The Florida Senate

BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: The Professional Staff of the Committee on Rules

BILL:	CS/CS/SB 44
INTRODUCER:	Rules Committee; Criminal Justice Committee; and Senator Wright
SUBJECT:	Drones
DATE:	March 4, 2021
REVISED:	

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Cellon	Jones	CJ	**Fav/CS**
2.	Stallard	Caldwell	MS	**Favorable**
3.	Cellon	Phelps	RC	**Fav/CS**

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

CS/CS/SB 44 expands the possibilities for drone use by law enforcement agencies, fire departments, state agencies, and political subdivisions.

The bill creates additional exceptions for law enforcement agency drone use found in s. 934.50(4), F.S. The new exceptions allow law enforcement agencies to use drones to:

- Gain an aerial perspective of a crowd of 50 or more persons;
- Assist with traffic management, except that the agency may not issue a traffic infraction based on images or video captured by a drone; and
- Facilitate evidence collection at a crime scene or traffic crash scene.

The bill authorizes state agencies and political subdivisions to use drones for damage assessment due to a flood, wildfire, or natural disaster, or for vegetation and wildlife management purposes on publicly owned land or water. The bill also allows certified fire department personnel to use drones to perform tasks within the scope and practice authorized under their certification.

The bill requires policies and procedures, that include certain guidelines, for law enforcement agencies that use a drone to gain an aerial perspective of a crowd of 50 or more people. The guidelines must address the storage, retention, and release of images or video captured by the drone. The guidelines must also address the personal safety and constitutional protections of the persons being observed. The agency head must provide written authorization for the use of a drone in this manner.

The bill is effective July 1, 2021.

II. Present Situation:

Overview

Section 934.50, F.S., prohibits a law enforcement agency from using a drone to gather information, and prohibits any person or state entity from using a drone to record an image of a person in violation of the person's reasonable expectation of privacy.[1] However, these prohibitions are subject to several exceptions, including use by police pursuant to a search warrant or under exigent circumstances, such as the prevention of an imminent loss of life or escape of a prisoner.[2] Other exceptions to the statutory ban include certain uses by utility companies or by a licensed professional who is not using the drone to track people.[3]

Federal law, unlike Florida law, does not include a statute or regulation expressly targeting governmental drone use that might invade a citizen's privacy. However, federal law does include various restrictions and regulations on drone use, including airspace restrictions and licensing requirements.

Moreover, the Fourth Amendment to the United States Constitution guarantees a person the right to be free from an unreasonable search. This is relevant because remote surveillance could constitute a search, which, if not supported by a search warrant or other authorization, would violate the Fourth Amendment.

Drones

A drone, also called Unmanned Aerial Vehicle (UAV) and Unmanned Aerial System (UAS), is defined in s. 934.50, F.S., as a powered, aerial vehicle that:

- Does not carry a human operator;
- Uses aerodynamic forces to provide vehicle lift;
- Can fly autonomously or be piloted remotely;
- Can be expendable or recoverable; and
- Can carry a lethal or nonlethal payload.[4]

Drones range in size from wingspans of 6 inches to 246 feet and can weigh from approximately 4 ounces to over 25,600 pounds.[5] They may be controlled manually or through an autopilot that uses a data link to connect the drone's pilot to the drone.[6] Drones can be equipped with infrared

[1] Section 934.50(3), F.S.
[2] *See* s. 934.50(4), F.S., for the list of exceptions.
[3] *Id*.
[4] Section 934.50(2), F.S.
[5] 14 CFR Part 91, Docket No. FAA-2006-25714, Department of Transportation, Federal Aviation Administration, *Unmanned Aircraft Operations in the National Airspace System*, February 6, 2007.
[6] *Id*.

cameras,[7] and "LADAR" (laser radar).[8] In 2011, it was reported that the U.S. Army contracted with two corporations to develop facial recognition and behavioral recognition technologies for drone use.[9]

Federal Law and Regulation

Federal law and regulation govern who may fly a drone, as well as when and where the person may do so. The FAA is responsible for regulating aircraft, including drones that fly in U.S. airspace.[10] In February 2012, Congress passed the Federal Aviation Authority (FAA) Modernization and Reform Act of 2012 (Act), which required the FAA to safely open the nation's airspace to nongovernmental drones by September 2015.[11]

Neither federal law nor regulation categorically prohibit police, firefighters, or other governmental agents to operate a drone over a crime scene, or over a flood or other natural disaster. However, the FAA often implements Temporary Flight Restrictions around wildfires to protect firefighting aircraft.[12] Additional FAA airspace restrictions include the area around Washington, D.C., sports stadiums, and airports.[13]

Choice of Federal Regulatory Framework for Governmental Operators

A governmental agent may operate a drone under one of two legal frameworks — that for "public unmanned aircraft systems," or that for "small unmanned aircraft systems." The

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[7] Infrared cameras can see objects through walls based on the relative levels of heat produced by the objects. *Drones in Domestic Surveillance Operations: Fourth Amendment Implications and Congressional Response*, Congressional Research Service, April 3, 2013, available at www.fas.org/sgp/crs/natsec/R42701.pdf (last visited March 2, 2021). Search and rescue drones equipped with thermal imaging help first responders identify the location of people lost in chaotic scenes, and police departments have started using drones with thermal capabilities to identify the location of suspects while keeping an infrared eye on their officers. *Best Infrared Drones (Buying Guide)*, Spire Drones, available at https://buythebestdrone.com/best-infrared-drones/ (last visited March 2, 2021).

[8] The research and development laboratory at the Massachusetts Institute of Technology has developed airborne ladar systems that generate detailed 3D imagery of terrain and structures, including those beneath dense foliage. The lab reports that the micro-ladar could be used under both clear and heavy foliage conditions for surveillance and reconnaissance missions as well as for humanitarian assistance and disaster relief operations. Lincoln Laboratory, Massachusetts Institute of Technology, R & D Projects, *Micro-ladar*, available at https://www.ll.mit.edu/r-d/projects/micro-ladar (last visited March 2, 2021).

[9] Popular Science, Clay Dillow, *Army Developing Drones That Can Recognize Your Face From a Distance*, September 28, 2011, available at pops ci.com/technology/article/2011-09/army-wants-drones-can-recognize-your-face-and-read-your-mind (last viewed January 7, 2021). *See also* PoliceOne.com, 2017 Guide to Emerging Technologies, Val Van Brocklin, *Facial recognition technology and a 'reasonable expectation of privacy,'* May 16, 2017, available at *https://www.policeone.com/emerging-tech-guide/articles/facial-recognition-technology-and-a-reasonable-expectation-of-privacy-cxdcrWsBRCu8Dieb/* (last visited March 2, 2021).

[10] *See* 49 U.S.C. s. 40103(b)(1) and (2).

[11] Public Law 112-95, February 14, 2012, The FAA Modernization and Reform Act of 2012, *Drones in Domestic Surveillance Operations: Fourth Amendment Implications and Legislative Responses*, Congressional Research Service, April 3, 2013, available at www.fas.org/sgp/crs/natsec/R42701.pdf (last visited March 2, 2021).

[12] FAA, *FAA Drones and Wildfires Digital Toolkit*, available at https://www.faa.gov/uas/media/FAA_drones_wildfires_toolkit.pdf (last visited, March 2, 2021). Moreover, Congress has authorized the FAA to impose a civil penalty of up to $20,000 against any drone pilot who interferes with wildfire suppression, law enforcement, or emergency response operations. FAA, *FAA Targets UAS Violators for Enforcement*, available at https://www.faa.gov/news/updates/?newsId=91706 (last visited March 2, 2021).

[13] FAA, Unmanned Aircraft Systems, *Airspace Restrictions*, July 16, 2020, available at https://www.faa.gov/uas/where_to_fly/airspace_restrictions/ (last visited March 2, 2021); *see also* FAA Drones and Wildfires Digital Toolkit, available at https://www.faa.gov/uas/media/FAA_drones_wildfires_toolkit.pdf (last visited March 2, 2021).

framework for small unmanned aircraft systems is much more extensive, and it is the same framework under which a private citizen would operate a drone.[14]

The legal framework for "public unmanned aircraft systems" consists primarily of one statute.[15] Under this statute, a governmental operator may seek a certificate of authorization or certificate of waiver from the FAA.[16] If granted, the operator may operate a drone weighing 4.4 pounds or less.[17] The drone must be kept within the line of sight of the operator and below 400 feet, and may only be operated during the day.[18]

Many governmental operators choose instead to operate their drones as "small unmanned aircraft systems." These drones are subject to extensive regulations, codified in the Code of Federal Regulations, and first promulgated in 2016.[19] These regulations were recently substantially amended, and the amendments take effect in March.[20]

As of March 16, 2021, operators of small drones (those under 55 pounds) will no longer need to seek special authorization before operating a drone that passes over people, including people in moving vehicles.[21] However, the regulations pertaining to these flights vary somewhat, depending on the size of the craft.[22] Moreover, operating a drone in *sustained* flight over an open-air assembly of people remains subject to restrictions.[23] Under these restrictions, a drone must be equipped with individual identification as specified in rule and must continuously transmit specified information regarding its location.[24]

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[14] FAA, Drones in Public Safety—A Guide to Starting Operations (Feb. 2019), available at https://www.faa.gov/uas/public_safety_gov/media/Law_Enforcement_Drone_Programs_Brochure.pdf FAA, *A "UAS Primer for Public Safety", Public Aircraft OPS VS Part 07*, (Jan. 2020), available at https://www.faasafety.gov/files/gslac/library/documents/2020/Jan/233377/Public%20Safety%20PAO%20vs%20Part%20107%20Primer%20v2.1.pdf (last visited March 2, 2021). *See* 49 U.S.C. ch. 448 for the federal statutes pertaining to drones. The primary statute relating to public unmanned aircraft systems is 49 U.S.C. s. 44806, and the primary statute relating to small unmanned aircraft systems is 49 U.S.C. s. 44802. The rules authorized by 49 U.S.C. s. 44802 are at 14 C.F.R. 107.

[15] 49 U.S.C. s. 44806.

[16] *See* 49 U.S.C. s. 44806(a)(1).

[17] 49 U.S.C. s. 44806(b)(2)(C).

[18] *Id*.

[19] *See* 14 C.F.R. 107.

[20] FAA, *Operation of Small Unmanned Aircraft Systems Over People*, 86 FR 4314, available at https://www.federalregister.gov/d/2020-28947/p-85 (last visited March 2, 2021).

[21] *Id.* Prior to this change, a drone operator who did not have special authorization could not fly a drone over people who were not in covered structure, stationary vehicle, or participating in the drone operation.

[22] *See* 14 C.F.R. 107.110-165 (effective March 16, 2021), available at https://www.ecfr.gov/cgi-bin/text-idx?SID=a70adf1ff1545784a28e989f2ddeae94&mc=true&node=20210115y1.103. These provisions set forth Categories 1 through 4, each with its own requirements.

[23] The FAA describes sustained flight to include "hovering above the heads of persons gathered in an open-air assembly, flying back and forth over an open-air assembly, or circling above the assembly in such a way that the small unmanned aircraft remains above some part of the assembly." FAA, *Operation of Small Unmanned Aircraft Over People*, 86 FR 4314, available at https://www.federalregister.gov/d/2020-28947/p-208 (last visited March 2, 2021).

[24] *See* 14 C.F.R. 89.110 and 89.115(a) (effective March 16, 2021) for the details of these requirements, available at https://www.ecfr.gov/cgi-bin/text-idx?SID=a70adf1ff1545784a28e989f2ddeae94&mc=true&node=pt14.2.89&rgn=div5 (last visited March 2, 2021).

However, these restrictions are subject to waiver by the FAA. Thus, if an operator receives a waiver, he or she does not have to meet the normal requirements for operating a drone over people.[25]

The Fourth Amendment to the United States Constitution

The Fourth Amendment prohibits an unreasonable search.[26] The analysis of whether an instance of governmental conduct, such as surveillance, violates this prohibition involves two main questions: Was there a search, and if so, was it reasonable?

Under the Fourth Amendment, a search occurs when the government breaches a person's reasonable expectation of privacy, such as by physically entering the person's home or by tapping a person's phone.[27] A search is unreasonable under the Fourth Amendment if it is conducted without a warrant or other constitutionally sufficient authorization, such as consent.[28]

The Court does not appear to have decided a drone-surveillance case. However, in at least two cases, the Court has examined (warrantless) aerial surveillance to see whether it amounted to a search.[29] In these cases, the Court determined that governmental agents did not conduct searches for Fourth Amendment purposes when they observed private property with the naked eye from heights of 400 and 1,000 feet, respectively.[30] Nonetheless, given that Fourth Amendment cases are highly fact-dependent, it is possible that the Court would distinguish these cases from a future case involving surveillance by way of a drone equipped with a camera.

Law Enforcement Use of Drones in Florida – Section 934.50, F.S.

A law enforcement agency is defined in s. 934.50, F.S., as a lawfully established state or local public agency that is responsible for the prevention and detection of crime, local government code enforcement, and the enforcement of penal, traffic, regulatory, game, or controlled substance laws.[31]

The Florida Sheriff's Association indicates that 30 sheriff's offices have drones.[32] Of the 133 police departments that responded to the question regarding whether their department has at least one drone, 59 said they do have a drone and 23 responded that they plan to obtain a drone.[33]

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[25] 14 C.F.R. 107.205.
[26] U.S. CONST. amend. IV
[27] *E.g.*, *Katz v. U.S.*, 389 U.S. 347, 353 (1967) (holding that the use of a listening device to the outside of a phone booth to record the conversation occurring within the booth was a search notwithstanding the lack of physical intrusion of the booth because the speaker had a reasonable expectation that his conversation was private).
[28] *See California v. Carney*, 471 U.S. 386, 390-91 (1985).
[29] *See California v. Ciraolo*, 476 U.S. 207, 213-14 (1986) (holding that the government did not conduct a search when it observed a private home from 1,000 feet up in the "public navigable airspace" in a "physically nonintrusive manner"); *Florida v. Riley*, 488 U.S. 445, 450-52 (1989) (holding that the government did not conduct a search when it observed marijuana plants in the curtilage of a property from 400 feet up).
[30] *Id*.
[31] Section 934.50(2)(d), F.S.
[32] E-mail from Florida Sheriff's Association Deputy Executive Director of Operations dated January 8, 2021 (on file with the Senate Committee on Criminal Justice).
[33] E-mail from Florida Police Chiefs Association Executive Director dated January 20, 2021 (on file with the Senate Committee on Criminal Justice).

Section 934.50(3)(b), F.S., provides that a real property owner, tenant, occupant, invitee, or licensee of the property is presumed to have a reasonable expectation of privacy from drone surveillance[34] of the property or the owner, tenant, occupant, invitee, or licensee by another person, state agency,[35] or political subdivision,[36] if he or she cannot be seen by persons at ground level who are in a place they have a legal right to be.[37]

Section 934.50, F.S., prohibits law enforcement agencies from using a drone to gather evidence or other information, with certain exceptions.[38] Evidence obtained or collected by a law enforcement agency using a drone is not admissible in a criminal prosecution in any court of law in this state unless it is permitted under one of the statute's exceptions.[39] An aggrieved party may initiate a civil action against a law enforcement agency to obtain all appropriate relief in order to prevent or remedy a violation of s. 934.50, F.S.[40]

The exceptions in s. 934.50(4), F.S., for law enforcement agencies using drones to gather evidence and other information are as follows:

- The U.S. Secretary of Homeland Security determines that credible intelligence exists indicating a high risk of a terrorist attack by an individual or organization and the drone is used to counter the risk;
- The law enforcement agency first obtains a search warrant authorizing the use of a drone; or
- The law enforcement agency has reasonable suspicion that swift action is necessary to prevent imminent danger to life or serious damage to property, to forestall the imminent escape of a suspect or the destruction of evidence, or to achieve purposes including, but not limited to, facilitating the search for a missing person.[41]

State Agency Use of Drones in Florida

Section 934.50(4)(k), F.S., authorizes the use of drones by a non-law enforcement employee of the Fish and Wildlife Conservation Commission or of the Florida Forest Service for the purposes

[34] Surveillance is defined in. s. 934.50(2)(e), F.S.: With respect to an owner, tenant, occupant, invitee, or licensee of privately owned real property, the observation of such persons with sufficient visual clarity to be able to obtain information about their identity, habits, conduct, movements, or whereabouts; or with respect to privately owned real property, the observation of such property's physical improvements with sufficient visual clarity to be able to determine unique identifying features or its occupancy by one or more persons.

[35] A state agency, as defined in s. 11.45, F.S., is a separate agency or unit of state government created or established by law and includes, but is not limited to, the following and the officers thereof: authority, board, branch, bureau, commission, department, division, institution, office, officer, or public corporation, as the case may be, except any such agency or unit within the legislative branch of state government other than the Florida Public Service Commission.

[36] A political subdivision is defined in s. 11.45, F.S., as a separate agency or unit of local government created or established by law and includes, but is not limited to, the following and the officers thereof: authority, board, branch, bureau, city, commission, consolidated government, county, department, district, institution, metropolitan government, municipality, office, officer, public corporation, town, or village.

[37] Section 934.50(3)(b), F.S. *See also* s. 934.50(5)(b)-(d) F.S., providing for compensatory damages, injunctive relief, attorney fees, and punitive damages for a violation of s. 934.50(3)(b), F.S.

[38] Section 934.50(3)(a), F.S.

[39] Section 934.50(6), F.S.

[40] Section 934.50(5)(a), F.S.

[41] Section 934.50(4)(a)-(c), F.S. There are additional exceptions to the prohibition on the use of drones that are not law enforcement agency related. These exceptions can be found in s. 934.50(4)(d)-(j), F.S.

of managing and eradicating invasive exotic plants or animals on public lands and suppressing and mitigating wildfire threats.

Weaponized Drones Prohibited in Florida

In Florida, s. 330.411, F.S., prohibits a person from possessing or operating an unmanned aircraft or unmanned aircraft system as defined in s. 330.41, F.S., with an attached weapon, firearm, explosive, destructive device, or ammunition as defined in s. 790.001, F.S.[42] North Dakota is the only state that allows law enforcement agencies to utilize weaponized drones. The weapons are limited to the non-lethal variety such as tear gas, rubber bullets, beanbags, pepper spray, and tasers.[43]

Use of Drones for Law Enforcement Investigations

Several jurisdictions outside Florida, including the Massachusetts State Police and the Lake County Police in Illinois, are reported to be using drones to assist in more efficient and timely traffic crash investigations.[44] The North Carolina Department of Transportation and North Carolina State Highway Patrol demonstrated in a research project that some advantages to using drones in traffic crash investigations include faster processing and clearing of the scene and opening the road to traffic flow more quickly than traditional evidence-gathering methods.[45]

In addition to quickly and efficiently clearing traffic crash scenes, drone technology has enhanced crime scene documentation using a process called orthomosaic photography that can recreate a crime scene in 3-D.[46]

Drones can also be used by law enforcement to more efficiently do jobs such as searching for evidence.[47] For example, the San Bernardino Police Department used a drone to successfully

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[42] Section 330.41(2)(c), F.S., defines an unmanned aircraft system as a drone and its associated elements, including communication links and the components used to control the drone which are required for the pilot in command to operate the drone safely and efficiently. Section 330.41(2)(b), F.S., specifies that drone has the same meaning as s. 934.50(2), F.S.

[43] North Dakota House Bill 1328 (2015), available at https://www.legis.nd.gov/assembly/64-2015/documents/15-0259-05000.pdf?20150501154934 (last visited March 2, 2021).

[44] *How drones help Lake County police investigate crashes, get roads open faster*, Daily Herald, May 7, 2017, available at http://www.dailyherald.com/news/20170506/how-drones-help-lake-county-police-investigate-crashes-get-roads-open-faster (last viewed March 2, 2021).

[45] "Research shows that documenting a collision scene using photogrammetry and UAS can be advantageous, especially in terms of speed and cost. With a combination of advanced imaging software and the latest UAS technology, we find that the North Carolina State Highway Patrol (NCSHP) can rapidly map collision scenes and simultaneously gather more information than legacy technologies. Indeed, large scenes can be documented in less than 30 minutes." *Collision Scene Reconstruction & Investigation Using Unmanned Aircraft Systems*, Division of Aviation, UAS Program Office, N.C. Department of Transportation, August 2017, available at https://www.ncdot.gov/divisions/aviation/Documents/ncshp-uas-mapping-study.pdf (last viewed March 2, 2021).

[46] Mesa County, Colorado, Sheriff's Office unmanned aircraft program director, Ben Miller, envisions the 3-D crime scene preservation technique as a real aid in cold cases. The Huffington Post, Michelle Fredrickson, *Drones Add a New Dimension to Crime Scene Investigations*, October 24, 2014 (updated December 6, 2017), available at https://www.huffingtonpost.com/pro-journo/drones-add-a-new-dimensio_b_6033392.html (last visited March 2, 2021).

[47] Patti Blake, Tom McLaughlin, The News Herald, *Several Florida Police Departments Utilizing Drone Technology*, December 17, 2019, available at https://www.governing.com/news/headlines/Several-Florida-Police-Departments-Utilizing-Drone-Technology.html (last visited March 2, 2021).

search a large field for a gun thrown by a suspect who was being pursued.[48] The San Bernardino police chief emphasized the cost benefit in deploying a drone versus assembling a team to look for the gun in that situation.[49]

Tactical Uses for Drones

Some have suggested that drones could be used to gain a tactical advantage in active shooter situations like that which occurred in Las Vegas in 2017 at the outdoor music festival at which 58 people were killed and more than 500 injured.[50] For example, Brian Levin, director of The Center for the Study of Hate and Extremism at California State University-San Bernardino opines that a "drone could have provided real-time intelligence and surveillance to what's going on" during the Las Vegas incident.[51] In an article written for the International Journal of Aviation, Aeronautics, and Aerospace, Ryan Wallace and Jon Loffi, analyzed the law enforcement response to the Las Vegas shooting, concluding that had a drone been accessible to the Las Vegas Police it may have provided life-saving reconnaissance and shooter distraction.[52]

Crowd Control and Monitoring for Public Safety

According to a December 2017 news article, the Las Vegas Police Department planned to use drones to monitor New Year's Eve revelers on the Strip on December 31, 2017. The department decided to use drones to monitor crowds from an aerial view, which would help police better position barricades and other pedestrian control devices. Additionally, the department intended to use the drones to identify suspicious packages, track any unusual activity, and check hotel windows to try to detect anyone who might try to recreate the mass shooting incident that occurred in the city just a few months earlier.[53]

Likewise, New York City had planned to have a camera-equipped drone in the sky during the 2018 New Year's Eve celebration, but "relegated to a cordoned-off area and tethered to a building" to prevent injury should the drone fall. Inclement weather prevented the drone operation.[54]

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[48] National Police Foundation, Jarrod Burguan, San Bernardino Police Chief, *Drones help augment a police department's capabilities to fight crime*, available at https://www.policefoundation.org/drones-help-augment-a-police-departments-capabilities-to-fight-crime/ (last visited March 2, 2021).
[49] *Id*.
[50] Las Vegas Review-Journal, Nicole Raz, *Las Vegas police drones will monitor New Year's Eve crowds*, December 27, 2017, available at https://www.reviewjournal.com/entertainment/new-years-eve-in-vegas/las-vegas-police-drones-will-monitor-new-years-eve-crowds/ (last visited March 2, 2021).
[51] *Id*. *See* also Wallace, Ryan and Loffi, Jon, *How Law Enforcement Unmanned Aircraft Systems (UAS) Could Improve Tactical Response to Active Shooter Situations: The Case of the 2017 Las Vegas Shooting*, Vol. 4, Article 7, International Journal of Aviation, Aeronautics, and Aerospace, October 9, 2017, available at https://commons.erau.edu/cgi/viewcontent.cgi?referer=https://scholar.google.com/&httpsredir=1&article=1198&context=ijaa (last visited March 2, 2021).
[52] *Id*.
[53] Las Vegas Review-Journal, Nicole Raz, *Las Vegas police drones will monitor New Year's Eve crowds*, December 27, 2017, available at https://www.reviewjournal.com/entertainment/new-years-eve-in-vegas/las-vegas-police-drones-will-monitor-new-years-eve-crowds/ (last viewed March 2, 2021).
[54] The Washington Post, Peter Holley, *The NYPD planned to use drones during Times Square New Year's Eve celebration. Then it started raining*, December 31, 2018, available at https://www.washingtonpost.com/technology/2018/12/31/nypds-

Fire Department Use of Drones

According to an October 2018 news article, fire departments use UAVs for reconnaissance of wildfires and motor vehicle accident scenes, hazmat incidents, and hot spot identification at structure fires. In addition to the reconnaissance function and hot spot identification, additional uses for UAVs include:

- Search and rescue, even in urban settings;
- Preplanning with aerial photos and video identifying water supply sources, utility shutoffs, and apparatus location planning;
- Winter and ice rescue; and
- Disaster assessment and post-disaster reconnaissance after weather events such as floods or tornados.[55]

The Mesa Fire and Medical Department in Mesa, Arizona, has also used drones in a variety of capacities, including:

- Gaining a 360-degree perspective on damaged structures;
- Surveying buildings to provide hazard assessments for property owners;
- Water rescue operations and flood damage assessment;
- Assisting with a search for a missing kindergarten teacher; and
- Demonstrating how drones outfitted with special meters and cameras to identify lethal chemicals in hazmat situations can help keep first responders safe.[56]

In Brevard County, Fire Rescue personnel have been trained to test for the FAA drone pilot certification[57] so they can conduct search-and-rescue operations, ocean rescue, map brush fires, and examine burning buildings to identify safe entry points for firefighters using drones.[58]

Other Governmental Functions for Drones

Drones are becoming useful for governmental functions outside policing. For example, the Daytona Beach Police Department utilized its drones to document the state of the city's infrastructure immediately before and after Hurricane Irma came through in September 2017 to provide the Federal Emergency Management Agency with the proof necessary to obtain funding for rebuilding. Additionally, the department was able to aid first responders in navigating the

latest-tool-keeping-times-square-revelers-safe-remote-controlled-drone/?utm_term=.1a63123ba637 (last visited March 2, 2021).

[55] Fire Apparatus & Emergency Equipment, Alan M. Petrillo, *Fire Department Drones Serve a Variety of Needs on Incident Scenes*, October 1, 2018, available at https://www.fireapparatusmagazine.com/articles/print/volume-23/issue-10/features/fire-department-drones-serve-a-variety-of-needs-on-incident-scenes.html (last visited March 2, 2021).

[56] East Valley Tribune, Wayne Schutsky, *Ariz. Fire, EMS Leads the Way with Drone Use*, December 20, 2017, available at https://www.ems1.com/ems-products/technology/articles/370989048-Ariz-fire-EMS-leads-the-way-with-drone-use/ (last visited March 2, 2021).

[57] Federal Aviation Administration, *Become a Drone Pilot*, August 4, 2020, available at https://www.faa.gov/uas/commercial_operators/become_a_drone_pilot/ (last visited March 2, 2021).

[58] Florida Today, Rick Neale, *Florida Tech drone training takes flight for Brevard County firefighters, lifeguards*, November 30, 2018, available at https://www.floridatoday.com/story/news/2018/11/30/florida-tech-drone-training-takes-flight-brevard-firefighters/2140086002/ (last visited March 2, 2021).

fastest and safest routes to those in need of aid by providing a birds-eye view to downed power lines, unstable infrastructure, and blocked roads in the wake of the storm.[59]

III. Effect of Proposed Changes:

The bill adds exceptions to the prohibitions of the use of a drone. Specifically, the bill allows law enforcement agencies to use drones to:

- Provide a law enforcement agency with an aerial perspective of a crowd of 50 people or more;
- Assist a law enforcement agency with traffic management, except that the agency may not issue a traffic infraction citation based on images or video captured by a drone; and
- Facilitate a law enforcement agency's collection of evidence at a crime scene or traffic crash scene.

Additionally, the bill authorizes the use of a drone by:

- A state agency or political subdivision for:
  - The assessment of damage due to a flood, wildfire, or any other natural disaster; or
  - Vegetation or wildlife management on publicly owned land or water.[60]
- Certified fire department personnel to perform tasks within the scope and practice authorized under their certifications.[61]

The bill requires policies and procedures, that include certain guidelines, for law enforcement agencies that use a drone to gain an aerial perspective of a crowd of 50 or more people. The agency head must provide written authorization for the use of a drone in this manner and keep it on file. The guidelines must address the storage, retention, and release of images or video captured by the drone. The guidelines must also address the personal safety and constitutional protections of the persons being observed.

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[59] PoliceOne.com, Jinnie Chua, *Why drones should be part of every PD's disaster response plan*, February 22, 2018, available at https://www.policeone.com/2018-guide-drones/articles/471474006-Why-drones-should-be-part-of-every-PDs-disaster-response-plan/ (last visited March 2, 2021); for additional ways the Daytona Beach Police Department has utilized its drones *see* Stephen Rice, Forbes.com, *10 Ways That Police Use Drones To Protect And Serve*, October 7, 2019, available at https://www.forbes.com/sites/stephenrice1/2019/10/07/10-ways-that-police-use-drones-to-protect-and-serve/?sh=5a1b31d96580 (last visited March 2, 2021); and Ginger Pinholster, Fox News 35, Orlando, *Eyes in the Sky and Embry-Riddle Training Help Police End Hotel Standoff*, September 27, 2019, available at https://news.erau.edu/headlines/eyes-in-the-sky-and-embry-riddle-training-help-police-end-hotel-standoff (last visited March 2, 2021).

[60] There does not seem to be a singular definition in the Florida Statutes for the term publicly owned land. For example, in s. 317.0003(8), F.S., public lands is defined as lands within the state that are available for public use and that are owned, operated, or managed by a federal, state, county, or municipal government entity. In s. 375.312(2), F.S., public lands means any lands in the state which are owned by, leased by, or otherwise assigned to the state or any of its agencies and which are used by the general public for recreational purposes. There is no definition of public waters appearing in the Florida Statutes although there is a detailed definition of "waters" found in s. 403.031(13), F.S.

[61] There does not seem to be a definition for the scope and practice authorized for fire department personnel under their certification in the Florida Statutes. However, s. 633.408, F.S., contains firefighter and volunteer firefighter training certification requirements, and R. 69A-37.055, F.A.C., contains curriculum requirements for training firefighter recruits or firefighters.

The terms law enforcement agency, state agency, and political subdivision as used in s. 934.50, F.S., are currently defined in s. 934.50(2)(d), F.S., and s. 934.50(3)(b), F.S., (by cross-reference to s. 11.45, F.S.).

The bill reenacts s. 330.41(4)(c), F.S., for the purpose of incorporating the amendments made to s. 934.50, F.S.

The bill is effective July 1, 2021.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

Privacy

Although it is generally understood that a person does not currently have a reasonable expectation of privacy under the circumstances set forth in the bill, with the evolution of technology as it relates to intrusion into a person's privacy interests, the law applying the Fourth Amendment to the U.S. Constitution, too, may evolve.[62]

Preemption

The regulation of the national airspace and the aircraft that occupy it is a federal matter.[63] The FAA Chief Counsel issued a document in 2015 about state and local regulation of drones in which he said that state and local restrictions affecting UAS operations should be consistent with the extensive federal statutory and regulatory framework in order to "ensure the maintenance of a safe and sound air transportation system and of navigable

[62] The Fourth Amendment to the U.S. Constitution protects persons from unreasonable searches and seizures by the government. U.S. Const. amend. IV. *See Katz v. United States*, 389 U.S. 347 (1967) finding there is no reasonable expectation of privacy in the public view. *See also Carpenter v. United States*, 138 S.Ct. 2206 (2018) a recent Fourth Amendment case finding a reasonable expectation of privacy in historical cell phone location records.

[63] Congress has vested the FAA with authority to regulate the areas of airspace use, management and efficiency, air traffic control, safety, navigational facilities, and aircraft noise at its source. 49 U.S.C. ss. 40103, 44502, and 44701-44735.

airspace free from inconsistent restrictions."[64] However, given the Chief Counsel's acknowledgement that "laws traditionally related to state and local police power – including land use, zoning, privacy, trespass, and law enforcement operations – generally are not subject to federal regulation"[65] it appears that the bill would not be an encroachment into an area exclusively regulated by the federal government.

V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

The bill allows for new uses for drones by government agencies under certain circumstances that could result in a cost savings for such agencies. However, nothing in the bill requires law enforcement agencies, fire departments, state agencies, or political subdivisions to spend resources to acquire drones or train personnel to use them.

The Florida Department of Law Enforcement reports that it does not expect a fiscal impact from this bill.[66]

The Florida Department of Agriculture and Consumer Services is unable to estimate a fiscal impact, if any, on the department.[67]

VI. Technical Deficiencies:

None.

VII. Related Issues:

None.

VIII. Statutes Affected:

This bill substantially amends section 934.50 of the Florida Statutes.

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[64] FAA, Office of the Chief Counsel, *State and Local Regulation of Unmanned Aircraft Systems (UAS) Fact Sheet*, December 17, 2015, available at https://www.faa.gov/uas/resources/policy_library/media/UAS_Fact_Sheet_Final.pdf (last viewed March 2, 2021).
[65] *Id*., citing *Skysign International, Inc. v. City and County of Honolulu*, 276 F.3d 1109, 1115 (9th Cir. 2002).
[66] Florida Department of Law Enforcement 2021 Legislative Bill Analysis, SB 44, January 8, 2021 (on file with the Senate Criminal Justice Committee).
[67] Florida Department of Agriculture and Consumer Services 2021 Legislative Bill Analysis, SB 44, January 12, 2021 (on file with the Senate Criminal Justice Committee).

This bill reenacts section 330.41 of the Florida Statutes.

IX. Additional Information:

A. Committee Substitute – Statement of Substantial Changes:
(Summarizing differences between the Committee Substitute and the prior version of the bill.)

CS/CS by Rules on March 4, 2021:
The committee substitute allows a law enforcement agency to use a drone to provide an aerial perspective of a crowd of 50 people or more and requires that the agency have policies and procedures in place for such use. The committee substitute requires the agency head to authorize this particular use of a drone and keep on file the written authorization. Agency guidelines must address the storage, retention, and release of images or video captured by the drone, and the personal safety and constitutional protections of the persons being observed.

CS by Criminal Justice on January 26, 2021:
The committee substitute removes the exception that allowed a law enforcement agency to use a drone to provide an aerial perspective of a crowd of 50 people or more.

B. Amendments:

None.