



Senate Fiscal Agency  
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## BILL ANALYSIS



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Senate Bill 992 (as enacted)  
Sponsor: Senator Peter MacGregor  
Senate Committee: Transportation  
House Committee: Communications and Technology

**PUBLIC ACT 436 of 2016**

Date Completed: 3-10-17

**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. Michigan statute, however, has not directly addressed drone operation; and drones have been neither legal nor illegal under Michigan law. Due to increased drone use and the lack of rules or laws, some 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 creates the "Unmanned Aircraft Systems Act" to do the following:

- Allow a person to operate an unmanned aircraft system in the State if the person is authorized by the Federal Aviation Administration (FAA) to operate unmanned aircraft systems for commercial purposes and the system is 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 is 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" means 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" means 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 will take effect on April 4, 2017.

### Lawful Unmanned Aircraft System Operation

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

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

### Prohibited Actions & Penalty

An individual may not knowingly and intentionally operate 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.

A person may not knowingly and intentionally operate an unmanned aircraft system to subject an individual to harassment. "Harassment" means 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 may 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 may not knowingly and intentionally operate an unmanned aircraft system to violate Section 539j of the Michigan Penal Code, or to otherwise capture photographs, video, or audio recordings of an individual in a manner that would invade the individual's reasonable expectation of privacy. (Section 539j of the Code prohibits the capturing, photographing, recording, or surveilling of a person who is clothed only by undergarments or undressed under circumstances in which the individual would have a reasonable expectation of privacy; prohibits the distribution or transmission for access by another person of the captured media described above; and prescribes penalties related to those provisions.)

An individual who is required to register as a sex offender under the Sex Offenders Registration Act may 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 violates any of these provisions will be guilty of a misdemeanor punishable by imprisonment for up to 90 days or a maximum fine of \$500, or both. This penalty does not affect the ability to investigate or to arrest, prosecute, or convict an individual for any other violation of a State law.

### Unmanned Aircraft Systems Task Force

The bill creates the Unmanned Aircraft Systems Task Force 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 must appoint initial members of the Task Force. The individuals appointed, initially and subsequently, must 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 who represents airports in Michigan, nominated by the MDOT Director.
- A member from the Michigan Municipal League, nominated by the executive director of the League.
- A law enforcement official from a municipality, nominated by a statewide police chiefs association.
- A member who represents county sheriffs, nominated by the president of the Michigan Sheriffs' Association.
- 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 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.
- One member from the Upper Peninsula and one from the Lower Peninsula who are knowledgeable about the operation of public utilities and who represent public utilities in the Upper or Lower Peninsula, as applicable, nominated by the chairperson of the Public Service Commission.
- A member who represents the Mackinac Bridge Authority, nominated by the authority.
- A member who represents the City of Mackinac Island.

("Key facilities" means 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.)

Initial nominations to the Task Force must be submitted to the Governor within 60 days after the bill's effective date. The Governor must make the initial appointments within 30 days after the close of nominations. Members of the Task Force must serve for terms of four years or until a successor is appointed, whichever is later. Of the initial members appointed, however, six must serve for one year, six must serve for two years, and seven must serve for three years. The Governor must designate which members serve for each initial period.

If a vacancy occurs on the Task Force, the Governor must make an appointment for the unexpired term in the same manner as the original appointment. The Governor may remove a member for

incompetence, dereliction of duty, malfeasance, misfeasance, or nonfeasance in office, or any other good cause.

The member from MDOT must 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 must meet as necessary to complete its duties. Meetings must be held in the central part of Michigan. The members of the Task Force may not receive compensation for serving.

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

The Task Force must 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. The recommendations must include recommendations regarding the protection of public and private property interests and the use of unmanned aircraft systems over public property.

Within three months after its first meeting, the Task Force must submit a report with recommendations to the Governor and the standing committees in the House and Senate that mainly deal with transportation issues. After submitting the report, the Task Force must meet at least once every 18 months to consider any new developments or problems that may require further consideration and recommendations.

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

#### Political Subdivisions & Conflicting Law

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

The Unmanned Aircraft Systems Act does 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 does not affect Federal preemption of State law.

If the Act conflicts with Section 40111c or 40112 of the Natural Resources and Environmental Protection Act, that section controls. (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" means 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 reported that drone unit sales and revenue were expected to double in 2016, and that 2.8 million consumer drones would be sold in the United States during the year, with revenue reaching \$953.0 million. The group also had 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 "geo-fencing" 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 will be the best way to address growing drone operation and the lack of State policy on the subject. If separate restrictions were created by many jurisdictions in Michigan, drone regulation could have led to 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 could create a dangerous airspace. The rules regarding drone operation need to be clear, reasonable, and consistently applied. The bill averts this potential patchwork of regulation through an approach that also allows the industry to innovate. Moreover, the bill provides clarity for residents and businesses regarding drone use and will help ensure safe and legal drone operation.

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

Legislative Analyst: Drew Krogulecki

## **FISCAL IMPACT**

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

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.