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## BILL ANALYSIS



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Senate Bill 992 (Substitute S-2 as passed by the Senate)  
Sponsor: Senator Peter MacGregor  
Committee: Transportation

Date Completed: 10-28-16

### **RATIONALE**

The ownership of commercial drones (otherwise known as unmanned aerial vehicles or unmanned aerial or aircraft systems) has steadily increased over the last few years. This trend is expected to continue due to factors such as advancing drone technologies, lower costs, and competitive pricing. Regulation of drone operation is ongoing at the Federal level, as the Federal Aviation Administration created new commercial drone regulations that became effective on August 29, 2016. Currently, however, there are no provisions in Michigan statute that directly address drone operation; drones are neither legal nor illegal under Michigan law. Due to increased drone use and the lack of rules or laws, some have suggested creating a regulatory framework to provide standards for individuals and businesses regarding drone operation, ensure safe and legal drone use, and establish a consistent statewide drone policy.

### **CONTENT**

The bill would enact the "Unmanned Aircraft Systems Act" to do the following:

- **Allow a person to operate an unmanned aircraft system in the State if the person were authorized by the Federal Aviation Administration (FAA) to operate unmanned aircraft systems for commercial purposes and the system were operated in a manner consistent with Federal law.**
- **Permit a person to operate an unmanned aircraft system in the State for recreational purposes if the system were operated in a manner consistent with Federal law for the operation of a model aircraft.**
- **Prohibit certain activities involving the use of an unmanned aircraft system, and prescribe penalties.**
- **Create the Unmanned Aircraft Systems Task Force to develop statewide policy recommendations on the operation, use, and regulation of unmanned aircraft systems.**
- **Require the Task Force, within three months after its first meeting, to report to the Governor and the House and Senate committees that deal with transportation issues.**
- **Prohibit a political subdivision from regulating the ownership or operation of unmanned aircraft, but allow a political subdivision to regulate the use of unmanned aircraft systems by the political subdivision within its boundaries.**

"Unmanned aircraft system" would mean an unmanned aircraft and all of the associated support equipment, control station, data links, telemetry, communications, navigation equipment, and other equipment necessary to operate the unmanned aircraft. "Unmanned aircraft" would mean an aircraft flown by a remote pilot via a ground control system, or autonomously through the use of an on-board computer, communication links, and any additional equipment necessary for the unmanned aircraft to operate safely.

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

## Lawful Unmanned Aircraft System Operation

A person who was authorized by the FAA to operate unmanned aircraft systems for commercial purposes could operate an unmanned aircraft system in the State if the system were operated in a manner consistent with Federal law.

A person could operate an unmanned aircraft system in the State for recreational purposes if the unmanned aircraft system were operated in a manner consistent with Federal law for the operation of a model aircraft.

## Prohibited Actions & Penalty

An individual could not knowingly and intentionally operate an unmanned aircraft system in a manner that interfered with the official duties of any of the following:

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

A person could not knowingly and intentionally operate an unmanned aircraft system to subject an individual to harassment. "Harassment" would mean the term as defined in the Michigan Penal Code. (The Code defines "harassment" as conduct directed toward a victim that includes repeated or continuing unconsented contact that would cause a reasonable individual to suffer emotional distress and that actually causes the victim to suffer emotional distress. Harassment does not include constitutionally protected activity or conduct that serves a legitimate purpose.)

A person could not knowingly and intentionally operate an unmanned aircraft system within a distance that, if the person were to do so personally rather than through remote operation of an unmanned aircraft, would be a violation of a restraining order or other judicial order.

A person could not knowingly and intentionally operate an unmanned aircraft system to capture photographs, video, or audio recordings of an individual in a manner that would invade the individual's reasonable expectation of privacy.

An individual who was required to register as a sex offender under the Sex Offenders Registration Act could not operate an unmanned aircraft system to knowingly and intentionally follow, contact, or capture images of another individual, if the individual's sentence in a criminal case would prohibit him or her from following, contacting, or capturing the image of the other individual.

An individual who violated any of these provisions would be guilty of a misdemeanor punishable by imprisonment for up to 90 days or a maximum fine of \$500, or both.

## Unmanned Aircraft Systems Task Force

The Unmanned Aircraft Systems Task Force would be created to develop statewide policy recommendations on the operation, use, and regulation of unmanned aircraft systems in Michigan.

Within 90 days after the bill's effective date, the Governor would have to appoint members of the Task Force. The individuals appointed would have to include one member from each of the following agencies or interest groups:

- A member from the Michigan Department of Transportation (MDOT) nominated by the MDOT Director.
- A member from the division of MDOT that performs bridge inspections and road work, nominated by the MDOT Director.
- A member from the Department of State Police, nominated by the Director of the Department.
- A member from the Department of Natural Resources, nominated by the Department Director.

- A member from the Michigan Department of Agriculture and Rural Development, nominated by the Department Director.
- A member from the Department of Licensing and Regulatory Affairs, nominated by the Department Director.
- A member from the Department of Corrections, nominated by the Department Director.
- An unmanned aircraft systems technical commercial representative.
- An unmanned aircraft systems manufacturing industry representative.
- A member licensed by the FAA to operate unmanned aircraft weighing less than 55 pounds.
- A member of a statewide agricultural association, nominated by the president of the association.
- A member of a statewide retail association, nominated by the president of the association.
- A member of a statewide manufacturing trade association, nominated by the president or chief executive officer of the association.
- A member of a statewide property and casualty insurance association, nominated by the president or chief executive officer of the association.
- A member of a statewide association that represents real estate brokers licensed in Michigan, nominated by the president of the association.
- A member of a statewide surveying association, nominated by the president of the association.
- A law enforcement official from a municipality, nominated by a statewide police chiefs association.
- A member of a statewide freight railroad association, nominated by the president of that association.
- A member of a statewide broadcasters association, nominated by the president of the association.
- A member representing people who operate key facilities.

("Key facilities" would mean the term as defined in the Michigan Penal Code, e.g., a chemical manufacturing facility, a refinery, an electric or natural gas utility facility, or a water intake structure or water treatment facility.)

Nominations to the Task Force would have to be submitted to the Governor within 60 days after the bill's effective date. The Governor would have to make the appointments within 30 days after the close of nominations. The terms of the appointments would be until the Task Force submitted its report with recommendations. The member from MDOT would have to chair the Task Force and serve as a liaison to the Governor and the standing committees in the House and Senate that mainly deal with transportation issues. The Task Force would have to meet as necessary to complete its duties. Meetings would have to be held in the central part of Michigan. The members of the Task Force could not receive compensation for serving.

The Task Force would be subject to the Open Meetings Act and the Freedom of Information Act.

The Task Force would have to consider commercial and private uses of unmanned aircraft systems, landowner and privacy rights, and general rules and regulations for safe operation of unmanned aircraft systems, and prepare comprehensive recommendations for the safe and lawful operation of unmanned aircraft systems in Michigan.

Within three months after its first meeting, the Task Force would have to submit a report with recommendations to the Governor and the standing committees in the House and Senate that mainly deal with transportation issues.

The Department of Transportation would have to provide administrative support to the Task Force.

#### Political Subdivisions & Conflicting Law

Except as expressly authorized by statute, a political subdivision could not enact or enforce an ordinance or resolution that regulated the ownership or operation of unmanned aircraft or otherwise engage in the regulation of the ownership or operation of unmanned aircraft.

The proposed Act would not prohibit a political subdivision from promulgating rules, regulations, and ordinances for the use of unmanned aircraft systems by the political subdivision within the boundaries of the political subdivision.

The Act would not affect Federal preemption of State law.

If the Act conflicted with Section 40111c or 40112 of the Natural Resources and Environmental Protection Act, that section would control. (Section 40111c prohibits an individual from taking game or fish using an unmanned vehicle or unmanned device that uses aerodynamic forces to achieve flight or using an unmanned vehicle or unmanned device that operates on the surface of water or underwater. Section 40112 prohibits an individual from obstructing or interfering in the lawful taking of animals or fish by another individual, and lists actions that constitute a violation of that provision. The actions include the use of an unmanned vehicle or unmanned device that uses aerodynamic forces to achieve flight or that operates on the surface of the water or underwater, to affect animal or fish behavior in order to hinder or prevent the lawful taking of an animal or fish.)

"Political subdivision" would mean a county, city, village, township, or other political subdivision, public corporation, authority, or district in the State.

## **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**

Consumer drone operation has steadily increased over the past few years and is projected to continue well into the future as the possible technological application expands to different commercial industries, such as agriculture, land management, energy, and construction. According to an article in the *New York Times* ("A Field Guide to Civilian Drones", 8-29-2016), the Consumer Technology Association has reported that drone unit sales and revenue are expected to double in 2016, and that 2.8 million consumer drones will be sold in the United States during the year, with revenue reaching \$953.0 million. The group also has projected the international sale of 9.4 million units in 2016 with revenue reaching \$3.0 billion, according to the article. A report from BI Intelligence projects revenue from drone sales to exceed \$12.0 billion in 2021, a reported \$4.0 billion increase from the \$8.0 billion revenue generated in 2015 ("The Drone Report", *Business Insider*, 10-2-2016). The report also predicts that consumer drone shipments will more than quadruple over the next five years because of pricing competition and technologies that are making drone operation more accessible. In addition, the report forecasts that technology such as "geofencing" and collision avoidance software will make drone operation safer.

As the use of drones becomes more prevalent, however, concerns about safety and security also increase. In particular, there are fears that drones could collide with aircraft, endangering passengers and pilots. Drones also could present security threats to critical infrastructure such as power plants, refineries, and water treatment facilities. In addition, drones could be used to smuggle weapons, drugs, and other contraband into prisons. Drones also have great potential to violate individual privacy and conduct unauthorized surveillance. While the Federal regulations establish restrictions for commercial drone use, and requirements for owners of recreational drones, the State also should take steps to help prevent misconduct and promote safety.

A broad framework would be the best way to address growing drone operation and the current lack of State policy on the subject. If separate restrictions were created by many jurisdictions in Michigan, drone regulation could turn into a "patchwork" of rules at the local, State, and Federal levels. Multiple sets of rules that applied within different jurisdictions would be confusing both to consumers and producers, and would create a dangerous airspace. The rules regarding drone operation need to be clear, reasonable, and consistently applied. The bill would avert this potential patchwork of regulation through an approach that also would allow the industry to innovate. Moreover, the bill would provide clarity for residents and businesses regarding drone use and would help ensure safe and legal drone operation.

In addition, with input from a variety of affected interests and State departments, the proposed Task Force would develop statewide policy recommendations on the operation, use, and regulation of drones. These recommendations could help law-makers determine what would be best for Michigan, in light of the State's own industries and infrastructure, and could help prevent conflicts with Federal regulations.

Legislative Analyst: Drew Krogulecki

### **FISCAL IMPACT**

The bill would have no fiscal impact on the State and an indeterminate fiscal impact on local government. 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.

Fiscal Analyst: Ryan Bergan

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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.