



**House
Legislative
Analysis
Section**

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**PROHIBIT HARMFUL ELECTRONIC
OR ELECTROMAGNETIC DEVICES**

House Bill 4513 (Substitute H-2)

Sponsor: Rep. Mike Nofs

House Bill 4514 (Substitute H-2)

Sponsor: Rep. William Van Regenmorter

Committee: Criminal Justice

First Analysis (5-27-03)

THE APPARENT PROBLEM:

Technological advances often result in new devices that improve the health and well-being of citizens, but they also can herald the advent of dangerous new weapons of mass destruction. An attempt by the U.S. military and others to design a weapon less lethal to humans may have led to technology for a new weapon that can be used by terrorists to disrupt communications systems and other electronics systems. Known as an electromagnetic pulse (EMP) weapon, or "E-bomb", the weapon emits a high-energy pulse of microwaves that can wipe out computers and stored data; melt telephone wires, telephone switching centers, and electronic funds transfer exchanges; disable car and airplane electronic ignitions; and endanger the health and life of patients and workers in hospitals and those with pacemakers or other electronic implants.

According to news reports, the military version of an E-bomb is delivered by a cruise missile and used as a less-lethal weapon to target an enemy's communications system without high civilian casualties (Reports are that one may have been used in the Iraqi war to disable the television station.) However, a low-tech, comparatively low-cost version that uses technology called the flux compression generator (FCG) could be developed and used by terrorists or criminals to do considerable damage, albeit on a smaller scale than military versions of EMP weapons. In an article published in the September 2001 edition of *Popular Mechanics*, the author writes that an FCG emits a pulse that "makes a lightning bolt seem like a flashbulb by comparison."

In light of society's dependence on electricity and electronic equipment, it is easy to imagine the short- and long-term effects of terrorists or criminals using FCGs to attack telecommunications centers or knock out security systems at banks, etc., for political or personal gain. However, there is no specific

prohibition in state law against using E-bombs. In order to prosecute a person under last session's terrorism package, a connection to terrorism would have to be made. Since it is conceivable that a person with no political agenda could also use an E-bomb for his or her own purposes, it is time that a new crime category be established for making, possessing, or using an E-bomb.

THE CONTENT OF THE BILLS:

The bills would amend provisions contained in Chapter 33 of the Michigan Penal Code entitled "Explosives and Bombs, and Harmful Devices" to define the term "harmful electronic or electromagnetic device" and to prohibit the manufacture or use of such a device. The bills are tie-barred to each other and would take effect October 1, 2003. Specifically, the bills would do the following:

House Bill 4513 would amend the penal code (MCL 750.200h) to define "harmful electronic or electromagnetic device" as a device that does, or that was designed to, emit or radiate an electronic or electromagnetic pulse, current, beam, signal, or microwave intended to cause harm to others or cause damage to, destroy, or disrupt any electronic or telecommunications system or device including, but not limited to, a computer, computer network, or computer system. The bill would also include a harmful electronic or electromagnetic device in the definition of "imitation harmful substance or device." The terms "computer", "computer network", "computer system", and "telecommunications system" would mean those terms as defined elsewhere in the code (Sections 145d and 219a, respectively). Further, Section 200h currently defines "serious impairment of a body function" as meaning that term as defined by Sections 58c or 625

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of the Michigan Vehicle Code. The reference to Section 625 would be deleted.

House Bill 4514 would amend the penal code (MCL 750.200i et al.) to make it a crime to manufacture, deliver, possess, transport, place, use, or release a harmful electronic or electromagnetic device (“E-bomb”) for an unlawful purpose. This would be in addition to the current prohibitions for harmful biological substances or devices, harmful chemical substances or devices, and harmful radioactive materials or devices. The penalty for a violation involving an E-bomb would be the same as currently allowed for the crimes involving biological, chemical, and radioactive materials and devices. (Penalties range from imprisonment for not more than 15 years and a fine of not more than \$10,000, or both to life without parole and a fine up to \$40,000.) In addition, the bill would specify that the penalties for any of these crimes would apply whether the violation resulted directly or indirectly in property damage or in personal injury, serious impairment, or death to another person.

Similarly, it would also be prohibited to cause an individual to falsely believe that he or she had been exposed to a harmful electronic or electromagnetic device just as it is currently prohibited to do so regarding a harmful biological substance or device, harmful chemical substance or device, or harmful radioactive material or device. The penalty for this crime would be the same as it is currently for the others at imprisonment for not more than five years, a fine of not more than \$10,000, or both.

Section 212a, which enhances the penalty for a violation of Chapter 33 if it is directed at a vulnerable target, specifies that it does not prohibit an individual from being charged with, convicted of, or punished for any other violation of law committed by that individual while committing the violation against a vulnerable target. The bill would delete this provision and apply it instead to any crimes involving explosives and harmful devices by specifying that a charge or a conviction or punishment for a violation of Chapter 33 would not prevent a person from being charged with, convicted of, or punished for any other violation of law that arose from the same transaction.

Further, Public Act 709 of 2002 amended Section 224a of Chapter 37 of the penal code, entitled “Firearms”, to allow the possession and use of electro-muscular devices (EMDs) by certain professionals. (For more information, see the House Legislative Analysis Section’s analysis of enrolled House Bill 6028 dated 1-3-03.) Some of the

language added to the penal code by PA 709 would also be placed in Chapter 33. Specifically, the bill would not prohibit the possession and use of electro-muscular disruption technology by a law enforcement officer, employee of the Department of Corrections authorized in writing by the department director, probation officer, court officer, bail agent authorized under Section 167b, licensed private investigator, aircraft pilot, or aircraft crew member, who had been trained in the use, effects, and risks of using the device while in the performance of his or her duties. (These are the same professionals authorized under Section 224a, with the exception that Section 224a refers to a “peace officer” and the bill refers to a “law enforcement officer”. Also, Section 224a allows for the “possession and reasonable use” of EMDs by these professionals, whereas the bill refers to possession and use.)

The bill would also incorporate the same definition for “a device that uses electro-muscular disruption technology” as is contained in Section 224a, and would include a provision from Section 224a that allows a manufacturer, authorized importer, or authorized dealer to demonstrate, offer for sale, hold for sale, sell, give, lend, or deliver a device that uses electro-muscular disruption technology to a person authorized to possess a device, and allows possession of such a device for any of those purposes.

Lastly, the bill would delete several redundant provisions. For instance, the act requires a court to impose costs on a person who led others to falsely believe that they had been exposed to harmful substances or devices, with the costs intended to reimburse a governmental agency for its expenses incurred as a result of the violation. This provision is unnecessary as the Code of Criminal Procedure requires a court, as part of a person’s sentence for a conviction of any violation or attempted violation of Chapter 33 of the penal code, to order the person to reimburse any governmental entity for expenses incurred in relation to the incident, including expenses for an emergency response and expenses for prosecuting the person. Also, several sections of Chapter 33 contain definitions of the term “serious impairment of a body function.” Since House Bill 4513 would retain a definition of this term in Section 200h, these provisions are unnecessary and repetitive.

FISCAL IMPLICATIONS:

According to the House Fiscal Agency, the bills would have an indeterminate fiscal impact on state and local correctional systems. (5-22-03)

ARGUMENTS:**For:**

Though primarily designed as a military weapon, a smaller, cheaper version of an e-bomb can be made by terrorists or criminals using the flux compression generator (FCG) technology. In simple terms, an FCG is a tube packed with explosives that uses chemical explosions and capacitors to generate a magnetic field. The magnetic field creates a sort of moving short circuit, which in turn creates a ramping current pulse. The effects of an E-bomb, which has been likened to a lightning bolt, can reproduce in a short burst the amount of electrical energy generated by the Hoover Dam in a day. In short, E-bombs are deadly to anything electronic. It is easy, therefore, to see the potential for terrorists or criminals to attempt to use such weapons to disable portions of a community's infrastructure for political or personal gains. The bills would make the manufacture, possession, or use of an E-bomb illegal in the same manner that it is illegal to use radioactive, chemical, or biological materials or devices. Even if the likelihood is small of such a device being unleashed within the state, it still makes good public policy to have a law on the books with which to charge someone.

Against:

Some private investigators have expressed a concern that they are particularly susceptible to false allegations at the hands of people they have been hired to investigate. Specifically, this arises in the use of chemical sprays (pepper spray or Mace) or Tazers when defending against an aggressive person. Apparently, if a charge is filed against them with a law enforcement agency, their licenses are suspended for the duration of the investigation into the incident. Since a police investigation and resolution of a charge can take years to settle, this could lead to loss for a private investigator of his or her business and livelihood. They would like to see the bill amended to include an exemption for private investigators when using chemical sprays or Tazers so that they would not be subject to criminal prosecution under the bill's provisions.

Response:

This concern could be a result of a misreading of the bills. The bills do not change current law regarding the use of chemical sprays by private investigators (or anyone else) when defending themselves. Therefore, the bills do not increase the risk to private investigators or any person lawfully using a chemical spray such as pepper spray for the purpose of defense. There was a concern that the definition of a

"harmful electronic or electromagnetic device" contained in House Bill 4513 could be applied to electro-muscular disruption technology devices (EMDs). Legislation last year authorized possession and reasonable use of EMDs (which would include Tazers) for certain professionals, including private investigators. House Bill 4514 was amended in committee to incorporate some of the language from last year's legislation so that it would be clear that devices meeting the definition of an EMD would not be considered to violate the prohibition of using an E-bomb.

POSITIONS:

The Department of State Police supports the bills. (5-21-03)

The Michigan Contract Security Association supports the bills. (5-22-03)

The Court Officers Deputy Sheriff's Association supports the bills as amended. (5-21-03)

A representative for the Prosecuting Attorneys Association of Michigan (PAAM) indicated support for the bills. (5-21-03)

The Michigan Council of Private Investigators opposes the bills. (5-21-03)

Analyst: S. Stutzky

■ This analysis was prepared by nonpartisan House staff for use by House members in their deliberations, and does not constitute an official statement of legislative intent.