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AeroVironment Advances Research with Farmers and University Partners; Adds Multi-Crop Support to Its Intuitive Quantix Drone and Decision Support System

- Research program entering third year to expand the agronomic analytics and capabilities of the company's innovative drone and analytics platform
- AeroVironment growing its library of supported crops to provide targeted analytics with more precision and value to producers in key agriculture markets
- Findings to provide a deeper understanding of how multispectral data can be used to speed awareness and empower faster decisions for greater yields

TULARE, Calif.--(BUSINESS WIRE)-- AeroVironment, Inc. (NASDAQ: AVAV), a global leader in unmanned aircraft systems for both military and commercial applications, shared details regarding its ongoing pilot programs, which are entering their third year and have guided development of the AV DSS platform. The company also displays its Quantix™ drone and AV Decision Support System™ (AV DSS) to World Ag Expo and National Farm Machinery Show attendees this week, highlighting the fully-integrated ecosystem's powerfully-simple operations and innovative data analytics capabilities.

This Smart News Release features multimedia. View the full release here:
http://www.businesswire.com/news/home/20170214005829/en/

AeroVironment Quantix drone and Decision Support System developed with growers, for growers. (Photo: Business Wire)

"Our extensive work with early adopter agriculture customers continues to inform the architecture for our Quantix drone and AeroVironment Decision Support System," said Jon Self, vice president of Commercial Information Solutions at AeroVironment. "The pilot programs allow us to learn how to integrate drone technology into the way growers operate and is helping us to develop some very specific analytics. Our results and experience from working with multiple crops guide our design to give farmers an intuitive solution that is the first of its kind in the marketplace."

AeroVironment partnered with a group of independent farmers and universities to ensure the Quantix drone and AV DSS platform meet the agronomic needs of commercial farmers and operators. The project team repeatedly surveyed tens of thousands of acres during the past two years, focusing research efforts into various crops including almonds, walnuts, corn, grapes, sugar beets, strawberries and tomatoes to test analytics that identify canopy cover, early disease detection and yield prediction capabilities.

The projects employed a variety of sensors including photogrammetry, multispectral, and LiDAR to develop highly precise (1 in. resolution) topographical maps for water management, developing flow diagrams that examined drainage, erosion, run-off and tile line designs within a field.

As the pilot programs extend into 2017, AeroVironment will expand research to include additional surveys of row crops, specialty crops and permanent crops. This commitment to research ensures that Quantix with AV DSS will continue to evolve in its precision and targeted crop analytics.

Innovative design, engineered for precision agriculture

The findings from this research strengthen the capabilities of AeroVironment's Quantix and DSS ecosystem. Quantix boasts a hybrid design that combines the aerodynamic efficiency of a fixed-wing aircraft with the flexibility and safety of a multi-rotor drone. Quantix is the first hybrid drone to be introduced to the agricultural marketplace and is designed to pair seamlessly with AV DSS, allowing growers to review drone-collected data easily for both quick insights and deeper analysis.

Quantix collects RGB and NDVI multispectral images that can be viewed on-site immediately after each flight and then are uploaded, processed and stored securely in the cloud for growers to view either on their mobile device or a desktop computer. The AV DSS will feature a mobile app component allowing producers to collect and record infield observations. The platform is equipped with an alert system that instantly notifies farmers of anomalies in the field so that immediate action can be taken to address stressors.

To develop this technology based on agronomic research, AeroVironment has partnered with leading universities that are studying the use of aerial multispectral imagery to better identify specific crop stresses.

The company recently announced it has begun a year-long study with California State University, Fresno to research how UAV imagery and analytics could potentially detect varying levels of water stress in almond trees and give producers smarter insights to make more effective in-season decisions regarding water management.

AeroVironment also has engaged with North Dakota State University on a similar study to enable the early detection of three key diseases in sugar beets. Findings could help sugar beet growers identify infected plants before symptoms are visible to the naked eye - saving time and production costs while increasing yield.

Quantix and AV DSS will be available for sale later this year. Learn more about Quantix with AV DSS at avinc.com/shows and visit AeroVironment's booth (#3024) at World Ag Expo, and (#7456) at the National Farm Machinery show to meet with drone experts and participants in the ongoing pilot program.

Recommended Tweets for Media

AeroVironment introduces hybrid drone with integrated analytics at World Ag Expo #agtech #wae17 http://bit.ly/2kWBAGm

AeroVironment introduces hybrid drone with integrated analytics at National Farm Machinery Show #agtech #nfms17 http://bit.ly/2kWBAGm

About AeroVironment, Inc.

AeroVironment (NASDAQ: AVAV) provides customers with more actionable intelligence so they can proceed with certainty. Based in California, AeroVironment is a global leader in unmanned aircraft systems, tactical missile systems and electric vehicle charging and test systems, and serves militaries, government agencies, businesses and consumers. For more information, visit www.avinc.com.

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We do not intend, and undertake no obligation, to update any forward-looking statements, whether as a result of new information, future events or otherwise.

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