

Drones and first responders ••

Draganfly has been a leader in the drone industry for two decades serving new solutions in the field. Now pursuing Phase 1 of its contract with Coldchain Delivery Systems to support drones in first response activities, the company is exploring how drone technology can be integrated into all manner of industries. Cameron Chell, CEO, explained the company's progress, and how they plan to evolve, continuing to shape the everchanging drone market.

Laurence Russell, Assistant Editor, Global Military Communications

GMC: There has been some concern over drone responsibility and safety in recent years due to unregulated usage. How important is it that a standard of practice is set, educated, and regulated by actors operating drone technology?

Cameron Chell: Draganfly believes that setting and enforcing a standard of practice is essential for those operating drone technology. Phase 1 of our contract with Coldchain Delivery Systems, one of the largest vaccine distributors in the US, showcases how we are working to accomplish this.

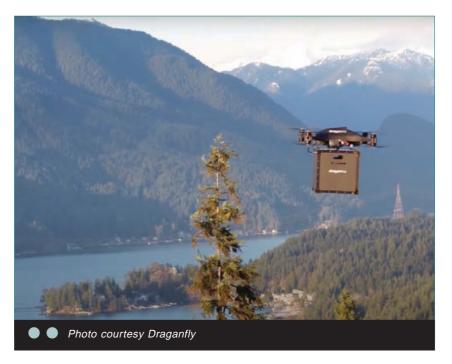
In Spring Branch, Texas, Draganfly is teaching EMS (emergency medical services) personnel how to properly operate drones and handle deliveries in emergency, medical and disaster response situations. The intake is made up of professional drone operators and former US Air Force (USAF) personnel who have previous experience with unmanned aerial vehicles (UAVs) including the MQ-9 Reaper RPA.

Pilots and personnel are being taken through various scenarios while learning the drone techniques required to meet rigorous standards. Trained operators will support first responders by providing critical equipment, medical supplies and data during active emergency and disaster relief operations.

To date, Draganfly has completed over 300 daytime test flights with plans to begin night flight training and testing. 100 of the daytime flights used our innovative temperature managed payload box, which can transport up to 15 pounds of medical supplies including vaccines and testing kits. The payload box is uniquely top mounted to make deliveries safer and more accessible.

The data collected from Draganfly's daytime and night flight tests will be submitted to the FAA for approval to enter Phase 2 of the agreement with Coldchain Delivery Systems. Feedback from EMS personnel is also being used to improve Draganfly's training module.







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We are proud to work with regulators and first responders to develop thorough and effective industry standards for drones.

GMC: What are the standout applications of sustainable, safe drone technologies?

Cameron Chell: For more than two decades, Draganfly has developed sustainable and safe drone solutions for a variety of industries. Our award-winning products are trusted by a number of established brands for data collection, public safety, and deliveries.

Working with our partners, we are able to collect high-quality data using multi and hyper-spectral imaging, 3D modelling as well as a suite of sophisticated sensor technology. Our products allow crews to remotely conduct environmental monitoring and assess the damage caused by storms, floods, and fires.

To keep people safe during and after the COVID-19 global pandemic, Draganfly's Vital Intelligence platform is capable of turning cameras into a contactless symptom detection system that can measure vital signs and social distancing. With voluntary consent, the Smart Vital system monitors vital signs including temperature, heart rate, breathing rate and blood oxygen content (SpO2). In addition to the Vital Intelligence platform, Draganfly's drone technology equipped with Varigard's disinfectant spray is able to sanitize high-traffic locations including stadiums and arenas in as little as four to six hours.

Our technology is also being used to help first responders. Draganfly's drones can provide emergency crews with visual oversight during critical missions like search and rescue and for collision reconstruction. The Draganflyer X4-ES is credited as the first drone to save a human life. In 2013, it helped Canadian officials locate missing hikers in a heavily wooded area in Saskatchewan. The drone now resides on permanent display in the Smithsonian National Air and Space Museum.

Draganfly is also teaching EMS personnel in Spring Branch, Texas how to properly operate drones and handle deliveries in emergency, medical and disaster response situations. Over 300 daytime test flights have been completed with plans to begin night flight training and testing.

Draganfly recently entered into an exclusive manufacturing agreement with Valqari to produce its Drone Delivery Stations. This opportunity allows both companies to revolutionize drone deliveries for industries including pharmaceuticals, meal delivery, grocery services, governments, and residential e-commerce.

Sustainable and safe drone technologies are proving to be a game-changer for a variety of sectors including agriculture, construction, energy and environmental, mining as well as public safety. Draganfly is committed to providing high-quality products and services that solve real-world problems.

GMC: Draganfly initiated an EMS drone pilot training program producing operators who can assist first response personnel such as firefighters, search and rescuers and paramedics, alongside other critical relief measures. Could you expand on that program?

Cameron Chell: In May, Coldchain Delivery Systems finalized a US\$750,000 definitive agreement with Draganfly. The agreement provides for Phase 1 of a planned five-phase rollout to develop, deploy and operate solutions for the delivery of medical supplies, medicine, and vaccines.

Coldchain is one of the largest vaccine distributors in the US. The company supports multiple governments and commercial clients including the Defense Logistics Agency, the Centers for Disease Control and Prevention, Johnson & Johnson brands as well as the Chicago Department of Public Health and Texas Department of State Health Services.

Currently in Phase 1, Draganfly is working with emergency crews on the development and training of how to properly pilot drones and handle deliveries in emergency, medical and disaster response situations. Professional drone operators and former US Air Force (USAF) personnel are being taken through various scenarios — learning the drone techniques required to meet

rigorous standards. Trained operators will support first responders by providing critical equipment, medical supplies and data during active emergency and disaster relief operations.

GMC: The program will be led by professional operators, some of them former US Air Force (USAF) personnel. What can the experiences and achievements of military drone technology do to assist emergency response at home? Cameron Chell: Draganfly is incredibly grateful to have former US Air Force (USAF) personnel contributing to this program. Their operational and piloting experience with multiple drone systems including the MQ-9 Reaper RPA is crucial as we work to ensure trained operators can effectively support first responders by providing critical equipment, medical supplies

and data during active emergency and disaster relief operations. From wars to search and rescue operations, drones have provided military officials with an alternative to crewed flights in potentially dangerous or hard-to-reach areas. In 2006, the Federal Aviation Administration (FAA) allowed a military-based Predator drone to fly in US civilian airspace for the first time to search for survivors following the devastation caused by Hurricane Katrina.

To provide world-class drone delivery services, the best pilots are essential. Having former USAF staff participating in this program is a testament to the caliber of talent Draganfly attracts.

GMC: What can drone delivery and first response systems offer that traditional agents cannot?

Cameron Chell: Draganfly's EMS drone delivery program enables a faster and safer response to emergency, medical and disaster relief situations. Instead of initially sending emergency crews into a potentially dangerous area, drones can provide high-resolution imagery of the scene, 3D mapping and conduct damage assessments. This high-quality data is vital as first





responders determine the best course of action. It allows crews to better protect themselves as they save lives.

In time-sensitive situations, drones can quickly deliver critical medical supplies to affected individuals in hard-to-reach places.

GMC: Some experts warn that automation can cost jobs. but others insist that machine-assisting automation is capable of increasing productivity for existing staff while relying on their judgment and supervision, thereby protecting jobs. Does Draganfly have an opinion on either theory and is that reflected in its design priorities?

Cameron Chell: Draganfly firmly believes that drone technology is protecting jobs and creating exciting opportunities. We work with our partners to craft the perfect solution that fits seamlessly into their existing operations. Our focus is on developing reliable and versatile drones that improve the way people live and work.

The Draganflyer Commander2 showcases our design priorities. Proudly built in North America, the drone is capable of fully and semi-automated missions as well as manual flight operations.

It can be programmed to assist crews by recording data at a precise location or piloted to accomplish specific tasks that require a high level of skill.

According to research done by the Milwaukee School of Engineering on drone use in the surveying industry, every company interviewed said the use of unmanned aerial vehicles (UAVs) reduced costs on many if not all projects. Many also saw productivity increase by at least 50 percent – claiming that drones allowed them to take on more work with the same human workforce.

Draganfly's cutting-edge drone solutions, software and Al systems are revolutionizing the way organizations do business and service their stakeholders. We are constantly looking for new ways to help our partners save time, money, and lives.

GMC: Do you have any predictions for the future of the drone economy?

Cameron Chell: The drone industry has grown rapidly since the Federal Aviation Administration (FAA) granted hundreds of new exemptions in 2016 for companies to operate (UAVs in the US through FAA Part 107. Draganfly is predicting that the nonmilitary drone market will increase substantially over the next few years as recreational and commercial drone use continues to rise.

According to the Global Drone Service Market Report 2019, the drone services market size is expected to grow to US\$63.6 billion by 2025 with a compound annual growth rate (CAGR) of 55.9 percent during the forecast period. Insider Intelligence believes drone growth will occur across five main segments of the enterprise industry: agriculture, construction and mining, insurance, media and telecommunications, and law enforcement.

Draganfly is well positioned in all of these sectors with several referenceable and repeat customers. Our manufacturing, logistics and value-added services are helping established brands further cement their market-leading position. **GMC**



Draganfly