



VERTICAL AVIATION
INTERNATIONAL



Saving NYC's West 30th Street Heliport

VAI Scores Infrastructure Win

SEP 2024

POWER



ROTORTRADE
A THC COMPANY

HELICOPTERS YOU CAN TRUST

Unique Partner For Helicopter Transactions

At Rotortrade, our commitment to excellence and innovation has firmly established us as a market leader in the helicopter trading industry.

Our collaborations with OEMs enable us to offer certified pre-owned aircraft meeting the highest standards of quality and reliability. In 2023, we have reached a significant milestone in our growth trajectory with our acquisition by THC.

This accession not only bolsters our financial foundation but also amplifies our growth potential, positioning Rotortrade as the strongest player among helicopter dealers worldwide.

We are proud to leverage:

- Our industry expertise.**
- A robust global network.**
- Our dedication to customer satisfaction.**

Global Network, Local Expertise

With 12 dealerships worldwide, Rotortrade has a strong and strategic global presence. Our locations span across key regions, ensuring we are always close to our clients and can provide local expertise with a global perspective.

This extensive network allows us to offer tailored solutions and exceptional service beyond borders.

Whether you're in:

- North America, Europe,**
- Latin America, Asia, Oceania,**
- Africa, Middle East**

or any other part of the world, our industry experts are ready to serve you with in-depth knowledge and experience, delivering personalized and effective solutions for all your helicopter needs.

Global Industry Leadership

Rotortrade stands unrivalled in the helicopter industry due to our unparalleled selection, strategic alliances, and innovative business model.

We offer an exceptional range of the best brands in the industry:

- Sole distributor of Leonardo Helicopters**
- Approved reseller of Airbus Helicopters**
- Close relationship with Bell Helicopters**

Our robust and exclusive inventory, combined with our expanding MRO capabilities, allows us to provide comprehensive turnkey solutions, taking care of everything for our clients.



WWW.ROTORTRADE.COM
RT AMERICAS . RT APAC . RT MEA . RT EUROPE



MORE INFORMATION ABOUT ROTORTRADE HERE

Photo © Lloyd Hagan

Do Your Starter Generator Brushes & Armature Look Like This After 1,281 Hours?

ETR-20™ & ETR-25™
1,000 Hour Brush Life Guarantee



Repair & Overhaul Services for the Aircraft Industry

Since 1984, **NAASCO** has provided **Component Overhaul/Repair & DER/PMA Engineering & Manufacturing** services. Because our solutions have been time-tested, we are confident that our many cost-saving programs will significantly reduce your maintenance costs.

Services:

- Outright Purchase & Exchange
- Repair & Overhaul
- Manufacturing & Engineering

Capabilities:

- Starter Generators
- Contactors, Relays, Terminal Blocks
- AC/DC Motors
- Electro-Mechanical
- Lighting

LED AND HID LIGHTING SPECIAL

SPEND \$500 & RECEIVE \$100 CREDIT!

For every \$500 you spend on select lighting products, you receive a \$100 credit on your next Starter Generator overhaul.



VISIT US OCT. 22-24, 2024 | NBAA-BACE - LAS VEGAS, NV | BOOTH #3767 - WEST HALL

NAASCO.com | 631.399.2244 | FAA Repair Station No. FD1R135K | EASA. 145.4687

FEATURES



40

Rotor Technologies Photo 

28

The Battle for West 30th

VAI leads the charge to keep critical New York heliport open.

By Mark Huber

40

Rotor Technologies: Tackling the Dull, Dirty & Dangerous

The start-up aims to unite the benefits of traditional helicopters and unmanned aircraft.

By Justin Bachman

48

Navigating the Most Restricted Airspace in the World

Being part of AOPA's celebration of general aviation gave me a flight I will never forget.

By James A. Viola

DEPARTMENTS

6

FROM THE BOARD

A Solid Foundation

By Mark A. Schlaefli

8

PRESIDENT'S MESSAGE

Making the Sky Safe for Vertical Aviation

By James A. Viola

10

ADVOCATING FOR YOU

A Strategic Approach to State and National Policy

By Cade Clark and Katia Veraza

12

UPDRAFTS

VAI Briefs

VAI Member Benefit of the Month

5 Dos and Don'ts

In the Spotlight

Vertical Aviation Calendar

26

FLYOVER

Outbound Heli Adventures and a Robinson R66

By Mark Bennett

56

FLIGHT PATH

James Simmons

58

ACCIDENT RECOVERY

Underestimated Safety Risks

By David Jack Kenny

64

FLY SAFE

Whom Do You Trust?

By Chris Hill

68

WORK SAFE

No Place for Recklessness

By Zac Noble

70

LAST HOVER

US Sen. James Inhofe

71

INDEX OF ADVERTISERS

72

MEMBER FOCUS

SHOTOVER Systems

By Mark Bennett

Be Empowered

Subscribe or Renew

Email Info@verticalavi.org to begin or renew your free subscription to POWER UP.

Update My Mailing Address

Email Info@verticalavi.org to update your mailing address.

Got something to say to the international aviation industry?

Email story ideas, manuscripts, or questions to News@verticalavi.org.



On the Cover

Dan Sweet, Photographer

A Heliflights Sikorsky S-76C lifts off from the West 30th Street Heliport in Manhattan, Aug. 14, 2024. The New York City facility faced closure before VAI rallied its members to protest legislation that would have shut down the critical airfield. See p. 28.

POWER UP

MAGAZINE

ABOUT
POWER UP

September 2024 | Vol. 1 No. 1

A Quarterly Publication of [Vertical Aviation International](#)
© 2024 Vertical Aviation International. ALL RIGHTS RESERVED.

POWER UP

PUBLISHER

James A. Viola

EDITOR-IN-CHIEF

Gina Kvitkovich

MANAGING EDITOR

Christine A. DeJoy

GRAPHIC DESIGN

Phyllis J. Utter

CONTRIBUTING EDITORS

Jayne Wood, Andrew Parker

EDUCATION & TRAINING

Greg Brown

FLIGHT OPERATIONS & MAINTENANCE

Chris Martino, Zac Noble

GOVERNMENT AFFAIRS

Cade Clark, Josh Rousseau,
Chuck Street, Katia Veraza

SAFETY

Chris Hill

STRATEGIC COMMUNICATIONS

Dan Sweet, Bailey Wood

CONTRIBUTING WRITERS

Justin Bachman, Mark Bennett,
Mark Huber, David Jack Kenney,
Christine Knauer

PHOTO & DESIGN CONTRIBUTOR

Mark Bennett

VAI Board of Directors

CHAIR Mark A. Schlaefli

Dakota Rotors LLC, Custer, S.Dak., USA – Commercial Aviation

VICE CHAIR Brian Jorgenson

Timberline Helicopters, Sandpoint, Idaho, USA – Commercial Aviation

TREASURER Rick Kenin

Boston MedFlight, Bedford, Mass., USA – Commercial Aviation

ASSISTANT TREASURER Paul Gottwig

Los Angeles County Fire Department, Los Angeles, Calif., USA – Government Service

PRESIDENT & CHIEF EXECUTIVE OFFICER James A. Viola

Vertical Aviation International, Alexandria, Va., USA

DIRECTOR, CORPORATE AFFAIRS & CORPORATE SECRETARY Sarah Arnold

Vertical Aviation International, Alexandria, Va., USA

DIRECTOR Nicole Battjes

Rainbow Helicopters, Honolulu, Hawaii, USA – Commercial Aviation

DIRECTOR David McColl

Winco Inc., Aurora, Ore., USA – General Aviation

DIRECTOR Randal R. Rowles

Helicopter Institute Inc., Fort Worth, Tex., USA – Commercial Aviation

DIRECTOR Stacy Sheard

Executive Jet Management/Fanatics, Philadelphia, Pa., USA –
Commercial Aviation

DIRECTOR Robert Miller Stallings

Titan Aviation Fuels, New Bern, N.C., USA – General Aviation

SPECIAL ADVISOR – EMERGING TECHNOLOGY Michael Romanowski

Slate Run Strategies LLC, Nokesville, Va., USA

SPECIAL ADVISOR – INTERNATIONAL Francois Lassale

SGI, Denpasar Selatan, Bali, Indonesia

LEGAL ADVISOR Arthur L. Herold

Webster, Chamberlain & Bean LLP, Washington, D.C., USA

Advertising Sales: Contact Sales@verticalavi.org or call 352-388-7031.

Subscriptions: Email Info@verticalavi.org to sign up for or manage your FREE subscription.

Permissions: No part of this publication may be reproduced, adapted, used for commercial purposes, or distributed without prior written permission from VAI. To request permission, contact the editor at News@verticalavi.org.

Postmaster: Send all address changes and correspondence to: POWER UP Magazine
1920 Ballenger Ave., 4th Flr., Alexandria, VA 22314-2898
703-683-4646 | Info@verticalavi.org | verticalavi.org

Disclaimers: All statements of fact and expressions of opinion by contributing authors are attributable to those authors and may not reflect the views of VAI. VAI cannot guarantee the completeness or accuracy of information provided by contributing authors, and VAI will not accept liability for any injuries or damages caused to the reader that may result from the reader's acting upon or otherwise relying upon the content contained in this publication. The publisher has not tested any of the products advertised in this publication, nor has it verified any of the statements made in any of the advertisements. Readers are strongly advised to follow all laws and regulations, to rely on their professional knowledge and experience, and to confirm any information presented in this publication before acting on the basis of such content.

VAI Launches New Magazine

Welcome to the inaugural issue of **POWER UP!**

THE ASSOCIATION FOR VERTICAL FLIGHT TOOK ON A NEW IDENTITY in February 2024: Vertical Aviation International (VAI). The Board of Directors, taking direction from the membership, rebranded the association, formerly Helicopter Association International, to embrace an expanding and diversifying industry.

Another step in that rebranding was choosing a new name and look for the association's quarterly publication. ROTOR magazine printed its last issue in June 2024, after 36 years. You can see below a selection of ROTOR covers showing the continuing evolution of our industry (as well as graphic design trends).

POWER UP is now VAI's quarterly magazine, beginning with this, the September 2024 issue. We hope you like our bold new look, which aligns with the parent VAI brand.

We adapted our magazine's name from the VAI tagline, "Powering Up." The VAI staff and magazine contributors share that aspiration: to fuel growth and innovation within our industry by empowering the people who come to work each day to make vertical flight happen.

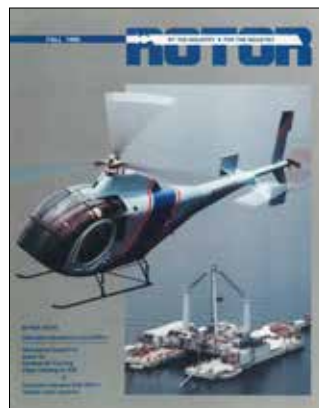
Just as ROTOR did, POWER UP will cover the breadth of our industry: the issues, technologies, companies, and people.

If you already received ROTOR, your subscription will automatically transfer to POWER UP. If you weren't a subscriber, why not email Info@verticalavi.org and get your own FREE subscription to POWER UP?

Please send comments about our fresh look or feedback on our coverage of vertical flight to News@verticalavi.org. We look forward to covering this exciting time in vertical aviation and hope you will continue to POWER UP! **■**



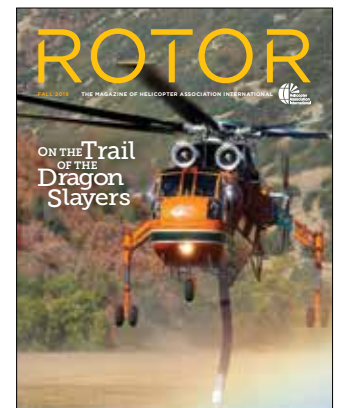
1988



1990



2010



2018

A Solid Foundation

Historic firsts set up VAI members for success.

By Mark A. Schlaefli

DURING ITS 75-YEAR HISTORY, VERTICAL Aviation International (VAI) has experienced a lot of “firsts,” all for the benefit of our members. But the past year has truly been historic.

Since February 2024, the association has taken on a new identity, rebranding from Helicopter Association International to a new, more inclusive name that builds bridges across our industry and redefines how we think of vertical aviation.

This column, my first as VAI chair, appears in the first issue of POWER UP, the publication that replaces the familiar ROTOR magazine in your mailbox. Since 1988, ROTOR has been the voice of the helicopter community, and now POWER UP will do the same for our expanded industry. With our growing partnerships in Europe and an expanding official role at the International Civil Aviation Organization (ICAO), our association is truly international, living up to the “I” in VAI.

VAI has just hosted the first safety conference dedicated to air tour operations, bringing together operators and regulators to drive safety culture and develop best practices. Meanwhile, our annual conference and trade show, previously known as HAI HELI-EXPO®, will be stepping out as the first VERTICON in March 2025 in Dallas, Texas. A center of vertical aviation manufacturing and business, Dallas is a fitting location for an event that brings us together. All of this adds up to a lot of firsts!

Reflecting on these changes, I’m filled with excitement for the future. VAI provides our industry with advocacy that has proven to be an effective agent for change, successfully blocking harmful legislation and initiatives. When rulemaking committees and standards boards meet to discuss the future direction of regulations, VAI is there to represent our interests. Access to safety programs, professional education



MARK A. SCHLAEFLI, of Dakota Rotors and a Parts 135/133 operator in the US Upper Midwest and Mountain West, began his one-year term as chair of the VAI Board of Directors on Jul. 1, 2024. Mark holds an ATP rotorcraft certificate as well as instrument, CFI, and CFII ratings.

opportunities, and a growing suite of member benefits—all these provide tangible reasons to be part of this great organization. I can attest to how my VAI membership has added value to my companies.

VAI's activities in service to the industry are accomplished by having a solid foundation in place: a strategic plan that vigorously supports today's missions with today's aircraft while paving the way for the industry to embrace emerging technologies and the future of vertical flight. Our five strategic initiatives—born from close collaboration with you, the membership—will be regularly reviewed to ensure VAI remains proactively engaged with the changing landscape that is vertical aviation.

As chair of the VAI Board of Directors for 2024–25, my critical items of interest are workforce development, access to airspace, and continued collaboration with regulators to advance our strategic initiatives. To take just one example, with airline hiring once again poised to expand,

our technician and pilot pools will become prime recruiting grounds. VAI is working to foster new ideas to attract the next generation to our industry, including building a pathway for both pilots and technicians to help fill the needs of our members.

While VAI is hard at work on these issues, it will take all of us in the industry to confront them with outside-the-box thinking and, more importantly, action. VAI members must play a key role in crafting our opportunities and solutions. As the chair—and as a pilot and operator who faces many of the same challenges as you—I'm excited to engage with you on new ideas and programs. Contact me at MarkS@verticalavi.org with your thoughts. Let's work together to further the industry we're all passionate about: vertical aviation! ■



AERIAL WORK SAFETY CONFERENCE

Nov. 19–21, 2024 / Boise, ID, USA

Conference and Exhibits Nov. 20–21

Firefighting – Utility Patrol & Construction – Restricted-Category Operations

Three days of learning and networking:

- General sessions
- Breakout sessions for specific sectors
- Updates from USDOJ and USFS

REGISTER NOW!



Making the Sky Safe for Vertical Aviation

VAI is speaking up to safeguard our industry's future.

By James A. Viola

ONLY ONE ORGANIZATION FIGHTS EVERY day to ensure a bright future for our expanding and diversifying industry: Vertical Aviation International (VAI). It is VAI's purpose to fuel the growth of the vertical aviation industry—to see that it not only survives but thrives. Our advocacy efforts on your behalf are one important way we fulfill that purpose.

With all the changes occurring in aviation, critical questions are ahead for us to resolve, questions whose answers will have lasting effects on our industry. Here are some of the ways in which VAI has been representing your interests in front of regulators, legislators, the courts, and other aviation interests:

- **Who administers the airspace?** VAI gained a recent victory when the US District Court in Hawaii agreed with our assertion that, as the federal government's authorized agent for aviation, the FAA, not the state legislature, should oversee the airspace. The court's decision overturned a section of a bill that imposed burdensome reporting requirements on that state's air tour operators.
- **What will the rules be for remotely piloted operations?** The FAA is currently writing rules that would permit unmanned aircraft systems to fly beyond the visual line of sight (BVLOS) of the remote pilot or observer. VAI will soon release a policy statement on the issue that explains our position in more detail. Briefly, though, VAI maintains that BVLOS operations must be performed within a system of performance-based requirements harmonized across all airspace operators that protect the safety of all.



JAMES A. VIOLA is VAI's president and CEO. After a career as a US Army aviator, he joined the FAA, where he served as director of the Office of General Aviation Safety Assurance before joining VAI. James holds ATP ratings in both airplanes and helicopters and is a CFII. Contact him at President@verticalavi.org.

■ **Who should be in the room when decisions affecting aviation safety are made?** The National Park Service’s decision to have nonaviation stakeholders make critical safety-of-flight decisions is one of the alarming outcomes of that agency’s air tour management plan (ATMP) process. VAI is working to get the ATMPs back on track, including bringing aviation stakeholders such as VAI and operators into the decision-making process.

VAI’s advocacy on behalf of our industry pays off in other ways as well. New legal or regulatory decisions are often based on precedent—past decisions or rulings—so VAI’s actions to, for example, preserve infrastructure and airspace access are vital to the success of both the current and future vertical aviation industry. When access to airspace is eliminated, when vital aviation infrastructure is torn down, we risk losing that airspace and that infrastructure forever.

This is why coming together as a united industry makes so much sense. We occupy the same low-altitude airspace,

use the same infrastructure, and enjoy all the advantages that vertical aviation gives us. We also wrestle with the same challenges—why not find solutions that will lift us all?

Moreover, the public does not see the fine distinctions that we in the industry think divide us. When an operator 1,000 miles from you, someone you have never met or even talked to, has an accident, that news affects how the public sees your operation—and indeed vertical aviation as a whole. All sectors of our industry have a stake in making sure that the next era of aviation is launched efficiently, economically, and safely. The whole world is watching.

VAI’s commitment to addressing the immediate needs of the vertical aviation industry lays the groundwork for a future in which we all can thrive, ensuring that the industry can fly to new heights for generations to come. ■

POWER UP

MAGAZINE

2025 PHOTO CONTEST

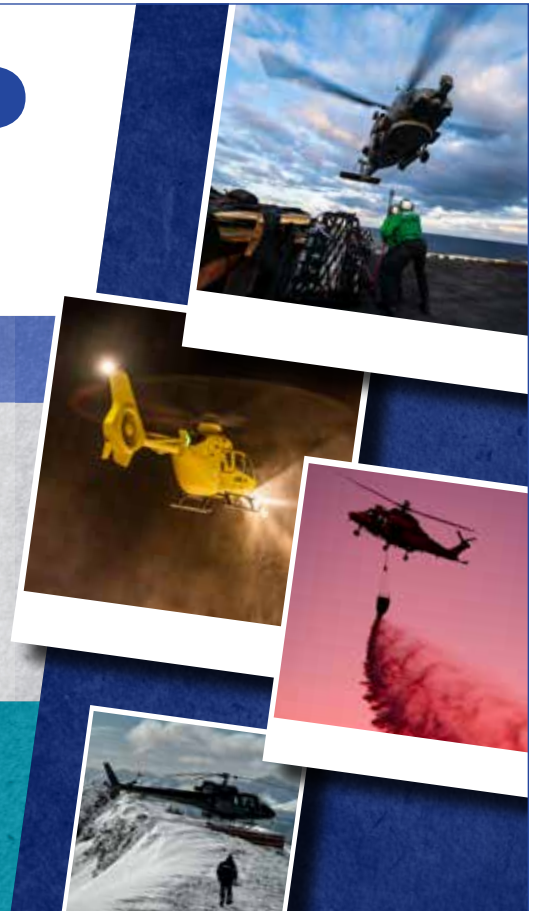
CELEBRATE YOUR STORY!

WIN UP TO \$500!

Visit photo.verticalavi.org

Enter by Dec. 1, 2024

Winning photos will be published in the Mar. 2025 issue of POWER UP and displayed at VERTICON 2025.



A Strategic Approach to State and National Policy

VAI's advocacy efforts yield notable victories for vertical aviation.

By Cade Clark and Katia Veraza

VAI'S GOVERNMENT AFFAIRS TEAM WAS very active during the first half of this year, working diligently to safeguard and promote the interests of the vertical flight industry. Our team has tracked more than 800 aviation-related bills across all 50 states, engaging strategically to either support or oppose legislation depending on its potential impact on our industry.

This activity has led to several significant victories, including the successful opposition to Hawaii Senate Bill 2747. This bill, if passed, would have required air tour operators in that state to carry a minimum of \$20 million in liability insurance per person per incident—a mandate that could have forced those companies to close their doors.

Through collaboration with state legislators, we were able to halt the bill, securing the future of these businesses while also demonstrating our industry's commitment to safety. As part of that commitment, VAI hosted the Air Tour Safety Conference on Sep. 23–24, 2024, at the Hawaii Convention Center on Oahu. The event brought together US aerial tour operators, state and local government officials, and other stakeholders to discuss critical safety issues, including the recent FAA mandate for safety management systems. The December 2024 issue of

POWER UP will feature more news from the conference.

Success in Multiple States

VAI has successfully opposed and helped amend several key bills across multiple states, including California, Florida, Michigan, New York, and Wisconsin. These bills, if passed in their original form, could have posed significant challenges to several VAI priorities, including the continued evolution of the advanced air mobility (AAM) sector, the availability of leaded fuels, the safe transition to unleaded fuels, and the preservation of vertical flight infrastructure. Through targeted advocacy and collaboration with state legislators and industry stakeholders, VAI was able to protect and promote the interests of general aviation.

We've also taken steps to

advance AAM within Texas, having chaired the Infrastructure Subcommittee of the Texas legislature's AAM Advisory Committee. In this role, VAI worked closely with the Texas Department of Transportation and key AAM stakeholders to help develop a comprehensive AAM roadmap for the state. This roadmap will serve as a critical tool for legislators as they consider new laws to facilitate the integration and adoption of AAM technologies in Texas. VAI's involvement in this process underscores our commitment to fostering a legislative environment that supports innovation and growth in the vertical flight industry.

As mentioned above, much of our focus during the first six months of the year was on fighting to stop legislation that could harm the vertical flight industry. Now, with most state legislatures out of session for the rest of the year, we have a valuable opportunity to take an even more active role in advancing the interests of vertical aviation. Over the next few months, VAI will explore, and advocate for, model legislation and policy recommendations that will promote the industry in upcoming legislative sessions.

Election Season Fast Approaching

With election season just around the corner, we're closely monitoring the stakes for vertical aviation at both the national and state levels. While the upcoming presidential and congressional elections are attracting significant attention, state and local elections are equally critical to the future of the vertical flight industry.

In 2024, 85 state legislative chambers across 44 states will hold regular elections, with 5,793 of the country's 7,386 state legislative seats—nearly 80%—up for grabs. These elections will determine the makeup of state legislatures, which play

a crucial role in shaping policy that affects our industry.

Recognizing the importance of state and local policymakers, VAI is preparing to engage with newly elected officials following the elections. It is essential that we introduce ourselves and our industry's interests to new state and congressional legislators, educating them about the benefits and needs of the vertical flight industry.

By fostering positive relationships with policymakers at all levels of government, we will create a legislative environment that supports innovation, growth, and safety in vertical flight. We also ask VAI members to continue their own outreach to their local elected officials. If you'd like assistance in connecting with your representatives, please contact the VAI advocacy team at Advocacy@verticalavi.org.

As we continue to develop our strategic plans and outreach initiatives for the remainder of 2024, hearing from you is critical to our efforts. We encourage you to share your invaluable insights and feedback on how we can better support the industry in your state.

If you have suggestions or would like to discuss specific needs, please don't hesitate to reach out at Advocacy@verticalavi.org. Your participation—and success—is crucial to our collective success. ■

Cade Clark is VAI's chief government affairs officer.

Katia Veraza is VAI's manager of government affairs and regional relations.

VAI Members

Regulatory, advocacy, and legislative help is just an email away. VAI is here for you. Contact Advocacy@verticalavi.org



VAI BRIEFS

- 12** California Town Halls Address Pilot Shortage
- 13** VAI Working Groups Are Now Industry Advisory Councils
- 16** EUROPEAN ROTORS Goes to Amsterdam
- 18** POWER UP Magazine Photo Contest Open for Entries
- 19** VAI Aerial Work Safety Conference: The Place to Be

VAI MEMBER BENEFIT OF THE MONTH

15 2025 VAI Scholarship Program

5 DOS AND DON'TS

20 Compliance with SOPs

IN THE SPOTLIGHT

22 Senior Master Sgt. Rob Dimel, Civil Air Patrol, Texas Wing Command

VERTICAL AVIATION CALENDAR

25 Upcoming Events

VAI BRIEFS

California Town Halls Address Pilot Shortage

REFILLING THE VERTICAL AVIATION WORKFORCE

pipeline remains a top priority for VAI. That’s why the association, in conjunction with the Southern California Rotorcraft Association (SoCal Rotors), is holding a series of town halls designed to help new and potential helicopter pilots prepare for careers in vertical flight.

The inaugural event in the series, “The Fire Pilots: The Pathway to Becoming a Fire Pilot and Adventures Along the Way,” was held Jun. 29, 2024, in Los Angeles. Panelists



included current aerial firefighting pilots who explained their duties and the best way to follow in their footsteps. Between 35 and 40 people attended the event.

VAI Western US Regional Representative Chuck Street led the town hall, whose panelists were Paul Gottwig, Los Angeles County Fire Department Air Operations (LACFDAO) and VAI board member; Mike Sagely, LACFDAO and 2024 VAI Salute to Excellence Pilot of the Year; Ethan Jensen, LACFDAO; and Josh Murphy, Orange County (California) Fire Authority.

The panelists emphasized the value of building flight time, encouraging audience members to gain experience in various sectors, such as utility operations, mountain flying, overwater operations, and longline and sling-load work. They also discussed the importance of developing night-vision goggles skills through operations such as medical transport.

The four pilots advised attendees to be ready to move around the country to diversify their experience and qualifications for a range of fire service jobs. The group also recommended keeping detailed logbooks and stressed the importance of teamwork.

Most helicopter flights in Southern California involve public service missions, and this town hall—as will future events—was a valuable resource for those interested in serving the public through aviation.

“We have identified over 40 types of missions performed by helicopters and

F From left: VAI Western US Regional Representative Chuck Street joins pilots Josh Murphy, Paul Gottwig, Mike Sagely, and Ethan Jensen at the inaugural VAI/SoCal Rotors pilot career development town hall, Jun. 29, 2024, in Los Angeles, California. (Don Kelsen Photo)

vertical flight aircraft,” says James Viola, president and CEO of VAI. “These town halls will provide a pathway for pilots into their desired industry segments.”

Workforce development is critical for the vertical flight industry. “We still face a pilot shortage, and programs like this town hall generate interest in the profession. I appreciate everyone who volunteered to hold this event and encourage others to think about how they can contribute. We’re all responsible for spreading the word: we have an industry with great career opportunities that is looking for the right people to join us,” Viola adds.

VAI will collaborate with SoCal Rotors to hold future town halls roughly every two months. The next event, tentatively scheduled for sometime in late September, will cover air ambulance operations, with additional topics to address airborne law enforcement and flying for the television industry. Other regional vertical aviation organizations, including flight schools and businesses, may contact VAI for information on producing their own town halls to promote workforce development. Contact ChuckS@verticalavi.org for more information. ■

VAI BRIEFS

VAI Working Groups Are Now Industry Advisory Councils

FOR MORE THAN 30 YEARS, VAI’s working groups have been instrumental to the efforts of the association formerly known as Helicopter Association International.

These volunteer advisory entities, made up of VAI members and established by the VAI Board of Directors, serve various sectors spanning the vertical aviation industry, from air medical services to safety to unmanned

aircraft systems and beyond. Most recently, the board established the Aviation Insurance and Workforce Development Working Groups to tackle two of today’s most pressing industry challenges.



DIAL DOWN YOUR RISK

Are You Ready for FAA-Mandated SMS Implementation?

SMS Assessment and Coaching from WYVERN can get you ready and see you through!

Schedule your evaluation now!



Scan to learn more



VERTICAL AVIATION INTERNATIONAL

Now, to better serve the needs of our members, VAI has recast the working groups as industry advisory councils (IACs). This new structure allows the IACs to focus less on administrative duties and more on fulfilling their critical role as advisors to the VAI Board and staff.

Though the names of the IACs may differ slightly from when they were working groups, their fundamental purpose remains unchanged: to serve as a key channel for communication between the industry and VAI, provide expertise and identify priorities specific to their sectors, and develop products, tools, and aids when needed.

VAI's current IACs are:



Though the names of the IACs may differ slightly from when they were working groups, their fundamental purpose remains unchanged.

- Advanced Air Mobility OEMs
- Aerial Firefighting & Natural Resources
- Air Medical Services
- Aviation Insurance
- Helicopter Tour Operators
- Restricted & Experimental Category Aircraft
- Safety
- Small Business Initiatives
- Technical & Maintenance
- Unmanned Aircraft Systems
- Utility Patrol & Construction
- Vertical Aviation Operations (includes the former Flight Operations, Fly Neighborly/Environmental, and Training Working Groups)
- Vertical Flight Infrastructure
- Workforce Development.

VAI members interested in joining an IAC should contact Chris Martino at ChrisM@verticalavi.org.

POWER UP YOUR SAFETY

WITH THE ORRA PROGRAM

- MANAGE RISK
- IMPROVE PROCESSES
- GAIN ACCREDITATION

Integrates with any stage of SMS implementation or development

VAI SAFETY

Operational Risk and Resilience Accreditation (ORRA) Program | verticalavi.org/ORRA



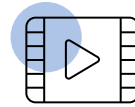
2025 VAI Scholarship Program

Supercharge your education as a pilot or maintenance technician.

VAI IS ACCEPTING APPLICATIONS THROUGH NOV. 8, 2024, to its 2025 scholarship program. VAI scholarships provide monetary awards and other benefits, including a complimentary registration to VERTICON 2025, which takes place Mar. 10–13, 2025 (exhibits open Mar. 11–13), in Dallas, Texas. Applicants must be VAI members, and [student memberships](#) are available. The following scholarships are available:

- **Bell 505 B2 Integrated Avionics Maintenance Technician Scholarship:** This scholarship is awarded to an individual who has received an A&P license or has finished avionics technician training within the past two years. The recipient receives full tuition to attend Bell's 505 B2 Integrated Avionics Maintenance Course.
- **Commercial Helicopter Pilot Rating Scholarship:** The winner of this scholarship receives \$5,000 toward the cost of obtaining a commercial helicopter rating.
- **WINCO Commercial Helicopter Pilot Rating Scholarship:** Presented by WINCO Powerline Services, this scholarship awards \$5,000 to one pilot toward the cost of obtaining a commercial helicopter rating.
- **Bell Sanderson Aviation Maintenance Technician Scholarship:** This scholarship awards full tuition to up to seven recipients to attend a maintenance course from airframe and power-plant manufacturers.
- **Maintenance Technician Certificate Scholarship:** This scholarship grants \$2,500 to up to two people each toward the cost of obtaining an aviation maintenance certificate.
- **WINCO Maintenance Technician Certificate Scholarship:** This scholarship, presented by WINCO Powerline Services, provides \$5,000 to one student toward the cost of obtaining an aviation maintenance certificate.
- **Michelle North Scholarship for Safety:** The recipient of this scholarship receives full tuition to a VERTICON Elevations (formerly Professional Education) safety management system (SMS) course.

Questions? Contact Scholarships@verticalavi.org. Submit your application today at verticalavi.org/scholarships.



CHECK OUT
the excitement at last year's
EUROPEAN ROTORS!

VAI BRIEFS

EUROPEAN ROTORS Goes to Amsterdam

EUROPEAN ROTORS

travels to Amsterdam, the Netherlands, Nov. 4 to 7, 2024 for its fourth annual showcase of the vertical flight sector. Produced by VAI and organized by the European Helicopter Association (EHA) and the European Union Aviation Safety Agency (EASA), Europe's largest event dedicated exclusively to vertical aviation highlights innovation, networking, and safety in that industry.

Attendee registration is now open for the 2024 event, and interested exhibitors can still secure space on the show floor. The show floor at the RAI Amsterdam Convention Centre will be open Nov. 5 to 7, after the EASA Rotorcraft and VTOL Safety Symposium on Nov. 4. The symposium will offer the latest safety advancements and regulatory updates in the industry and bring together a diverse group of stakeholders, including civil



aviation authorities, operators, pilots, and manufacturers.

Last year's show in Madrid, Spain, attracted more than 5,400 participants from over 80 countries and featured over 200 exhibitors and 23 aircraft on display. EUROPEAN ROTORS 2024 will showcase the latest rotorcraft technology, uncrewed aerial systems, and urban air mobility solutions, including cutting-edge products and services and hands-on demonstrations highlighting innovations that are shaping the industry's future.

Networking will be at the forefront of the conference, with numerous events designed to foster connections

between industry professionals. Opportunities for collaboration and relationship building will include dedicated receptions and social meet-and-greets.

The EUROPEAN ROTORS 2024 educational program will be stronger than ever, with courses designed and led by industry experts. Sessions will cover a vast array of topics, from pilot training and maintenance practices to market insights and emerging trends.

"EUROPEAN ROTORS 2024 is poised to be our most comprehensive event yet," says EHA Chairman Fredrik Kämpfe. "Amsterdam, known for its innovation, provides the perfect backdrop for this gathering of vertical flight enthusiasts."

For further details on the full agenda and registration options, visit the official event website at europeanrotors.eu.



FALCON CREST AVIATION SUPPLY YOUR #1 CHOICE FOR SALES & SERVICE!



Falcon Crest Aviation Supply, Inc. exclusively distributes Concorde® starting and standby batteries recognizing them as the world leader in valve regulated lead acid battery technology. RG® Battery performance is dependable, with quantifiable time, service and cost savings over nickel cadmium and other lead acid batteries. Concorde's dependability is operationally proven by global militaries, fleets, and private owners.

Falcon Crest Aviation Supply holds Supplemental Type Certifications for installation of several Concorde Batteries on Sikorsky, Airbus Helicopters, MD Helicopters, Bell, and more. Our sales group will answer any technical questions to help protect your investment and keep you flying.

Contact us today! We are a stocking distributor and will specify the right battery for your rotorcraft.

Falcon Crest Aviation Supply, Inc.

8318 Braniff, Houston, TX 77061
713.644.2290 | 800.833.5422 | Fax 713.644.0356
www.falconcrestaviation.com



BRANCH LOCATIONS

San Antonio, TX 800-833-8229
Irvine, CA 888-304-8844
St. Charles, IL 800-481-1391
Lafayette, LA 800-327-6380
Englewood, CO 800-314-1185
Addison, TX 888-811-0012
Ft. Lauderdale, FL 877-404-8151
Atlanta, GA 888-451-7290

VAI BRIEFS

POWER UP Magazine Photo Contest Open for Entries

DO YOU LOVE TAKING PHOTOS

of helicopters and other vertical flight aircraft? Now's your chance to show them off to your fellow aviation lovers!

The 2025 POWER UP Magazine Photo Contest, sponsored by VAI, welcomes submissions from both amateur and professional photographers of any aircraft that achieves flight through vertical lift, including not only helicopters but also tiltrotors, cargo drones, and electric vertical takeoff and landing aircraft.

Formerly the ROTOR Magazine Photo Contest, the 2025 competition will award one grand prize winner and six category winners, all of which will be featured in the March 2025 issue of POWER UP. Plus, the winning entries will be displayed at VERTICON (formerly HAI HELI-EXPO) Mar. 10–13, 2025, (exhibits open Mar. 11–13) in Dallas, Texas.

We'll also share your images across various VAI media products, offering significant exposure for the talented individual behind the lens while highlighting the innovation and importance of vertical aviation.

We're looking for high-quality, visually captivating photos in the following categories:

■ Vertical Flight Aircraft at Work

Show off aircraft in action (no AOG shots, please!).

Photographer Dianne Bond captured a pararescueman the moment he deployed from an Airbus H225. Taken during a special-ops training exercise conducted by the US Air Force with the aid of Air Center Helicopters, this powerful image won the Grand Prize in the 2023 ROTOR Magazine Photo Contest.
(VAI/Dianne Bond)

■ Vertical Flight Aircraft in the Military

Pay tribute to aircraft and aviators serving their country.

■ People and Their Vertical Flight Aircraft

Focus your lens on aircraft and the people who love them.

■ Wrench Turners

Show your maintenance crew working proudly by the aircraft they help keep flying.

■ How We Serve

Display all the ways we use vertical flight aircraft to keep our communities safe, secure, and prosperous—from fighting fires to keeping the lights on and more!

■ Digitally Enhanced Photos of Vertical Flight Aircraft

Flaunt your photo-editing skills!

The contest closes Dec. 2, 2024.

Visit photo.verticalavi.org to enter for a chance to win cash prizes! ■



VAI Aerial Work Safety Conference: The Place to Be



VAI IS GEARING UP FOR ITS annual Aerial Work Safety Conference, which this year takes place Nov. 19–21 (conference and exhibits open Nov. 20–21) at Boise Centre in downtown Boise, Idaho. This premier event will bring together professionals from various sectors of vertical aviation, including aerial firefighting; utility, construction, and patrol; and restricted-category operations.

Kicking off on Nov. 19 with VAI Industry Advisory Council meetings (see “VAI Working Groups Are Now Industry Advisory Councils,” p. 13), the conference will open its first full day on Nov. 20 with a general session, followed by breakout sessions tailored by industry sector. Attendees can expect in-depth discussions on safety enhancements, protocols, and risk-management strategies vital to promoting safety in aerial operations.

On the final day, Nov. 21, participants will hear from key personnel

from the US Forest Service and the US Department of the Interior who will share insights on national safety practices, regulations, and other contracting issues. Additionally, FAA representatives will provide crucial regulatory updates and networking opportunities.

The Aerial Work Safety Conference is particularly beneficial for those working in or aspiring to join the vertical aviation industry, including companies competing for government contracts or those operating restricted-category aircraft. The event offers unmatched networking potential, allowing professionals to connect and exchange ideas with fellow industry members.

Don't miss this opportunity to boost your understanding of aerial work safety and to build valuable connections within the industry. [Register today for the 2024 VAI Aerial Work Safety Conference at verticalavi.org/events.](https://verticalavi.org/events) ■



Need Cash for Courses?

**Apply for a
VAI Scholarship!
MEMBERS ONLY!**

- Aviation Maintenance
- Commercial Helicopter Pilot Ratings
- Pilot Safety

Application Deadline:
Nov. 8, 2024

Apply Now!



VAI VERTICAL
AVIATION
INTERNATIONAL

5 DOS AND DON'TS

Compliance with SOPs

Avoid the “this is how we’ve always done it” mindset.

By Andrew Parker

DO YOU HAVE YOUR OWN WAY OF DOING THINGS IN THE HANGAR? A mindset of following internal norms instead of standard operating procedures (SOPs) can be a liability in aircraft maintenance. Numerous accident reports document how deviations from the rules enabled those tragedies to take place. Follow the suggestions below to strengthen your safety culture.



1 DO turn near misses into learning opportunities.

“A near miss is a gift. It’s telling you something is wrong,” says Mark Tyler, VP and general manager at Precision Aviation Services. “If you have a near miss, discuss it. Use it as a chance to make corrections.”

2 DON'T let pressure affect your decision-making.

Maintenance technicians can't let the pressure to get an aircraft in the air lead to assumptions about safety, says Tyler, who cites the time he and a pilot had to abort a flight because a brand-new oil-filter O-ring was defective. “I *looked* at the O-ring when I put it on, but I hadn't *inspected* it,” Tyler recalls. “Once you deviate from a standard and nothing goes wrong, and then you do it again, you've normalized the deviation and that becomes the new norm.”

3 DO say something if you see something wrong.

“If it doesn't look right, if it doesn't feel right, talk to someone,” says Tyler. “Be the greasy wheel. Silence is considered agreement or acceptance.”

4 DON'T get into the habit of bending the rules.

“You must be disciplined. You can't just fly by the wind,” Tyler says. “I like to say that discipline equals victory.”

5 DO maintain a just culture within your team.

Company leaders should foster a culture in which maintenance technicians feel they can freely talk about mistakes, discuss rules and norms, and share their viewpoints about the safest and most logical ways to return an aircraft to service. ■

Thanks to Mark Tyler for these tips, which are based on his presentation at the Jun. 13, 2024, VAI webinar, “Do You Do Maintenance by the Rules or by the Norms?” To learn more about the dangers of deviating from SOPs, watch the recording of the webinar at hai.rotor.org/QEBCM7.

The Pilatus logo, featuring the word "PILATUS" in a bold, sans-serif font, flanked by three horizontal lines on each side.

PC-12 NGX

THE WORLD'S GREATEST SINGLE

The PC-12 NGX is a true multi-role platform that provides greater mission capability on reduced budgets.



 **Crafted in Switzerland**

pilatus-aircraft.com

IN THE SPOTLIGHT

Senior Master Sgt. Rob Dimel, Civil Air Patrol, Texas Wing Command



Longtime pilot spearheaded first vertical aviation-focused cadet program.

By Christine Knauer

IN JUNE, THE TEXAS WING

Command of the Civil Air Patrol (CAP), a US Air Force civilian auxiliary, held its first-ever Rotary Education School (RES). During the weeklong summer

special activity, 20 cadets took ground-school classes taught by FAA CFIs, worked the controls of a Bell 505 simulator, and toured Bell's maintenance training hangar at the Bell flight

facility in Fort Worth. They also had the opportunity to talk with various aviation professionals and enjoy a helicopter flight over downtown Fort Worth.

POWER UP spoke with Texas Wing Command Senior Master Sgt. Rob Dimel, who served as both RES director and an instructor. An active air ambulance pilot, CFI, and retired law enforcement officer, Dimel drew on his 17 years of flying experience to create an engaging and unforgettable learning adventure for the cadets.

POWER UP: How did the Rotary Education School come to be?

Dimel: As part of their capstone project, a group of cadets presented the idea of a cadet special activity and training event focused on helicopters. The cadets pointed out that they learn



Civil Air Patrol cadets pose in front of a Bell 407 on the flight line at Helicopter Institute in Fort Worth. (Staff Sgt. Deyton Talley Photo)

Cadet Lt. Col. Arial Quick, one of the cadets who proposed the Rotary Education School, salutes during morning formation at RES. (Staff Sgt. Deyton Talley Photo)

a lot about rockets, airplanes, balloons, and spaceflight, but never about vertical aviation.

I want to emphasize that it's the cadets who are craving this input. They're asking to see what options are out there in vertical aviation. RES filled a need that we didn't know existed.

It took us a solid year to put the curriculum together. I wrote it, for the most part, and the cadet staff helped coordinate everything.

Cadets had to be at least 16 years old and, at minimum, a staff sergeant to participate in the RES. Having progressed through the ranks up to at least what we consider a noncommissioned officer grade shows they have some maturity.

What challenges did you face in organizing the RES?

CAP offers cadet special activities on a variety of topics, including fixed-wing aircraft and gliders. Nothing has ever been done with rotary wing simply because CAP doesn't have helicopters. They're expensive and complex to operate, and not enough people can fly them. We thought, "We can find a way around this. We don't have to own the aircraft, and we can do a lot in the classroom."

While the cadets had a really good concept, we needed to be realistic. We started by asking ourselves, what's our goal? The goal wasn't to get cadets ready for an FAA written test. We simply can't do that in five days, but we *can* teach them about helicopter aerodynamics and the principles of helicopter flight and introduce them to the industry.



In addition to ground school, what did the cadets cover in the classroom?

We discussed helicopter missions, from law enforcement and EMS to pipeline patrol and utility. A sensor operator discussed the science behind thermal imaging, which is often used in pipeline patrols. A paramedic taught a block on aeromedical issues as they relate to pilot performance. Two CAP members who work for Bell taught lessons related to maintenance and engineering.

A US Marine Corps Cobra pilot at Camp Pendleton in California joined by Zoom. She talked about her pathway through college, Officer Candidate School, and flight school. It showed the cadets that they have a route to become a pilot other than the military service academies.

Did every cadet get to fly a helicopter?

We tried to get every cadet a 30-minute hands-on discovery flight, but it was just too costly. We were trying to keep it budget-friendly for parents. So we made the program competitive,

with the top five academically achieving cadets earning the right to take a discovery flight in which they got to manipulate the controls of a Robinson R44.

The other 15 cadets flew for about 30 minutes in a Bell 407 in groups of four or five at a time.

About 90% of the cadets had never been in a helicopter before. They just couldn't stop smiling. The Jeff Pino Foundation was clutch for us to make that happen.

How did VAI and the Jeff Pino Foundation get involved?

Last year, at EAA AirVenture Oshkosh, a couple of cadets asked Greg Brown [VAI's director of education and training services], if VAI would be able to provide some guidance. That led Greg to join our planning meetings via Zoom. When he learned we needed financial support, Greg put us in touch with the Jeff Pino Foundation. They were amazing.

We needed outside support to be able to pull this off. We had little to no budget, and having the foundation come in and fund the Bell 407



Cadet 2nd Lt. Bryce Ward gives a thumbs-up before the flight over Fort Worth in a Bell 407. (Staff Sgt. Dayton Talley Photo)

flights and partner with the Helicopter Institute in Fort Worth to provide us with a lower rate for the R44 discovery flights was fantastic.

What other experiences did the cadets enjoy?

On the third day, we went to Bell Flight, where each cadet had a chance to fly the 505 sim. They also spent a fair amount of time in Bell’s maintenance hangar talking with the aircraft maintainers and looking at the training aircraft, which have the inner workings exposed.

That was really satisfying for me. So much of the stuff we’d been teaching in the classroom, such as how the control systems work, was on display in Bell’s training device called the Iron Maiden. It shows all the control systems and the cyclic and collective in a cutaway view. When you pull on the cyclic, you can see how it activates the pushrods and moves the swash plate. I think it helped everything click for the cadets.

Bell treated us amazingly well. They provided a whole lot more than we expected. It was really gratifying how they embraced us and how they

thought through ways to help the cadets.

Will you offer RES next summer, and if so, will there be any changes?

Yes, we’ll offer it again, but it really needs to be five full days. The cadets arrived on Sunday afternoon, then went straight into the classroom that evening after dinner. We held a group study time in the evenings so they could review their Rotorcraft Flying Handbook, do their assignments, and ask questions. The program ended early on Friday, which served more as an administrative day.

There’s so much more we can cover. So Friday probably needs to be a full day, with our admin processing happening on Saturday.

Still, we’re throwing a lot of academics at the students. We could add a fun yet educational activity like a trip to an air museum.

Will you expand it to other CAP locations?

For it to become a national cadet special activity, we have to run it successfully and show some growth

in the program over a couple of years. Unfortunately, that will be challenging. Given the logistics, I don’t know that we’ll be able to have more than 20 cadets.

Assuming Bell would have us back, just getting all the cadets through the sims takes a lot of time. We want to be mindful of Bell’s hospitality. Maybe we can split the group, with half going to Bell and the other half visiting another facility.

I think we can show growth in other ways. We had cadets from Texas, Arkansas, North Carolina, and Tennessee. We can expand our reach to cadets from other wings.

How can RES be a model in workforce development?

That’s the big key, right? Everyone is experiencing shortages of pilots and maintainers. Where do future helicopter professionals come from? In the airline industry, they’re starting their own training academies, but there’s nothing like that in the helicopter industry. We’re relying on either the military or law enforcement to recruit and train.

We want to catch cadets when they’re thinking about their future. We want to inform them that there are many opportunities and viable career paths in vertical aviation.

It’s great to know there are folks in the industry like VAI, the Jeff Pino Foundation, Helicopter Institute, and Bell who are willing to step up and help inspire the next generation. ■

Christine Knauer is a journalist specializing in aviation. She holds a master’s degree in aviation safety.

Upcoming Events

Oct. 22–24

2024 NBAA Business Aviation Convention & Exhibition (NBAA-BACE)

National Business Aviation Association
Las Vegas, Nevada, USA
Learn more at nbaa.org

Visit VAI at Booth #3406

Oct. 29–Nov. 1

HAC Convention and Trade Show

Helicopter Association of Canada
Vancouver, British Columbia, Canada
Learn more at h-a-c.ca/conference.html

Nov. 4–6

2024 Air Medical Transport Conference

Association of Air Medical Services
Salt Lake City, Utah, USA
Learn more at aams.org/AMTC24

Visit VAI at Booth #1027

Nov. 4–7

EUROPEAN ROTORS 2024

European Helicopter Association
European Union Aviation Safety Agency
Amsterdam, North Holland,
The Netherlands
Learn more at europeanrotors.eu

Nov. 5–7

77th Annual International Aviation Safety Summit

Flight Safety Foundation
Brazilian National Civil Aviation Agency
Rio de Janeiro, Brazil
Learn more at flightsafety.org/events

Nov. 16

American Heroes Air Show

Los Angeles, California, USA
Learn more at heroes-airshow.com

Nov. 18–21

2024 Ag Aviation Expo

National Agricultural Aviation Association
Fort Worth, Texas, USA
Learn more at agaviation.org/ag-aviation-expo

Nov. 19–21

VAI Aerial Work Safety Conference

Vertical Aviation International
Boise, Idaho, USA
Learn more at verticalavi.org

Dec. 4–6

Conference on Advanced Air Mobility Systems

Vertical Flight Society
James Cook University, Singapore
Learn more at vtol.org/icaams

Mar. 10–13, 2025

VERTICON

Vertical Aviation International
Dallas, Texas, USA
Learn more at verticon.org

FDM

Flight Data Monitoring (FDM) Program

*Clearer insight.
Safer flights.*

Easy-to-use dashboard that helps you identify risks, improve fuel consumption.

Get a customized plan and hands-on support through our partnership with Truth Data Insights.

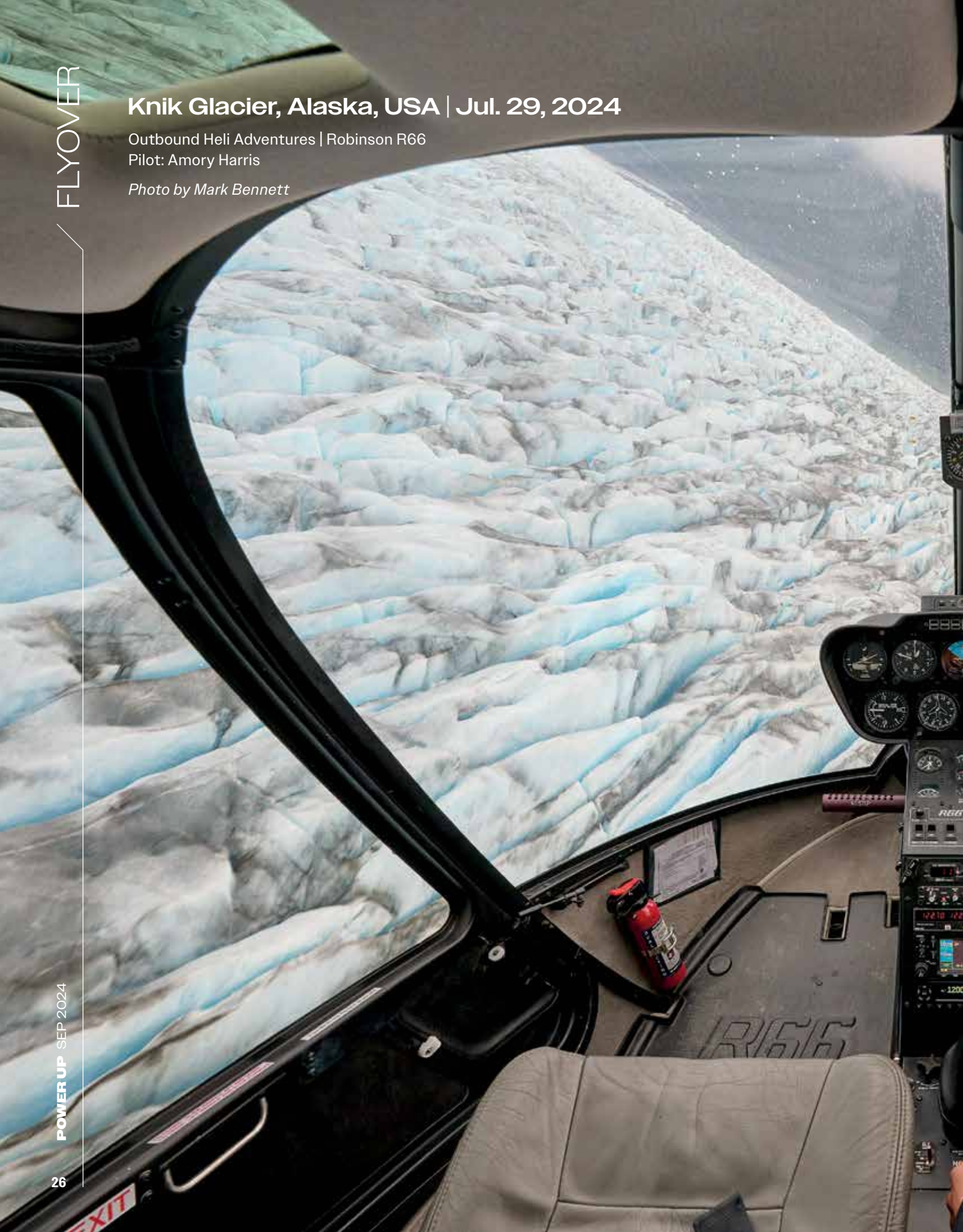


Knik Glacier, Alaska, USA | Jul. 29, 2024

Outbound Heli Adventures | Robinson R66

Pilot: Amory Harris

Photo by Mark Bennett







THE
Battle FOR
West 30TH

**VAI leads the charge to keep
critical New York heliport open.**

By Mark Huber



N707DS

BLADE

AVIATION

Previous spread: Jeffrey Sherrills, a ramp agent for heliport operator Air Pegasus, hot-refuels a Sikorsky S-76C as a pair of Sikorsky S-76Cs coordinate passenger transfers at the West 30th Street Heliport. (VAI/Dan Sweet)

A convergence of Sikorsky S-76C helicopters is a common sight at the heliport, which can handle multiple aircraft at a time. A Zip Aviation model under contract to Blade waits for charter passengers while a Flexjet helicopter prepares for landing. (VAI/Dan Sweet)

SWIFT ACTION BY VERTICAL Aviation International (VAI) earlier this year thwarted the latest attempt to shut down the West 30th Street Heliport (KJRA) in New York City.

Buried inside proposed New York State legislation to expand the green space associated with the redevelopment of Pier 76 in the 550-acre, 4.5 mile-long Hudson River Park was language that could have led to the closure of the heliport. Specifically, it prohibited “any facility for motorized aircraft, including a heliport.”

VAI quickly mobilized its members to respond in what Cade Clark, VAI chief government affairs officer, called the largest grassroots campaign in the association’s history. The VAI outreach included its members, affected companies throughout the Northeast, and other regional and national aviation organizations.

In just three to four days, the coordinated effort generated an impressive 96,000 emails to New York State legislators. According to VAI’s northeastern US regional representative, Josh Rousseau, the emails from the grassroots campaign “blew up” the inboxes of legislators.

Rousseau, who joined VAI last year after a 25-year career in New York State government, says the email campaign prompted former colleagues to seek him out in the hallways of the state capitol to ask about the heliport. Rousseau used the opportunity to open lines of communication and educate lawmakers and their staffs about the importance of KJRA. “We now have a seat at the table,” he says.

Serving New York since the 1950s

The West 30th Street Heliport is a thriving facility for air taxi and general aviation helicopter operations, logging more than 40 flights per day. The majority are air taxi operations, including helicopter rideshare Blade-branded flights. That company also operates a dedicated passenger terminal on-site. Law enforcement and air ambulances also use the heliport. Air tour flights at the site ended in 2010.

The heliport has been in continuous operation since 1956. Begun with two helipads, it now hosts six, with parking for up to 11 helicopters (8 on a 30,000-sq.-ft. concrete wharf and 3 on an adjacent barge). Normal operating hours are 7 am



to 7 pm weekdays and 11 am to 7 pm on weekends, but the heliport is available 24/7 with fuel when needed, the only one in the New York City metropolitan area offering this convenience.

The heliport is owned by the Hudson River Park Trust, a local-state partnership formed in 1998 via the Hudson River Park Act to administer the Hudson River Park and related commercial development. Businesses at the 1.6-acre site pay the trust annual fees.

That ownership structure has enabled a political climate that puts KJRA under almost perennial attack from a small group of local activists and area residents. Critics maintain that the operation of a commercial heliport within the confines of a public park creates a conflict, even though all approaches and departures must be conducted over the Hudson River and not over the park's green space. Antihelicopter advocates have been highly successful in getting industry-limiting legislation introduced and nearly passed into law.

"It's an ongoing, contentious matter for certain groups—small pockets of residents, particularly in New York City, who have a problem with our operations as it relates to their quality of life. We recognize that, and we do not diminish that," says Rousseau. "We embrace that conversation because we want to be good neighbors. We fly where we live."

Rousseau characterizes most of these anti-industry efforts as "ill-informed ideas and misconceptions about the realities of how we operate," adding that most flights conducted out of KJRA are dictated by the FAA's rules for local airspace that control "what

Nestled against the western shoreline of the Hudson River in Midtown Manhattan, the heliport is ideally situated to accommodate business and personal charter flights.

(VAI/Dan Sweet)





we can and cannot do to mitigate our impact on the local community.” For example, helicopters on local flights in the Hudson River VFR corridor may fly no higher than 1,000 ft. and must maintain a speed of less than 140 kt. and fly in designated north- and southbound “lanes” over the river. In addition, complaints coming into the 311 hotline, New York City’s all-purpose government service center, show a high number of sound complaints stem from a small number of residents.

Airspace Access under Threat

Nevertheless, in certain circles, attacking helicopters is good politics, and both local and state officials have used that tactic. In 2022, the state legislature passed a bill that would allow the state attorney general and individual citizens to sue helicopter operators who created “an unreasonable level of sustained noise on the ground” and would amend the Hudson River Park Act to ban from KJRA “nonessential” helicopter traffic—defined as anything unrelated to public safety, construction, research, or news-gathering.

Concurrently, the New York City Council introduced legislation to ban similarly “nonessential” flights from the two other government-owned heliports in the city, Downtown Manhattan/Wall Street Heliport (KJRB) and East 34th Street Heliport (6N5). Fresh versions of that legislation remain pending, as does a proposed helicopter sound tax, but the ability of those bills to affect the amount of sound from helicopter operations is highly questionable, according

to an analysis by the New York City Economic Development Corporation (NYCEDC).

Despite an alleged 17-fold increase in 311 complaints about helicopter sound over the past five years, only 4% of those flights originated at those two heliports, according to the NYCEDC. (There also seems to be a correlation between a rapid increase in 311 complaints and pending antihelicopter legislation dating to at least 2015.)

New York Gov. Kathy Hochul vetoed the state legislation in December 2022 on the grounds of its questionable legality, noting, “Recent federal case law makes clear that nonfederal actors must carefully consider how state and local restrictions interact with federal laws governing aviation. ... Certain elements of this legislation run counter to the federal scheme regulating New York’s airports and airspace.”

It is highly likely any city-enacted ban would similarly run afoul of the legal principle of federal preemption, which gives the federal government sole authority to regulate aviation. Even if the ban survived a legal challenge, however, it likely wouldn’t make an impact on sound levels in the city. A recent analysis published by the nonprofit newsroom Gothamist shows that two-thirds of the helicopter sound over the city is from flights that originate in New Jersey or the Hamptons. While 13% of the flights analyzed did originate at KJRA, the city ban would extend only to the two heliports it owns, not to KJRA, which is controlled by the Hudson River Park Trust.

But the diffuse origin of flights underscores a point

Whether the passenger has two feet or four, charter flight crews at the heliport assist all in their travels, including the passengers of this M R Aviation Leonardo AW139. (VAI/Dan Sweet)

Rousseau successfully made in his April 2024 testimony before the New York City Council: “Banning this and banning that, from our perspective, is not sensible policy. You’re moving a problem from one place to another.”

Such was the case when, in the name of noise abatement, the city strong-armed New York air tour operators to “voluntarily” limit flights originating at the Downtown Manhattan/Wall Street Heliport by 50%, beginning in 2017, or lose access to that heliport



Banning this and banning that, from our perspective, is not sensible policy. You’re moving a problem from one place to another.”

altogether. In response, several operators either relocated their bases to New Jersey or established satellite bases there, in both cases originating flights that continue to fly over New York City.

Such a scenario solves nothing, Rousseau says. “We want to be good neighbors and solve problems together.

If folks are interested in that, we are always ready and willing. If they’re not, that’s a different conversation.”

Finding Compromise

Initially, the latest state legislation impacting KJRA was a different conversation. “This was a very direct



Excellence at Altitude

HELICOPTER SERVICES



Comprehensive Maintenance Repair and Overhaul services

TURBINE ENGINES



Customised individually tailored repair and overhaul solutions

DYNAMIC COMPONENTS



Specialising in the repair, overhaul, supply and installation of dynamic components

SALES & LEASING



Specialist in aircraft sales, leasing and fleet management

www.salusaviation.com | sales@salusaviation.com



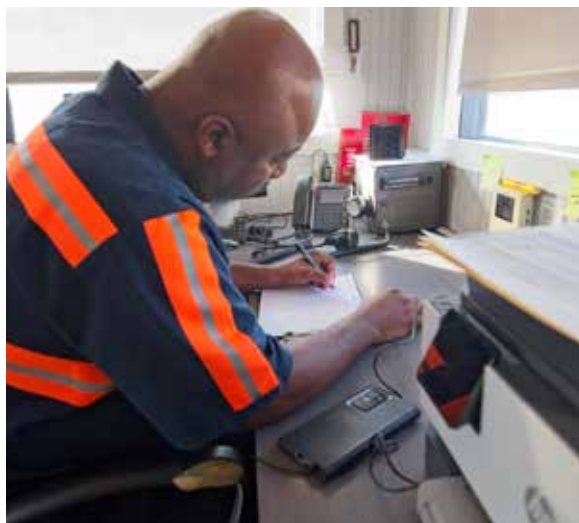
An Airbus ACH160 arrives at the West 30th Street Heliport. The facility can handle several medium-sized aircraft simultaneously. (VAI/Dan Sweet)

assault on this facility to simply get rid of it, as opposed to limiting operations or taxing this or taxing that. That’s what made this dramatically different and critical,” Rousseau says. Left unchecked, the original bill language was “the first true, legitimate threat to KJRA in 20 years,” he says. “It got our attention.”

The bill came less than a year after ecoprotest

group Extinction Rebellion (XR) unsuccessfully tried to forcibly shut down KJRA on Sep. 13, 2023, leading to multiple arrests. Groups such as XR aren’t interested in negotiating with the rotorcraft industry, which they characterize as “pestilence.” Nor can they be persuaded of the promise of clean, quiet transportation by electric vertical takeoff and landing (eVTOL) aircraft. XR spokesperson Jack Baldwin says eVTOLs would be “simply electrifying wasteful, unnecessary transportation.”

Fortunately, New York State legislators seem more open to compromise. Rousseau says VAI’s outreach to members—the one that generated 96,000 emails—was “short, sweet, and to the point” about the consequences of closing KJRA: direct and indirect job losses, reduced access for first responders and helicopter air ambulance transport, and slowed advancement of advanced



Working from an office located between the landing areas, Air Pegasus heliport supervisor Richard Hargrove handles the phones, the radio, and of course, the paperwork for the flights at the heliport. (VAI/Dan Sweet)

air mobility (AAM). The last outcome directly conflicts with New York Mayor Eric Adams’s goal of integrating AAM into the city’s future transportation mix.

Overall, general aviation in New York supports 43,200 jobs and contributes \$8.6 billion to the state’s economy, according to the National Business Aviation Association (NBAA). According to a 2012 study prepared by New York University’s Rudin Center for Transportation Policy and Management, businesses in the greater New York City area that use helicopter services account for 4.2% of local private-sector payroll and \$40 billion in the city’s gross domestic product (GDP).

The study found that “in a survey of corporate helicopter users, 80% rated ‘helicopter access’ as either ‘important’ or ‘very important’ and indicated that without it, their presence in New York City would be significantly reduced or activities dramatically curtailed.” The study went on to note that a mere 1% drop in private-sector employment would reduce the local

GDP by \$678 million (in 2024 dollars, adjusted for inflation).

Rousseau notes that preserving existing vertical aviation infrastructure such as KJRA is critical for the future of AAM and eVTOLs. “No matter what state we’re talking about, what locality we’re talking about, if a piece of infrastructure like this disappears, it is very, very unlikely to return.”

With the grassroots campaign alerting legislators to the issues posed by KJRA’s closure, Rousseau then worked with supporters, the legislation’s sponsors, and the co-chairs of the New York Legislative Aviation Caucus to make the bill more favorable to vertical aviation interests. He also reached out to members of the state legislature whose districts host companies that either rely on the heliport for transportation or contribute to it as rotorcraft industry suppliers.

“Thanks to relationships forged during my career in New York State government, I was also able to utilize my network of talented and connected state capitol veterans who shared THE BATTLE FOR WEST 30TH *continues on p. 38*

Built from the Ground Up

From our first test flights in a small quarry to becoming an internationally trusted manufacturer, Enstrom Helicopter has elevated the standards in production, performance, and safety through our unique fleet of aircraft for over six decades.

Each Enstrom helicopter is built and assembled by a dedicated team in Menominee, Michigan. Using decades of professional and skilled experience, the team-oriented crew behind each helicopter embeds a sense of care, precision, and passion into every aspect of the build.



Join the Team with Career & Growth Opportunities
Scan the code or visit
EnstromHelicopter.com/careers



Photo Credit: Brent Bundy



THE VTOL
SHOW AND
SAFETY
CONFERENCE

STANDS STILL AVAILABLE!

Contact us to exhibit!

Amsterdam
The Netherlands

4–7 Nov | Exhibits Open 5–7 Nov

www.europeanrotors.eu

For more information, contact sales@eha-heli.eu

organised by



produced by



supported by



VERTICON

FORMERLY HAI HELI-EXPO

Dallas 2025 | POWERED BY VAI

APPLY FOR SPACE NOW!



March 10–13, 2025
Exhibits Open March 11–13
verticon.org

our goal to preserve the heliport,” adds Rousseau. “With our grassroots campaign, working closely with the mayor’s office and tapping into the numerous private-sector business interests and VAI members who value the facility, and with the support of our sister organizations and others (Aircraft Owners and Pilots Association, The Business Council of New York State, Eastern Region Helicopter Council, NBAA, New York Aviation Management Association, and the Partnership for New York City), we succeeded in preventing the immediate closure of the heliport.”

In the end, the heliport prohibition was stripped from the legislation, which now also directs the creation of an advisory task force that must include members from the rotorcraft and business communities. The result, Rousseau says, is “a level playing field” and an increased “degree of fairness” for the rotorcraft community.

“We really struck a chord. It was a very successful effort.”

VAI’s Clark assigns much of the success of the campaign to save the heliport to the passion of a VAI membership dedicated to protecting the industry. “When your outreach campaign generates nearly 100,000 messages to legislators, they sit up and take notice.”

Clark also credits Rousseau’s efforts and VAI’s regional advocacy. “This win is a testament to VAI’s regional representative program. The program we put in place on the West Coast and now on the East Coast is paying dividends and providing our members with a return on their investment.”

But ever the realist, Rousseau cautions against complacency in a political environment rife with continuing threats, including “the burden the new law has placed on all involved to make economic investment in the Hudson

River Park a reality while balancing the needs of the industry and others who support the heliport,” he says. “Our work is far from over. We need our membership and industry to understand that the investment of their time

and energy moving forward is still vital to what we need to do to gain a lasting positive outcome.” ■

Mark Huber is an aviation journalist with more than two decades of experience in the vertical flight industry.

Worried about your aircrew’s training and qualifications requirements?

The VAI Flight Training and Checking Program* can help with:

- Managing your aircrew’s training
- Testing
- Qualification
- Certification
- Compliance needs.

**Meets FAA OpSpec A031 requirements for third-party contract training and checking*



Scan here to learn more





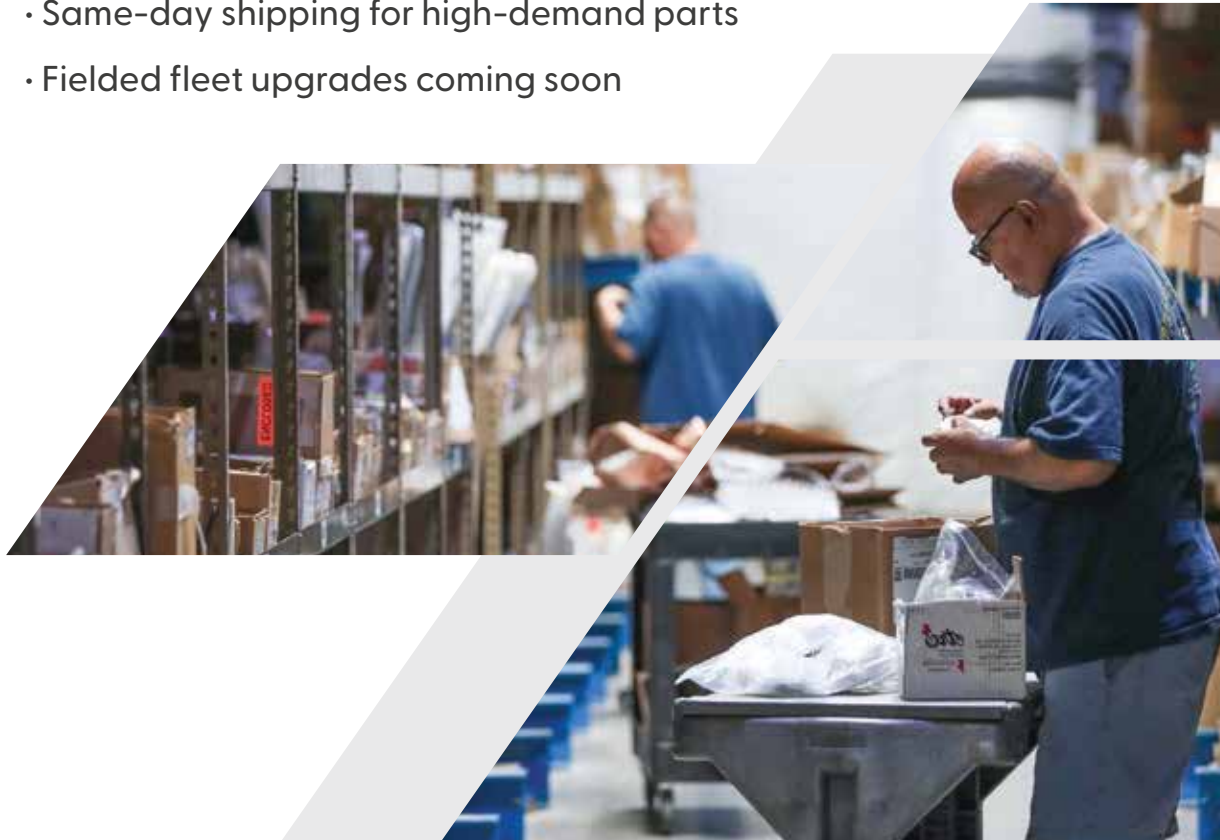
COMMITTED TO PERFORMANCE

A new, higher level of execution.

We are committed to improving our customer service and support. We've made significant improvements in larger spares volume, an increase in repair and overhauls and an increase in AOG shipments within 24 hours. And we're not done there.

2024 Key Commitments

- 95% fulfillment rate on top 1,000 parts
- Same-day shipping for high-demand parts
- Fielded fleet upgrades coming soon



MD | HELICOPTERS™

+1 (480) 346-6300 | mdhelicopters.com/support

ROTOR TECHNOLOGIES

The start-up aims to unite the benefits of traditional helicopters and unmanned aircraft.

By Justin Bachman

A **N ENORMOUS AMOUNT OF HELICOPTER** work qualifies as perilous. Battling a raging wildfire. Conducting utility inspection work in treacherous terrain. Navigating cornfields dotted with wind turbines. Contending with gusty winds buffeting offshore oil rigs.

In such scenarios, piloting the helicopter remotely could increase safety. It's not a new idea, of course, with major manufacturers, from Airbus to Bell and Boeing to Sikorsky, all researching the technical promise—and pitfalls—of remotely operated helicopters, many to serve military applications.

On the civilian side of vertical flight, much of the commercial focus has been on electric unmanned aircraft systems (UASs) and manufacturers' efforts to expand the capabilities of these platforms in areas such as agriculture and surveillance work.

Into this burgeoning field of remotely piloted aircraft comes [Rotor Technologies](#), a small, 40-person New England start-up that's evolving the well-known Robinson R44 workhorse into its own line of unmanned aerial vehicle (UAV). The company has designated the aircraft the R550 and calls it "the world's largest civilian drone," a helicopter that will be flown remotely.

On Aug. 13, Rotor, as the company is known, introduced two R44 derivatives optimized for agricultural spraying work and for construction jobs. Rotor calls the former the Sprayhawk, with a 110-gal.



Tackling the Dull, Dirty & Dangerous



capacity for crop work, and the latter the Airtruck, an R550 that's designed as a utility vehicle with a payload capacity of 1,000 lb. Rotor says its vehicles will be the "largest and most capable" unmanned civilian vertical takeoff and landing (VTOL) aircraft and slash operating costs as much as half relative to conventional helicopters.

"Rotor is really the intersection of helicopters and the drone world," says Hector Xu, founder and CEO of Rotor, which is based in Nashua, New Hampshire. "And the hope is to bring the benefits of the two together."

As technology advances, Rotor and other manufacturers foresee a fertile market for helicopters that will eventually be flown beyond the visual line of sight (BVLOS) of the pilot.

These steps are incremental, from piloting remotely with the aircraft in full view to BVLOS flying to perhaps piloting the aircraft remotely from hundreds or thousands of miles away. Eventually, as technology matures—and regulators and the public become more comfortable with it—helicopters may operate autonomously, meaning flights will be conducted by software, without human-pilot involvement.

"It's a spectrum, but I think everybody is thinking about

autonomy and how it can bring them benefits, because it's just a technology that's really hard to ignore," says Ben Frank, Rotor's chief commercial officer. "And it's really hard to bet against, when you think about it."

Behind the UAV

Rotor acquires used R44s that have around 2,000 service hours each. The VTOL company then overhauls and retrofits the helicopters into R550s, transforming them into an Airtruck or a Sprayhawk vehicle. The aircraft is sold with a 2,200-hour service life and comes with warranties and maintenance support provided by Rotor. Robinson holds no equity or other investment in Rotor, which is funded with venture capital, Xu says.

Prices start at \$850,000 for the Airtruck and \$990,000 for the Sprayhawk, although Rotor describes both of those figures as introductory prices for orders placed before Dec. 15, 2024. The aircraft have a maximum takeoff weight of 2,500 lb. (1,134 kg) each and fly at a top speed of around 104 kt. (120 mph). Rotor formerly referred to the R44-derived platform as the R550X and displayed its prototype UAV at



HAI HELI-EXPO 2024 in Anaheim, Calif.

Rotor's fly-by-wire system functions via computers and multiple communications links and onboard sensors. Neither UAV is rated to carry humans on board; they're strictly remotely piloted vehicles. (Rotor says future aircraft may carry people, depending on market needs.)

The company plans to boost output to 25 aircraft next year for its first production run, with an initial focus on the US agriculture market, primarily in crop-spraying operations. In the future, Rotor sees commercial end users supporting an output of 50 to 100 aircraft each year.

Customer field testing with two Sprayhawks is set to commence this year, followed by formal deliveries in 2025. "The goal is to begin full-rate commercial operations for spray season next year, which will begin in April or May," Xu says.

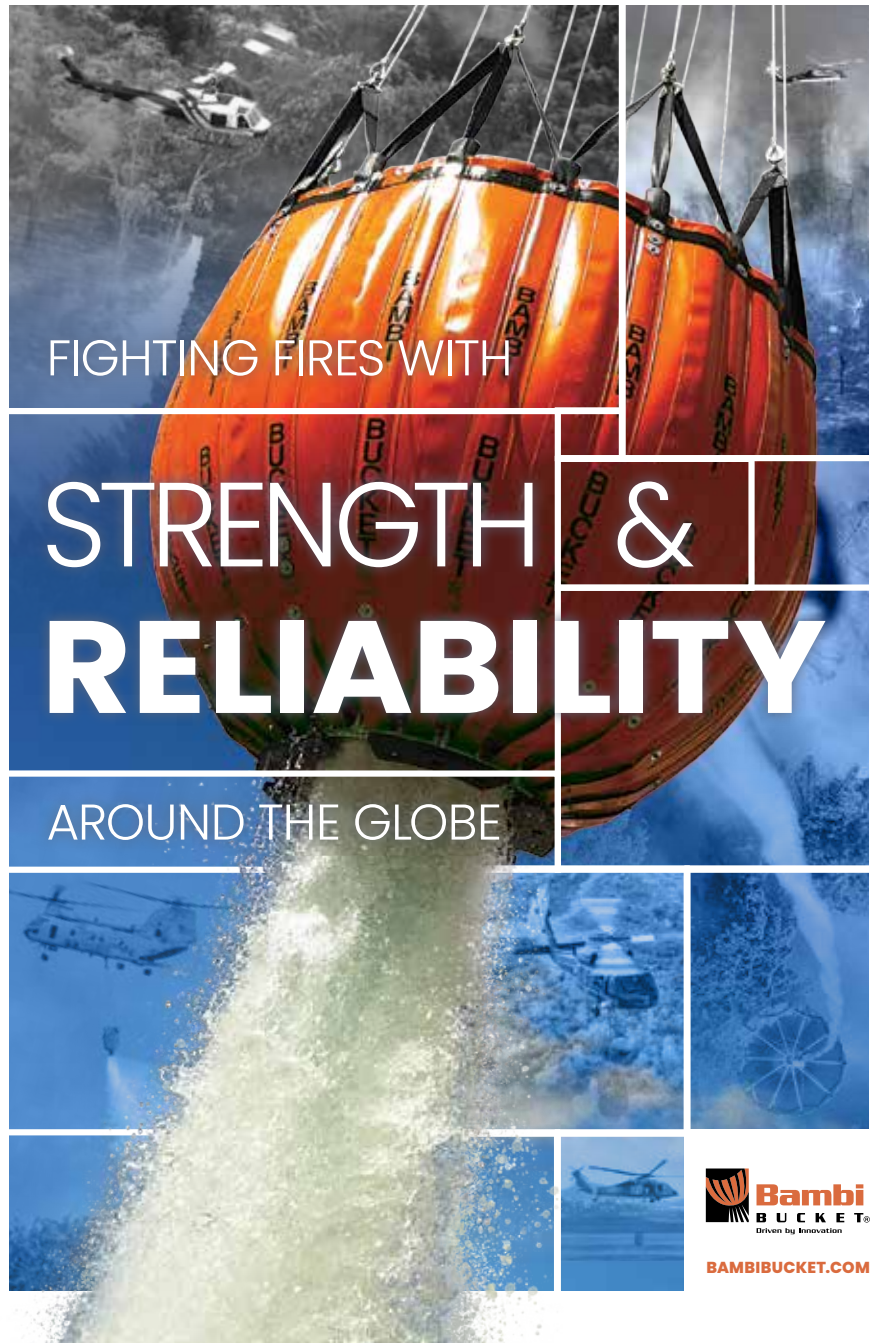
By focusing on a remotely piloted platform, Rotor is avoiding the ambitious pursuit by some electric VTOL start-ups of certification for human-rated autonomous platforms to fly in populated areas and controlled airspace. The FAA is working to certificate several new eVTOLs from companies including Joby and Archer for passenger flights that could begin as soon as 2025.

"We're letting the tiger sleep," Xu wrote in an "Autonomy Manifesto" the company published on its website in January 2024, noting that the R550 will "operate in the fringes" of the US National Airspace System in mostly unpopulated areas such as crop fields.

Rotor's Sprayhawk UAV is shown equipped with a tank and boom during a test flight to apply chemicals to a field. The aircraft is meant to provide a more cost-effective means of field application work. (Rotor Technologies Photo)

Rotor is seeking various exemptions to operate the aircraft under FAA Part 107 rules initially, with plans to fly under the future Part 108 rules the FAA is formulating to govern BVLOS flight.

Given some of the restrictions the agency imposes for Part 107 flying, including an aircraft weight limit of 55 lb. (25 kg), Rotor will "have to navigate their way through the regulatory side of the house in order to put these



Rotor is also selling an R550 variant for utility and construction work, dubbed the Airtruck, which has a payload capacity of 1,000 lb. (Rotor Technologies Photo)

[aircraft] up,” notes Chris Martino, VAI’s senior director of operations and international affairs. Some of the FAA’s exemptions for Part 107 involve aircraft that operate below 400 ft. (122 m) and under 87 kt. (100 mph), both of which would apply to Sprayhawk agriculture flights.

In this era of growing experimentation with rechargeable UASs, the Sprayhawk comes with two other selling points: the aircraft can be loaded on a trailer for road transport, without the need for rotor stowage or other modifications, and it runs on plain 100LL aviation fuel.

In many remote areas, charging and swapping batteries on a UAV out in the field can prove far more vexing for operators than finding 100LL or simply bringing along extra avgas, Xu says. And larger UAVs often require partial disassembly for trailer transport because of their rotor design, Xu adds.

Rotor is also developing a 24/7 “piloting-as-a-service” product called Cloudpilot. It uses satellite, cellular/LTE, and radio links to enable aircraft to operate autonomously around the world, potentially eliminating the need to deploy a human pilot to each R550 worksite and thereby saving money. The company describes Cloudpilot as a “human-supervised autonomy service”—an alternative to having a human safety pilot on board to take the controls when issues arise.

Rotor executives also envision a secondary but potentially significant line of business: using its proprietary Cloudpilot technology to help equip other VTOL aircraft to operate remotely.



“There’s only so many UAVs we can build. There’s only so many people who want to buy an R44-sized capability-and-cost aircraft,” Xu says. “And I think this is the way for us to scale our impact more quickly.”

Why Agriculture?

Across the vertical aviation industry, boosting the safety of “dull, dirty, and dangerous” missions has been a decades-long effort.

“We talked to almost 200 helicopter operators to hear about their problems and to think about where the opportunities were,” says Frank. “We decided that dull, dirty, and dangerous was where we should start. It’s where unmanned aircraft clearly had the best kind of near-term value proposition, where the regulatory case and precedent were the strongest, where the safety case was the easiest.”

Rotor identified agricultural



SEE
the Airtruck and Sprayhawk
in action

spraying—operations that involve applying pesticides, herbicides, and fungicides to row crops and orchards—as a primary market in the midwestern United States. “Ag is somewhere where there’s a clear use case for this today and people who want it. It’s kind of that simple,” Frank says.

Only “a small fraction” of aerial applicators want BVLOS operating capability, Xu says, which simplifies the regulatory and technical hurdles for remotely piloted helicopters.

“The thing that they really want is high levels of automation,” Xu notes. “They don’t want to be hand-flying this thing around. What they want is to click a button and it’ll spray the field. We’ve seen a shift toward high levels of automation for this specific use case and stripping back some of the more technically challenging things, like very long-range flight.”

In recent years, farmers have flocked to remotely piloted UAVs from companies such as DJI and Yamaha to apply chemicals to their crops. Still, UAVs, which are far smaller than traditional aircraft, remain a tiny part of the overall mix for row-crop spraying and other work in agricultural aviation, says Andrew Moore, CEO of the National Agricultural Aviation Association (NAAA).

For most ag-spraying operations, growers provide size and shape files to load into computer programs or apps that design aerial treatment plans. Once they’re completed, pilots download the programmed plans to USB drives and feed them to the UAV. This process will work just as well with the Sprayhawk, Frank says.

“We’re not trying to reinvent the wheel with everything here,” Frank says. “We’re trying to make use of the existing systems, tools, and processes that people already have in place.”

More than a quarter of all US cropland, or about 127 million acres, is sprayed, according to NAAA data. Helicopters make up about 16% of the domestic fleet of aerial applicators, with fixed-wing aircraft making up the bulk of the field.

“Nothing beats the speed and hopper [payload] capacity of a manned helicopter or fixed-wing aircraft flights,” Moore says.

About 900 agriculture operators are currently registered with the FAA to fly UAVs under Part 137 regulations, with about 1,940 vehicles registered

for aerial application. These UAVs are almost exclusively a “complementary addition” to the same operators’ manned-helicopter and fixed-wing aircraft flights, Moore says.

“I do think there’s some competition [with traditional helicopters], but you’re seeing uncrewed aircraft treating areas you typically wouldn’t try to get [a crewed] aircraft into for safety reasons,” Moore continues. “And that’s what some of the hybrid operations are doing.”

One of the operational issues smaller UAVs confront is the sheer size of most midwestern fields that grow corn, soybeans, and other crops. The industry requires multiple manned assets to accomplish the needed spraying, Moore says.

“There’s no way that acreage can be treated by current commercial UAVs,” Moore adds. “It’s manned aircraft because of their speed and capacity. [Because of] the amount of corn in Iowa, Indiana, Illinois, Nebraska, and other corn states, you have [manned] ag aircraft coming in from other states” in high season to meet the demand.

Current UAV operations also require workers

REISER
SIMULATION • TRAINING

**YOUR TRAINING NEEDS
ARE OUR UNIVERSE**

Sustainable training solutions elevating the standards of safety and efficiency in helicopter operations.

www.reiser-st.com

CEO and cofounder Hector Xu started Rotor after several years conducting post-doctoral research in aerospace engineering. *(Rotor Technologies Photo)*

in the field to change batteries and refill hoppers, and “labor’s hard to find in agriculture,” Moore says. “A lot of people don’t want to do that work. Sometimes it’s hard work, with hot, humid, long days.”

Another issue benefiting fixed-wing and rotary-wing aircraft in the agricultural-application industry is “a century of testing and calibrating and understanding how manned aircraft work in terms of how to position the boom, how and where it sits in relation to the wings or rotors, how to drop the boom,” Moore says.

“There’s been testing done on spray efficacy, testing done on drift potential, and there are models on how to set up your aircraft to maximize efficacy and mitigate drift,” Moore explains. “With drones, they’re still working on how to model all that, how to set it up properly, how to maximize efficacy.” He goes on to point out that the Sprayhawk benefits from its R44 platform, which has been modeled and tested. “They know how that’s going to work.”

Anticipating Market Evolution

The true economics of large, remotely piloted VTOLs will resolve themselves only as the industry scales, VAI’s Martino says, pointing to the many questions the market will address over time.

For example, how will maintenance costs in the future compare between remotely piloted helicopters and manned aircraft? Will the remotely piloted vehicle operate with a single ground pilot, or will it need a team of pilots? Do operator rest and fatigue rules make ground-based helicopter



pilots more efficient? Will flying from the ground affect pilots’ wages?

“A lot of folks think UAVs will replace manned helicopters. They’re not going to replace helicopters,” Martino says. “It’s completely foreseeable that for the future of legacy helicopter operations, operators are not only going to have helicopters, they’re also going to have some unmanned systems. It will provide more capability for them to meet their customers’ needs.”

Utility work using UAVs has become common across the United States and the United Kingdom (UK), with companies such as Pacific Gas & Electric, San Diego Gas & Electric, Entergy, and the UK’s National Grid Group all flying UAVs for various inspection missions.

It’s easy to foresee that an operator with 15 to 20 traditional aircraft today may in the future operate with 10 traditional aircraft and 20 UASs, Martino says. “It comes down to the work that can be done by those unmanned systems and how that can help offset the manned side of the house,” he says.

Beyond agricultural applications,

Rotor sees plenty of market space for an unmanned helicopter to operate in wildfires as both a surveillance tool and to drop water or fire retardants. A Rotor UAV or its successors could inspect utility lines and wind turbines or ferry parts and other supplies to oil rigs offshore.

As the technology continues to evolve, the future of VTOLs almost inevitably will involve more vehicles piloted remotely—if not by themselves one day.

“I think the key for us is how to save some lives, sell some unmanned helicopters, and make some money, not to be crass about it,” says Xu, a London native who has settled in New Hampshire after years in Boston as an MIT student and post-doctoral researcher studying aerospace engineering and plasma physics. “I’m very grateful we’ve taken this path that is more focused on the near-term marketplaces, because it allows us to build a lot of maturity.” ■

Justin Bachman is a professional writer specializing in aviation news and analysis.

EAGLE COPTERS

YOUR **GLOBAL PROVIDER**

*Sales and Leasing
Fleet Management Needs
Airframe Upgrades
Part and Component Solutions
Maintenance, Repair, and Overhaul
Engineering*



WWW.EAGLECOPTERS.COM | +1.403.250.7370 | SALES@EAGLECOPTERS.COM



NAVIGATING THE MOST RESTRICTED AIRSPACE

Being part of AOPA's celebration of general aviation gave me a flight I will never forget.

By James A. Viola



IN THE WORLD

AFTER THE EVENTS OF SEP. 11, 2001, flying in and around Washington, D.C., including over monuments and federal buildings, became nearly impossible. Flight paths were changed and approaches radically altered to protect the White House, the US Capitol, and the thousands of federal workers in the city. In this airspace—one of the most restricted and closely monitored in the world—only pilots with special permission based on background checks and interviews can fly. Because of these restrictions, most flights over the city are air medical, military, or law enforcement missions.

On May 11, 2024, I had the opportunity to fly in that airspace at 1,000 ft above ground level (AGL). The event, the National Celebration of General Aviation D.C. Flyover, was part of the 85th anniversary celebration of the Aircraft Owners and Pilots Association (AOPA). The flight also demonstrated general aviation's contributions to society from the dawn of commercial aviation in the 1920s through today while showcasing the professionalism and focus on safety that courses through all of aviation.



Organizing a Flyover

Planning for this historic flyover started more than 15 months earlier, back in early 2023. AOPA's Mike Ginter, VP of airports and state advocacy, was tasked with making it happen. Fortunately, Ginter and the participating agencies had some experience.

An Arsenal of Democracy Flyover took place over Washington, D.C., on May 8, 2015, to commemorate the 70th anniversary of VE Day, the end of World War II in Europe.

That flyover was organized by the General Aviation Manufacturers Association, the National Air Traffic Controllers Association, the International Council of Air Shows, and the Commemorative Air Force. As a veteran, I was moved by the sight of the World War II-era warbirds flying in formation over the US capital. They represented both American military might and the sacrifices that our country made, both essential to winning that war.

Ginter also oversaw the second Arsenal of Democracy flyover to commemorate the 75th anniversary of VE Day. The event was approved, and some 60 World War II aircraft had gathered at local airports in May 2020. However, the weather





WATCH
footage of the AOPA
D.C. Flyover



did not cooperate, and the event was canceled.

For the 2024 flyover, Ginter's goal was to keep everything very simple. However, nothing is simple about wrangling the federal government to get a flyover approved in the most controlled airspace in the United States!

A great deal of credit for making the flyover possible goes to the chair and ranking member of the US House of Representatives Transportation and Infrastructure Committee, Sam Graves (R-Mo.-06), who is also a pilot, and Rick Larsen (D-Wash.-02), respectively. The two leaders wrote to the FAA asking the agency "to support and assist in commemorating the 85th anniversary of the 'Golden Age of Aviation' and the many contributions the US general aviation industry has [provided] and continues to provide to our nation with a National Mall flyover [in spring 2024]."

Piloting my Robinson R44 over Washington, D.C., one of the most tightly controlled airspaces in the world. (AOPA Photo)

With this opening, AOPA started the laborious process of making the flyover a reality.

Coordinating 11 Offices, 54 Aircraft, and 210 Pilots and Passengers

Eleven different federal offices, most under the FAA, needed to approve the plan. If the US Secret Service, the Transportation Security Administration (TSA), the US Capitol Police, or any of the other government offices objected, it was not going to happen.

"Each of the 11 offices had the ability to end this flyover before it even got off the ground," Ginter says, adding that the offices were in fact supportive of the event. "From the outset, they were inclined to make it happen if we followed all proper rules, waiver requests, and other procedures."

I am a proud member of AOPA and have been since 1987, and as the president and CEO of Vertical Aviation International, I was thrilled to be asked to lead the rotorcraft contingent of the flyover.

After attending the first briefing for the

US Secret Service canine teams inspected every aircraft prior to liftoff. (AOPA Photo)



The flight path of the historic flight over Washington, D.C. (OpenStreetMap; VA/Bailey Wood)

flyover pilots in January of this year, I came away impressed by the organization and planning that went into making this flyover happen.

Three months later, a four-plane practice flight took place, led by AOPA President and CEO Mark Baker, and including Pete Muntean, CNN’s aviation correspondent who is also a pilot and flight instructor.

“We captured phenomenal video to help train the pilots,” Ginter says. “For the final flight, this video was indispensable to show the participants the flight path and visual features down the Potomac River, and the monuments, giving them the confidence to make the flight both securely and safely.”

Ginter adds that the video was valuable for the approving agencies, too, as it enabled them to see that the plan worked and the flight could be done safely and securely.

Another hurdle to overcome was the fact that the inbound and outbound flight paths for Ronald Reagan Washington National Airport (KDC) were nearly identical to the flyover route. Traffic at the extremely busy airport would have to be halted for an hour in the middle of a Saturday. However, flyovers such as those over nearby Arlington National Cemetery for military funerals are not

uncommon, so there was a precedent for briefly stopping airport traffic.

Prior to the flyover, 210 people had to be vetted by the Secret Service and the TSA. This included pilots, copilots, student pilots, and passengers. Additionally, every aircraft had to be “ramp-checked” by the FAA’s local Flight Standards District Office and the TSA and “canined” (inspected by the Secret Service’s explosive-detecting dogs) at the departure airport, Frederick Municipal Airport (KFDK) in Frederick, Maryland, about 45 miles from downtown D.C.

A Lineup for the Ages

The day of the flight was “clear blue and 22,” as we would say in the army. We could not have asked for nicer flying weather. The ground crew carefully lined up every aircraft in a particular order to facilitate taking off at specific intervals. After we got a thumbs-up from the security personnel, a complex and carefully choreographed dance by all participating aircraft took place.

The goal was to have each aircraft pass by the Washington Monument at 2.5-minute intervals starting precisely at noon. Because the different aircraft had different cruising speeds, takeoffs and flight times had to be precisely calculated

and scheduled down to the second. Credit goes to expert air boss Wayne Boggs, who got every aircraft in the air exactly on time.

The flyover was organized into 15 distinct “chapters” representing the history of general aviation, from the Golden Age of Aviation—considered the 1920s and 1930s—to the present. The lineup included vintage planes from the 1930s, seaplanes, homebuilts, public-service aircraft, and trainers.

The formation was led by AOPA’s Baker in his historic Beechcraft Staggerwing, followed by other notable aircraft, including the Waco UPF-7, North American Navion, Douglas DC-3, Spartan Executive, Hatz biplane, and HU-16 Albatross. Modern aircraft making the trip included a Carbon Cub, Icon A5, the newest Piper M700 Fury, and my Robinson R44. In total, 54 aircraft were featured, flown by some of the most accomplished pilots in the country. CNN’s Muntean joined in his Super Decathlon, and the Titan Aerobatic Team concluded the event.

The flyover was livestreamed on AOPA’s YouTube channel using video cameras positioned on buildings throughout downtown D.C. A media helicopter hovered near the Washington Monument to capture pictures and additional footage. Commentators and renowned aviation journalists and pilots [Tom Haines](#) and [Miles O’Brien](#) provided [live narration](#), discussing the background of each aircraft in the flight. From the roof of the Smithsonian National Museum of American History, as different generations of aircraft flew overhead they shared the history and, more importantly, the impact of general aviation.

“Some \$150 billion a year in economic impact comes out of the general aviation community,” Haines said during the livestream. “A million jobs across the country are related to this industry, and many of the aircraft we will see today are built in small towns across the United States.”

The narration also touched on how aircraft are evolving. As a de Havilland Canada DHC-2 Beaver, a single-engine

heli-mart
Spare Parts.
Exceptional Service.
CALL OR CLICK TODAY!
1-800-826-6899 helimart.com

Advertise
in
POWER UP
MAGAZINE
Contact
Sales@verticalavi.org
or 352-388-7031

HELILADDER
Focus on your work — not your balance![™]
New MX5+MXPS HeliLadder.com



Joining me in my R44 was National Air Transportation Association President and CEO Curt Castagna (right) and my fiancée, Ellen Boone (not pictured). (James Viola Photo)

floatplane, flew over, the two hosts explained that Harbor Airlines, from the northwestern United States, is converting its Beavers to electric flight due to the short hops they take to and from Vancouver, British Columbia, Canada.

“It’s a perfect mission for electric aviation,” O’Brien said.

They also highlighted general aviation’s efforts to eliminate lead from avgas. As a Beech Baron flew over, the pair noted that the twin-engine plane was using different fuels for each engine. One used traditional fuel; the other, a new unleaded fuel called G100UL.

I led the vertical aviation category as “Rotor 1” in my Robbie. I was followed by an experimental-category Enstrom 480B piloted by Enstrom’s Dennis Martin and an Airbus EC120 flown by AOPA trustee Matt Desch. Joining me in my helicopter to witness this momentous flight were National Air

Transportation Association President and CEO Curt Castagna and my fiancée, Ellen Boone.

The Event Route

All aircraft followed a strict predetermined route. Initially, we flew south at an altitude of 2,000 ft. AGL, then we descended to 1,000 ft. over the Potomac River and maintained that altitude after making a left turn at the Lincoln Memorial.

We remained over Independence Avenue, but the view over the monuments, the White House, the federal office buildings, the US Capitol, and the Smithsonian museums was breathtaking. Very few have been able to experience the grandeur of Washington, D.C., from this altitude!

Flying parallel to the National Mall, we flew within 500 ft. of the Washington Monument. Seeing it from that perspective was remarkable.

The National Mall section of the route terminated near the Smithsonian National Air and Space Museum, where all aircraft turned south. The flyover’s three helicopters included the Enstrom, so we flew farther south on the Potomac River to Mount Vernon, home of George Washington, the first US president.

From there, we proceeded west and around the controlled airspace of Washington Dulles International Airport (KIAD), before returning to KFDK.

The return flight in the Robbie was uneventful, as all of us sat quietly processing what we had just experienced.

A Testament to Aviation

The entire flight was well over 120 miles and took us a little over an hour. All aircraft returned safely.

As we landed back on the tarmac, there was a palpable sense of accomplishment and camaraderie among all the participants. Wayne Boggs, the KFDK air boss, and the ground crew and support staff greeted us with smiles, recognizing the significance of what we had just achieved.

Reflecting on the experience, I realized the flyover was more than a celebration of AOPA’s anniversary. It was a testament to the enduring spirit of aviation and the passion it sparks. The event also underscored the critical role organizations such as AOPA and VAI play in advocating for our industry and ensuring our future. The National Celebration of General Aviation D.C. Flyover was the flight of a lifetime, and I was honored to be part of it. ■

James A. Viola is president and CEO of VAI.



Powering You!

VAI Membership **Fueling Your Growth!**

- Tuition Discounts
- Health Insurance
- SMS Coaching and Assessment
- Flight Training and Checking



Join VAI to access
these and many more
amazing benefits!

verticalavi.org/join

VAI
VERTICAL AVIATION
INTERNATIONAL

James Simmons

Aerospace entrepreneur, Madison, Alabama, USA



Quick Facts

CURRENT JOB

I am the founder and general manager of Avolatus, an aerospace consulting firm.

FIRST VERTICAL AVIATION JOB

My first job with helicopters involved serving as a Sikorsky UH-60 Black Hawk repair technician in the US Army.

FAVORITE HELICOPTER

My favorite helicopter is the UH-60 Black Hawk, the aircraft in which I began my career as a US Army crew chief. The Black Hawk holds a special place in my heart, and I've dedicated much of my career to ensuring its operational excellence and safety.

How did you decide helicopter aviation was the career for you?

Growing up around US Army airfields, I was captivated by the daily operation of helicopters, which sparked in me a deep curiosity about how they fly and operate.

How did you get to your current position?

When I enlisted, I had very little experience in any form of maintenance and was both excited and nervous about the role. I barely knew how to change the oil on a car, yet I was about to become a helicopter technician. I'm incredibly grateful for the teachers and mentors I have had the privilege of working with throughout the years.

To further my career, I earned an FAA airframe and powerplant (A&P) certificate, and I continuously expanded my skill set and knowledge base while working for various employers. Also, once eligible, I obtained FAA inspection authorization (IA), further broadening the opportunities available to me.

After completing my military service, I attended Embry-Riddle Aeronautical University, earning degrees in aviation technical management, aviation maintenance, and management.

Several key positions throughout my career have significantly contributed to my professional growth, ultimately leading to the establishment of Avolatus.

What are your career goals?

My career goals are centered around continuing to drive innovation and excellence in the aviation industry. Additionally, I aspire to help the next generation of aviation professionals achieve their full potential by sharing my knowledge and experience as a mentor.

I also stay actively involved in industry organizations and initiatives, contributing to the ongoing evolution of aviation standards and workforce development.

What advice would you give someone pursuing your career path?

I would offer the following advice to anyone interested in aviation maintenance:

- **Start with a strong foundation:** Begin by gaining hands-on experience and foundational knowledge. Whether through military or civilian roles, immerse yourself in the practical aspects of aviation maintenance and operations.
- **Pursue education and certifications:** Earning degrees in aviation-related fields and obtaining certifications such as the FAA A&P certificate and IA can open many doors.
- **Embrace continuous learning:** The aviation industry is constantly evolving, so commit yourself to a lifelong-learning mindset. Stay up-to-date with the latest technology, regulations, and best practices.
- **Seek mentorship and networking opportunities:** Build relationships with experienced professionals in the industry. Their guidance and insights can be invaluable.
- **Be resilient and persistent:** Learn from your setbacks and use them as stepping stones to growth and improvement.
- **Focus on quality and safety:** Always prioritize quality and safety in your work.
- **Set clear goals, and plan:** Define your career goals and create a roadmap to achieve them. Regularly assess your progress and be willing to adjust your plans as needed.

Who inspires you?

My grandfather served as a mechanic for the B-25 bomber during World War II, and his dedication and expertise left a lasting impression on me. One of the best days I spent with him involved walking through the National Museum of the US Air Force, near Dayton, Ohio. As we toured the different aircraft, he shared stories about his unit and the old days in the US Army Air Corps. His



passion for and commitment to aviation continue to inspire me.

Tell us about your most memorable helicopter flight.

It was my first time in a crew seat in the Black Hawk. The sensation of lifting off the ground vertically, combined with the coordination of the crew and the guidance from the tower, was astonishing. I'll never forget the exhilarating feeling of hanging out the window, truly being part of the crew. From that vantage point, you can look all around the aircraft with no barrier or window between you and the open air.

What still excites you about helicopter aviation?

The ability of helicopters to perform a wide range of missions never ceases to amaze me. Every day in helicopter aviation presents new challenges and the chance to make a positive impact, which is incredibly fulfilling.

What challenges you about helicopter aviation?

Ensuring that all maintenance and

operational procedures adhere to the highest standards while also meeting tight deadlines and mission requirements is a constant challenge. Additionally, keeping up with rapidly evolving technology and regulations requires continuous learning and adaptation.

The dynamic and often unpredictable nature of helicopter missions also demands quick decision-making and problem-solving skills. These challenges, however, are what drive me to stay dedicated and strive for excellence in every aspect of my work.

Complete this sentence: I love my job, but I'd rather work for a paper company in Scranton when ...

Never. There is no other place that I would rather be than dealing with the everyday needs of organizations to perform effective and quality maintenance on aircraft at all times. I am by nature a problem solver. I enjoy the challenge of the helicopter industry today and look forward to being part of the evolution that it will go through in the years to come. ■

Underestimated Safety Risks

An open helicopter door triggers a disastrous sequence of events.

By David Jack Kenny

S **MALL ERRORS CAN HAVE GRAVE CONSEQUENCES.** While this fact is not exactly news in aviation and especially the rotorcraft sector, it seems to merit periodic repetition. Over time, the history of accidents shows a pattern of gradual erosion of standards arrested only after an avoidable tragedy shocks the industry back into paying attention.



The Mission

On the morning of Oct. 18, 2018, the pilot and two Department of Conservation rangers met at the Wānaka Airport (NZWF) on New Zealand’s South Island to prepare for what the Transport Accident Investigation Commission (TAIC) later described as “an airborne wildlife-culling operation.” The plan was to load a commercial operator’s MD Helicopters MD 500D with equipment and supplies, including some to be handed off to a second helicopter’s crew, and fly to a remote staging area near the Landsborough River in the Southern Alps. From there, they would make several flights with the doors off to conduct the hunt.

In addition to four rifles and 4,000 rounds of ammunition, the cargo included the crew’s cold-weather overalls, recording equipment to document the cull, a cooler containing food and drink, and two 20 L cans of jet fuel. By 10:45 am, it had all been loaded into the cabin, with most items stowed on the floor or under the left side of the rear bench seat.

Press reports indicate the operation was intended to control Himalayan

Impressions from the pilot's black overalls appear on the tail-rotor blade (right) and tail boom (far right). The garment had snagged on the blade, breaking it and ultimately shattering the tail-rotor gearbox. (Transport Accident Investigation Commission Photo)

tahrs, large goatlike mammals that were deliberately introduced to New Zealand as big-game trophies in 1904. In the absence of any natural predators, their ability to subsist on a wide variety of vegetation led their populations to increase to the point that their grazing inflicted extensive damage on the landscape and its plant life, threatening the survival of native species that rely on that foliage for food and cover. Tahrs were recognized as a threat to the environment as early as 1930, their numbers having doubled in the first 16 years. Hunting remains the principal method of keeping the population in check, and while their eradication from New Zealand is believed feasible, it hasn't been pursued due to their popularity with recreational hunters and the income those hunts provide to landowners.

The Flight

Images from two digital camera systems on the airport grounds showed that by 10:45, the helicopter had been pulled from its hangar, refueled to capacity, given its preflight inspection, and loaded. It lifted off at 10:53 with one of the sharpshooters in the right front seat and the other on the right side of the rear bench. The pilot air-taxied to the approach end of Runway 11 and then climbed to 300 ft. above the runway centerline. The pilot advised a Robinson helicopter in the traffic pattern of his intention to depart early before turning left and climbing to 500 ft. on a northerly heading.

Witnesses at the airport recalled



seeing the helicopter rotating as it descended “near vertically, with items trailing behind it” until the aircraft disappeared from sight behind the escarpment north of the field. Two experienced flight instructors were in the Robinson, watching the MD 500D to maintain separation. One saw “items exiting the helicopter toward the tail rotor.”

Moments later, the tail boom bent upward and separated from the cabin and the helicopter spun to the ground in a flat attitude “with several items being flung out.” The other instructor described “items being ejected from the cabin that looked like confetti” as the aircraft spun. It took about five seconds for the helicopter to hit the ground and catch on fire.

The Robinson pilots flew to the scene and orbited, making Mayday calls and summoning emergency services, then landed just southwest of the main wreckage. “Light debris” was still falling as they climbed out. Firefighters, police, and ambulances reached the scene about five minutes later. The fire was brought under control, but all

three occupants of the helicopter had been killed. Because the operator had received threats from opponents of the cull, the police initially treated the debris field as a crime scene.

The Aircraft

The MD 500D (variously known as the Hughes 369D and Hughes 500D) is powered by a 420-shaft horsepower Rolls-Royce M250-C20B turboshaft engine driving a five-blade fully articulated main rotor and a semirigid two-blade tail rotor. The operator had leased the 1979 model aircraft on Aug. 31, 2018, to fill a gap in its fleet until two newly ordered helicopters arrived. As of Oct. 15, 2018, its total time in service had reached 19,469.25 hours, while its engine, built in 1977, had operated for 18,569.85 hours. Its most recent 100-hour inspection had been completed on Jun. 25, 2018, not quite four months before the accident, at 19,430.50 hours of operation.

The Pilot

The 38-year-old pilot earned his commercial license in 2007 and had

accumulated about 5,500 hours of rotorcraft flight time in addition to 314 hours in single-engine airplanes, for which he held a private pilot rating. He held current approvals for sling loads, agricultural application, and

Part 135 passenger operations. His most recent Part 135 flight test was completed about three months before the accident with an October 2019 expiration date. He also held ratings in the Robinson R22 and R44 and Airbus

AS350. He had flown 67 hours in the preceding 90 days, including 35 in the MD 500D, in which he'd logged 1,138 hours of career experience.

He was also the son of the company founder and the youngest brother of a pilot killed just three months earlier when his R44 crashed into Lake Wānaka, an accident attributed to mast bumping. Their two older brothers, also pilots, made a tribute flight over his memorial service.

The Investigation

The debris field began more than 150 m (492 ft.) before the main wreckage and continued at least as far beyond, to the far side of the Clutha River, while spreading almost as far to either side. Data recovered from a Garmin GPSMap 296 and an iPhone allowed reconstruction of the helicopter's flight path. Moving along that track from south to north, the first pieces of wreckage were one tail-rotor blade, the tip of another, the tip of one main-rotor blade, and the tail boom, all slightly to the left of the flight path, while the tail-rotor bell crank was farther off to the right.

Another main-rotor blade was just behind the main wreckage, which was largely consumed by fire; the tips of two other blades were found about 200 m to the right. The tail-rotor drive-shaft and left rear door were just ahead on the left, while the tail-rotor gearbox was well off to the right, about 50 m ahead of the second main-rotor blade tip. Five ammunition boxes and the two fuel containers were found another 50 m to 100 m north. A few fragments of the acrylic windshield made it to the far side of the river; about 40% of the windshield presumably fell into the river and was not recovered.

The distribution of the fragments corroborated witness accounts of

HEALTH INSURANCE?

「WE'VE GOT YOU COVERED」

Just talk to one of our licensed insurance experts. They'll help you find the best options for YOU!





- Scan here to learn more
- Call **800-9092-4106**

Health Coverage for VAI Members

Individuals | Families | Businesses

A

VERTICAL AVIATION INTERNATIONAL

Member Benefit from



an in-flight breakup. TAIC investigators determined that “impact marks on the tail-rotor blade and tail-rotor gearbox matched the profile of the leading edge or a main-rotor blade” and that the tail boom had also been severed by the main rotor. A torque twist in the tail-rotor driveshaft “was consistent with the engine having driven it against a solid resistance at the tail-rotor end.”

The left rear door was free of burn marks, showing that it had detached from the cabin before the post-impact fire. The fact that heavy items such as the ammunition boxes had been carried far ahead despite the helicopter’s near-vertical descent indicated they “had been flung out of the rear cabin” as the aircraft spun.

Crucially, the first large item in the debris field was the pilot’s black cold-weather overalls, which had snagged on one tail-rotor blade and “flailed around until the tail-rotor blade broke off.” This imposed loads that twisted the tail-rotor driveshaft; at 3,200 rpm, the resulting imbalance

shattered the tail-rotor gearbox.

The overalls had been slashed, and paint transfer marks on one leg “matched the color and profile of the tail-rotor blades,” one of which bore witness marks matching the overalls’ zipper and snap fastener. Similar witness marks were found on the left side of the tail boom. These proved to be the clues that enabled the TAIC to reconstruct the accident sequence, though the commission’s report acknowledges some uncertainty about the exact order of some events.

The accident sequence was triggered when the left rear door opened about two minutes after takeoff. The TAIC listed seven possible reasons this might have happened, ranging from the plausible—failure to latch the door properly before takeoff, or a mechanism that was worn and out of adjustment—to the highly unlikely (such as someone had opened the door deliberately). In any case, unsecured items immediately began leaving the cabin.

The remnants of the tail-rotor assembly pitched forward

Book Your Hotel Today for VERTICON 2025

VERTICON
FORMERLY HAI HELI-EXPO
Dallas 2025 | POWERED BY VAI



Sleep better when you book with the official hotel provider.

onPeak offers conveniently located hotels with flexible change and cancellation policies to make your travel planning simple. **Shop hotels now at www.onpeak.com/VERTICON25.**



Deep Discounts

Get an event rate lower than other travel websites.



Exceptional Service

We’re your advocate before, during and after your stay.



Hotel Rewards Points

Enter a hotel loyalty number for any rewards program.



Flexible Policies

Make adjustments without penalty in case plans change.

Contact onPeak by phone: Toll-free: (855) 211 4898 | International: (312) 527 7300

into the main-rotor disc, snapping the outermost 500 mm (20 in.) off two blades. This tilted the main-rotor disc out of its normal plane until the main rotor severed the tail boom, rendering the aircraft uncontrollable. The left rear door was wrenched from its hinges as the aircraft spun and was also struck by the remaining main-rotor blades. As the helicopter slowed, the remaining cargo was flung from the opening the door left behind. The entire chain of events, from door opening to final impact, lasted barely 20 seconds.

The Response

After the accident, the TAIC was informed that doors on the same helicopter had opened on four other flights in the preceding two weeks. One involved the left rear door, the other three the right front. None were reported via the operator's safety management system or recorded in the ship's technical logs. All were resolved safely after precautionary landings.

In an interim report in December 2018, the commission issued safety recommendations that included a reminder of the importance of reporting accidents and incidents. Nationwide, reports of doors opening increased thereafter but quickly tailed off again, dropping from 42 in 2019 to just 14 in 2022.

Interviews with maintenance staff found that they were unfamiliar with the manual chapter that detailed procedures for inspecting door seals, latches, and hinges—perhaps because that chapter was listed as specific to three related models but not the MD 500D. Routine checks during 100-hour inspections largely consisted of latching the doors, then trying to push them open from inside.

The manufacturer stated that

all parts eligible for replacement on condition—that is, without service-time limits—had a minimum life of 20,000 hours. The door latch assemblies in the accident helicopter were original to the aircraft, which had flown almost 19,500 hours.

The mechanism in the left rear door, which largely escaped damage, and those in the other three doors (intact aside from fire damage) all showed enough wear in the various latches and linkages to create significant “slop” in their operation.

In response, MD Helicopters revised its maintenance manual to clarify and detail procedures for checking the “proper operation of latching and locking mechanisms.” The TAIC found that this adequately addressed the safety risk and declined to issue further recommendations.

The 2018 interim report also called attention to the risks posed by keeping loose items in the cabin. The operator generally didn't secure cargo in the MD 500D when it was flown with the doors on, instead trying to pack items tightly enough to prevent them from moving in flight. They had previously experimented with cargo nets but found that they created other hazards (not specified in the report). Following the accident, they fitted the replacement helicopters with cargo pods mounted between the skids with their contents packed in heavy plastic zippered bags.

New Zealand's civil aviation authority (CAA) issued a safety message in November 2018 reminding operators to secure loose items in helicopter cabins, a response the TAIC found sufficient to address the immediate safety risk.

Finally, to guard against “risk normalization of helicopter doors opening in flight,” the commission made a safety recommendation to the CAA

on Dec. 12, 2018, urging the authority to remind operators of their obligation under Civil Aviation Rules (CAR) Part 12 to report accidents and incidents. The CAA accepted this recommendation and issued a series of related publications in 2019 and 2022. In addition to detailing the regulatory requirements, the CAA assured operators that their reports would not serve as the basis for any enforcement actions unless “reporting is patently incomplete or reveals reckless or repeated unsafe behavior.”

The TAIC also recommended that the CAA “revise the rules, notes, and guidance” to CAR Part 12 “to make it clear that a door opening in flight is a safety issue and to take steps to address occurrences that are not being promptly reported to the CAA.” The CAA agreed to revise the notes and guidance but considered a rules change to be beyond its jurisdiction, referring the commission to the secretary for transport. Accordingly, on Jun. 12, 2024, the TAIC forwarded its recommendation to the secretary.

The Takeaway

“The trouble with getting away with something,” it's been said, “is that it makes you think you'll get away with it.” Door latches aren't the most critical systems of a turbine helicopter, but their failure still carries potential for mayhem. An open door can usually be handled without much drama ... usually.

Cargo wedged against the cabin structure ought to stay put unless turbulence shakes something loose or that structure suddenly changes. And incremental increases in multiple risks can ratchet up the overall level of hazard to an extent that may be difficult to appreciate at the time. ■

David Jack Kenny is a fixed-wing ATP with commercial privileges for helicopter.

SUPERIOR PERFORMANCE FOR A HIGHER PURPOSE

**POWERING HELICOPTERS TO RISE
ABOVE – AND ANSWER ANY CALL.**

From search and rescue to energy services to aerial work duties, Pratt & Whitney's industry-leading engines provide the power, speed and reliability to meet your objectives – and serve the greater good.

**ELEVATE YOUR MISSION AT
[PRATTWHITNEY.COM/HELICOPTERS](https://prattwhitney.com/helicopters)**



Whom Do You Trust?

Effective safety reporting depends on listening.

By Chris Hill

SAFETY CULTURE IS FUNDAMENTALLY shaped by the trust employees have in their organization to accept reports about potential safety issues without fear of retribution. But what about an organization's trust in its employees? How does that affect its safety culture?

It turns out that trust in your sources is the cornerstone of a legitimate reporting program, as it allows the organization to

field a variety of reports, from potentially frivolous to lifesaving, without backlash. Understanding the different types of employees who might report safety issues—and reaffirming the value of each employee's contribution—is crucial to fostering an environment in which all concerns are taken seriously.

WHOM SHOULD YOU TRUST TO SAVE YOUR COMPANY?

EVERYONE
ALL PERSPECTIVES ARE REQUIRED FOR ELEVATED SAFETY INTELLIGENCE

Spotlight on Safety

© 2024 Vertical Aviation International. All Rights Reserved.

VAV SAFETY



LEARN
how to elevate your safety reporting culture



Fostering a culture in which every employee feels not only empowered but obligated to report safety issues is fundamental to establishing trust, preventing accidents, and ensuring long-term success and safety.

- For the silent worker, the recluse, create an environment that encourages open communication without fear of retribution.
- For the occasional critic, the respected, reinforce the value of their input to help maintain and increase their engagement.
- For the constant complainer, the reviler, filter through the noise to identify legitimate concerns, as their constant vigilance can often uncover genuine safety hazards that others are more inclined to overlook.

Elevate Your Reporting Culture

Building a robust safety culture requires more than just having reporting mechanisms in place. It involves careful, constant nurturing of an atmosphere in which every staff member feels responsible for safety and is encouraged to speak up without fear of reprisal.

Consider elevating your reporting culture through:

- **Leadership commitment:** Every leader in the organization must embrace open safety reporting and demand the same from every supervisor and direct report. They

The Three Employee Types

Typically, a company with a functional safety reporting program can anticipate receiving reports from three types of employees.

The Recluse: This employee is rarely seen or heard. They are diligent and dedicated workers who focus on their tasks, complete the work without complaint, and go home—quiet and content. They listen to others but prefer to fly under the radar.

Recluses may notice safety issues but hesitate to report them due to a preference for avoiding conflict or believing it's not their place to voice a concern. They may rely on others to speak up, not realizing they were the only witness to a hazardous condition.

The Respected: Like the recluse, the respected employee generally keeps to themselves but occasionally offers constructive criticism. The organization values these employees for their experience, insights, and skills.

The respected's rare but thoughtful contributions to safety discussions carry significant weight. Their comments are usually well supported and helpful, making them influential in talks about safety and operational improvements. Their impact in these discussions is critical to the organization's safety culture. However, the respected may overlook small but problematic issues, not recognizing how these early signals, if left unreported, could lead to a major system failure.

The Reviler: The third type of employee isn't a fan favorite, often for good reason. They're the constant

complainer. They project negativity, pointing out flaws in less-experienced employees and in efforts to improve processes. These curmudgeons remain valued employees because they're the most experienced or possess unique or perishable skills essential to the company's success.

The reviler's delivery is often crude and insensitive. These employees frequently report safety issues, but their concerns are sometimes dismissed because of their abrasive manner.

Whom Do You Trust to Save Your Company?

Which of these employees would you trust most to prevent a fatal accident, thereby protecting—and perhaps saving—your company?

The answer is all of them—equally.

Every employee is equally capable of recognizing and reporting potential hazards and thus preventing them from becoming certain disasters. Failure to structure and support a safety reporting program designed for *all* employees can allow a fatal chain of events to continue undiscovered and unchecked, eventually resulting in preventable tragedy and financial ruin.

Every safety report is potentially priceless, regardless of the source. Responding only to reports from reputable employees and dismissing those from staff who seem always to be crying wolf or who hold a consistently negative outlook will irreparably damage the organization's safety culture.

Effective safety risk management requires treating each report equally and ensuring that every concern is investigated thoroughly and objectively, no matter how frustrating doing so can sometimes be.

Try these techniques to get the best out of each type of employee and engage them in your reporting:

Effective safety reporting depends on a program *everyone* in your organization can contribute to. Learn more about elevating your reporting culture in the [August 2024 VAI Spotlight on Safety](#), at verticalavi.org.
(Colten Gonzalez-Hill Design Image)

should routinely demonstrate this commitment in words and deeds, leaving no doubt that reporting safety issues is vital not only to the safety and security of every employee but also to the survival of the company.

- **Safety training and workshops:** Regular training must emphasize the importance of reporting and teach employees how to recognize and report potential hazards.
- **Recognition programs:** Acknowledging and rewarding proactive safety reporting reinforces the value we place on our employees' contributions to safety. Consider implementing a program that incentivizes continual reporting of perceived hazardous conditions or behaviors.

Achieving Reporting Nirvana

Ultimately, fostering a culture in which every employee feels not only empowered but obligated to report safety issues, and making sure each report is taken seriously, is fundamental to establishing trust, preventing accidents, and ensuring

your organization's long-term success and safety. Ignoring or undervaluing reports, even from the most vocal and challenging employees, can have dire consequences.

Recognizing and acting on valuable insights from all employees, regardless of how they are delivered, is essential for maintaining one of the most challenging but vital elements of an advanced safety culture—pure, unfiltered, transparent reporting.

Ready to Power Up Your Safety Reporting?

VAI, in partnership with the Air Charter Safety Foundation, offers VAI members exclusive access to the FAA's Aviation Safety Action Program (ASAP), a user-friendly, voluntary operator reporting program. ASAP provides third-party facilitation, issue tracking, and corrective-action support to mitigate hazards and prevent accidents. To learn more, go to verticalavi.org/asap. ■

Chris Hill is VAI's senior director of safety.

TURBOCHARGE YOUR CAREER!



Are you a helicopter pilot or mechanic?
We offer on-demand education just for you!

- **IA Certification:** Get the courses you need to excel.
- **Professional Education Courses:** Stay current with courses recorded at 2024 VAI events.
- **Safety Courses:** Enhance safety and operational efficiency.



SCAN ME

BE PART OF THE WORLD'S LARGEST VERTICAL AVIATION CONFERENCE & TRADE SHOW

VERT:CON

FORMERLY HAI HELI-EXPO

Dallas 2025 | POWERED BY VAI

March 10–13 | Exhibits Open March 11–13

SAVE THE DATE

Registration Opens Oct. 29



Connect, Learn & Power Up

15,000 Attendees from 85+ countries

600 Exhibitors & 60+ aircraft on display

125+ Education & safety sessions

Learn more



verticon.org

No Place for Recklessness

Bad aviation decisions hurt more than just the person who makes them.

By Zac Noble

HOW MANY TIMES HAVE YOU REMINDED yourself or others that just because you *can* do something doesn't mean you *should* do it? For me, in my life and my career, the answer is "a lot." In aviation, one bad decision can begin a chain of events that

leads to an unwanted career change, the loss of one's pilot or mechanic certificate, or, worse, tragedy.

Lately, I've observed several instances of poor aeronautical





In aviation, one bad decision can begin a chain of events that leads to an unwanted career change, the loss of one’s pilot or mechanic certificate, or, worse, tragedy.

decision-making that could have caused serious problems.

Taking Off in Confined Areas

In one case, a helicopter took off from a confined area at an airport. What made the area confined was the temporary placement of people, tents, and other aircraft in very close proximity to the running helicopter. Some people likely didn’t comprehend the power of the aircraft’s rotor wash and the hazards it presented.

Looking back, I think the person(s) who made the decision to take off under those conditions should review 14 CFR 91.13, Careless or Reckless Operation, a rule I’m sure most of us are familiar with. In simple terms, the regulation states that “no person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another.” Paragraph (b) of the rule extends that language to airport operations.

Other, safer options did exist at that airport. For example, to ensure everyone’s safety, authorities could have decided to tow the helicopter into another position for departure.

Did an emergency require the helicopter to lift off in that environment? I don’t know. I *can* say, however, that the aircraft wasn’t an air ambulance.

I can also say that the operator that day was very lucky. With them having forged the first link in the accident chain by taking off in a confined area with multiple hazards present, the rest of the accident chain didn’t materialize—that time.

Obstructing Other Aircraft Movement

On another occasion, I saw a helicopter pilot occupying the runway of an uncontrolled airport seemingly without concern for other aircraft needing to use it. Pilots who were attempting to land were forced to perform go-around maneuvers because the runway pilot failed to respond to radio calls on the local common traffic advisory frequency.

What made this behavior reckless? We have a regulation, 14 CFR 91.113, Right-of-Way Rules, that instructs pilots on what to do in this situation. It says in part that, except in water operations, “aircraft, while on final approach to land or while landing, have the right-of-way over other aircraft in flight or

operating on the surface, except that they shall not take advantage of this rule to force an aircraft off the runway surface.”

It’s not a requirement to talk on the radio—or even have a radio at many of our nation’s uncontrolled airports—but when there are other aircraft, especially fixed-wing aircraft, in the vicinity, “each pilot of a helicopter or a powered parachute must avoid the flow of fixed-wing aircraft,” per 14 CFR 91.126 (b)(2).

Setting the Standard

In aviation, we’re taught to think ahead and always consider the consequences of our decisions. That’s understandable. Some links in aviation accident chains are actions—like leaving behind an unsecured tool—that in other industries or situations do not lead to death and destruction.

However, aviation is the industry that we’ve chosen, and we must strive each day to meet its high standards.

We’re helicopter operators, pilots, and maintenance technicians. Let’s be the operator, pilot, or maintenance tech who sets the standard for others to follow. ■

Zac Noble is VAI’s director of flight operations and maintenance.

AIRBUS TRIM TAB TOOL KITS
HIGHLY ACCURATE - HIGHEST QUALITY

HELITooling.com + HELILadder.com

VAI MEMBERS
Save 30% on King Courses!

verticalavi.org/benefits



HEAR
Sen. Inhofe speak at
AirVenture Oshkosh 2021

US Sen. James Inhofe

General aviation advocate served in Congress from 1994 until 2023.

FORMER US SEN. JAMES INHOFE (R-OKLA.), a pilot, distinguished public servant, and staunch advocate for general aviation, died from complications of a stroke on Jul. 9, 2024. He was 89.

Inhofe’s passion for aviation defined both his personal and professional life. His advocacy for general aviation focused on improving airport infrastructure, enhancing safety measures, and expanding access to aviation education and opportunities.

“Sen. Inhofe was a true champion of general aviation, and his absence will be deeply felt,” says James Viola, president and CEO of VAI. “On behalf of the vertical flight community, we extend our heartfelt condolences to his wife, Kay, and their children—thank you for sharing him with us. We are grateful for his dedication to advancing our industry.”

Significant contributions to aviation legislation marked Inhofe’s tenure in the Senate from 1994 until his retirement in 2023. As a member of the Senate General Aviation Caucus and a pilot himself, he brought unique insights to congressional debates and authored crucial bills such as the 2012 Pilot’s Bill of Rights and the 2021 RETAIN (Recognizing and Ensuring



Taxpayer Access to Infrastructure Necessary for) GPS and Satellite Communications Act. These laws address critical issues affecting aviation infrastructure and navigation systems and have had a lasting impact on the industry.

“We valued Sen. Inhofe’s partnership on initiatives like the RETAIN GPS Act, where his deep understanding of aviation challenges was invaluable,” says Viola. “His legacy of public service and advocacy for aviation safety and growth will endure.”

Inhofe is survived by his wife, 3 children, and several grandchildren. His son Perry, also a pilot, died in a 2013 plane crash in Oklahoma. ■



VAI President and CEO James Viola with then-Sen. James Inhofe at the 2021 Experimental Aircraft Association (EAA) AirVenture Oshkosh show in Oshkosh, Wisconsin.

Eagle Copters Ltd 47 403-250-7370 eaglecopters.com	Rotortrade Services Pte. Ltd C2 +33 1 47 57 79 32 rotortrade.com
Enstrom Helicopter 35 906-863-1200 enstromhelicopter.com	Salus Aviation 33 +64 9 295 2100 salusaviation.com
EUROPEAN ROTORS 2024: The VTOL Show and Safety Conference 36 +49 1511 5229886 europeanrotors.eu	SEI Industries 43 866-570-3473 sei-ind.com
Falcon Crest Aviation Supply, Inc. 17 626-813-1234 falconcrestaviation.com	VAI: Advertise in POWER UP 53 352-388-7031 Sales@verticalavi.org
HeliLadder of Blue Moon Designs 53, 69 541-350-3748 heliladder.com	VAI Aerial Work Safety Conference 7 703-683-4646 verticalavi.org/aerialworksafetyconf
Heli-Mart, Inc. 53 714-755-2999 helimart.com/shop	VAI: Attend VERTICON 2025 67 703-683-4646 verticon.org
King Schools 69 703-683-4646 verticalavi.org/benefits	VAI: Exhibit at VERTICON 2025 37 703-683-4646 verticon.org
LIG Solutions 60 800-902-4106 ligmembers.com/vai	VAI Flight Data Monitoring (FDM) Program 25 703-683-4646 verticalavi.org/FDM
MD Helicopters, LLC 39 480-346-6300 mdhelicopters.com	VAI Flight Training and Checking Program 38 703-683-4646 verticalavi.org/ftc
NAASCO 1 631-399-2244 naasco.com	VAI: Join VAI 55 703-683-4646 verticalavi.org/benefits
onPeak 61 855-211-4898 onpeak.com/VERTICON25	VAI Online Academy 66 703-683-4646 verticalavi.org/academy
Pacific Southwest Instruments C3 951-737-0790 psilabs.com	VAI Operational Risk and Resilience Accreditation (ORRA) Program 14 703-683-4646 verticalavi.org/ORRA
Pilatus Business Aircraft Ltd. 21 303-465-9099 pilatus-aircraft.com	VAI POWER UP Magazine Photo Contest 9 703-683-4646 photo.verticalavi.org
Pratt & Whitney 63 450-677-9411 prattwhitney.com	VAI Scholarship Program 19 703-683-4646 verticalavi.org/scholarships
Reiser Simulation and Training GmbH 45 +49 8178 86810 reiser-st.com	VAI: SMS Assessment and Coaching from WYVERN 13 703-683-4646 wyvernltd.com/ wyvern-vai-sms-evaluation-program-2/
Robinson Helicopter Company C4 310-539-0508 robinsonheli.com	

VAI ON SOCIAL



youtube.com/
@verticalavi



facebook.com/
verticalavi.org



instagram.com/
vertical_avi



x.com/
verticalavi



linkedin.com/company/
vertical-aviation-international

SHOTOVER Systems

M2 Multi-Sensor Camera System
Boulder Municipal Airport (KBDU)
Boulder, Colorado, USA
VAI Member — Manufacturers & Suppliers

Photo by Mark Bennett

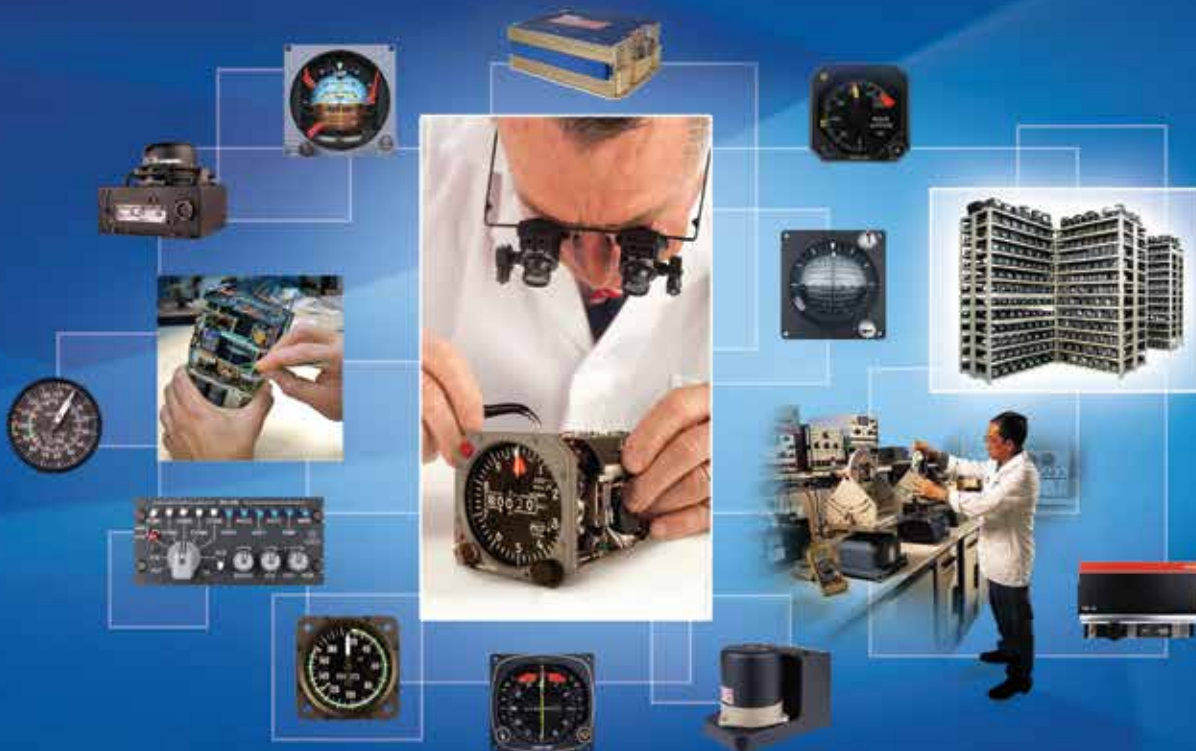
SHOTOVER Systems specializes in augmented reality mapping software for airborne law enforcement, firefighting, search and rescue, electronic news-gathering, utility inspections, and more. Built to seamlessly interface with gyro-stabilized camera systems, the software technology is combined with SHOTOVER's stabilized gimbals, such as the Academy Award-winning K1, to create the company's latest complete mission management solution for airborne public safety operations: the M2 Multi-Sensor Camera System, shown in the foreground.



Pacific Southwest Instruments

Legacy Support Specialists

OVERHAUL • REPAIR • EXCHANGE



- Over 55,000 MRO Capabilities
- AOG Exchange Inventory
- Proactive Quality Control Program
- DER Repair Solutions
- 37,000 sq. ft. Repair Center
- Inventory Asset Management

See our complete support capabilities at

www.psilabs.com

1721 Railroad Street • Corona, CA 92878 USA • (951) 737-0790

FAACRS#KD3R627L • EASA.145.4723 • Instrument 1,2,3,4 • Radio 1,2,3 • Accessory 3

CLIMB HIGHER



Robinson Helicopter Company provides law enforcement agencies worldwide with fully certified and mission-ready Robinson R66 police helicopters, offering fully equipped aircraft from a single source. A streamlined maintenance program minimizes downtime and maximizes operational availability for public safety agencies, ensuring aircraft readiness for critical missions and emergency response.

Robinson Helicopter designs and builds reliable and accessible helicopters that enable law enforcement agencies maximum performance with one of the lowest operating costs. **Climb Higher.** For additional information, visit www.robsonheli.com.

