, Alabama Cooperative Extension System and Auburn University), Keaton Lyons (Owner, Lyon Sight Ag Solutions)*

**1:30pm-2pm: Spray Drone Research Activities, Applications and Legislation from a European Perspective: The Case of Belgium.** *Jonathan Van Beek and David Nuyttens (Precision crop farming research engineers, Flanders research institute for agriculture, fisheries and food (ILVO), Belgium)*

**Description:** This presentation explores advancements in drone-based spraying technology, practical applications in EU and Belgium, and the regulatory framework in Belgium and Europe, highlighting both opportunities and challenges for precision agriculture. The presentation will showcase results from indoor and field measurements and simulations, highlighting opportunities and challenges for precision agriculture.

**2pm-2:30pm: Spray coverage deep dive – How RPAS droplets move in 4D.** *Jason Deveau (Application technology specialist, Ontario Ministry of Agriculture, Food and Rural Affairs)*

**Description:** Despite what you may have heard, RPAS do not spray like planes or helicopters. RPAS spray coverage across and within a swath can be highly variable, and this is primarily due to the effect of downwash on droplet behavior. Using a three dimensional array of samplers, we've captured a snapshot of the direction and magnitude of spray along the swath, and it may change how you think about RPAS spraying.

**2:30pm-3pm: Maximizing Herbicide Application Efficiency with Spray Drones: Key Factors and Recommendations.** *Tommy Butts (Clinical Assistant Professor, Site-Specific Weed Management Botany & Plant Pathology, Purdue University)*

**Description:** This talk will explore recent spray drone research evaluating multiple herbicide application factors such as nozzle selection, spray volume, and adjuvant use. A discussion revolving around these factors and their influence on effective spray swath width, coverage, and weed control will occur. General recommendations will be considered for maximizing the effectiveness and consistency of spray drone herbicide applications.

## **Breakout Session 6: Essential Software Solutions for Drone Operations**

### **Location: Breakout room 2**

**Chair and Co-Chair:** *Rick Jordan (Operations Manager, CNY Drone Services), Bryan Hammis (Owner and PIC, Flying Acres Ag)*

**1:30pm-1:45pm: AcreConnect: Real-Life Success Stories and What's New for 2025.** *Chris Rickman (Principal Product Manager, Rantizo), Zach Hanner (Agronomy Operations Lead, Rantizo)*

**Description:** Spray season is hectic with last-minute requests, unpredictable weather, logistical challenges, and sky-high customer expectations. Discover real-life examples of how *AcreConnect™* is helping operators run operations smoothly, exceed customer expectations, and make every

moment count. Explore the exciting new features for 2025 designed to support your operational success throughout the season.

**1:45pm-2pm: *From Orthomosaics to Action: How Sairone's Drone Software Enhances Invasive Species Control and Precision Agriculture.* Kate Withers Hess (Co-Founder, Saiwa Inc.)**

**Description:** Discover how Sairone simplifies the detection and mapping of invasive species, noxious weeds, and nuisance aquatic plants. By uploading your orthomosaics to Sairone, you can process this imagery to generate actionable maps and shapefiles. These outputs include precisely delineated polygons, ideal for programming both spray-drones and ground sprayers to execute variable rate and spot-spray herbicide applications.

**2pm-2:15pm: *Enhancing Workflow and Operations with Chem-Man.* Regina Farmer (Owner, Chem-Man)**

**Description:** Chem-Man has been the leading software choice amongst all applicators with its easy-to-use platform. Since 1993, Chem-Man has successfully helped applicators across the US and Canada eliminate wasted hours of double entry, improve efficiency, assist in the daunting task of record keeping, and provide better options for billing. Enhance your workflow with an operational management tool like Chem-Man.

**2:15pm-2:30pm: *DJI Terra & Smart Farm application for agriculture drones.* Michael Zhang (Solution engineer, DJI Agriculture)**

**Description:** In this presentation, workflow and major software functions of DJI terra & DJI Smart Farm will be introduced regarding the agriculture drone application. Topics will include: prescription map / precision agriculture, HD map reconstruction, orchard / 3D flight planning.

**2:30pm-2:45pm: *Closing the Gaps: Drone Data for Optimized Spray-Drone Operations.* Julius Petri (Head of Agriculture, Pix4D)**

**Description:** PIX4D will demonstrate how UAV-based mapping with the PIX4Dfields platform improves Spray-Drone Operations and enables new applications like Variable Rate Application (VRA) and Patch-Spraying. Drawing on real-world examples from service providers and farmers, this session covers essential use cases that showcase how precise aerial data helps streamline workflows, reduce costs, and deliver better crop outcomes.

**2:45pm-3:00pm: *Agremo for Crop Monitoring, Field Analytics, and Variable Prescription Maps.* Luka Zivkovic (Head of Sales, Agremo)**

**Description:** Agremo is a precision ag application for crop monitoring, field analytics, and variable prescription maps. This session will present the app, its functionalities, and how drone service providers can build businesses using the Agremo app.

**3pm-3:30pm: Coffee Break, Networking and Exhibitor Visit**

## **Breakout Session 7: Navigating Turbulence: Spray Drones in America Amid Government Headwinds**

**Location:** Grand ballroom

**Chair and Co-Chair:** *Eric Ringer and Jeff Clack (President and VP, American Spray Drone Coalition)*

### **3:30pm-4:15pm: Panel Discussion-End users**

**Description:** End User panel discussing the drones the panelists use, why they've chosen them and what they like about them, how they're viewing the policy issues plaguing Chinese made drones and Chinese drone components, and how those issues affect their purchasing decisions.

**Panelists:** *Josh DiPippo (Owner, Spotters Aerial Ag), Nate Nouwels (Chief Pilot, Ag-Bee), Marcus Apple (Drone Specialist, Apple Farm Service), Cody Cash (Central UAS Technologies)*

### **4:15pm-5pm: Panel Discussion-Drone manufacturers**

**Description:** Manufacturer panel on how they're adapting to changes in policy, where they think their drones shine, etc.

**Panelists:** *Wayne Baker (Director of public relationship, DJI), Arthur Erickson (CEO, Hyllo), Arthur Chen (President, Pegasus Robotics), Kelley Wittenburg (Sales director, Central UAS technologies)*

## **Breakout Session 8: Drone Basics: Essential Skills for Safe and Effective Operations**

**Location:** Breakout room 1

**Chair and Co-Chair:** *Rick Jordan (Operations Manager, CNY Drone Services), Keaton Lyons (Owner, Lyon Sight Ag Solutions)*

### **3:30pm-4pm. Keeping Spray Drones Airworthy: Repairs, Maintenance, and Warranty Essentials.** *Elijah Poehlman and Nathan Sayre (Drone technicians, Agri Spray Drone)*

**Description:** This presentation will provide an in-depth overview of the essential practices for maintaining and repairing spray drones to ensure optimal performance and longevity. Topics will include common maintenance schedules, troubleshooting tips for repairs, and understanding warranty coverage to minimize downtime. Attendees will gain actionable insights on how to keep their spray drones in peak condition and reduce operational disruptions

### **4 pm-4:30pm. Field Layout, Flight Planning, and Data Management.** *James Harris (Co-Founder, YellowHammer Drones)*

**Description:** Discover key techniques for efficient field layout and flight planning to maximize drone operation effectiveness. This session will also explore best practices for managing operational data, ensuring accuracy, and streamlining workflows.

### **4:30 pm-5pm. Drone Basics Q&A**

**Panelists:** *James Harris (Co-Founder, YellowHammer Drones), Rick Jordan (Operations Manager, CNY Drone Services), Elijah Poehlman and Nathan Sayre (Drone technicians, Agri Spray Drone)*

**Description:** Questions regarding spray drone basics and operation will be answered.

### **Breakout Session 9: Drone + Seed**

**Location:** Breakout room 2

**Chair and Co-Chair:** *Nathan Parmentier (President, Airgro), Aaron Duval (Chief Operation Officer, Acuspray)*

**3:30pm-4pm. Assessing Rate Accuracy and Distribution Uniformity of Cover Crop Seeding with Drones.** *Jacob Sizemore (Graduate research assistant, Auburn University)*

**Description:** Information on rate accuracy and distribution uniformity across the swath for application of cover crops with drones will be presented. The presentation will also cover the effect of seeding rate, flight speed and application height on spread distribution along with sharing some recommendations for seeding cover crops with drones.

**4 pm-4:30pm. Drone Seeding Practices.** *Zach Martindale (Owner, Ag Pro Drone Service)*

**Description:** In this session learn about the different seed types and applications, tendering, field operations and drone info.

**4:30 pm-5pm. Cover Crop Seeding Q&A**

**Panelists:** *Bryan Hammis (Owner, Flying Acres Ag), Rick Mark Archibald (Owner, Universal Aerial Solutions), Cameron Rozell (Owner, Ag Drones East), Brett Baldwin (Owner, BT AG Drones), Ryan Vonderhaar (Co-Owner, L&R AG)*

**Description:** Hear from those that have done it! Expanding your portfolio with drone seeding jobs, how to tap into the seed market, field practices like tendering to drone operations and present your seed specific questions.

**5-6pm. Social, Networking and Door Prize Drawings**

**Location:** Grand ballroom foyer

**6-8pm. Speaker, Panelist and Chair Dinner**

**Location:** Room 201D

**Description:** RSVP required. This event is only open to the conference speakers, panelists, and chairs.

## **7pm-9pm. Special session: Drone Mapping & Precision Spraying with Pix4D Fields**

**Location: Breakout room 1**

**Instructors:** *Julius Petri (Head of Agriculture, Pix4D), Nathan Stein (Owner, Airstrike Ag)*

**Description:** Join Pix4D's Julius Petri & fifth-generation farmer and owner of Airstrike Ag, Nathan Stein, for a free training on how to master your precision spray drone applications with PIX4Dfields.

**Note:** This training is free for in-person and remote conference participants. Registration is required: <https://discovery.pix4d.com/training-registration-drone-mapping-and-precision-spraying-with-pix4dfields>

## **March 25<sup>th</sup>**

**7:30am-8:30am: Light breakfast and Exhibitor Visit**

**Location: Grand ballroom**

### **General Session 3**

**Location: Grand ballroom**

**8:30am-9am: Drones Do More: Canadian Farmers are Winning without Spraying.** *Markus Weber (Owner, LandView Drones, Alberta Canada)*

**Description:** Canadian regulators won't let drones spray pesticides (yet), but that doesn't mean they're just fancy paperweights. Farmers are using drones to assess crop damage, plan drainage improvements, inspect bins, estimate harvest timing, respond to emergencies, boost farm security, and count everything from seedlings to bison. This rapid-fire session is packed with surprising, creative, and downright cool ways drones are making farm life easier—no spray, no problem! Don't worry, there will be some cool regenerative product spraying examples too.

**9am-9:30am: Overview of Spray Drone Usages in Brazil.** *Ulisses Antuniassi (Professor, Sao Paulo State University, Brazil)*

**Description:** Data on the Brazilian drone spraying fleet will be presented, showing the evolution of the number of drones, manufacturers and best-selling models. The basic parameters of the application technology in use in the country will be discussed in contrast to the most frequent challenges encountered by operators. Another highlight will be an analysis of the regulatory situation, considering the expected profound changes in current legislation.

**9:30am-10:10am: Empowering Farmers Globally: The Growing Impact of Drone Technology on Modern Agriculture.** *Niki Shen (Head of DJI Agriculture Marketing, DJI), Wayne Baker (Director of Stakeholder Engagement, DJI)*

**Description:** Learn how DJI's cutting-edge drone technology is elevating precision farming around the world to boost yields, cut costs, and protect crops. This presentation will include case studies on drone use for different crops and address current U.S. regulatory challenges.

### **10:10am-10:30am: Coffee Break, Networking and Exhibitor Visit**

### **Breakout Session 10: Pesticide Applications: The Basics**

**Location:** Grand ballroom

**Chair and Co-Chair:** *Sarah Hovinga (Regulatory Policy Analyst, Digital Farming. Bayer Cropscience), Briana Layfield (President, Ag-Bee)*

**10:30am-11am: Pesticides 101.** *Erin Whitteck (Science Engagement Lead, Bayer Crop Science)*

**Description:** Pesticides are substances used to prevent, destroy, or control pests, with types including herbicides, insecticides, fungicides, and rodenticides. Developing pesticides involves extensive investment in R&D, rigorous safety testing (focused on drift, crop residue, and operator exposure), regulatory approval, and crafting label language, as the label provides critical information on safe and effective use, which applicators must understand and be certified to follow through proper training.

**11am-11:30am: Drone Application In-Practice.** *Briana Layfield (President, Ag-Bee)*

**Description:** Experienced drone application expert sharing insights on navigating pesticide labels, ensuring proper handling, and maintaining accurate records, while highlighting challenges such as adapting labels for drone-specific applications.

**11:30am-12pm: Panel Discussion**

**Description:** Panel of experts sharing basic experiences and answering FAQs

**Panelists:** *Erin Whitteck (Science Engagement Lead, Bayer Crop Science), Nate Nouwels (Chief Pilot and Operations Manager, AgBee LLC), Nathan Parmentier (President, Airgro), Keaton Lyons (Owner, Lyons Sight Ag Solutions), Tommy Butts (Clinical Assistant Professor Extension Weed Scientist, Purdue University)*

### **Breakout Session 11: Pasture, Forage, and Rangeland Management**

**Location:** Breakout room 1

**Chair and Co-Chair:** *Preston Cave (Owner, Pac Aerial Applications), Kurt Bohrer (Owner, Ag Drone Service)*

**10:30am-11am: Pasture Management Fundamentals.** *Preston Cave (Owner, Pac Aerial Applications), Kurt Bohrer (Owner, Ag Drone Service), Ethan Westfall (Owner, Orion Solutions), James Harris (Co-Founder, YellowHammer Drones), Jnani Matson (Owner, Vortex Advantage AG)*

**Description:** This session will provide a comprehensive overview of pasture and range management, including species identification, mapping techniques, and common chemical applications. We will also discuss collaboration with relevant agencies and cost-effective strategies.

**11am-11:30am: Precision Application Techniques.** *Preston Cave (Owner, Pac Aerial Applications), Kurt Bohrer (Owner, Ag Drone Service), Ethan Westfall (Owner, Orion Solutions), James Harris (Co-Founder, YellowHammer Drones), Jnani Matson (Owner, Vortex Advantage AG)*

**Description:** This session will delve into the intricacies of adapting farm ground management practices, emphasizing the significance of GPA (gallons per acre), addressing terrain-related challenges, and exploring the impact of DRA (drift reduction agents) and surfactants. Integrated vegetation management (IVM) practices, including seeding and forage crop applications, will also be covered.

**11:30am-12pm: Panel discussion.**

**Description:** This panel will facilitate an open forum for audience questions, addressing any topics not covered in previous sessions. We will prepare a few introductory questions to stimulate discussion.

**Panelists:** *Preston Cave (Owner, Pac Aerial Applications), Kurt Bohrer (Owner, Ag Drone Service), Ethan Westfall (Owner, Orion Solutions), James Harris (Co-Founder, YellowHammer Drones), Jnani Matson (Owner, Vortex Advantage AG)*

## **Breakout Session 12: Golf Course and Turf Management**

**Location:** Breakout room 2

**Chair and Co-Chair:** *Aaron Duval (Chief Operation Officer, Acuspray), Jackson McKenzie (Drone pilot, Aurora Co-op)*

**10:30am-11am: Challenges & Advantages of Drones on the Golf Course.** *Tim Reinagle (Owner, Hawkeye Spray Drone Services)*

**Description:** We will discuss the barriers to entry in the turf sector. Pros and Cons of drones in the Golf Course sector and the types of applications you would be making.

**11am-11:30am: Equipment needs for Golf Industry.** *Aaron Duval (Chief Operation Officer, Acuspray)*

**Description:** We will discuss what a business model looks like along with the equipment needed in the turf sector.

**11:30am-12pm: Panel discussion.**

**Description:** Speakers will answer questions from the audience regarding drone applications in golf course and turf.

**Panelists:** *Tim Reinagle (Owner, Hawkeye Spray Drone Services), Aaron Duval (Chief Operation Officer, Acuspray)*

**12pm-1:30pm: Lunch (Sponsored by DJI)**

**Location:** Grand ballroom

**Lunch Presentations:**

**12:30pm-12:45pm: PrecisionVision UAS Application Versatility.** *Kelley Wittenberg (Technical sales, Central UAS Technologies, formerly known as Leading Edge Aerial Technologies)*

**Description:** A discussion of real-world applications that Central UAS Technologies (formerly known as Leading Edge Aerial Technologies) has completed across the United States, focusing on particularly unique and challenging use cases in agriculture, aquatics, and mosquito control.

**12:45pm-1pm: Maximizing Every Flight, Advancing Agriculture Together.** *Justin Gong (Co-founder of XAG)*

**Description:** Founded in 2007 by a group of geeks, XAG has spent 18 years in research, development and manufacturing of agricultural drones. With the intelligent flight ability and exceptional efficiency, the XAG P Series had empowered millions of modern farmers protecting their crops in the past decade. Justin Gong will take you back into the development journey of the latest P150 agricultural drone, from the concept of design to manufacturing challenges, explain how the engineers at XAG are optimizing every flight for end users.

Dr. Gong will also share his vision about the future of agriculture as a fellow researcher at University of Paris Dauphine in the realm of agriculture innovation, as well as XAG's corporate strategy to echo the transformation of global agriculture.

**Breakout Session 13: Vineyard and Orchard Application**

**Location:** Grand ballroom

**Chair and Co-Chair:** *Briana Layfield (President, Ag-Bee), Steve Li (Extension Professor, Auburn University)*

**1:30pm-2pm: Optimizing Vineyard Applications - A Case Study.** *Briana Layfield (President, Ag-Bee)*

**Description:** Vineyard applications present unique challenges for drone operators. A collaborative case study examining the interplay between coverage, concentration, and uptake will be reviewed, along with important factors to consider during vineyard projects.

**2pm-2:30pm: Comparing Spray Drones to Ground-based Air Assisted Sprayers in Vineyard and Orchard Systems.** *Michael Reinke (Extension faculty, Michigan State University Extension)*

**Description:** The benchmark insecticide and fungicide application technology in fruit cropping systems is the airblast sprayer. The purpose of these studies is to compare how spray drones stack up against this benchmark. In one study, coverage, application time, and water usage of spray drones were compared to different airblast sprayers with and without software assisted intelligent capabilities in different tree fruit canopies. In a second study, a full season spray program for disease and insect management was conducted in juice grapes in Michigan. Efficacy and application of drone-only was compared to airblast-only for all sprays for the 2024 growing season.

**2:30pm-3pm: Vineyard and Orchard Applicator Panel**

**Description:** Operators from across the US review their successes and failures in vineyard and orchard applications.

**Panelists:** *Briana Layfield (President, Ag-Bee), Michael Reinke (Extension faculty, Michigan State University Extension), Nathan Stein (Owner, Airstrike Ag), Pete Shanley (Owner, Osprey Drone Services)*

## **Breakout Session 14: Pesticide Regulation and Compliance**

**Location: Breakout room 1**

**Chair and Co-Chair:** *Sarah Hovinga (Regulatory Policy Analyst, Digital Farming. Bayer Cropscience), Briana Layfield (President, Ag-Bee)*

**1:30pm-2pm: State Regulatory Update on Pesticide Application with Drones.** *Nathan Davis (Office of the Indiana State Chemist, AAPCO Technology Workgroup Lead)*

**Description:** The mission of the AAPCO technology workgroup is to work with states, US EPA, and other stakeholders to gain a thorough understanding of issues associated with the use of new technologies within the existing regulatory framework, help develop guidance that will ensure consistent compliance interpretation and assistance and serve as a communication hub on these topics. Label language issues/questions and the most recent national survey results will be discussed.

**2pm-2:30pm: Pesticide Industry Activities w/Spray Application Drones.** *Travis Bui (Human Safety Science Policy & Strategy Leader, Corteva, Incoming 2025 Chair to the Unmanned Aerial Pesticide Application System Task Force)*

**Description:** The pesticide industry, including the UAPASTF and CropLife America, are actively engaged in generating information to inform and support the use of UAVs for crop protection and other pesticide applications while engaging globally in advocacy efforts. Their efforts focus on

assessing off-site movement, operator exposure, crop residue, and developing UAV-specific Best Management Practices and regulatory models to enhance risk assessment and approval processes. Regulatory needs, including those that will inform future drone regulations/labels/labeling/risk assessment will be discussed.

### **2:30pm-3pm: Pesticide Regulatory and Industry Panel Discussion**

**Description:** This panel will allow for further discussion on the regulatory status of drones in the United States, emerging State and Industry guidance, and discussing research activities that are addressing regulatory gaps and supporting end-users.

**Panelists:** *Nathan Davis (Office of the Indiana State Chemist and AAPCO Technology Workgroup Lead), Travis Bui (Human Safety Science Policy & Strategy Leader, Corteva), Sarah Hovinga (Global Regulatory Policy Analyst, Bayer Crop Science)*

### **Breakout Session 15: Drone Solutions for Aquatic and Habitat Management**

**Location: Breakout room 2**

**Chair and Co-Chair:** *Jeff Dickens (Regional Lead, Rantizo), Rick Jordan (Operation manager, CNY Drone Services)*

**1:30pm-2pm: Drone Mapping and Application in Aquatic Settings.** *Ethan Noll (Western Corn Belt Regional Lead, Rantizo)*

**Description:** Identifying aquatic weeds through multispectral mapping for precise drone chemical applications. Real world examples will be shown in regards to American Lotus, Phragmites, and Cattail control.

**2pm-2:30pm: Use Cases for Spray Drones in Habitat Restoration.** *Nate Nouwels (Chief Pilot and Operations Manager, AgBee)*

**Description:** Building infrastructure often affects natural habitats. In this section we will give an introduction on habitat restoration and discuss a few types of habitat restoration projects. We will discuss potential challenges in reverting habitats, such as strict environmental considerations, typical protocols, and drone technology implementation and limitations.

### **2:30pm-3pm: Panel Discussion**

**Description:** An open Q&A session where attendees can engage with experts on the applications of drones in aquatic and habitat restoration. This is an opportunity to discuss challenges, innovative solutions, and real-world applications in ecological management.

**Panelists:** *Ethan Noll (Western Corn Belt Regional Lead, Rantizo), Nate Nouwels (Chief Pilot and Operations Manager, AgBee)*

**3pm-3:30pm: Coffee Break, Networking and Exhibitor Visit**

## **Breakout Session 16: Expert Q&A: Insights from Industry Leaders**

**Location: Grand ballroom**

**Chair and Co-Chair:** *Rick Jordan (Operation manager, CNY Drone Services), Nathan Parmentier (President, Airgro)*

### **3:30pm-4pm: Navigating Regulations & Compliance.**

**Description:** As drone regulations evolve, operators must stay informed about FAA requirements, state-level compliance, permitting, and liability concerns. This panel brings together legal and regulatory experts to discuss best practices for staying compliant and avoiding common pitfalls.

**Panelists:** *Jonathan Rupprecht, Esq. (Commercial Pilot (ASEL/AMEL) & Flight Instructor (CFI/CFII), Rupprecht Law, P.A). Vaughn Tolbert (Owner, VT Insurance), Kevin McDonald (CEO, Red Sparrow Ag)*

### **4pm-4:30pm: Equipment, Maintenance & Operational Best Practices.**

**Description:** A well-maintained drone fleet is critical to operational success. This panel explores maintenance schedules, troubleshooting strategies, and best practices for ensuring mission-ready equipment and maximizing efficiency in the field.

**Panelists:** *Rhyan Syester (Owner, Veteran Drone Services), Blake McGrew (Lead Technical Support, Drone Deploy Aerotech), Elijah Poehlman and Nathan Sayre (Drone technicians, Agri Spray Drones)*

### **4:30pm-5pm: Advanced Operational Strategies & Application Techniques**

**Description:** For operators looking to optimize efficiency, adapt to field conditions, and scale their drone operations, this panel explores real-world application strategies across agriculture, forestry, and vector control.

**Panelists:** *Joel Buettner (District general manager, Placer Mosquito), James Harris (co-founder, YellowHammer Drones), Nathan Parmentier (President, Airgro), Mikaya Wallis (Founder, The Inspired Collective)*

## **Breakout Session 17: Elevating Drone Business Operations: Streamlining Success from the Ground Up**

**Location: Breakout room 1**

**Chair and Co-Chair:** *Kurt Beckley (Owner, Altitude Agri Services), Jeff Dickens (Regional Lead, Rantizo)*

**3:30pm-4pm: Setting the Table, Meeting Customer Expectations.** *Dustin Polasek (IVM Eastern Regional Manager, Nutrien)*

**Description:** Dustin Polasek has helped pioneer the IVM drone application industry and has had two successful companies. Dustin will speak about how his companies set up for success by establishing criteria for customer communications with regards to expectations and meeting those through learnings, tests and trials his team designed and established. His discussion about their approach to a team-based atmosphere when dealing with clients will provide listeners with valuable tools and tips on how to be realistic with clients.

**4pm-4:30pm: Making Insurance Part of Your Future Planning When Starting a Business.**

*Vaughn Tolbert (Owner, VT insurance)*

**Description:** This segment is going to discuss the reality of getting compliant with your State Pesticide Insurance requirements and discussing what expenses that may incur. We will also discuss how your insurance cost may change if you plan to work under a co-op, fly in states other than the one you reside in, or plan to expand your fleet during the spray season. To finish off, we will discuss pros/cons of turning in a claim of varying levels and how that could affect your future planning.

**4:30pm-5pm: Introduction to Crop Flight Drone Logbook.** *Michelle Truman (Board director, U-PASS)*

**Description:** Crop Flight Drone Logbook is the ultimate solution for the agriculture industry. Our drone logbook is programmed in the US and simplifies flight input, billing, analysis, and compliance, making it easy and automatic. With our advanced drone logbook, you can take control of your FAA operations and make informed flight decisions.

**Breakout Session 18: Novel & Specialty Applications via Drone**

**Location: Breakout room 2**

**Chair and Co-Chair:** *Briana Layfield (President, Ag-Bee LLC), Bryan Hammis (Owner and PIC, Flying Acres Ag)*

**3:30pm-3:45pm: Beneficial Insect Applications.** *Jaclyn Bennett (General manager, ParaBug)*

**Description:** Discussion on the innovative use of drones for applying beneficial insects, highlighting their potential to revolutionize pest management in agriculture by enhancing precision and efficiency. This talk covers the technology, benefits, and real-world applications of this novel approach.

**3:45pm-4pm: From Above: Revolutionizing Greenhouse Shading with Drone Technology.** *Mike Eaton (NA sales manager, Lumiforte)*

**Description:** Discover how drones are transforming greenhouse shading applications by providing safe, precise, efficient, and sustainable solutions. This innovative approach optimizes light management, enhances crop performance, while reducing labor costs, paving the way for smarter agriculture.

**4pm-4:15pm: Drone Based Vector Control.** *Ed Horvath (Founder and Owner, Three Rivers Mosquito and Vector Control)*

**Description:** Discussion on the use of spray drones for mosquito abatement, both in adult and larval stages, focusing on how the ultra-low volume capabilities of drones allow for minimally invasive and effective vector control.

**4:15pm-4:30pm: Elevating Precision: Drone Application in Ornamental Shrubs, Trees & Exotic Flowers.** *Dirk Boon (Owner, OnPoint Applications Group)*

**Description:** Discover how drones revolutionize the care and cultivation of ornamental plants, enhancing efficiency and precision over hoop houses and open fields through advanced aerial application technology.

**4:30pm-5pm: Panel Discussion: Novel & Specialty Application**

**Description:** Operators from across the US review alternate applications with spray drone technology.

**Panelists:** *Jaclyn Bennett (General manager, ParaBug), Mike Eaton (NA sales manager, Lumiforte), Ed Horvath (Founder and Owner, Three Rivers Mosquito and Vector Control), Kirk Babcock (Owner, OnPoint Applications Group)*

**5-6pm. Social, Networking and Door Prize Drawings**

**Location: Grand ballroom foyer**

**7pm-8pm. Special session: Meet the Researchers**

**Location: Breakout room 1**

**Description:** This is an informal session to unite spray drone research community at the conference to discuss ideas, issues, and answer questions from the conference participants. A panel of professional field researchers will be formed for this session.

**Note:** This session is open to all conference participants.

**8pm-11pm. U-PASS Party**

**Location: Cedar Street Social (4 N Cedar St. Mobile, AL. 36602)**

**Description:** Social event hosted by U-PASS ([www.u-pass.org](http://www.u-pass.org)) opening to all conference participants. Free event to U-PASS members, non-member \$20. Shuttle cars provided to and from host hotel from 8pm-11pm. Event include membership giveaways and FAA reps will be attending.

**Note:** Visit U-PASS website for more event information.

**March 26<sup>th</sup>**

**8am-9am: Light breakfast and Exhibitor Visit**

**Location: Grand ballroom**

**Breakout Session 19: Precision Drone Applications in Vegetation and Forestry Management**

**Location: Grand ballroom**

**Chair and Co-Chair:** *Jeff Dickens (Regional Lead, Rantizo), Rick Jordan (Operation manager, CNY Drone Services)*

**9am-9:30am: Drones in Industrial Management/Natural Resources.** *Dustin Polasek (Eastern Regional Manager IVM, Nutrien)*

**Description:** Dustin's talk will cover the basics of operating drones in IVM and natural resource environments. He will cover some of the different styles of applications in these environments relating to drones. Dustin will also discuss some of the operations and testing Nutrien has completed in these environments.

**9:30am-10am: Drones in Forestry.** *Dan Hammond (Owner and operator, Grow Timber)*

**Description:** Dan's talk will cover the basics of operating drones in a forestry environment. He will cover some of the basic chemistry and adjuvants utilized. As well as discuss his operations in a forestry environment.

**10am-10:30am: Panel Discussion**

**Description:** An open Q&A session where attendees can engage with experts on the applications of drones in IVM and forestry management. Discussions will include practical applications, troubleshooting, and potential challenges in vegetation and forestry management.

**Panelists:** *Dustin Polasek (Eastern Regional Manager IVM, Nutrien), Dan Hammond (Owner and operator, Grow Timber)*

**Breakout Session 20: Insurance and Liability**

**Location: Breakout room 1**

**Chair and Co-Chair:** *Aaron Duval (Chief Operation Officer, Acuspray), Steve Li (Extension professor, Auburn University)*

**9am-9:30am: Incident Reporting and Actions Needed.** *Jonathan Rupprecht, Esq. (Commercial Pilot (ASEL/AMEL) & Flight Instructor (CFI/CFII), Rupprecht Law, P.A)*

**Description:** We will discuss what to do when an accident or mishap occurs. Regulations for such event will also be covered.

**9:30am-10am: What we expect for the 2025 Season.** *John Songin (Chief Underwriting Officer, World Link Specialty)*

**Description:** Drone underwriter presenting on the 2025 season and what changes to expect.

**10am-10:30am: How to insure your Drone.** *Luke Petty (Owner, Flightline Assurance)*

**Description:** We will discuss the Pros and Cons of Drone Hull Insurance. How the Drone and its Spare parts should be insured. Chemical Application Liability Insurance

## **Breakout Session 21: Drone Business Foundations**

**Location: Breakout room 2**

**Chair and Co-Chair:** *Nathan Parmentier (President, Airgro), Kurt Beckley (Owner, Altitude Agri Services)*

**9am-9:30am: Marketing Your Drone Business.** *Jnani Matson (Owner, Vortex Advantage AG)*

**Description:** In this session you will hear firsthand how Jnani with Vortex Advantage AG has developed and practiced drone specific marketing to excel his business. Providing tips on how you can propel your business forward and a chance to follow up with questions.

**9:30am-10am: Drone Business Financing.** *Kurt Beckley (Owner, Altitude Agri Services)*

**Description:** In this session Kurt with Altitude Agri Services will share his extensive experience with financing a business especially drone businesses. Learn smart practices and where to find financing for your new or established business.

**10am-10:30am: Panel Discussion**

**Description:** Hear from the experts on everything drone business. Learn their journey from start up to success and have the opportunity to ask questions from those that have cut the path in our new industry.

**Panelists:** *Kurt Beckley (Owner, Altitude Agri Services), Josh DiPippo (Owner, Spotter Aerial Ag), Briana Layfield (President, AgBee), Jnani Matson (Owner, Vortex Advantage AG), Josh Howard (Owner, Black Dog Drone Company)*

**10:30am-11am: Coffee Break, Networking and Exhibitor Visit**

**Breakout Session 22: Coordinated Flight: Enhancing Agriculture with Drones and Manned Aircraft**

**Location: Grand ballroom**

**Chair and Co-Chair:** *Bryan Hammis (Owner and PIC, Flying Acres Ag), Jeff Dickens (Regional Lead, Rantizo)*

**11am-12pm: Shared Airspace in Agriculture.** *Liam Zahm (Owner, Zahms Aerial Enterprises)*

**Description:** Sharing the airspace with manned aerial applicators. How we are all responsible for safety and how to improve communication for safer skies.

### **Breakout Session 23: Developing Agricultural UAS Programs for Education**

**Location: Breakout room 1**

**Chair and Co-Chair:** *Joel Jones (Commercial UAV Instructor, Orange Coast College CA), Kurt Beckley (Owner, Altitude Agri Services)*

**11am-12pm: Roundtable for Educators Building Ag Drone Programs.** *Madison Dixon (Associate Director, Mississippi State University), Richard Ham (Senior Director and faculty, University of Arkansas), Diana Robinson (Project manager, FAA UAS Collegiate Training Initiative)*

**Description:** 1 hour round table session will be focused on helping workforce educators unpack all that they have seen and heard over the past two days and gain insight from program directors with who have launched successful UAS programs.

### **Breakout Session 24: Cotton, Potato and Rice**

**Location: Breakout room 2**

**Chair and Co-Chair:** *Steve Li (Extension Professor, Auburn University), Jeff Dickens (Regional Lead, Rantizo)*

**11am-12pm: Roundtable discussion.** *Steve Li (Extension Professor, Auburn University), Bryan Hammis (Owner and PIC, Flying Acres Ag), Kurt Beckley (Owner, Altitude Agri Services), Jeff Dickens (Regional Lead, Rantizo), Jnani Matson (Owner, Vortex Advantage AG)*

**Description:** In this session, successful spray drone applications including herbicides, insecticides, fungicides, defoliant, desiccants, and plant growth regulators in these crops will be discussed. Panelists will share their valuable experience in field operation. Opportunities and challenges in these crops will be discussed.

**12pm-1pm. Box Lunch and Networking**

**1pm. Conference adjourns**



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