

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 471 Unmanned Aircraft
SPONSOR(S): Justice Appropriations Subcommittee, Yarborough and others
TIED BILLS: **IDEN./SIM. BILLS:** SB 624

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Criminal Justice Subcommittee	11 Y, 0 N	Bruno	Sumner
2) Justice Appropriations Subcommittee	12 Y, 0 N, As CS	Welty	Gusky
3) Judiciary Committee			

SUMMARY ANALYSIS

Section 934.50, F.S., 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 full system comprising of a drone and its associated elements – including communication links and components used to control the drone – is called an unmanned aircraft system (UAS).

CS/HB 471 amends the definition of critical infrastructure facilities in s. 330.41, F.S. to include state correctional institutions or private correctional facilities, specified juvenile justice facilities, and county jail and detention facilities. A person may not knowingly and willfully:

- Operate a drone over a critical infrastructure facility,
- Allow a drone to make contact with a critical infrastructure facility, or
- Allow a drone to come close enough to a critical infrastructure facility as to interfere with the operations of or cause a disturbance to the facility.

A first time violation is a second degree misdemeanor and a second or subsequent violation is a first degree misdemeanor.

The bill also amends s. 934.50, F.S., to expand the use of a drone for surveillance when law enforcement has reasonable suspicion that swift action is needed to facilitate the collection of evidence at a crime scene or traffic crash scene. Additionally, the bill allows the use of a drone by a state or local agency when assessing damage by natural disasters, land management purposes, or for the collection of scientific or marketing data.

To the extent that person are arrested for, charged with, and convicted of, the criminal offenses modified in the bill, this bill will have an indeterminate fiscal impact on state and local governments.

The bill provides an effective date of October 1, 2018.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Background

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 comprising of a drone and its associated elements – including communication links and components used to control the drone – is called an unmanned aircraft system (UAS).²

In recent years, drone use has increased substantially among hobbyists and commercial users. The Federal Aviation Administration (FAA) forecasts up to seven million annual drone sales by 2020.³ The increase in drone operation presents new public safety challenges. For example, drones have interfered with aerial efforts to extinguish wildfires,⁴ and people have crashed drones near crowds⁵ and on the White House lawn.⁶ People have also used drones to smuggle contraband – including cell phones, drugs, weapons, and escape tools – into correctional facilities across the country.⁷ As drones become increasingly prolific and their capabilities advance, this threat will likely continue and grow.

Federal Drone Regulation

The FAA regulates use of navigable airspace under federal law.⁸ The FAA has allowed drone use for essential public operations such as firefighting, disaster relief, search and rescue, law enforcement, border patrol, and scientific research since 1990.⁹ In 2012, the United States Congress directed the Secretary of the United States Department of Transportation to determine whether to allow other drone operations in the national airspace system and, if so, to establish safety requirements.¹⁰ Consequently, the FAA introduced regulations to facilitate civilian drone use in the navigable airspace.¹¹

¹ S. 934.50(2)(a), F.S.

² S. 330.41(2)(c), F.S.

³ Federal Aviation Administration, FAA Aerospace Forecast: Fiscal Years 2016-2036, available at:

https://www.faa.gov/data_research/aviation/aerospace_forecasts/media/FY2016-36_FAA_Aerospace_Forecast.pdf

⁴ Jennifer Medina, *Chasing Video with Drones, Hobbyists Imperil California Firefighting Efforts*, NY TIMES, (July 19, 2015), available at: <https://www.nytimes.com/2015/07/20/us/hobby-drones-hinder-california-firefighting-efforts.html>

⁵ Associated Press, *Drone hovers over court during match, crashes in Louis Armstrong Stadium*, ESPN, (Sept. 4, 2015), available at: http://www.espn.com/tennis/usopen15/story/_/id/13577411/drone-enters-louis-armstrong-stadium-crashes-empty-seats-match; Jeff Sanders, *A bird? A plane? No, a drone crash lands at Petco Park*, SAN DIEGO UNION-TRIBUNE, (May 22, 2017), available at: <http://www.sandiegouniontribune.com/sports/padres/sd-sp-drone-crashes-at-petco-park-20170522-story.html>; Steve Miletich, *Man convicted in drone crash that injured woman during Seattle's Pride Parade*, SEATTLE TIMES, (Jan. 13, 2017), available at: <https://www.seattletimes.com/seattle-news/crime/man-convicted-in-drone-crash-that-injured-woman-during-seattles-pride-parade/>

⁶ Bart Jansen, *Small drone crashes near White House despite ban against flights in D.C.*, USA TODAY, (Oct. 9, 2015), available at: <https://www.usatoday.com/story/news/2015/10/09/drone-crash-white-house-ellipse-us-park-police-federal-aviation-administration/73641812/>

⁷ Terrell Wilkins, *Drone carrying drugs, phones crashes into prison yard*, USA TODAY, (Nov. 17, 2017), available at: <https://www.usatoday.com/story/news/nation-now/2017/11/17/drone-carrying-contraband-crashes-prison-yard/873557001/>; Michael Gerstein, *Drone sneaks package into Michigan Prison*, THE DETROIT NEWS, (Oct. 1, 2017), available at: <http://www.detroitnews.com/story/news/local/michigan/2017/10/01/report-drone-sneaks-contraband-prison/106224348/>; Randy Ludlow, *Drone drops drugs, tobacco in Mansfield prison yard, spurs fight*, THE COLUMBUS DISPATCH, (Aug. 4, 2015), available at: <http://www.dispatch.com/content/stories/local/2015/08/04/drone-drops-drugs-in-Ohio-prison-yard.html>;

⁸ 49 U.S.C. § 40103.

⁹ Fact Sheet – Unmanned Aircraft Systems, Federal Aviation Administration (Feb. 15, 2015), available at: https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=18297

¹⁰ Pub. L. 112-95.

¹¹ Federal Aviation Administration, *Press Release – DOT and FAA Propose New Rules for Small Unmanned Aircraft Systems*, (February 15, 2015), available at: https://www.faa.gov/news/press_releases/news_story.cfm?newsId=18295

In 2016, Congress enacted the FAA Extension, Safety, and Security Act (FAAESSA),¹² which directed the FAA to establish a process for applicants to petition the Administrator of the FAA for a designation to prohibit or restrict the operation of an unmanned aircraft in close proximity to a fixed site facility. Eligible fixed site facilities are limited to:

- Critical infrastructure, such as energy production, transmission, and distribution facilities and equipment,
- Oil refineries and chemical facilities,
- Amusement parks, or
- Other locations that warrant such restrictions.

The FAA has not established the process by which entities may apply for a designation prohibiting or restricting drone operations in close proximity to fixed site facilities.¹³

The FAA has expressed concerns about state and local government attempts to regulate the operation of flight or aircraft.¹⁴ According to the FAA, these efforts raise substantial safety issues by fractionalizing the national airspace and thereby limiting the flexibility of the FAA to control the airspace and flight patterns.¹⁵

Pending legislation and executive action, however, could allow for more state and local involvement in drone regulation. On October 25, 2017, the White House announced the Unmanned Aircraft Systems Integration Pilot Program.¹⁶ One objective of this pilot program is to test and evaluate various models of state, local, and tribal government involvement in the development and enforcement of federal regulations of drone operations. Additionally, the proposed Drone Federalism Act of 2017 would ensure that state, local, or tribal governments' authority to issue reasonable restrictions on the time, manner, and place of drone operation below 200 feet above ground level or within 200 feet of a structure is not preempted.¹⁷

State Drone Regulation

Sections 330.41, and 934.50, F.S. provide definitions and regulations regarding the use of drones in Florida. The regulation of drones is preempted to the state, and political subdivisions cannot enforce ordinances or resolutions impacting drones. Political subdivisions may continue to enforce ordinances relating to nuisances, voyeurism, harassment, reckless endangerment, property damage, or other illegal acts arising from the use of drones if such laws or ordinances are not specifically related to the use of drones for those illegal acts. Finally, a person or governmental entity may petition the FAA to restrict the operation of drones over facilities that the person or government entity owns.¹⁸

Restricted Areas – Protection of Critical Infrastructure Facilities

As part of Florida's regulation of drones, s. 330.41, F.S., defines critical infrastructure facilities as:

- 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,

¹² Pub. L. 114-190, s. 2209.

¹³ Email from Ryan Landers, Office of Chief Counsel, Federal Aviation Administration, RE: UAS Questions (November 22, 2017) (copy on file with Criminal Justice Subcommittee staff).

¹⁴ State and Local Regulation of Unmanned Aircraft Systems Fact Sheet – Federal Aviation Administration, Office of Chief Counsel, December 17, 2015.

¹⁵ Id.

¹⁶ The White House, Office of the Press Secretary, *Presidential Memorandum for the Secretary of Transportation*, (Oct. 25, 2017), available at: <https://www.whitehouse.gov/the-press-office/2017/10/25/presidential-memorandum-secretary-transportation>

¹⁷ Drone Federalism Act of 2017, S. 1272, 115th Cong. (2017).

¹⁸ S. 330.41(3)(a)-(d), F.S.

- 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.¹⁹

Current law prohibits a person from knowingly and willfully:

- Operating a drone over a critical infrastructure facility,
- Allowing a drone to make contact with a critical infrastructure facility, or
- Allowing a drone to come close enough to a critical infrastructure facility as to interfere with the operations of or cause a disturbance to the facility.

A first time violation of the prohibition is a second degree misdemeanor;²⁰ a second or subsequent violation is a first degree misdemeanor.²¹ According to FDLE's Statistical Analysis Center, there are no arrest or judicial records in the Computerized Criminal History database for a violation of s. 330.41, F.S.²²

Prohibited Use of Drones

In addition to the restricted areas where an individual cannot fly a drone, s. 934.50, F.S., provides restrictions on the use of drones to conduct surveillance. Law enforcement may not use a drone to gather evidence or other information, with certain exceptions.²³ When law enforcement has reasonable suspicion that swift action is needed for one of the following reasons, drone use is permitted:

- 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 facilitating the search for a missing person.²⁴

Other exceptions to the use of a drone include:

- Countering terrorist attacks,
- Effecting search warrants, authorized by a judge,
- Lawful business activities licensed by the state, with certain exceptions,
- Assessing property for ad valorem taxation purposes,
- Capturing images of utilities for specified purposes,
- Aerial mapping,
- Cargo delivery,
- Capturing images necessary for drone navigation, and
- Routing, siting, installation, maintenance, or inspection of communications service facilities.²⁵

¹⁹ S. 330.41(2)(a), F.S.

²⁰ A second degree misdemeanor is punishable by up to 60 days in county jail and a \$500 fine. Sections 775.082 and 775.083, F.S.

²¹ A first degree misdemeanor is punishable by up to one year in county jail and a \$1,500 fine. Sections 775.082 and 775.083.

²² Email from Ron Draa, External Affairs Director, Department of Law Enforcement, RE: HB 471 - Unmanned Aircraft (January 3, 2018) (copy on file with Justice Appropriations Subcommittee staff).

²³ S. 934.50(3)(a) & (4), F.S.

²⁴ S. 943.50(4)(c), F.S.

²⁵ S. 943.50(4)(a)-(b), (d)-(j), F.S.

Effect of Proposed Changes

Restricted Areas – Protection of Critical Infrastructure Facilities

The bill amends s. 330.41(2), F.S., in the definition of “critical infrastructure facility” to include a:

- State correctional institution or private correctional facility as defined in s. 944.02, F.S. and chapter 957, F.S., respectively,
- Secure juvenile detention center or facility, a nonsecure juvenile residential facility, a high-risk juvenile residential facility, or a maximum-risk juvenile residential facility as defined in s. 985.03, F.S., or
- County detention facility as defined in s. 951.23, F.S.

The bill maintains the prohibitions of operating a drone over a critical infrastructure facility, allowing a drone to make contact with a critical infrastructure facility, or allowing a drone to come close enough to a critical infrastructure facility as to interfere with the operations of or cause a disturbance to the facility. A first time violation of these prohibitions is a second degree misdemeanor;²⁶ a second or subsequent violation is a first degree misdemeanor.²⁷

The bill leaves the sunset provision of s. 330.41, F.S., intact. Once the FAA establishes the designation process directed under the FAAESSA, the criminal provisions of this bill will be repealed after 60 days.

Prohibited Use of Drones

In addition to adding sites to the definition of critical infrastructure facility, the bill amends s. 934.50, F.S., relating to use of drones for surveillance. The bill permits a law enforcement agency to use a drone when there is reasonable suspicion that swift action is needed to facilitate the collection of evidence at a crime scene or traffic crash scene.

In other states, drones have proven useful to law enforcement, in the area of traffic accident reconstruction. Drones can capture images above a crash site and stitch them together to allow for highly accurate reconstructions.²⁸ The North Carolina Department of Transportation found that utilizing drones and advanced imaging software law enforcement can greatly accelerate accident investigations at a lower cost and with less risk to motorists and investigators.²⁹

The bill also adds an exception for state and local agencies to use drones to assess damage, flood state, wildfire, or land management or to monitor and collect scientific or marketing data. The Department of Agriculture and Consumer Services identified several areas of their operation that could be assisted with the aid of drones including, wildfire suppression activities; land management surveys, prescribed burning, access to hard to reach areas due to dense vegetation; pest and disease—observation, collection, and analysis of scientific data; marketing—crop data collection, and storm damage assessment.³⁰

The bill provides an effective date of October 1, 2018.

B. SECTION DIRECTORY:

Section 1: Amends s. 330.41, relating to Unmanned Aircraft Systems Act.

²⁶ A second degree misdemeanor is punishable by up to 60 days in county jail and a \$500 fine. Sections 775.082 and 775.083, F.S.

²⁷ A first degree misdemeanor is punishable by up to one year in county jail and a \$1,500 fine. Sections 775.082 and 775.083, F.S.

²⁸ Bob Susnjara, *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>

²⁹ COLLISION SCENE RECONSTRUCTION & INVESTIGATION USING UNMANNED AIRCRAFT SYSTEMS (August 2017), available at: <https://www.ncdot.gov/aviation/download/ncshp-uas-mapping-study.pdf>

³⁰ Email from Grace Lovett, Director of Legislative Affairs, Department Agriculture and Consumer Services, RE: Drones (January 16, 2018), (copy on file with Justice Appropriations Subcommittee staff).

Section 2: Amends s. 934.50, F.S., relating to searches and seizure using a drone.

Section 3: Provides an effective date of October 1, 2018.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

See fiscal comments.

2. Expenditures:

See fiscal comments.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

See fiscal comments.

2. Expenditures:

See fiscal comments.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

See fiscal comments.

D. FISCAL COMMENTS:

The expansion of restricted areas where drones cannot be used creates additional opportunities for individuals to be charged with a second degree misdemeanor. Given that there have been no arrest or charging events for the current law, this section has an indeterminate, yet likely insignificant impact on state and local governments.

Based on information from other states, the expansion of the use of drones for traffic crash scenes and crimes scenes may have a positive fiscal impact for law enforcement agencies, by reducing the time it takes to recreate accident and crime scenes.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable. The bill appears to be exempt from the requirements of Article VII, Section 18, of the Florida Constitution because it is a criminal law.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

None.

C. DRAFTING ISSUES OR OTHER COMMENTS:

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On January 18, 2018, the Justice Appropriations Subcommittee adopted one amendment and reported the bill favorably as a committee substitute. The amendment:

- Removed the definition of “fixed site facility” in s. 330.41, F.S. However, the amendment includes state or private correctional institutions, secure and nonsecure juvenile residential facilities and detention centers, and county jails or detention facilities into the current definition of critical infrastructure facilities in that section.
- Eliminated the creation of a new second degree felony offense for using a drone to introduce contraband into a fixed site facility.
- Added another exception to the prohibition on using drones for surveillance by allowing state and local agencies to utilize drones in the assessment of damage, flood state, wildfire, or land management, or monitoring and collection of scientific or marketing data.

This analysis is drafted to the committee substitute as approved by the Justice Appropriations Subcommittee.