



Senate Fiscal Agency
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BILL ANALYSIS



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Senate Bill 917 (as passed by the Senate)
Senate Bill 918 (as passed by the Senate)
Senate Bill 919 (as passed by the Senate)
Senate Bill 921 (Substitute S-1 as passed by the Senate)
Senate Bill 922 (Substitute S-1 as passed by the Senate)
Sponsor: Senator Peter MacGregor (S.B. 917)
 Senator Tom Casperson (S.B. 918)
 Senator Rick Jones (S.B. 919)
 Senator Darwin L. Boher (S.B. 921 & 922)
Committee: Transportation

Date Completed: 10-30-18

RATIONALE

The Federal Aviation Administration regulates civil aviation in the United States, and has the authority to regulate the use of drones, or unmanned aircraft systems (UASs). While the Federal government has established some policies governing commercial UAS use, it has yet to promulgate comprehensive UAS regulations. Some believe that, while the Michigan Legislature has enacted statutes addressing UAS operation, there is still some ambiguity or omissions that should be addressed. Furthermore, some contend that the lack of clarity and breadth of UAS laws make 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 contend 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 has been suggested that the State amend the Unmanned Aircraft Systems Act, and other laws based on the Task Force's recommendations.

CONTENT

Senate Bill 917 would amend 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.

Senate Bill 918 would amend the Unmanned Aircraft Systems Act to create the Unmanned Aircraft Systems Joint Program Office within the Michigan Department of Transportation and prescribe its duties.

Senate Bill 919 would amend the Unmanned Aircraft Systems Act to specify that, for the purposes of the penal law of Michigan, an unmanned aircraft system would be an extension of the individual who was operating it, and that in a prosecution for a violation

of a penal law of Michigan it would not be a defense that a person used an unmanned aircraft system to carry out the violation.

Senate Bill 921 (S-1) would amend the Michigan Penal Code to prohibit a person from knowingly and intentionally using an unmanned aircraft in a manner that interfered 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 were operated in compliance with Federal Aviation Administration regulations, authorizations, and exemptions; and to prescribe a felony penalty for a person who violated the above prohibition.

Senate Bill 922 (S-1) would amend the Code of Criminal Procedure to include the felony proposed by Senate Bill 921 (S-1) in the sentencing guidelines.

Senate Bill 922 (S-1) is tie-barred to Senate Bill 921 (S-1).

Each bill would take effect 90 days after it was enacted.

Senate Bills 917, 918, 921, and 922 are described in further detail below.

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 would change 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 and the Local Corrections Officers Training Act, respectively.

(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.)

Senate Bill 918

Under the bill, the Unmanned Aircraft Systems Joint Program Office would have to 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 Office'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 were interested in or affected by the use of UAS.

The departments and agencies of the State would have to provide support to the Office 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 would have to provide primary support to the Office:

- 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.

Senate Bill 921 (S-1)

The bill would prohibit a person from knowingly and intentionally using an unmanned aircraft in a manner that interfered with the operations of a key facility, a correctional facility, or other law enforcement facility. If one of these facilities were included on the Federal Aviation Administration's Registry of Fixed Site Facilities, a person could not fly or cause an unmanned aircraft to hover over the facility.

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

The bill would not apply to a commercial operator of an unmanned aircraft if it were operated under and in compliance with Federal Aviation Administration regulations, authorizations, and exemptions.

"Key facility" would mean 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 (S-1)

Under the bill, using an unmanned aircraft in a manner that interfered with certain facilities would be 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 would be a Class F felony against public safety, with a statutory maximum sentence of four years' imprisonment.

MCL 259.321 (S.B. 917)
 MCL 259.303 et al. (S.B. 918)
 Proposed MCL 259.320 (S.B. 919)
 Proposed MCL 750.45a (S.B. 921)
 MCL 777.16b (S.B. 922)

BACKGROUND

The Unmanned Aircraft Systems Act allows a person to operate a UAS 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 UAS 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 a UAS, 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, 41 states have enacted laws addressing UAS, including defining what a UAS is and how it may be used. Although Michigan has enacted some laws governing UAS operation, current UAS policies need to be revised or expanded to keep up with changing technology and increasing UAS popularity. In particular, UAS use around important facilities and infrastructure needs 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 a UAS to gain access to those facilities is a security risk and is not currently addressed in Michigan statute. The bills would 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 difficulty enforcing existing law related to UAS. 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 UAS 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 would help establish standards for acceptable UAS use and create an official office that could 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 would accomplish this by streamlining Michigan's UAS regulations and making them more comprehensive.

Legislative Analyst: Drew Krogulecki

FISCAL IMPACT

Senate Bill 917

The bill would have no fiscal impact on the State and an indeterminate fiscal impact on local government. A violation of Section 21, which the bill would amend, 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 could increase resource demands on law enforcement, court systems, and jails. Any increased fine revenue would be dedicated to public libraries.

Senate Bill 918

The bill would have an indeterminate impact on the Department of Transportation, and to a lesser extent on the Departments of State Police, Natural Resources, Corrections, Agriculture and Rural Development, and Licensing and Regulatory Affairs. The bill would have no fiscal impact on local units of government.

The creation of the Unmanned Aerial Systems Joint Program Office was recommended in the final report (November 2017) of the Governor's Unmanned Aircraft Systems Task Force, along with 12 other recommendations. The Task Force recommended the creation of the office as a single point of contact for State agency use of unmanned aerial systems technology and also for inquiries from the general public. While the bill would do both of those things, it is not clear how much administrative support the Office would require from the Department of Transportation, how big the Office would be, if any new FTEs would be required, what expenses it would have, etc. The other named State departments in the bill also would be required to provide support for the new office, but it is unclear what that would entail. For these reasons, the costs to the State for the office are indeterminate.

Senate Bill 919

The bill could have a negative fiscal impact on the State and local government. It is not known whether the provisions of the bill would lead to more misdemeanor and felony convictions, but they would not lead to a reduction. More misdemeanor and felony convictions could increase resource demands on community supervision, jails, and correctional facilities. 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 \$3,764 per prisoner per year. Any associated increase in fine revenue increases funding to public libraries.

Senate Bill 921 (S-1)

The bill could have a negative fiscal impact on the State and local government. More felony arrests and convictions could increase resource demands on law enforcement, court systems, community supervision, jails, and correctional facilities. 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 the State is approximately \$3,764 per prisoner per year. Any associated increase in fine revenue increases funding to public libraries.

Senate Bill 922 (S-1)

The bill would 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 would 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.

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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.