

**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.)

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Prepared By: The Professional Staff of the Committee on Military and Veterans Affairs, Space, and Domestic Security

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BILL: CS/SB 44

INTRODUCER: Criminal Justice Committee and Senator Wright

SUBJECT: Drones

DATE: February 15, 2021

REVISED: \_\_\_\_\_

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Cellon</u>	<u>Jones</u>	<u>CJ</u>	<u>Fav/CS</u>
2.	<u>Stallard</u>	<u>Caldwell</u>	<u>MS</u>	<u>Pre-meeting</u>
3.	_____	_____	<u>RC</u>	_____

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**Please see Section IX. for Additional Information:**

COMMITTEE SUBSTITUTE - Substantial Changes

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**I. Summary:**

CS/SB 44 provides additional exceptions to the statutory ban on certain uses of drones by law enforcement agencies, fire departments, state agencies, and political subdivisions of the state.

Currently, s. 934.50, F.S., prohibits a:

- Law enforcement agency from using a drone to gather evidence or other information.
- Person, or state or local entity, from using a drone to capture images of private property in violation of a person's reasonable expectation of privacy.

However, these prohibitions are subject to exceptions, and the bill adds to these exceptions. Specifically, under the bill, s. 943.50, F.S., no longer prohibits a law enforcement agency from using a drone to:

- Assist with traffic management, except that the agency may not issue a traffic citation based on images or video captured by a drone; and
- Facilitate evidence collection at a crime scene or traffic crash scene.

Moreover, the bill provides that s. 934.50, F.S., does not prohibit a state agency or political subdivision to use a drone to assess damage due to a natural disaster, or for the management of vegetation and wildlife management on public land or water. Finally, the bill provides that this section does not prohibit certified fire department personnel to use drones, as long as they use the drone to perform tasks within the scope and practice authorized under their certifications.

The bill takes effect 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.<sup>1</sup> 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.<sup>2</sup> 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.<sup>3</sup>

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 an 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.<sup>4</sup>

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

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<sup>1</sup> Section 934.50(3), F.S.

<sup>2</sup> See s. 934.50(4), F.S., for the list of exceptions.

<sup>3</sup> *Id.*

<sup>4</sup> Section 934.50(2), F.S.

<sup>5</sup> 72 FR 6689, Federal Aviation Administration (FAA), *Unmanned Aircraft Operations in the National Airspace System*, February 13, 2007, available at <https://www.federalregister.gov/documents/2007/02/13/E7-2402/unmanned-aircraft-operations-in-the-national-airspace-system>.

<sup>6</sup> *Id.*

cameras,<sup>7</sup> and “LADAR” (laser radar).<sup>8</sup> 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.<sup>9</sup>

### 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.<sup>10</sup> 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.<sup>11</sup>

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.<sup>12</sup> Additional FAA airspace restrictions include the area around Washington, D.C., sports stadiums, and airports.<sup>13</sup>

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<sup>7</sup> 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 Legislative Responses*, Congressional Research Service, April 3, 2013, available at [www.fas.org/sgp/crs/natsec/R42701.pdf](http://www.fas.org/sgp/crs/natsec/R42701.pdf) (last viewed January 7, 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 viewed February 3, 2021).

<sup>8</sup> The research and development laboratory at the Massachusetts Institute of Technology has developed airborne lidar systems that generate detailed 3D imagery of terrain and structures, including those beneath dense foliage. The lab reports that the micro-lidar 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-lidar*, available at <https://www.ll.mit.edu/r-d/projects/micro-lidar> (last viewed February 3, 2021).

<sup>9</sup> 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](http://pops.ci.com/technology/article/2011-09/army-wants-drones-can-recognize-your-face-and-read-your-mind) (last viewed February 3, 2021). See also Police1.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.police1.com/emerging-tech-guide/articles/facial-recognition-technology-and-a-reasonable-expectation-of-privacy-cxdcrWsBRCu8Dieb/> (last viewed February 3, 2021).

<sup>10</sup> See 49 U.S.C. s. 40103(b)(1) and (2).

<sup>11</sup> 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](http://www.fas.org/sgp/crs/natsec/R42701.pdf) (last viewed February 3, 2021).

<sup>12</sup> FAA, *FAA Drones and Wildfires Digital Toolkit*, available at [https://www.faa.gov/uas/media/FAA\\_drones\\_wildfires\\_toolkit.pdf](https://www.faa.gov/uas/media/FAA_drones_wildfires_toolkit.pdf) (last viewed February 3, 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 Feb. 4, 2021).

<sup>13</sup> FAA, Unmanned Aircraft Systems, *Airspace Restrictions*, July 16, 2020, available at [https://www.faa.gov/uas/where\\_to\\_fly/airspace\\_restrictions/](https://www.faa.gov/uas/where_to_fly/airspace_restrictions/) (last viewed February 7, 2021); see also FAA Drones and Wildfires Digital Toolkit, available at [https://www.faa.gov/uas/media/FAA\\_drones\\_wildfires\\_toolkit.pdf](https://www.faa.gov/uas/media/FAA_drones_wildfires_toolkit.pdf) (last viewed February 3, 2021).

### *Choice of 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 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.<sup>14</sup>

The legal framework for “public unmanned aircraft systems” consists primarily of one statute.<sup>15</sup> Under this statute, a governmental operator may seek a certificate of authorization or certificate of waiver from the FAA.<sup>16</sup> If granted, the operator may operate a drone weighing 4.4 pounds or less.<sup>17</sup> 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.<sup>18</sup>

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.<sup>19</sup> These regulations were recently substantially amended, and the amendments take effect in March.<sup>20</sup>

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.<sup>21</sup> However, the regulations pertaining to these flights vary somewhat, depending on the size of the craft.<sup>22</sup> Moreover, operating a drone in *sustained* flight over an open-air assembly of people remains subject to restrictions.<sup>23</sup> Under these restrictions, a drone must be equipped with individual identification as specified in rule and must continuously transmit specified information regarding its location.<sup>24</sup>

<sup>14</sup> 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](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.faa.gov/uas/public\\_safety\\_gov/files/gslac/library/documents/2020/Jan/233377/Public%20Safety%20PAO%20vs%20Part%20107%20Primer%20v2.1.pdf](https://www.faa.gov/uas/public_safety_gov/files/gslac/library/documents/2020/Jan/233377/Public%20Safety%20PAO%20vs%20Part%20107%20Primer%20v2.1.pdf). 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. 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.

<sup>15</sup> 49 U.S.C. s. 44806.

<sup>16</sup> See 49 U.S.C. s. 44806(a)(1).

<sup>17</sup> 49 U.S.C. s. 44806(b)(2)(C).

<sup>18</sup> *Id.*

<sup>19</sup> See 14 C.F.R. 107.

<sup>20</sup> FAA, *Operation of Small Unmanned Aircraft Systems Over People*, 86 FR 4314, available at <https://www.federalregister.gov/d/2020-28947/p-85>.

<sup>21</sup> *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.

<sup>22</sup> See 14 C.F.R. 107.110-165 (effective March 16, 2021), available at <https://www.ecfr.gov/cgi-bin/text-idx?SID=a70adf1ff1545784a28e989f2ddea94&mc=true&node=20210115y1.103>. These provisions set forth Categories 1 through 4, each with its own requirements.

<sup>23</sup> 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>.

<sup>24</sup> 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=a70adf1ff1545784a28e989f2ddea94&mc=true&node=pt14.2.89&rgn=div5>.

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.<sup>25</sup>

### ***The Fourth Amendment to the United States Constitution***

The Fourth Amendment prohibits an unreasonable search.<sup>26</sup> 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.<sup>27</sup> A search is unreasonable under the Fourth Amendment if it is conducted without a warrant or other constitutionally sufficient authorization, such as consent.<sup>28</sup>

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.<sup>29</sup> 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.<sup>30</sup> 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.

### **Florida Law**

#### ***Florida's Prohibition on Certain Drone Uses – Section 934.50, F.S.***

Section 934.50, F.S., is the “Freedom from Unwarranted Surveillance Act.” Subject to exceptions, it prohibits a law enforcement agency<sup>31</sup> from using a drone to gather information and prohibits private or governmental entities from using a drone to capture images in violation of a person's reasonable expectation of privacy. For the purposes of this statute, a real property owner, tenant, occupant, invitee, or licensee is presumed to have a reasonable expectation of

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<sup>25</sup> 14 C.F.R. 107.205.

<sup>26</sup> U.S. CONST. amend. IV

<sup>27</sup> *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).

<sup>28</sup> *See California v. Carney*, 471 U.S. 386, 390-91 (1985).

<sup>29</sup> *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).

<sup>30</sup> *Id.*

<sup>31</sup> A law enforcement agency is defined in s. 934.50(2)(d), 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.

privacy from drone surveillance<sup>32</sup> while on the property.<sup>33</sup> However, this presumption only applies while the person is “not observable by persons located at ground level in a place where they have a right to be.”<sup>34</sup>

Section 934.50, F.S., includes a list of ten exceptions to its ban on drone surveillance. These exceptions include specified uses by law enforcement, utilities, firefighters, businesses, and individuals. With regard to law enforcement, the statute does not prohibit drone use that is pursuant to a search warrant or when the agency has a reasonable suspicion that “swift action” is necessary to prevent the imminent loss of life, escape of a prisoner, or other specified circumstance.<sup>35</sup> Additionally, the statute provides that it does not prohibit drone use for aerial mapping, for specified purposes by a utility company, for the delivery of cargo, or for surveying of wildlife and vegetation by a non-law enforcement employee of the Florida Fish and Wildlife Commission.<sup>36</sup>

The Florida Sheriff’s Association indicates that 30 sheriff’s offices have drones.<sup>37</sup> Of the 133 police departments that responded to the question regarding whether their department has at least one drone, 59 said they have a drone and 23 responded that they plan to obtain a drone.<sup>38</sup>

Section 934.50, F.S. provides several remedies for victims of prohibited drone use.<sup>39</sup> In order to enforce the prohibition in s. 934.50, F.S., on the wrongful use of a drone by law enforcement, the statute provides that evidence collected in violation of the statute is inadmissible in court. Moreover, 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.<sup>40</sup> Additionally, a victim may recover compensatory damages against any person or entity that violates s. 934.50, F.S., and may be entitled to punitive damages.<sup>41</sup>

### ***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,

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<sup>32</sup> 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.

<sup>33</sup> Section 934.50(3)(b), F.S.

<sup>34</sup> *Id.*

<sup>35</sup> Section 934.50(4)(b) and (c), F.S. Section 934.50, F.S., also does not prohibit the use of a drone to counter a high risk of a terrorist attack if the Secretary of the U.S. Department of Homeland Security indicates that such a risk exists. Section 934.50(4)(a), F.S.

<sup>36</sup> See s. 934.50(4), F.S., for a complete list of the exceptions, including the specific circumstances required for each exception.

<sup>37</sup> E-mail from Florida Sheriff’s Association Deputy Executive Director of Operations dated January 8, 2021 (on file with the Senate Committee on Military and Veterans Affairs, Space, and Domestic Security).

<sup>38</sup> E-mail from Florida Police Chiefs Association Executive Director dated January 20, 2021 (on file with the Senate Committee on Military and Veterans Affairs, Space, and Domestic Security).

<sup>39</sup> See s. 934.50(5), F.S.

<sup>40</sup> Section 934.50(5)(a), F.S.

<sup>41</sup> See s. 934.50(5), F.S., for the complete list of remedies.

explosive, destructive device, or ammunition as defined in s. 790.001, F.S.<sup>42</sup> North Dakota is the only state that allows law enforcement agencies to use weaponized drones. The weapons used are limited to the non-lethal variety such as tear gas, rubber bullets, bean bags, pepper spray, and tasers.<sup>43</sup>

### 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.<sup>44</sup> 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.<sup>45</sup> 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.<sup>46</sup>

Drones can also be used by law enforcement to more efficiently do jobs such as searching for evidence.<sup>47</sup> For example, the San Bernardino Police Department used a drone to successfully search a large field for a gun thrown by a suspect who was being pursued.<sup>48</sup> 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.<sup>49</sup>

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<sup>42</sup> 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.

<sup>43</sup> North Dakota House Bill 1328 (2015), available at <https://www.legis.nd.gov/assembly/64-2015/documents/15-0259-05000.pdf?20150501154934> (last viewed February 3, 2021).

<sup>44</sup> *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 February 3, 2021).

<sup>45</sup> “Our 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 unmanned aircraft systems (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 February 3, 2021).

<sup>46</sup> 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](https://www.huffingtonpost.com/pro-journo/drones-add-a-new-dimensio_b_6033392.html) (last viewed February 3, 2021).

<sup>47</sup> Patti Blake and 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 viewed February 8, 2021).

<sup>48</sup> 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 viewed February 3, 2021).

<sup>49</sup> *Id.*

## 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.<sup>50</sup> 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.<sup>51</sup> 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.<sup>52</sup>

## 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.<sup>53</sup>

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.<sup>54</sup>

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<sup>50</sup> 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 February 3, 2021).

<sup>51</sup> *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 viewed February 3, 2021).

<sup>52</sup> *Id.*

<sup>53</sup> 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/fire-apparatus/fire-department-drones-serve-a-variety-of-needs-on-incident-scenes/#gref> (last viewed February 3, 2021).

<sup>54</sup> Wayne Schutsky, East Valley Tribune, *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 viewed February 3, 2021).

In Brevard County, Fire Rescue personnel have been trained to test for the FAA drone pilot certification<sup>55</sup> 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.<sup>56</sup>

### Other Governmental Uses 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 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.<sup>57</sup>

### III. Effect of Proposed Changes:

The bill provides additional exceptions to the statutory ban on certain uses of drones by law enforcement agencies, fire departments, state agencies, and political subdivisions of the state.

Currently, s. 934.50, F.S., prohibits a:

- Law enforcement agency from using a drone to gather evidence or other information.
- Person, or state or local entity, from using a drone to capture images of private property in violation of a person's reasonable expectation of privacy.

However, these prohibitions are subject to exceptions, and the bill adds to these exceptions. Specifically, under the bill, s. 943.50, F.S., no longer prohibits a law enforcement agency from using a drone to:

- Assist with traffic management, except that the agency may not issue a traffic citation based on images or video captured by a drone; and
- Facilitate evidence collection at a crime scene or traffic crash scene.

Moreover, the bill provides that s. 934.50, F.S., does not prohibit a state agency or political subdivision to use a drone to assess damage due to a natural disaster, or for the management of vegetation and wildlife management on public land or water. Finally, the bill provides that this

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<sup>55</sup> Federal Aviation Administration, *Become a Drone Pilot*, available at [https://www.faa.gov/uas/commercial\\_operators/become\\_a\\_drone\\_pilot/](https://www.faa.gov/uas/commercial_operators/become_a_drone_pilot/) (last viewed February 3, 2021).

<sup>56</sup> Rick Neale, Florida Today, *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 viewed February 3, 2021).

<sup>57</sup> Police1.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 viewed February 3, 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 viewed January 8, 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 viewed February 3, 2021).

section does not prohibit certified fire department personnel to use drones, as long as they use the drone to perform tasks within the scope and practice authorized under their certifications.

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 takes effect July 1, 2021.

#### **IV. Constitutional Issues:**

##### **A. Municipality/County Mandates Restrictions:**

The bill does not appear to require cities and counties to expend funds or limit their authority to raise revenue or receive state-shared revenues as specified by Article VII, Section 18 of the State Constitution.

##### **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.<sup>58</sup>

#### **Preemption**

The regulation of the national airspace and the aircraft that occupy it is a federal matter.<sup>59</sup> 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

<sup>58</sup> The Fourth Amendment to the U.S. Constitution protects persons from unreasonable searches and seizures by the government. U.S. Const. amend. IV.

<sup>59</sup> 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.”<sup>60</sup> 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”<sup>61</sup> 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 could lead to cost-savings by state and local governments. The bill provides additional exceptions to the statutory ban on drone use by police, firefighters, and others. Accordingly, these entities may be able to use drones, for instance, to more efficiently assess a crime scene or fire.

**VI. Technical Deficiencies:**

None.

**VII. Related Issues:**

None.

**VIII. Statutes Affected:**

This bill substantially amends section 934.50 and reenacts section 330.41 of the Florida Statutes.

**IX. Additional Information:**

A. Committee Substitute – Statement of Changes:

(Summarizing differences between the Committee Substitute and the prior version of the bill.)

**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.

<sup>60</sup> 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](https://www.faa.gov/uas/resources/policy_library/media/UAS_Fact_Sheet_Final.pdf) (last viewed February 3, 2021).

<sup>61</sup> *Id.*, citing *Skysign International, Inc. v. City and County of Honolulu*, 276 F.3d 1109, 1115 (9th Cir. 2002).

B. Amendments:

None.

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This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.

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