

**HOUSE OF REPRESENTATIVES
FINAL BILL ANALYSIS**

BILL #:	CS/HB 1027	FINAL HOUSE FLOOR ACTION:		
SUBJECT/SHORT TITLE	Unmanned Devices	115	Y's 0	N's
SPONSOR(S):	Transportation & Infrastructure Subcommittee; Yarborough and others	GOVERNOR'S ACTION:		Approved
COMPANION BILLS:	CS/CS/SB 832			

SUMMARY ANALYSIS

CS/HB 1027 passed the House on April 20, 2017. The bill was amended in the Senate on May 5, 2017, and was returned to the House. The House concurred with the Senate amendment and passed the bill as amended on May 5, 2017. The bill includes SB 460 and CS/HB 601.

The bill provides statutory requirements governing personal delivery devices (PDDs) and unmanned aircraft systems.

The bill provides that PDDs are not motor vehicles and provides minimum operating requirements for PDDs, including identification, brake, operator, and insurance requirements. The bill authorizes, subject to local government regulation, the operation of PDDs on sidewalks, but prohibits them on certain state-owned trails.

The bill creates the Unmanned Aircraft Systems Act vesting in the state the authority to regulate the ownership or operation of unmanned aircraft systems, commonly known as drones. The bill prohibits political subdivisions from enacting or enforcing ordinances or regulations relating to the use of unmanned aircraft systems; however, they may enact ordinances regarding illegal acts arising from the use of unmanned aircraft systems if the ordinances are not specific to unmanned aircraft systems. The bill stipulates that entities seeking to restrict or limit the operation of a drone must apply to the Federal Aviation Administration (FAA) for such designation, and that the regulation of unmanned aircraft must be construed in accordance with federal statutes, regulations, and guidance issued through the FAA. The bill provides that the Unmanned Aircraft Systems Act sunsets 60 days after the date a process pursuant to the FAA Extension Safety and Security Act of 2016 becomes effective.

The bill is not expected to have a fiscal impact on state or local government.

The bill was approved by the Governor on June 23, 2017, ch. 2017-150, L.O.F., and will become effective on July 1, 2017.

I. SUBSTANTIVE INFORMATION

A. EFFECT OF CHANGES:

Personal Delivery Devices

Current 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 currently being tested in various communities in the United States and Europe. At least one other state, Virginia, has enacted legislation authorizing the use of PDDs on its sidewalks.

Currently, Florida law does not contain any provisions regarding the operation of PDDs.

Florida Traffic and Motor Vehicle Laws

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 to 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.

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 chapter 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 insurance requirements. Its purpose is 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 person or property caused by the operation of a motor vehicle. It provides that the operator of a motor

¹ Starship Technologies Frequently Asked Questions (On file with Transportation & Infrastructure Subcommittee).

² Section 316.001, F.S.

³ Section 316.002, 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.

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 chapter 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 may not include any motor vehicle as 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., inclusive, 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.

Proposed Changes

For purposes of the Florida Uniform Traffic Control Law, the bill defines “personal delivery devices” and “personal delivery device operator.” 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.

A PDD is not considered a vehicle unless expressly defined by law as such.

A personal delivery device operator is an entity or its agent¹⁰ 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 amends s. 316.008(7), F.S., providing 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)¹¹ or components of the Florida Greenways and Trails System.¹²

The bill creates s. 316.2071, F.S., relating to PDDs. It provides that notwithstanding any provision of law to the contrary, a PDD may operate on sidewalks and crosswalks subject to s. 316.008(7)(b), F.S. PDDs operating on sidewalks and crosswalks have all the rights and duties applicable to a pedestrian

⁸ Section 324.011, F.S.

⁹ Section 324.021(1), F.S.

¹⁰ The term “agent” means a person charged by the entity with the responsibility for navigating and operating the personal delivery device.

¹¹ SunTrail is created in s. 339.81, F.S.

¹² The Florida Greenways and Trails System is created in Ch. 260, F.S.

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.¹³

The bill requires PDD operators to maintain an insurance policy, on behalf of itself and its 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), F.S., providing that PDDs are not motor vehicles for purposes of motor vehicle licensing, and creates s. 320.02(19), F.S., providing 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., providing that PDDs are not motor vehicles for purposes of the Motor Vehicle Financial Responsibility Law.

Unmanned Aircraft

Current Situation

Federal Regulation

Congress has vested the Federal Aviation Administration (FAA) with the authority to regulate airspace use, management and efficiency, safety, navigational facilities, and aircraft noise. In the FAA Modernization and Reform Act of 2012,¹⁴ Congress directed the Secretary of the United States Department of Transportation (USDOT) to determine whether unmanned aircraft systems (UAS) operations posing the least amount of public risk and no threat to national security should be safely operated in the national airspace system and if so, to establish safety requirements for operating UAS in the national airspace system. The FAA has issued rules regarding small unmanned aircraft, including requirements that such aircraft have a maximum weight of 55 pounds, the operator must be able to see the aircraft, and limiting flying at a maximum height of 400 feet above ground level.¹⁵

Consistent with its statutory authority, the FAA requires Federal registration of a UAS in order for it to operate. Additionally, state and local governments may not impose any additional registration requirements for operating a UAS without first obtaining FAA approval.

The FAA has expressed concerns relative to state and local government attempts to regulate the operation of flight or aircraft. According to the FAA, these efforts raise substantial safety issues, potentially fractionalizing control of the navigable airspace.¹⁶

State Regulation

Section 330.27, F.S., defines "aircraft" as a powered or unpowered machine or device capable of atmospheric flight, except a parachute or other such device used primarily as safety equipment.

¹³ 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)."

¹⁴ Pub. L. 112-95

¹⁵ FAA Summary of Small Unmanned Aircraft Rule, June 21, 2016. (Copy on File with Transportation & Infrastructure Subcommittee).

¹⁶ State and Local Regulation of Unmanned Aircraft Systems Fact Sheet-Federal Aviation Administration, Office of the Chief Counsel, December 17, 2015. (Copy on file with Transportation & Infrastructure Subcommittee.)

Section 934.50, F.S., is the “Freedom from Unwarranted Surveillance Act.” This law prohibits law enforcement agencies from using a drone to gather evidence or other information. Additionally, a person, state agency, or political subdivision is prohibited from using a drone equipped with an imaging device to record an image of privately owned real property or of the owner, tenant, occupant, invitee, or licensee of such property with the intent to conduct surveillance on the individual or property captured in the image in violation of such person's reasonable expectation of privacy without his or her written consent.

Section 934.50, F.S., does not prohibit the use of a drone:

- To counter a high risk of a terrorist attack by a specific individual or organization if the U.S. Secretary of Homeland Security determines that credible intelligence indicates that there is such a risk.
- If the law enforcement agency first obtains a search warrant signed by a judge authorizing the use of a drone.
- If the law enforcement agency possesses reasonable suspicion that, under particular circumstances, swift action is needed 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.
- By a person or an entity engaged in a business or profession licensed by the state, or by an agent, employee, or contractor thereof, if the drone is used only to perform reasonable tasks within the scope of practice or activities permitted under such person's or entity's license. However, this exception does not apply to a profession in which the licensee's authorized scope of practice includes obtaining information about the identity, habits, conduct, movements, whereabouts, affiliations, associations, transactions, reputation, or character of any society, person, or group of persons.
- By an employee or a contractor of a property appraiser who uses a drone solely for the purpose of assessing property for ad valorem taxation.
- To capture images by or for an electric, water, or natural gas utility for certain purposes.
- For aerial mapping, if the person or entity using a drone for this purpose is operating in compliance with FAA regulations.
- To deliver cargo, if the person or entity using a drone for this purpose is operating in compliance with FAA regulations.
- 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.

Section 934.50(2)(a), F.S., defines the term “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.

Proposed Changes

The bill creates s. 330.41, F.S., creating the Unmanned Aircraft Systems Act.

Definitions

The bill defines “critical infrastructure facility” as 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 that indicate that entry is forbidden and that 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 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; or
- A wireless communications facility, including the tower, antennae, support structures, and all associated ground-based equipment.

The bill provides that “drone” has the same meaning as in s. 934.50(2), F.S.,¹⁷ and defines the term “unmanned aircraft system” to mean a drone and 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.

Regulation

The bill provides that the authority to regulate the ownership or operation of unmanned aircraft systems is vested in the state.

Except as otherwise expressly provided, a political subdivision may not enact or enforce 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; purpose of operations; and pilot, operator, or observer qualifications, training, and certification. The bill does not limit local government authority to enact or enforce local ordinances relating to nuisances, voyeurism, harassment, reckless endangerment, property damage, or other illegal acts arising from the use of unmanned aircraft systems if such ordinances are not specifically related to the use of an unmanned aircraft system for those illegal acts.

The bill requires a person seeking to restrict or limit the operation of unmanned aircraft in close proximity to infrastructure or facilities the person owns or operates to apply to the FAA for such designation pursuant to section 2209 of the FAA Extension, Safety, and Security Act of 2016.

Protection of Critical Infrastructure Facilities

The bill creates s. 330.41(4), F.S., providing that a person may not knowingly or willfully:

- Operate a drone over a critical infrastructure facility;
- Allow a drone to make contact with a critical infrastructure facility, including any person or object on the premises of or within the facility; or
- Allow 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 person who violates the above provisions commits a misdemeanor of the second degree, punishable by up to 60 days imprisonment¹⁸ or a fine of up to \$500.¹⁹ A person who commits a second or subsequent violation commits a misdemeanor of the first degree, punishable by up to one year imprisonment²⁰ or a fine of up to \$1,000.²¹

Section 330.41(4), F.S., does not apply to actions described above that are committed by:

- A federal, state, or other governmental entity or a person under contract with or otherwise acting under the direction of such entity.
- A law enforcement agency that is in compliance with s. 934.50, F.S.,²² or a person under contract with or otherwise acting under the direction of such law enforcement agency.

¹⁷ Section 934.50(2), F.S., defines “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.

¹⁸ Section 775.082, F.S.

¹⁹ Section 775.083, F.S.

²⁰ Section 775.082, F.S.

²¹ Section 775.083, F.S.

²² Section 934.50, F.S., relates to searches and seizure using a drone.

- An owner, operator, or occupant of the critical infrastructure facility or a person who has prior written consent of such owner, operator, or occupant.

The prohibition on the operation of a drone over critical infrastructure facilities does not apply to a drone operating in transit for commercial purposes in compliance with FAA regulations, authorization, or exception.

Section 330.41(4), F.S., sunsets 60 days after the date that a process created pursuant to Section 2209 of the FAA Extension, Safety, and Security Act of 2016 becomes effective.

The bill provides that s. 330.41, F.S., must be construed in accordance with the standards imposed by federal statutes, regulations, and FAA guidance on unmanned aircraft systems.

Prohibited Possession or Operation of Unmanned Aircraft

The bill creates s. 330.411, F.S., prohibiting a person from possessing or operating an unmanned aircraft or unmanned aircraft system with an attached weapon, firearm, explosive, destructive device, or ammunition.

Search and Seizure Using a Drone

The bill creates s. 934.50(4)(g), F.S., providing an additional exception regarding the prohibition against using drones for surveillance. The bill allows a communications services provider or its contractor to use drones for routing, siting, installing, maintaining, or inspecting facilities used to provide communications services.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

None.

2. Expenditures:

None.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

None.

2. Expenditures:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

Private businesses may see a reduction in delivery costs associated with the use of personal delivery devices.

Vesting the regulation of unmanned aircraft in the state will alleviate any patchwork regulation of unmanned aircraft that currently exists and may promote the use of unmanned aircraft. Violating the provision regarding operating unmanned aircraft around critical infrastructure facilities subjects one to possible criminal penalties.

The bill also authorizes communications service providers or their contractors to use unmanned aircraft for routing, siting, installing, maintaining, or inspecting certain facilities.

D. FISCAL COMMENTS:

None.