## Businesses reach new heights with drones

BY OLIVIA RUTT

**WELLINGTON COUNTY** - There's no doubt that unmanned aerial vehicles (UAVs) - more commonly known as drones - are sweeping the skies as a growing trend. How are businesses harnessing this emerging technology to reach new heights?

In real estate, it's about getting that perfect shot.

Many realtors, like Melissa Seagrove of Edge Realty in Fergus, have embraced the new technology.

In one of her videos, a drone speeds along the driveway at eye level before lifting into the air to soar up and over the house, giving a rare glimpse of the property from above.

Seagrove has been using drone footage to sell houses since 2013.

"We live in such a beautiful area, so seeing all the green space and how the house is situated in that space is pretty awesome from above," she said.

"The cameras that are on the drones are super sharp, so you're just seeing everything in hyper mode."

She said it can also be useful in inspecting the condition of a roof. Seagrove doesn't operate the drone herself, but she sees the value in having this specialized tool.

"It's trying to get people's attention," she said.

"You can pore through photos of anything every single day, but when you get that aerial or more than one aerial, I think that it's more exciting."

Seagrove said properties that have a distinguishing exterior feature, or that are on acreage or are situated near a river or lake are ideal for drone images.

Drones can help a buyer visualize how the property is located in relation to its surroundings.

"It's just another sales tool," said Seagrove.

"Any other opportunity to put the property in front of the buyer is going to keep them more engaged."

She added that it's also a great keepsake for the owners.

"It's so cool when you get to see what your property looks like from above," she said.

Kevin Arsenault of Puslinch also saw the value in jumping into this new technology when he left wedding photography to take to the skies.

He started UP Photography and for the last three and a half years, he has been using drones to take real estate and commercial photography.

He first took photos from an airplane, then used a telescopic mast before investing in a drone.

"I always had my eye on the drones," he said.

"I was just waiting for them to sort of mature to the point where they were sort of safe and reliable and you can have a camera on there





that was good enough to capture professionallevel photos."

It was a natural transition from aerial photography for Arsenault, but he said drones are less of a hassle, adding the cost difference is astronomical.

"It's really become almost a standard, especially for bigger properties, estate homes as well as rural farms and properties with acreage," said Arsenault.

"In that sense, it's pretty amazing; I get a lot of positive feedback from real estate agents because it's just about impossible to show the lay of the land when it's over a certain size."

Arsenault uses the DJI Phantom 4 for his business. Its features include obstacle sensing, precision hovering, visual tracking and a high-quality camera. He combines handheld, eye-level video with the drone photography for a complete real estate package.

## **REGULATIONS**

As the skies fill with drones competing for airspace, Transport Canada has been trying to keep up with the changing landscape.

Between 2010 and 2016, the number of Special Flight Operating Certificates (SFOC) for commercial drone operators rose from 66 to 4,756.

Potential infractions have increased too, from just one in 2010 to 125 in 2016. So far in 2017, Transport Canada has investigated 115 potential infractions.

"What we're seeing is almost on a daily basis, reports of UAV ... being flown in locations where they shouldn't be flown," said Aaron McCrorie, director general of civil aviation with Transport Canada.

"Aviation safety regulations are in place to ensure the safety of aircraft in the air, and of course the people that are flying in those aircraft in the air, as well to ensure the safety of people on the ground," he said.

Transport Canada is in a transition period, with rules changing to keep up with the increased use of the technology.

McCrorie said recreational users had been dealt with a light regulatory touch from Transport Canada compared to commercial

Recreational drone users need to follow the rules based on an interim order announced in March 2017. Commercial users still need to qualify for a SFOC.

However, new rules being proposed are changing how recreational and commercial drone operators are being classified.

'We are coming out with new regulations that drop the distinction between recreational and non-recreational and treat all users the same based on the size of the of the UAV, the drone that they're flying and where they are flying it," said McCrorie.

Announced in July, Transport Canada will now classify the drones based on weight and complexity of the operations.

These proposed rules will require the user

to pass a knowledge test, mark their drone, and follow strict distance regulations for airports, heliports, people, built up areas and open-air assemblies of people.

Operators who intend to fly in urban area, within controlled airspace will need to register with Transport Canada. The fee for this registration has not yet been set.

Insurance will now be required for all users with drones over 250 grams. Public input on the current rules is open until Oct. 13. The proposed rules can be found at tc.gc. ca/eng/civilaviation/opssvs/proposed-rulesdrones-canada.html.

McCrorie said the proposed regulations will make drone use safer.

"It is a good example of how technology is rapidly evolving, and we are trying to catch up," he said.

"On the one hand, because our regulations allow for the issue of the special flight operating certificate, we've been able to nurture and encourage this industry in Canada in a way that other jurisdictions, for example, the United States, couldn't."

"But that success has also been a challenge for us, the number of SFOCs that we've needed to issue, and the growing risk on the recreational side, so that's why we are developing those new regulations, and that's our effort to keep up with the technology."

Arsenault said these regulations are good for the industry.

"There's a lot of sort of - no pun intended



- fly-by-night outfits that are out there," he said.

"It's dangerous to have a whole bunch of inexperienced drone pilots flying and offering these services professionally."

If businesses want to jump in on this new technology, McCrorie encourages visiting the Transport Canada website to be familiarized with safety and operating information.

"The drone safety website has lots of really good information in terms of what they need to do to get the special flight operating certificate ... to educate themselves, so they understand what it means to follow the rules, operate safely, then make the best business use of this great technology," he said.

## **DRONES IN AGRICULTURE**

Apart from being able to showcase large rural properties and acreage in real estate, drones are also used in a variety of way to help farmers get more information about their crops.

Felix Weber of Ag Business and Crop Inc. in Palmerston helps farmers and agriculture consultants use precision tools, including drones, to collect data and improve crops. Farmers can use this new technology to inspect, measure and respond to crop needs.

Weber, who has been farming for over 15 years, has been attuned to the changing technology in precision farming. He has been using drones since 2010.

He said it is a part of a toolbox to help farmers operate better.

"In my mind, the UAV isn't really necessarily resolving a problem ... it could potentially, but in my mind, it's more like helping to walk the fields where needed, digitalize what we can see and quantify what we can

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- FELIX WEBER, AG BUSINESS AND CROP INC.

see," he said.

The SenseFLY's eBee fixed wing drone comes with a variety of cameras that can record certain key data points on the fields, giving farmers a fuller picture.

According to the SenseFLY website, these drones collect information that can help with visual inspections, elevation modelling, plant

counting, crop health and stress analysis, water management, yield forecasting and more. Weber said the images the drone captures can detect crop stress quicker than the human eye. This information can be used by the farmer to make better decisions to improve their net return.

Weber explained the fixed wing drone can be programmed to fly a precise route and can take about 160 to 200 pictures for a hundredacre property.

"The software afterwards mosaics them together and makes a single geo-referenced image out of it," he said.

Weber said there has been a mixed reaction to the drones in the agricultural sector but adds drones can provide more information than satellite or images taken from an airplane. It's also more accessible than those options.

Ag Business and Crop Inc. also provides a four-day training course for drone operators.

"We want to make sure that the farmers or the client or the potential client understands that there is a law," he said.

While some trends fizzle out, drone technology is paving the way for businesses to dramatically shift how they operate. There are plenty of uses for drones, with more opportunities cropping up as the technology advances. Businesses can now decide if/how they can utilize drones to their advantage.

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