## DRONES CATCHING ON IN NORTHWEST AGRICULTURE

-John O'Connell, Capital Press

AN IDAHO FARMER WHO HELPS RUN A COMPANY THAT ASSESSES FARM FIELDS USING DRONES SEES SIGNIFICANT GROWTH IN DRONE USE FOR AGRICULTURE IN THE SECOND SEASON IN WHICH DRONES WILL BE AVAILABLE AS A COMMERCIAL SERVICE FOR GROWERS.

KENDRICK, Idaho — Local farmer Robert Blair is helping to set up a new commercial drone service to aerially scout U.S. agricultural fields, and he anticipates rapid growth this season in the fledgling industry.

Last season — when the Federal Aviation Administration first allowed commercial drone services — Blair helped pioneer the use of drones in agriculture with Hayden, Idaho-based Empire Unmanned. It was the first company to work under an FAA exemption to fly commercial, unmanned aircraft for precision agriculture.

He now serves as vice president of agriculture with Measure, a Washington, D.C.-based drone service that was formed two years ago and will be making its first commercial unmanned flights for agriculture this spring. Measure has nine licensed pilots on its staff around the country — some specializing in assisting industries other than agriculture such as energy and construction. The company also has 450 FAA exemptions to fly specific drones commercially.

"We have pilots in the pipeline, and as demand increases, we will put them in place," Blair said.

On March 22, Measure also announced plans to offer commercial drone operators the opportunity to convert to Measure franchises.

Bill Orchard, an agronomist consulting on about 10,000 acres near Walla Walla, Wash., plans to contract with Measure to fly his growers' field three to four times this season.

"A lot of my clients are going into more and more precision agriculture. They are no-till growers, and they are starting to farm more and more of their fields by production zones," Orchard said. "The drones are

going to give me a better view of those zones as we go through the growing season, and we can match those up with information we're getting from harvest monitors and soil samples."

Rob Schoepflin, of Palouse, Wash., who was trained as an aerial applicator pilot, will serve as Measure's agricultural pilot for Idaho and Washington. He's undergone drone training in Florida and practices with a computer simulator. Schoepflin said it takes a drone roughly 12 minutes to survey 20 acres.

"There are definitely good field guys out there that go and check crops, but to send somebody out for 400 acres, that could take all day, whereas a drone could do a 2,000-acre field in one flight," Schoepflin said.

Blair said Measure's drones will take color photos and multispectral images using four channels. Analytics from the cameras will help identify crop anomalies, tying the information to specific GPS coordinates for use in field scouting, variable-rate maps and precision agriculture.

"You can save time scouting and provide more detailed information to make better management decisions," Blair said.

Blair said the FAA is expected to approve permanent rules governing drones this season. Blair believes it will be critical for crop researchers to prioritize drones and precision agriculture in their proposals, and he said universities must continue to develop programs in drones and precision agriculture to supply a workers who understand the technology.