



Senate Fiscal Agency
P. O. Box 30036
Lansing, Michigan 48909-7536

BILL ANALYSIS



Telephone: (517) 373-5383
Fax: (517) 373-1986

Senate Bills 917 and 922 (as enacted)
House Bills 5494, 5495, and 5496 (as enacted)
Sponsor: Senator Peter MacGregor (S.B. 917)
Senator Darwin L. Booher (S.B. 922)
Representative Michele Hoytenga (H.B. 5494 & 5496)
Representative Roger Hauck (H.B. 5495)

PUBLIC ACTS 468 & 469 of 2018
PUBLIC ACTS 444, 445, & 446 of 2018

Senate Committee: Transportation
House Committee: Communications and Technology

Date Completed: 3-4-19

RATIONALE

The Federal Aviation Administration (FAA) regulates civil aviation in the United States, and has the authority to regulate the use of drones, or unmanned aircraft systems (UAS). While the Federal government has established some policies governing commercial UAS use, it has yet to promulgate comprehensive UAS regulations. Despite the Michigan Legislature's recent enactment of statutes addressing UAS operation, some believed that there was still some ambiguity or omissions that needed to be addressed. Furthermore, some contended that the lack of clarity and breadth of UAS laws made it difficult for law enforcement to enforce appropriate and safe UAS operations.

Public Act 436 of 2016 (the Unmanned Aircraft Systems Act) established a regulatory framework for drone operation, and created the Unmanned Aircraft Systems Task Force to develop statewide policy recommendations for the operation and regulation of unmanned aircraft systems (see **BACKGROUND**). The Task Force consists of 27 members appointed by the Governor representing different entities and interests that are affected by UAS use. The Task Force published a report on November 20, 2017, which issued UAS regulatory recommendations to the State.

Unmanned aerial systems are rapidly evolving with greater capabilities, lower costs, and broader accessibility. Accordingly, some contended that the Legislature should act to address emerging issues pertaining to safe UAS operation as soon as possible, instead of waiting for the Federal government to take action. Thus, it was suggested that the State amend the Unmanned Aircraft Systems Act, and other laws based on the Task Force's recommendations.

CONTENT

Senate Bill 917 amends the Unmanned Aircraft Systems Act to revise the list of people an individual is prohibited from interfering with through the operation of an unmanned aircraft system.

House Bill 5494 amends the Unmanned Aircraft Systems Act to specify that a person is guilty of an offense committed with the aid of an UAS if the UAS is under the person's control and the activity performed with the aid of the UAS would have given rise to criminal liability under the penal law of the State if it were performed directly by the person without the aid of the UAS.

House Bill 5495 amends the Michigan Penal Code to prohibit a person from knowingly and intentionally using an unmanned aircraft in a manner that interferes with the operations of a key facility, correctional facility, or other law enforcement facility; to

exclude commercial operators of an unmanned aircraft from this prohibition if the aircraft is operated in compliance with Federal Aviation Administration regulations, authorizations, and exemptions; and to prescribe a felony penalty for a person who violates the above prohibition.

Senate Bill 922 amends the sentencing guidelines in the Code of Criminal Procedure to include the felonies established under House Bill 5495.

House Bill 5496 amends the Unmanned Aircraft Systems Act to prescribe several duties to the Michigan Aeronautics Commission pertaining to UAS regulatory advice and education.

Senate Bills 917 and 922 will take effect on March 27, 2019. House Bill 5494 will take effect on March 21, 2019. House Bills 5495 and 5496 will take effect on March 29, 2019.

Senate Bill 917

The Act prohibits an individual from knowingly and intentionally operating an unmanned aircraft system in a manner that interferes with the official duties of any of the following:

- A police officer.
- A firefighter.
- A paramedic.
- Search and rescue personnel.

The bill changes this list to the following:

- A law enforcement official, as that term is defined in the Code of Criminal Procedure.
- A firefighter.
- Emergency medical services personnel, as that term is defined in the Public Health Code.
- Search and rescue personnel.
- A State correctional officer or a local corrections officer, as those terms are defined under the Correctional Officers' Training Act, or any other individual employed by the Department of Corrections.
- A local corrections officer, as that term is defined in the Local Corrections Officers Training Act.

(The Code of Criminal Procedure defines "law enforcement official" as any of the following:

- A police officer of the State or a political subdivision of the State as defined under the Commission on Law Enforcement Standards Act.
- A county sheriff or his or her deputy.
- A prosecuting attorney.
- A public safety officer of a college or university.
- A conservation officer of the Department of Natural Resources.
- An individual acting under the direction of a law enforcement official described above.

The Public Health Code defines "emergency medical services personnel" as a medical first responder, emergency medical technician, emergency medical technician specialist, paramedic, or emergency medical services instructor-coordinator.

"State correctional officer" is defined by the Correctional Officers' Training Act as any person employed by the Department of Corrections in a correctional facility as a correctional officer or a corrections medical aide, or that person's immediate supervisor.

The Local Corrections Officers Training Act defines "local corrections officer" as any person employed by a county sheriff in a local correctional facility as a corrections officer or that person's supervisor or administrator.)

House Bill 5494

Under the bill, a person is guilty of an offense committed with the aid of an unmanned aircraft system if it is under the person's control and the activity performed with the aid of the unmanned aircraft system would have given rise to criminal liability under the penal law of the State if it was performed directly by the person without the aid of an unmanned aircraft system.

Except as otherwise provided in the Unmanned Aircraft Systems Act and Section 45(a)1 of the Penal Code (which House Bill 5495 adds), solely flying an unmanned aircraft system through navigable airspace in accordance with Federal law does not give rise to criminal liability under the penal law of the State.

House Bill 5495

The bill amends the Penal Code to prohibit a person from knowingly and intentionally using an unmanned aircraft in a manner that interferes with the operations of a key facility, a correctional facility, or other law enforcement facility. If a facility listed above is included on the FAA's Registry of Fixed Site Facilities, a person may not fly or cause an unmanned aircraft to hover over the facility.

A person who violates these provisions is guilty of a felony punishable by imprisonment for up to four years or a maximum fine of \$2,500, or both.

The bill does not apply to a commercial operator of an unmanned aircraft if it is operated under and in compliance with FAA regulations, authorizations, and exemptions.

"Key facility" means that term as defined in Section 552c of the Michigan Penal Code.

(Section 552c defines "key facility" as one or more of the following:

- A chemical manufacturing facility.
- A refinery.
- An electric utility facility, including a power plant, a power generation facility peaker, an electric transmission facility, an electric station or substation, or any other facility used to support the generation, transmission, or distribution of electricity.
- A water intake structure or water treatment facility.
- A natural gas utility facility, including an age station, odorization facility, main line valve, natural gas storage facility, or any other facility used to support the acquisition, transmission, distribution, or storage of natural gas.
- Gasoline, propane, liquid natural gas, or other fuel terminal or storage facility.
- A transportation facility, including a port, railroad switching yard, or trucking terminal.
- A pulp or paper manufacturing facility.
- A pharmaceutical manufacturing facility.
- A hazardous waste storage, treatment, or disposal facility.
- A telecommunication facility, including a central office or cellular telephone tower site.
- A facility substantially similar to a facility, structure, or station listed above or a resource required to submit a risk management plan under Federal law.)

Senate Bill 922

Under the bill, using an unmanned aircraft in a manner that interferes with certain facilities is a Class F felony against public safety, with a statutory maximum sentence of four years' imprisonment. In addition, flying over or causing an unmanned aircraft to hover over a facility designated on a Federal registry is a Class F felony against public safety, with a statutory maximum sentence of four years' imprisonment.

House Bill 5496

Under the bill, the Michigan Aeronautics Commission must do the following:

- Provide advice to other departments and agencies of the State about the use of UAS and related technology.
- Provide advice to the public about regulation of UAS by the Federal government, safe operating principles for UAS, restrictions on the use of UAS, and any other matters within the scope of the Commission's authority.
- Provide education and information to departments and agencies of the State, political subdivisions, and the general public about UAS.
- Receive and consider comments from people in Michigan that are interested in or affected by the use of UAS.

State departments and agencies must provide support to the Commission as necessary and as requested for it to perform its duties. In addition to the Department of Transportation's provision of support, all of the following must provide primary support to the Commission:

- The Department of State Police.
- The Department of Natural Resources.
- The Department of Corrections.
- The Department of Agriculture and Rural Development.
- The Department of Licensing and Regulatory Affairs.

MCL 259.321 (S.B. 917)
777.16b (S.B. 922)
259.320 (H.B. 5494)
750.45a (H.B. 5495)
259.330 (H.B. 5496)

BACKGROUND

The Unmanned Aircraft Systems Act allows a person to operate an unmanned aircraft system in the State if the person is authorized by the Federal Aviation Administration to operate it for commercial purposes and it is operated in a manner consistent with Federal law. A person also may operate a system in Michigan for recreational purposes, so long as it is operated in a manner consistent with Federal law. The Act prohibits certain activities involving the use of an unmanned aircraft system, such as interfering with certain law enforcement or first responders, harassing an individual, or capturing photographs, video, or audio recordings of an individual in a manner that would invade the individual's reasonable expectation of privacy.

The Unmanned Aircraft Systems Task Force was required to submit a report with UAS policy recommendations within its first three months after its first meeting. The report contained the following 13 recommendations:

- Establish an Unmanned Aerial System Joint Program Office (UASJPO) to coordinate public agency efforts and to provide a unified voice for Michigan's citizens seeking UAS information.
- Identify the organization through which private entities and universities can collaborate and interface with the UASJPO.
- Reaffirm the Michigan Aeronautics Commission as the State body responsible for all aeronautical activity in Michigan with authority to develop rules, regulations, policies, and procedures for the use and integration of UAS into Michigan.
- Develop an education and outreach strategy to address coordinated educational outreach efforts for local governments, law enforcement, and users.
- Design and distribute recommended guidelines for public agency data sharing and record retention policies for State agency data collected by UAS.
- Recommend an "extension of self principle" be enacted by the Michigan Legislature.

- Explore deployment of a UAS traffic management system in Michigan.
- Enact a State law to prohibit UAS interference with the operation of key and unique facilities.
- Revisit the part of Michigan statute that regulates UAS interference with official duties of police officers, firefighters, paramedics, or search and rescue personnel.
- Develop a submission for the Federal Aviation Administration UAS Integration Pilot Program.
- Coordinate with other State and Federal agencies to address current and future regulatory barriers.
- Identify opportunities to share technological innovations among industry partners.
- Expand the mission of the American Center for Mobility to include unmanned and autonomous aerial vehicles and systems.

ARGUMENTS

(Please note: The arguments contained in this analysis originate from sources outside the Senate Fiscal Agency. The Senate Fiscal Agency neither supports nor opposes legislation.)

Supporting Argument

Unmanned aircraft systems are popular among aviation hobbyists and have many commercial applications. For example, UAS could be used by photographers to take pictures from locations normally inaccessible or difficult to reach, by farmers to observe and plan the use of land, and by engineers to inspect infrastructure remotely. According to the National Conference of State Legislatures, as of September 10, 2018, 41 states had enacted laws addressing UAS, including defining what an unmanned aircraft system is and how it may be used. Although Michigan has enacted some laws governing UAS operations, previous UAS policies needed to be revised or expanded to keep up with changing technology and increasing UAS popularity. In particular, UAS use around important facilities and infrastructure needed to be addressed.

Certain places, such as chemical plants, refineries, electric utility facilities, and correctional facilities must remain secure from trespassing for the safety of Michigan residents. Using an unmanned aircraft system to gain access to those facilities is a security risk and was not addressed in Michigan statute. The bills ensure that those facilities remain safe from UAS operators who knowingly and intentionally seek to interrupt their operation.

Supporting Argument

According to the UAS Task Force, law enforcement officers have had difficulty enforcing existing UAS laws. The UAS Task Force report states that, "since (Federal Aviation Administration) regulations are not enforceable by state, county, or local law enforcement and state and local regulations are potentially preempted and ambiguous when viewed at a local level, Michigan's law enforcement personnel are left in a difficult situation, which can be compounded by unfamiliarity of UAS rules and regulations in the prosecutorial areas of state and local governments".

If the State does not enact unambiguous UAS regulations, municipalities may begin creating their own policies to bridge the perceived enforcement gap. This could lead to a patchwork of regulations across jurisdictions, which would be inefficient and burdensome to law-abiding UAS operators. By further modifying UAS laws and creating the UAS Joint Program Office, the bills help establish standards for acceptable UAS use and create an official office that may educate entities on UAS regulations, serve as an important entity to coordinate public agency efforts, and provide interested individuals a primary contact for UAS concerns.

Supporting Argument

The aviation industry is an important part of Michigan's economy. According to the Michigan Economic Development Corporation, Michigan "is a leader in materials R&D with Lightweight Innovations for Tomorrow (LIFT) and the Institute for Advanced Composite Manufacturing Innovation (IACMI)". The 2013 Economic Report from the Association of Unmanned Vehicle Systems International predicted that the UAS industry would contribute 1,426 new jobs and \$1.13 billion towards the Michigan economy, and \$8.26 million in taxes between 2015 and 2025. It is important to have clear, consistent, and updated UAS laws to ensure that Michigan remains a

competitive business environment and attractive to UAS hobbyists. The bills' provisions accomplish this by streamlining Michigan's UAS regulations and making them more comprehensive.

Legislative Analyst: Drew Krogulecki

FISCAL IMPACT

Senate Bill 917

The bill will have no fiscal impact on the State and an indeterminate fiscal impact on local government. A violation of Section 21, which the bill amends, is a misdemeanor punishable by imprisonment for up to 90 days, a fine of up to \$500, or both. An increase in misdemeanor arrests and prosecutions may increase resource demands on law enforcement, court systems, and jails. Any increased fine revenue will be dedicated to public libraries.

House Bill 5494

The bill will have no fiscal impact on the State or local government.

House Bill 5495

The bill will have a negative fiscal impact on the State and local government. New felony arrests and convictions may increase resource demands on law enforcement, court systems, community supervision, jails, and correctional facilities. However, it is unknown how many people will be prosecuted under provisions of the bill. The average cost to State government for felony probation supervision is approximately \$3,024 per probationer per year. For any increase in prison intakes, in the short term, the marginal cost to State government is approximately \$5,315 per prisoner per year.

Senate Bill 922

The bill will have no fiscal impact on local government and an indeterminate fiscal impact on the State. According to the Michigan Supreme Court's July 2015 opinion in *People v. Lockridge* (in which the Court struck down portions of the sentencing guidelines law), the sentencing guidelines are advisory for all cases. This means that the addition to the guidelines under the bill will not be compulsory for the sentencing judge. As penalties for felony convictions vary, the fiscal impact of any given felony conviction depends on judicial decisions.

House Bill 5496

The bill will have a small negative fiscal impact on the Department of Transportation. The bill will have no fiscal impact on local units of government.

The bill prescribes new duties for the Aeronautics Commission to provide advice and education regarding unmanned aircraft systems to other departments and to the public. There likely will be some expense related to these new duties, but those expenses are expected to be small.

Fiscal Analyst: Abbey Frazier
Michael Siracuse

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This analysis was prepared by nonpartisan Senate staff for use by the Senate in its deliberations and does not constitute an official statement of legislative intent.