

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 832

INTRODUCER: Rules Committee; Criminal Justice Committee; and Senator Young

SUBJECT: Unmanned Devices

DATE: April 26, 2017

REVISED: _____

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	<u>Cellon</u>	<u>Hrdlicka</u>	<u>CJ</u>	<u>Fav/CS</u>
2.	<u>Price</u>	<u>Miller</u>	<u>TR</u>	<u>Favorable</u>
3.	<u>Wiehle</u>	<u>Caldwell</u>	<u>CU</u>	<u>Favorable</u>
4.	<u>Cellon</u>	<u>Phelps</u>	<u>RC</u>	<u>Fav/CS</u>

Please see Section IX. for Additional Information:

COMMITTEE SUBSTITUTE - Substantial Changes

I. Summary:

CS/CS/SB 832 establishes a regulatory framework for personal delivery devices (PDDs), creating definitions and approved operating parameters in ch. 316, F.S., the Florida Uniform Traffic Control Law.

The bill amends s. 316.008, F.S. to authorize PDD operation in the absence of a local prohibition and authorizes local governmental entities to regulate operation of PDDs within county or municipal jurisdictions under certain conditions.

PDDs are treated like pedestrians by the bill and are specifically excluded from the definition of motor vehicles and the attendant registration and insurance requirements in ch. 320, F.S. The bill also amends ss. 324.021(1) and 324.022(2)(a), F.S., to provide that PDDs are not motor vehicles for purposes of the Motor Vehicle Financial Responsibility Law.

The bill requires a person who owns and operates a PDD to maintain an insurance policy, on behalf of himself or herself and his or her agents, that provides general liability coverage of at least \$100,000 for damages arising from PDD operation.

The bill also creates the "Unmanned Aircraft Systems Act." It preempts local governments from regulating the operation of unmanned aircraft systems, but does allow them to enact or enforce

local ordinances relating to illegal acts arising from the use of unmanned aircraft systems if the ordinances are not specifically related to the use of a drone for commission of the illegal acts.

The bill protects critical infrastructure facilities, as defined in the bill, by prohibiting any person from knowingly or willfully:

- Operating a drone over a critical infrastructure facility, unless the drone is in transit for commercial purposes and is in compliance with Federal Aviation Administration regulations;
- Allowing a drone to make contact with a critical infrastructure facility, including any person or object on the premises of or within the facility; or
- Allowing a drone to come within a distance of a critical infrastructure facility that is close enough to interfere with the operations of or cause a disturbance to the facility.

The bill creates exemptions to this prohibition. A first violation of the prohibition is a second degree misdemeanor and a second or subsequent violation is a first degree misdemeanor.

Section 330.411, F.S., is created by the bill to prohibit a person to possess or use a weaponized drone.

The bill also amends s. 934.50, F.S., to authorize the use of a drone by a communications service provider or a contractor for a communications service provider for routing, siting, installation, maintenance, or inspection of facilities used to provide communications services.

The bill takes effect July 1, 2017.

II. Present Situation:

Personal Delivery Devices

Personal delivery devices (PDDs) are low mass, low speed devices traveling on sidewalks using mapping, navigation, and obstacle avoidance technology. These devices are equipped with cameras and sensors and are monitored by a remote operator. PDDs are designed to be a low cost, low-emissions method of delivery.¹ PDDs are being tested in various communities in the United States and Europe. Currently, Florida law does not contain any provisions regarding the operation of PDDs.

Chapter 316, F.S., is the Florida Uniform Traffic Control Law,² the purpose of which is to make uniform traffic laws apply throughout the state and its counties and uniform traffic ordinances apply in all municipalities.³ Section 316.008, F.S., provides the powers of local authorities relating to traffic regulation. Specifically, s. 316.008(7), F.S., authorizes a county or municipality to enact ordinances to permit, control, or regulate the operation of vehicles, golf carts, mopeds, motorized scooters, and electric personal assistive mobility devices on sidewalks or sidewalk areas when such use is permissible under federal law. The ordinance must restrict such vehicles or devices to a maximum speed of 15 miles per hour in such areas.

¹ See Starship Technologies website available at <https://www.starship.xyz/for-businesses/> (last visited April 25, 2017.)

² Section 316.001, F.S.

³ Section 316.002, F.S.

Chapter 320, F.S., relates to motor vehicle licenses. It provides motor vehicle registration requirements and requires certain documents for motor vehicle registration, including proof of certain automobile insurance.⁴ For purposes of ch. 320, F.S., the term “motor vehicle” means an automobile, motorcycle, truck, trailer, semitrailer, truck tractor and semitrailer combination, or any other vehicle operated on Florida roads, used to transport persons or property, and propelled by power other than muscular power. It does not include traction engines, road rollers, special mobile equipment,⁵ vehicles that run only upon a track, bicycles, swamp buggies, or mopeds.⁶

Chapter 324, F.S., which is the Financial Responsibility Law of 1955,⁷ addresses motor vehicle financial responsibility. Its purposes are to recognize the existing privilege to own or operate a motor vehicle on the public streets and highways of Florida when such vehicles are used with due consideration for others and their property, and to promote safety and provide financial security requirements for such owners or operators whose responsibility it is to recompense others for injury to a person or property caused by the operation of a motor vehicle. The operator of a motor vehicle involved in a crash or convicted of certain traffic offenses must respond for such damages and show proof of financial ability to respond for damages in future accidents as a requisite to his or her future exercise of such privileges.⁸

For purposes of ch. 324, F.S., the term “motor vehicle” means every self-propelled vehicle that is designed and required to be licensed for use upon a highway, including trailers and semitrailers designed for use with such vehicles, except traction engines, road rollers, farm tractors, power shovels, and well drillers, and every vehicle that is propelled by electric power obtained from overhead wires but not operated upon rails. It does not include a bicycle or moped. In addition, the term does not include any motor vehicle defined in s. 627.732(3), F.S., when the owner of such vehicle has complied with the requirements of ss. 627.730 - 627.7405, F.S., (Florida Motor Vehicle No Fault Law), unless the provisions of s. 324.051, F.S., apply, and in such case, the applicable proof of insurance provisions of s. 320.02, F.S., apply.⁹

Section 324.022(2)(a), F.S., also defines the term “motor vehicle” as it relates to financial responsibility for property damage. It provides that a motor vehicle is any self-propelled vehicle that has four or more wheels and that is of a type designed and required to be licensed for use on Florida highways, and any trailer or semitrailer designed for use with such vehicle. It does not include a mobile home; a motor vehicle that is used in mass transit and designed to transport more than five passengers, exclusive of the operator of the motor vehicle, and that is owned by a municipality, transit authority, or political subdivision of the state; a school bus; or a vehicle providing for-hire transportation that is subject to the provisions of s. 324.031, F.S.

⁴ Section 320.02, F.S.

⁵ Section 316.003(71), F.S., defines the term “special mobile equipment” to mean any vehicle not designed or used primarily for the transportation of persons or property and only incidentally operated or moved over a highway, including, but not limited to, ditchdigging apparatus, well-boring apparatus, and road construction and maintenance machinery, such as asphalt spreaders, bituminous mixers, bucket loaders, tractors other than truck tractors, ditchers, leveling graders, finishing machines, motor graders, road rollers, scarifiers, earthmoving carryalls and scrapers, power shovels and draglines, and self-propelled cranes and earthmoving equipment. It does not include house trailers, dump trucks, truck-mounted transit mixers, cranes or shovels, or other vehicles designed for the transportation of persons or property to which machinery has been attached.

⁶ Section 320.01(1)(a), F.S.

⁷ Section 324.251, F.S.

⁸ Section 324.011, F.S.

⁹ Section 324.021(1), F.S.

Drones

Drones typically range in size from wingspans of 6 inches to 246 feet and can weigh from approximately 4 ounces to over 25,600 pounds.¹⁰ They may be controlled manually or through an autopilot which uses a data link to connect the drone's pilot to the drone.¹¹ Other terms for "drones" are Unmanned Aerial Systems (UAS) and Unmanned Aerial Vehicles (UAV).

Examples of non-military uses for drones include earthquake damage assessment at Japan's Fukushima power plant, volcano activity assessment of Mount St. Helens in Washington for the U.S. Geological Survey, and surveying wildfires in Texas.¹² The University of Florida's Unmanned Aerial Systems Research Group has developed an 11-pound drone having a 9-foot wingspan called "Nova 2.1" which it says can be used to safely and accurately gather data that will be helpful to wildlife biologists and many others.¹³

The drone industry is motivated to move into more civilian markets.¹⁴ It also appears that civilian markets are ready to adopt the drone industry. According to the Consumer Electronics Association, drone shipments will increase from 250,000 units in 2014 to nearly a million in 2018.¹⁵

Congress authorized the FAA to regulate the areas of airspace use, management and efficiency, air traffic control, safety, navigational facilities, and aircraft noise at its source.¹⁶ In February of 2012, Congress passed the FAA Modernization and Reform Act of 2012, which required the FAA to safely open the nation's airspace to drones by September 2015.¹⁷ The FAA authorized the testing of UAS at six sites around the country as part of its efforts to safely open airspaces.¹⁸ Many companies and individuals have applied for approval by the FAA to operate UAS in national airspace. These included airworthiness certificates to film for motion pictures, precision agriculture, and real estate, and to inspect distribution towers, wiring, and infrastructure. Over 5,000 such grants of operation had been approved before the end of 2016, including to

¹⁰ 14 CFR Part 91, Docket No. FAA-2006-25714, 72 FR 6689, Department of Transportation, Federal Aviation Administration, *Unmanned Aircraft Operations in the National Airspace System*, February 13, 2007.

¹¹ *Id.*

¹² James Chiles, *Drones for Hire*, Air & Space Smithsonian, January 2013, <http://www.airspacemag.com/flight-today/drones-for-hire-125909361/?all>, (last visited March 17, 2017).

¹³ James Dean, *Florida Hopes to Fill Its Skies with Unmanned Aircraft*, Florida Today, June 23, 2012, <http://usatoday30.usatoday.com/news/nation/story/2012-06-23/increased-drone-use-privacy-concerns/55783066/1>, (last visited March 17, 2017). Mickie Anderson, *UF Team's Work Pays Off With Unmanned-flight System that Captures Valuable Data*, Phys Org, October 20, 2010, <http://phys.org/news/2010-10-uf-team-unmanned-flight-captures-valuable.html>. (last visited March 17, 2017).

¹⁴ James Chiles, *Drones for Hire*, Air & Space Smithsonian, January 2013, <http://www.airspacemag.com/flight-today/drones-for-hire-125909361/?all>, (last visited March 17, 2017).

¹⁵ Larry Downes, *What's Wrong with the FAA's New Drone Rules*, Harvard Business News, March 2, 2015.

¹⁶ 49 U.S.C. ss. 40103, 44502, and 44701-44735.

¹⁷ Public Law 112-95, February 14, 2012, The FAA Modernization and Reform Act of 2012; Richard Thompson, *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 17, 2017).

¹⁸ Federal Aviation Administration, *Fact Sheet – FAA UAS Test Site Program*, December 30, 2013, available at https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=15575 (last visited March 17, 2017).

companies such as Amazon Logistics, Inc., and Alphabet, Inc. (Google).¹⁹ Amazon is working on a package delivery system called “Prime Air.”²⁰ Alphabet’s Project Wing has been testing delivery of food and other perishables.²¹

In June of 2016, the FAA adopted rules for the operation of small UAS.²² Small UAS²³ must be operated in accordance with the following limitations:

- Cannot be flown faster than a groundspeed of 87 knots (100 miles per hour);
- Cannot be flown higher than 400 feet above ground level, unless flown within a 400-foot radius of a structure and does not fly higher than 400 feet above the structure’s immediate uppermost limit;
- Minimum visibility, as observed from the location of the control station, may not be less than 3 statute miles; and
- Minimum distance from clouds may be no less than 500 feet below a cloud and no less than 2000 feet horizontally from the cloud.²⁴

The sole current Florida Statute on drones, s. 934.50, F.S., relates primarily to use by law enforcement.²⁵ The statute defines a drone 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. The statute prohibits a person using a drone to record an image of either privately owned real property or a person lawfully on such property with the intent to thereby obtain information about the property or person, in violation of such person’s reasonable expectation of privacy, and without his or her written consent. The statute exempts from this prohibition the following uses of drones:

- Use by a person or an entity engaged in a business or profession licensed by the state only to perform reasonable tasks within the scope of practice or activities permitted under such person’s or entity’s license;
- Use by a property appraiser solely for the purpose of assessing property for ad valorem taxation;

¹⁹ Federal Aviation Administration, *It’s (a) Grand! FAA Passes 1,000 UAS Section 333 Exemptions*, August 4, 2015, available at <https://www.faa.gov/news/updates/?newsId=83395> (last visited March 17, 2017); *Section 333*, as of September 28, 2016, available at https://www.faa.gov/uas/beyond_the_basics/section_333/ (last visited March 17, 2017); *Amazon Gets Experimental Airworthiness Certificate*, March 19, 2015, available at <https://www.faa.gov/news/updates/?newsId=82225> (last visited March 17, 2017). Additionally, realtors and real estate-related drone operators in Texas, California, and Pennsylvania have been issued testing certificates by the FAA. Matt Carter, *FAA approves more real estate drone flights, but there’s a catch*, March 9, 2015, available at <http://www.inman.com/2015/03/09/faa-approves-more-real-estate-drone-flights> (last visited March 17, 2017).

²⁰ Matt McFarland, *Amazon’s delivery drones may drop packages via parachute*, CNN Tech, February 14, 2017, available at <http://money.cnn.com/2017/02/14/technology/amazon-drone-patent/>, (last visited March 17, 2017).

²¹ Mark Bergen, *Alphabet Taps Breaks on Drone Project, Nixes Starbucks Partnership*, Bloomberg Technology, November 8, 2016, available at <https://www.bloomberg.com/news/articles/2016-11-08/alphabet-taps-brakes-on-drone-project-nixing-starbucks-partnership> (last visited March 17, 2017).

²² Title 14 CFR Part 107, Small Unmanned Aircraft Systems.

²³ *Id.*, Drones weighing less than 55 pounds.

²⁴ U.S. Department of Transportation, Federal Aviation Administration, Advisory Circular No. 107-2, June 21, 2016, pages 5-8 and 5-9.

²⁵ Section 934.50, F.S.

- Use to capture images by or for an electric, water, or natural gas utility: for operations, maintenance, and inspection of utility facilities including facilities used in the generation, transmission, or distribution of electricity, gas, or water, for the purpose of maintaining utility system reliability and integrity; for assessing vegetation growth for the purpose of maintaining clearances on utility rights-of-way; for utility routing, siting, and permitting for the purpose of constructing utility facilities or providing utility service; or for conducting environmental monitoring, as provided by federal, state, or local law, rule, or permit;
- Use for aerial mapping if the person or entity using a drone for this purpose is operating in compliance with Federal Aviation Administration regulations;
- Use to deliver cargo, if the person or entity using a drone for this purpose is operating in compliance with Federal Aviation Administration regulations; and
- Use to capture images necessary for the safe operation or navigation of a drone that is being used for a purpose allowed under federal or Florida law.²⁶

III. Effect of Proposed Changes:

Personal Delivery Devices

For purposes of the Florida Uniform Traffic Control Law, the bill defines the term “personal delivery devices” and “personal delivery device operator.” (Section 1, amending s. 316.003, F.S.). A personal delivery device is an electronically powered device that:

- Is operated on sidewalks and crosswalks and intended primarily to transport property;
- Weighs less than 80 pounds, excluding cargo;
- Has a maximum speed of 10 miles per hour; and
- Is equipped with technology to allow for operation of the device with or without the active control or monitoring of a natural person.

The bill provides that a PDD is not considered to be a vehicle unless expressly defined by law as such.

A personal delivery device operator is an entity or its agent²⁷ that exercises direct physical control or monitoring of the navigation system and operation of a PDD. A PDD operator is not an entity or person who requests the services of a PDD for the purpose of transporting property or an entity or person who only arranges for and dispatches the requested services of a PDD.

The bill creates s. 316.008(7)(b), F.S., (Section 2), to provide that a PDD may be operated on sidewalks and crosswalks within a county or municipality when such use is permissible under federal law. This does not restrict a county or municipality from otherwise adopting regulations for the safe operation of PDDs. It prohibits the use of PDDs on the Florida Shared-Use Nonmotorized Trail Network (SunTrail)²⁸ or components of the Florida Greenways and Trails System.²⁹

²⁶ Section 934.50(4)(d), (e), (f), and (h), F.S.

²⁷ The term “agent” means a person charged by the entity with the responsibility for navigating and operating the personal delivery device.

²⁸ SunTrail is created in s. 339.81, F.S.

²⁹ The Florida Greenways and Trails System is created in ch. 260, F.S.

The bill creates s. 316.2071, F.S., (Section 3), relating to PDDs. It provides that, notwithstanding any other law, a PDD may operate on sidewalks and crosswalks subject to s. 316.008(7)(b), F.S., (created in Section 2). PDDs operating on sidewalks and crosswalks have all the rights and duties applicable to a pedestrian under the same circumstances, except that PDDs must not unreasonably interfere with pedestrians or traffic and must yield the right-of-way to pedestrians on sidewalks and crosswalks.

The bill requires PDDs to obey all official traffic and pedestrian control signals and devices; include a plate or marker identifying the name and contact information of the PDD operator and a unique identifying number; and be equipped with a braking system that, when active or engaged, enables the PDD to come to a controlled stop. A PDD may not operate on a public highway, except to the extent necessary to cross a crosswalk; operate on a sidewalk or crosswalk unless the PDD operator is actively controlling or monitoring the navigation and operation of the PDD; or transport hazardous materials.³⁰

The bill requires a person who owns and operates a PDD to maintain an insurance policy, on behalf of himself or herself and his or her agents, that provides general liability coverage of at least \$100,000 for damages arising from the combined operations of PDDs under the entity's or agent's control.

The bill amends s. 320.01(1)(a), F.S., (Section 4), to provide that PDDs are not motor vehicles for purposes of motor vehicle licensing. It also creates s. 320.02(19), F.S., (Section 5), to provide that PDDs are not required to satisfy the motor vehicle registration and insurance requirements of s. 320.02, F.S. The bill amends ss. 324.021(1) and 324.022(2)(a), F.S., (Sections 5 and 6), to provide that PDDs are not motor vehicles for purposes of the Motor Vehicle Financial Responsibility Law.

The bill also makes conforming changes to ss. 316.2128, 316.545, 316.613, and 655.960, F.S., (Sections 11-14).

Drones

Regulation

The bill creates the "Unmanned Aircraft Systems Act." It preempts regulation of the operation of unmanned aircraft systems³¹ to the state except as provided in federal regulations, authorizations, or exemptions.

The bill does allow a local government to enact or enforce local ordinances relating to nuisances, voyeurism, harassment, reckless endangerment, property damage, or other illegal acts arising

³⁰ Section 316.003(28), F.S., defines "hazardous material" as any substance or material which has been determined by the secretary of the United States Department of Transportation to be capable of imposing an unreasonable risk to health, safety, and property. This term includes hazardous waste as defined in s. 403.703(13), F.S.

³¹ "Unmanned aircraft system" means 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. "Drone" has the same meaning as s. 934.50(2), F.S., which is, 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.

from the use of unmanned aircraft systems if such laws or ordinances are not specifically related to the use of an unmanned aircraft system for those illegal acts.

It prohibits a political subdivision from enacting or enforcing an ordinance or resolution relating to the design, manufacture, testing, maintenance, licensing, registration, certification, or operation of an unmanned aircraft system, including airspace, altitude, flight paths, equipment or technology requirements; the purpose of operations; and pilot, operator, or observer qualifications, training, and certification.

The bill requires any person or governmental entity seeking to restrict or limit the operation of drones in close proximity to infrastructure or facilities that the person or governmental entity owns or operates to apply to the Federal Aviation Administration for such designation pursuant to section 2209 of the FAA Extension, Safety, and Security Act of 2016.³²

Protection

The bill protects critical infrastructure facilities³³ by prohibiting any person from knowingly or willfully:

- Operating a drone over a critical infrastructure facility;
- Allowing a drone to make contact with a critical infrastructure facility, including any person or object on the premises of or within the facility; or
- Allowing a drone to come within a distance of a critical infrastructure facility that is close enough to interfere with the operations of or cause a disturbance to the facility.

A first violation of this prohibition is a second degree misdemeanor and a second or subsequent is a first degree misdemeanor.

³² Public Law 114-190, Section 2209(b)(1)(C) (Applications for Designation); 49 USC 40101 (UAS Safety, Sec. 2209). This section provides for designation of “fixed site facilities.” Only the following can be so designated: critical infrastructure, such as energy production, transmission, and distribution facilities and equipment; oil refineries and chemical facilities; amusement parks; and other locations that warrant such restrictions. In determining whether to grant an application for designation, the FAA administrator may consider aviation safety, protection of persons and property on the ground, national security, or homeland security. In an affirmative designation, the FAA will outline the boundaries for UAS operation near the fixed site facility and such other limitations that the FAA administrator determines may be appropriate.

³³ “Critical infrastructure facility” means any of the following, *if* completely enclosed by a fence or other physical barrier that is obviously designed to exclude intruders, *or if* clearly marked with a sign or signs which indicate that entry is forbidden and which are posted on the property in a manner reasonably likely to come to the attention of intruders:

- An electrical power generation or transmission facility, substation, switching station, or electrical control center.
- A chemical or rubber manufacturing or storage facility.
- A mining facility.
- A natural gas or compressed gas compressor station, storage facility, or natural gas or compressed gas pipeline.
- A liquid natural gas or propane gas terminal or storage facility with a capacity of 4,000 gallons or more.
- Any portion of an aboveground oil or gas pipeline.
- A wireless communications facility, including tower, antennae, support structures, and all associated ground-based equipment.

The prohibition does not apply to prohibited actions which are committed by:

- A federal, state, or other governmental entity, or a person under contract or otherwise acting under the direction of a federal, state, or other governmental entity;
- A law enforcement agency that is in compliance with s. 934.50, F.S., or a person under contract with or otherwise acting under the direction of such law enforcement agency; or
- An owner, operator, or occupant of the critical infrastructure facility, or a person who has prior written consent of such owner, operator, or occupant.

Additionally, the prohibition against operating a drone over a critical infrastructure facility does not apply to a drone operating in transit for commercial purposes in compliance with Federal Aviation Administration regulations, authorizations, or exemptions.

The part of the bill addressing protection of critical infrastructure facilities sunsets 60 days after the FAA's process for seeking a designation as a fixed site facility becomes effective.³⁴

Construction

The bill is to be construed in accordance with standards imposed by federal statutes, regulations, and Federal Aviation Administration guidance on unmanned aircraft systems.

Prohibitions

The bill creates s. 330.411, F.S., (Section 9), prohibiting a person to use or possess a drone with an attached weapon, firearm, explosive, destructive device, or ammunition.

The bill also amends s. 934.50, F.S., (Section 10), to authorize the use of a drone by a communications service provider or a contractor for a communications service provider for routing, siting, installation, maintenance, or inspection of facilities used to provide communications services.

Effective Date

The bill takes effect July 1, 2017 (Section 15).

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

³⁴ Id. at footnote 32.

V. Fiscal Impact Statement:**A. Tax/Fee Issues:**

None.

B. Private Sector Impact:

None.

C. Government Sector Impact:

None.

VI. Technical Deficiencies:

None.

VII. Related Issues:

The bill protects listed critical infrastructure facility but only if the infrastructure is either: completely enclosed by a fence or other physical barrier obviously designed to exclude intruders; or clearly marked with a sign which indicates that entry is forbidden and which is posted on the property in a manner reasonably likely to come to the attention of intruders. This provision raises two problems. First, the signage requirements to meet a standard of “reasonably likely to come to the attention of intruders” are far more difficult to determine and to comply with for drone operators than for ground level intruders. The fact that some drones will not be equipped with cameras or other imaging devices compounds the problem. Second, some types of facilities, such as an electrical transmission line, may be difficult or impossible to fence or adequately post.

Local governments that have adopted local ordinances regulating the use of drones that conflict with the provisions of the bill will need to repeal or amend their ordinances. Examples of local ordinances include:

- Defuniak Springs adopted an ordinance that requires commercial users of drones to register with the Defuniak Springs Police Department and to notify the Department at least 4 hours prior to each commercial use, with second degree misdemeanor penalties for a violation.³⁵
- The Town of Palm Beach requires a permit, permit fee, \$1 million of liability insurance, and approval of the Director of Public Safety to operate a drone.³⁶

VIII. Statutes Affected:

The bill substantially amends the following sections of the Florida Statutes: 316.003, 316.008, 316.2128, 316.545, 316.613, 320.01, 320.02, 324.021, 324.022, 655.960, and 934.50.

The bill creates the following sections of the Florida Statutes: 316.2071, 330.41, and 330.411.

³⁵ Section 22-52, Defuniak Springs, Florida City Code (Ord. No. 866, May 23, 2016).

³⁶ Chapter 14, Article II, Section 14-35, Town of Palm Beach, Florida Code (Ord. No. 08-2016, June 14, 2016).

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 April 25, 2017:

The CS:

- Adds provisions related to the definition, status, and operation of personal delivery devices in Sections 1-7 of the bill, and makes conforming changes in Sections 11-14;
- Amends Section 8 to include a chemical or rubber manufacturing or storage facility, mining facility, compressed gas compressor station, compressed gas pipeline, and bulk propane gas storage facility to the list of critical infrastructure facilities;
- Amends Section 8 to create a sunset provision related to the protection of critical infrastructure and the effective date of the FAA designation process for such infrastructure; and
- Creates s. 330.411, F.S., in Section 9 prohibiting the possession or use of weaponized drones.

CS by Criminal Justice on March 21, 2017:

The CS:

- Deleted the definition of “person” used in the bill;
- Eliminated the provision wherein the state would preempt authority from local governments over unmanned aircraft systems (UAS) ownership;
- Recognized the federal government’s authority to regulate the “airspace” by including a reference to federal regulations, authorizations, or exemptions;
- Added an exception to the bill to allow for drones operating in transit for commercial purposes in compliance with federal requirements to operate a drone over a “critical infrastructure facility,” as defined in the bill; and
- Made technical changes.

- B. **Amendments:**

None.