Revolutionizing Aerial Surveying and Emergency Response: An Interview with Josh O'Leary of AirWise Solutions

By Sanjay Gangal

In an enlightening interview, Josh O'Leary, the Chief Technology Officer at AirWise Solutions, discussed the innovative technologies and applications that his company is spearheading in the drone industry. AirWise Solutions has been at the forefront of developing advanced tools for airspace awareness, regulatory compliance, and operational efficiency, particularly in commercial and public safety sectors.

A Multifaceted Approach to Aerial Innovation

AirWise Solutions, according to O'Leary, offers a comprehensive suite of tools designed to enhance the efficiency and safety of drone operations. Central to their offerings is the Flight Manager, a program that facilitates 3D flight planning. This allows operators to effectively plan their missions, ensuring they are aware of potential obstacles, weather conditions, and airspace restrictions.

Moreover, the company's recent advancements include digital SGIs (Special Governmental Interest), mainly geared towards enhancing public safety. These tools allow for real-time monitoring and coordination, crucial for tasks ranging from surveying to emergency responses.

Integrating Technology with Practical Needs

O'Leary elaborated on the diverse functionalities integrated into their systems, including terrain and building extrusions on maps, weather forecasting, and real-time airspace updates. These features are invaluable for operators who need to plan precise flight paths and ensure compliance with local aviation regulations.

A standout feature discussed was the Omni Watch tool, which facilitates asset tracking and monitoring through multiple weather sources and other data inputs. For example, O'Leary explained, if specific weather conditions that could ice power lines are detected, the system can alert operators to inspect the potentially affected areas.

Democratizing Data Through Cloud-Based Solutions

Emphasizing the scalability and accessibility of their tools, O'Leary pointed out that all of AirWise's solutions are cloud-based, allowing users to access, share, and view data remotely and efficiently. This capability is particularly crucial for making high-quality photogrammetry accessible and manageable, which has traditionally been a challenge in the industry.

Streamlining Compliance and Safety Procedures

A pivotal aspect of AirWise Solutions' offerings is their robust approach to ensuring compliance and enhancing safety for drone operations. Josh O'Leary emphasized the company's dedication to streamlining the regulatory compliance process, which is critical for safe and efficient airspace management.

LANCE Authorization Simplified

At the heart of AirWise's regulatory tools is the ability to obtain LAANC (Low Altitude Authorization and Notification Capability) approvals swiftly. This system is vital for operators flying drones near airports, where airspace restrictions are stringent. AirWise's technology automatically provides operators with real-time data on allowable flight altitudes and necessary authorizations for specific zones. By integrating these features into their Flight Manager program, pilots can ensure they remain compliant with FAA regulations at all times, reducing the risk of penalties and enhancing the safety of both manned and unmanned aircraft.

Comprehensive Airspace Data Integration

In addition to facilitating LANCE authorizations, AirWise Solutions' platforms integrate extensive data related to airports and other critical aviation infrastructure. This includes details on small regional airports and even private airstrips, which might not be on every pilot's radar but are crucial for ensuring airspace safety. Pilots can access information about these areas directly through the AirWise interface, obtaining contact details and communication frequencies that enable proactive coordination with local airspace managers.

Advanced Notifications and Alerts

Beyond mere regulatory compliance, AirWise Solutions also offers advanced notification systems that alert operators to potential safety issues before they arise. For example, their system can monitor weather conditions that might impact power lines or other infrastructure and automatically notify operators to check these lines for potential ice accumulation or other hazards. This proactive approach not only ensures compliance with safety regulations but also significantly mitigates risk, enhancing the overall safety of drone operations.

Future Coordination and Higher Altitude Permissions

For more complex operations that require flying at higher altitudes, especially near busy airports, AirWise has implemented a feature for further coordination with the FAA. This advanced planning tool allows operators to request permission to fly at higher altitudes than typically allowed by submitting a safety justification through the app. This process, which traditionally would have been cumbersome and paper-based, is now streamlined through AirWise's digital platform, allowing for quicker responses and better planning.

Enhancing Safety with Digital Tools

AirWise Solutions recognizes the importance of safety not just in terms of regulatory compliance but as an integral part of all drone operations. Their tools are designed to provide a comprehensive overview of potential risks, from immediate airspace conflicts to longer-term environmental conditions, ensuring that every flight is as safe and efficient as possible.

AirWise Solutions is transforming the way drone operators meet compliance requirements and manage safety procedures. By leveraging advanced technology and real-time data, they are setting new standards in the industry, ensuring that drone operations contribute positively to the broader aviation community.

Future Directions and Collaborative Potential

The interview also touched on the recent integration of UA Sidekick with AirWise, marking a strategic move to unify their technological offerings under one umbrella. This merger aims to streamline their operations and optimize the collaborative features of their platforms, potentially under a new brand identity.

In closing, Josh O'Leary's insights reveal a company deeply embedded in the intersection of technology and practical application, striving to push the boundaries of

what drone technology can achieve in both commercial and public safety arenas. As they continue to innovate and expand their capabilities, AirWise Solutions stands poised to play a pivotal role in shaping the future of drone operations worldwide.

For more information on AirWise Solutions and their technologies, visit their website at airwisesolutions.com.