

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/CS/HB 1071 Drone Delivery Services

SPONSOR(S): Local Administration, Federal Affairs & Special Districts Subcommittee, Transportation & Modals Subcommittee, Duggan, Fernandez-Barquin and others

TIED BILLS: **IDEN./SIM. BILLS:** SB 1068

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Transportation & Modals Subcommittee	13 Y, 3 N, As CS	Lewis	Hinshelwood
2) Local Administration, Federal Affairs & Special Districts Subcommittee	15 Y, 0 N, As CS	Roy	Darden
3) Infrastructure Strategies Committee			

SUMMARY ANALYSIS

A drone 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.

Within the Unmanned Aircraft Systems Act, the bill:

- Defines “drone delivery service” as a person or entity engaged in a business or profession of delivering goods via drone and who is governed by Title 14 of the Code of Federal Regulations.
- Defines “drone port” as a stand-alone building that does not exceed 1,500 square feet in area or 36 feet in height; is located in a nonresidential area; is used, or intended for use, by a drone delivery service for the storage, launch, landing and observation of drones; was constructed using Type I or Type II construction as described in the Florida Building Code; and includes at least one stairwell compliant with the Florida Building Code.
- Prohibits a political subdivision from withholding the issuance of a business tax receipt to a drone delivery service or enacting or enforcing an ordinance or resolution that prohibits a drone delivery service’s operation based on the location of its drone port.

The bill exempts drone ports from the Florida Building Code and provisions of the Florida Fire Prevention Code concerning fire protection systems.

The bill has an indeterminate fiscal impact on local governments and the private sector.

The bill has an effective date of July 1, 2023.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Background

Drones

Under Florida law, a drone 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.¹

The full system comprised of a drone and its associated elements, including communication links and the components that control the drone which are required for safe and efficient operation, is called an unmanned aircraft system (UAS).²

Federal Drone Regulation

The Federal Aviation Administration (FAA) regulates the use of navigable airspace to ensure the safety of aircraft and the efficient use of airspace.³ Part 107 of Title 14 of the Code of Federal Regulations, known as the Small UAS Rule, allows many types of UAS operations. A pilot in control of a small UAS⁴ must comply with all of the following operating limitations when operating a small UAS:

- The groundspeed of the small unmanned aircraft may not exceed 87 knots (100 miles per hour);
- The altitude of the small unmanned aircraft cannot be higher than 400 feet above ground level, unless the small unmanned aircraft is flown within a 400-foot radius of a structure;
- The minimum flight visibility, as observed from the location of the control station must be no less than 3 statute miles and must be seen at all times during the flight without any device other than corrective lenses;
- The minimum distance of the small unmanned aircraft from clouds must be no less than 500 feet below the cloud and 2,000 feet horizontally from the cloud.⁵

A remote pilot in command, owner, or person manipulating the flight controls of a small UAS must physically possess a remote pilot certificate⁶ with a small UAS rating and identification when operating a small UAS.⁷ Anyone flying pursuant to the small UAS regulations has to register each drone they intend to operate with the FAA prior to operation.⁸

Related to package delivery operations, the small UAS regulations prohibit the carriage or transportation of dangerous goods at all times and is not subject to a waiver.⁹

¹ S. 934.50(2)(a), F.S.

² S. 330.41(2)(c), F.S.

³ 49 U.S.C. § 40103.

⁴ 14 C.F.R. § 107.3 defines a “small unmanned aircraft” as an unmanned aircraft weighing less than 55 pounds on takeoff, including everything that is on board or otherwise attached to the aircraft.

⁵ 14 C.F.R. § 107.51.

⁶ A person must be at least 16 years old to qualify for a remote pilot certificate. To obtain the certificate you must either pass an initial aeronautical knowledge test at an FAA-approved knowledge testing center, or if you already have a Part 61 pilot certificate, you must have completed a flight review in the previous 24 months and you must take a small UAS online training course provided by the FAA.

⁷ 14 C.F.R. § 107.7.

⁸ Federal Aviation Administration, FAADroneZone, <https://faadronezone-access.faa.gov/#/> (last visited Feb. 28, 2023).

⁹ 14 C.F.R. § 107.36.

State Drone Regulation

In Florida, the authority to regulate the operation of UASs is preempted to the state. Political subdivisions may not enforce ordinances or resolutions impacting the design, manufacture, testing, maintenance, licensing, registration, certification, or operation of a UAS.¹⁰ However, political subdivisions may enact or enforce ordinances or resolutions relating to nuisances, voyeurism, harassment, reckless endangerment, property damage, or other illegal acts arising from the use of UAS's if such laws or ordinances are not specifically related to the use of a UAS for those illegal acts.¹¹

Drone Delivery Services

Part 135 of Title 14 of the Code of Federal Regulations, known as "Air Carrier and Operator Certification," is the only regulatory path for small drones to carry the property of another for compensation *beyond visual line of sight (BVLOS)*. From 2017 through 2020, the UAS Integration Pilot Program focused on testing and evaluating the integration of civil and public drone operations into the national airspace system. The UAS BEYOND program began in 2020 and is a four-year initiative to continue addressing the challenges of UAS integration, including BVLOS operations.¹² Participants in these two programs are among the first to propose their concepts for package delivery by drone, and through the process will help the FAA identify unnecessary rules for drones, such as the requirement to carry flight manuals on board the aircraft.¹³

All Part 135 applicants, including those for drone delivery service, must go through the full five phases of the FAA certification process.¹⁴ Certificates are issued based on the type of services the operator plans to provide and where they want to conduct their operations. There are four types of Part 135 certificates ranging from limited to no limits on the size and scope of operations: Single Pilot, Single Pilot in Command, Basic, and Standard. Before they begin operations, operators must receive airspace authorizations and air carrier or operating certificates.¹⁵

UPS Flight Forward, Inc. was the first company to receive a Standard Part 135 air carrier certificate in October of 2019. UPS Flight Forward's standard certificate permits the company to fly an unlimited number of drones, with an unlimited number of remote operators in command, BVLOS, and at night.¹⁶ Today, five companies have received the full, Standard Part 135 certification: Alphabet's Wing Aviation, UPS, Amazon, Zipline, and Flytrex.¹⁷

In December of 2022, Walmart, in partnership with DroneUp, launched drone delivery service for select customers in the Tampa and Orlando areas of Florida. Seven stores offer the service for a \$3.99 delivery fee, to customers within a 1-mile radius.¹⁸ DroneUp does not have a Part 135 certificate; therefore, pending certification, their drone operations have limitations on the size and scope of their current operations, including that they can only operate under visual line of sight (VLOS) rules.

¹⁰ S. 330.41(3)(b), F.S.

¹¹ S. 330.41(3)(c), F.S.

¹² Federal Aviation Administration, Package Delivery by Drone, https://www.faa.gov/uas/advanced_operations/package_delivery_drone (last visited Mar. 3, 2023).

¹³ *Id.*

¹⁴ Federal Aviation Administration, 14 CFR Part 135 Certification Process, https://www.faa.gov/licenses_certificates/airline_certification/135_certification/cert_process (last visited Mar. 3, 2023).

¹⁵ *Supra* note 12.

¹⁶ Juan Plaza, *UPS Flight Forward Receives Part 135 Certification to Operate Drone Delivery*, Commercial UAV News, Airline (Oct. 2, 2019), <https://www.commercialuavnews.com/infrastructure/ups-flight-forward-receives-part-135-certification-to-operate-a-drone-airline> (last visited Mar. 3, 2023).

¹⁷ Miriam McNabb, *Flytrex, Causey Aviation Unmanned Win Part 135 Air Carrier Certification for Long-Range, On-Demand Commercial Drone Delivery*, Drone Life (Jan. 30, 2023), <https://dronelife.com/2023/01/30/flytrex-causey-aviation-unmanned-win-part-135-air-carrier-certification-for-long-range-on-demand-commercial-drone-delivery/> (Mar. 3, 2023).

¹⁸ Business Wire, Walmart's Drone Delivery Takes Flight in Florida with DroneUp <https://www.businesswire.com/news/home/20221215005622/en/Walmart%E2%80%99s-Drone-Delivery-Takes-Flight-in-Florida-with-DroneUp> (last visited Mar. 3, 2022).

Florida Building Code

Florida first adopted a state minimum building code in 1974 that required all local governments to adopt and enforce one of four model codes that established minimum building standards for health and life safety of the general public. Under that system, the enforcement and amendment of the adopted codes was left to the local governments.¹⁹

Following Hurricane Andrew in 1992, the state realized the apparent need to modernize and unify the local building codes into a single state building code, with an enhanced oversight role of the state government. The 2000 Legislature authorized the implementation of the Florida Building Code and the first edition replaced all local codes on March 1, 2002.²⁰ The current edition of the Florida Building Code is the seventh edition, which is referred to as the 2020 Florida Building Code.²¹

The Florida Building Code provides a mechanism for adopting, updating, amending, interpreting, and enforcing a unified state building code from jurisdiction to jurisdiction.²² The Florida Building Code contains or incorporates by reference all laws and rules, and enforces such laws and rules, which pertain to and govern the design, construction, erection, alteration, modification, repair, and demolition of public and private buildings, structures, and facilities.²³

Under current law, the following buildings, structures, and facilities are exempt from the Florida Building Code:

- Buildings and structures specifically regulated and preempted by the Federal Government.
- Railroads and ancillary facilities associated with the railroad.
- Nonresidential farm buildings on farms.
- Temporary buildings or sheds used exclusively for construction purposes.
- Mobile or modular structures used as temporary offices.
- Structures or facilities of electric utilities, directly involved in the generation, transmission, or distribution of electricity.
- Temporary sets, assemblies, or structures used in commercial motion picture or television production, or any sound-recording equipment used in such production, on or off the premises.
- Storage sheds that are not designed for human habitation and that have a floor area of 720 square feet, and buildings that are 400 square feet or less and that are intended for use in conjunction with one- and two-family residences, withstanding clauses.
- Chickees constructed by the Miccosukee Tribe of Indians of Florida or the Seminole Tribe of Florida.
- Family mausoleums not exceeding 250 square feet.
- A building or structure having less than 1,000 square feet which is constructed and owned by a natural person for hunting.²⁴

For certain of these categories, the Florida Building Commission, in order to preserve the health, safety, and welfare of the public, may adopt rules to provide exceptions to the broad categories of buildings exempted from the Code.²⁵

Florida Fire Prevention Code

Chapter 633, F.S., Fire Prevention and Control, designates the Chief Financial Officer (CFO) as State Fire Marshal (SFM). The SFM, through the Division of the State Fire Marshall within the Department of

¹⁹ The Florida Building Commission Report to the 2006 Legislature, Florida Department of Community Affairs, p. 4, https://www.floridabuilding.org/fbc/publications/2006_Legislature_Rpt_rev2.pdf (last visited Mar. 3, 2023).

²⁰ *Id.*

²¹ Florida DBPR, Florida Building Code, https://floridabuilding.org/bc/bc_default.aspx (last visited Mar. 3, 2023).

²² S. 553.72(1), F.S.

²³ S. 553.73(1)(a), F.S.

²⁴ S. 553.73(10), F.S.

²⁵ S. 553.73(10), F.S.

Financial Services (DFS), is charged with enforcing the provisions of ch. 633, F.S., and all other applicable laws relating to fire safety.²⁶ The SFM has the responsibility to minimize the loss of life and property in this state due to fire. Pursuant to this authority, the SFM regulates fire conditions; oversees the installation and maintenance of fire equipment and fire protection systems; trains and licenses fire service personnel and fire safety inspectors; tracks the causes of fires; and enforces arson laws.²⁷

The SFM adopts by rule the Florida Fire Prevention Code (FFPC), which contains all fire safety laws and rules related to the design, construction, erection, alteration, modification, repair, and demolition of public and private buildings, structures, and facilities, and the enforcement of such fire safety laws and rules.²⁸ The State Fire Marshal adopts a new edition of the FFPC every three years.²⁹ The 7th edition of the FFPC went into effect on December 31, 2020.³⁰

When adopting the FFPC, the SFM is required to adopt the most current version of the *National Fire Protection Association's Standard 1, Fire Prevention Code*, and the *Life Safety Code, NFPA 101*, by reference.³¹ The SFM has the ability to modify the national fire safety and life safety codes and standards to accommodate the needs of the state.³²

State law requires all municipalities, counties, and special districts with fire safety responsibilities to enforce the FFPC as the minimum fire prevention code, which shall operate uniformly among local governments and in conjunction with the Florida Building Code.³³ Municipalities, counties, and special districts may adopt more stringent fire safety standards, subject to certain requirements in s. 633.208, F.S., but may not enact fire safety ordinances that conflict with ch. 633, F.S., or any other state law.³⁴

Under current law, there are varying exemptions from the FFPC to accommodate specific needs. While some structures are exempt from certain provisions of the FFPC, only two buildings are exempt from the FFPC, including the national codes and the Life Safety Code incorporated by reference. These include a nonresidential farm building in which the occupancy is limited by the property owner to no more than 35 persons,³⁵ and an agriculture pole barn.³⁶

Effect of the Bill

The bill defines a “drone delivery service” as a person or entity engaged in a business or profession of delivering goods via drone and who is governed by Title 14 of the Code of Federal Regulations.

The bill defines a “drone port” as a stand-alone building that does not exceed 1,500 square feet in area or 36 feet in height; is located in a nonresidential area; is used, or intended for use, by a drone delivery service for the storage, launch, landing and observation of drones; was constructed using Type I or Type II construction as described in the Florida Building Code; and includes at least one stairwell compliant with the Florida Building Code..

²⁶ S. 633.104(1), F.S.

²⁷ S. 633.104(2), F.S.

²⁸ R. 69A-60, F.A.C.

²⁹ S. 633.202(1), F.S.

³⁰ State Fire Marshall, *Florida Fire Prevention Code*, <https://www.myfloridacfo.com/division/sfm/bfp/florida-fire-prevention-code> (last visited Mar. 9, 2023).

³¹ S. 633.202(2), F.S.

³² S. 633.202(2), F.S.

³³ S. 633.208(1), F.S.

³⁴ Ss. 633.208(3) and 633.214(4), F.S.

³⁵ S. 633.202(16)(b)1., F.S. A nonresidential farm building is defined as a temporary or permanent building or support structure that is classified as a nonresidential farm building on a farm under s. 553.73(10)(c), F.S., or that is used primarily for agricultural purposes, is located on land that is an integral part of a farm operation or is classified as agricultural land under s. 193.461, F.S., and is not intended to be used as a residential dwelling. The term may include, but is not limited to, a barn, greenhouse, shade house, farm office, storage building, or poultry house. S. 604.50(2)(d), F.S.

³⁶ S. 633.202(16)(b)2., F.S. An agricultural pole barn is defined as a nonresidential farm building in which 70 percent or more of the perimeter walls are permanently open and allow free ingress and egress. S. 633.202(16)(a)1., F.S.

The bill prohibits a political subdivision from withholding the issuance of a business tax receipt to a drone delivery service or enacting or enforcing an ordinance or resolution that prohibits a drone delivery service's operation based on the location of its drone port, notwithstanding part II of ch. 163, F.S. (relating to growth policy, county and municipal planning, and land development regulation), and notwithstanding ch. 205, F.S. (the Local Business Tax Act).

The bill exempts a drone port from the Florida Building Code.

Within the Florida Fire Prevention Code, the bill defines "drone port" to match the definition in the Unmanned Aircraft Systems Act, and exempts drone ports from provisions of the Florida Fire Prevention Code, including national codes and the Life Safety Code incorporated by reference, concerning fire protection systems.

B. SECTION DIRECTORY:

Section 1 Amends s. 330.41, F.S., relating to the Unmanned Aircraft Systems Act.

Section 2 Amends s. 553.73, F.S., relating to the Florida Building Code.

Section 3 Amends s. 633.202, F.S., relating to the Florida Fire Prevention Code.

Section 4 Provides an effective date of July 1, 2023.

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:

Indeterminate. The bill may result in an increase in business tax revenue due to the operation of drone delivery services.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

Indeterminate. Businesses and their customers may benefit from expansion of drone delivery services.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

None.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES

On March 10, 2023, the Transportation & Modals Subcommittee considered one amendment, which was adopted, and reported the bill favorably as a committee substitute. The committee substitute differs from HB 1071 in that it:

- Defines “drone port” in the Florida Fire Prevention Code.
- Exempts drone ports from the Florida Fire Prevention Code, including national codes and the Life Safety Code incorporated by reference.

On March 29, 2023, the Local Administration, Federal Affairs & Special Districts Subcommittee adopted an amendment reported the bill favorably as a committee substitute. The amendment:

- Defines “Drone Port” to mean a stand-alone building that does not exceed 1,500 square feet in area or 36 feet in height, is located in a nonresidential area, is used or intended for use by a drone delivery service for storage, launch, landing and observation of drones, was constructed using Type 1 or Type 2 construction as describe in the Florida Building Code, and includes at least one stairwell compliant with the Florida Building Code.
- Amends the exemption from the Florida Fire Prevention Code, limiting the exception to provisions concerning fire protection systems.

This analysis is drafted to the subcommittee substitute adopted by the Local Administration, Federal Affairs & Special Districts Subcommittee.