

JMU Facilities News August 2017

Drones: An Aerial Perspective

The use of Unmanned Aircraft Systems (UAS), popularly known as drones, is becoming more and more prevalent in facilities departments around the country. JMU has recently embraced this technology for use in facilities maintenance applications. This technology allows for the inspection of areas difficult to access or dangerous to monitor, saving time and assisting professionals with daily operations.

The Geographic Information Systems (GIS) team in JMU Facilities used drones to capture images to further inform, verify and correct utility locator maps for the new convocation center. Formerly, aerial images of the university were provided at an incurred cost every four years by the state of Virginia. The introduction of the drone technology has assisted GIS operations in acquiring aerial images more quickly and with less cost.

FM's drones have also been used to capture aerial graduation ceremony pictures, construction site pictures, and videos of streets on and around JMU's campus.

The development of university rules and regulations concerning the use of UAS on or above university property was spearheaded by Asa Taylor, FM Building Support Systems Manager, in collaboration with Nick Swayne, Executive Director of [4-VA](#). 4-VA is an organization that focuses on a collaborative partnership among five Virginia universities with the goal of improving efficiencies in higher education across the Commonwealth of Virginia. The drafted policy ensures that drones flown on and over JMU's property for commercial purposes are operated in a safe manner and by licensed operators.

JMU hopes to expand its use of drone technology in the future. Taylor explains, "I see us using drones in the future to continue documenting projects, maybe to do some thermography and crop inspection. We could even have communication drones put up at events or in the football stadium to augment the cell network towers in the area."

Thermal infrared cameras detect the temperature differences in or on a building and visualizes them in a thermal image. These thermal images can be used to diagnose the condition of buildings by detecting thermal bridges and other anomalies; they are also used in finding roof leaks, inspecting power lines, and monitoring agricultural environments. According to GIS Coordinator, Sam Hottinger, these thermal images could also be helpful in conducting energy audits.

Additionally, drone technology could be used to conduct and capture images of roof inspections, to monitor traffic challenges associated with event parking, and to oversee inspections and surveillance.

Licensed operators at JMU are Asa Taylor and Sam Hottinger; they can be contacted for additional information regarding drones at JMU.



Residence Hall Move-in Schedule

Tues., August 22 - Thur., August 24:

Friday, August 25:

Saturday, August 26:

Monday, August 28:

Residence halls open for freshmen

Residence halls open for transfer and international students

Residence halls open for returning students

Classes meet as scheduled



Caught in the A.C.T.: August Recipients

See FM's [Caught in the A.C.T.](#) site for more information

Dave Butler—Lock Shop
Charles Grimm—Facilities Inspectors
Teri Kitta—Financial Services
Jeff Knicely—Moving & Delivery
Brandon Lucas—Lock Shop
Bob Maphis—Transportation
Victor McManaway—Sign Shop

New Hires



(L-R) Front row: Amanda Sly (Hskp), Loria Smith (Hskp) Back row: Steven Smith (Hskp), Edward Paynter (Hskp), Shay Whetzel (Recycling), Gary Talley (Hskp)

Recent Hires



(L-R) Oneda Custer (Hskp), Robert Varner (Transportation), Jeremiah Gay (Hskp), Tonya Schimp (Hskp), Michael Chiarello (Landscape), Sonny Brooks (Transportation), Corbin Burkholder (Hskp)

Newman Lake Water Harvesting System

The famous Newman Lake on JMU's campus not only serves as an attraction to students, staff and visitors, it also supports stormwater management and sustainability efforts. In 2015, environmental upgrades were made to Newman Lake which resulted in improved water quality. Facilities Management then installed an irrigation system to recycle this water from the lake to irrigate surrounding vegetation.

The FM Landscape irrigation team developed an extensive implementation plan for the water harvesting program, which included various water quality tests, the purchase of water pumps, and system feasibility tests. FM's Irrigation Supervisor, Justin Morris, describes rainwater harvesting as the most traditional and a sustainable method used in reducing the pressure on water supply.

"We are building our system in such a way that if there are any restrictions to how much water is used for irrigation in the future, JMU will be prepared. The more you do irrigation, the more you see how much we take water for granted." The current system allows an estimated three million gallons of water to be harvested every three months to irrigate the surrounding landscape around the lake.

In addition to the benefit of reduced water consumption, the new irrigation system has saved the university a substantial amount of money. Prior to harvesting lake water to irrigate, JMU purchased this water from the City of Harrisonburg. According to FM Director, Craig Short, the water harvesting system is a "great example of the type of innovative and common sense solutions that our landscaping department deploys every day in balancing the values of financial stewardship, environmental conservation and social responsibility."



JMU Facilities Birthdays for August

Randal Alger 8/1	Jack Losh 8/2	Lisa Dunivan 8/3	Terry Nesselrodt 8/3	Amy Sager 8/3
Tyler Somers 8/3	Mark Woods 8/5	Mary Morris 8/6	Mike Dalmolin 8/7	Rick Dean 8/7
Daniel Smith 8/7	Chad Ellinger 8/8	Alyssa Shifflett 8/8	Dennis Kiracofe 8/10	Brian McAvoy 8/10
Tristan Simmons 8/10	Bob Weaver 8/11	Angela Branson 8/13	Dean Bryant 8/14	Trevor Gentry 8/14
Maritza Santiago 8/14	Ian Kelliher 8/15	Ricky Lucas 8/15	Cathy Miller 8/15	Bob Shanholtz 8/15
Brian Buckless 8/17	Jerry Myers 8/17	Tim Troyer 8/17	David Eppard 8/18	Angelina Gett 8/18
Gary Talley 8/18	Lowell Miller 8/19	Gib Whitmire 8/19	Jessica Seeders 8/20	Jeffrey Fisher 8/21
Thomas Estep 8/22	Darrel Hensley 8/22	Chris Shifflett 8/24	Sam Balser 8/25	Anna Leone 8/26
Sandra Baugher 8/27	Lynda Ewing 8/28	Tammiooka Harris 8/28	Brandi Huttner 8/28	Brain Clements 8/30
Candy Arbaugh 8/31	Kim Breeden 8/31	Barbara Myers 8/31		