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Bill Analysis

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Primary Sponsor: Sen. Gavarone

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Summary

Ohio Cyber Reserve

- Requires the Governor to organize and maintain state civilian cyber security reserve forces, to be known as the Ohio Cyber Reserve, to protect government, critical infrastructure, businesses, and citizens from cyber attacks.
- Makes the Reserve part of, and Reserve members civilian volunteers for, the Ohio organized militia under the Adjutant General's department.
- Permits the Reserve to become a civilian component of the Ohio National Guard, but does not authorize the Reserve to be called into national military service.
- Prescribes eligibility requirements for Reserve members.
- Treats Reserve members on state active duty similarly to other members of the Ohio organized militia.
- Requires the Adjutant General to establish Reserve members' rates of pay in state active duty and requires Reserve members to serve in unpaid volunteer status while training.
- Specifies procedures for the Governor to remove Reserve members.
- Allows the Governor to adopt rules governing the Reserve, and requires a copy of the rules to be publicly available in the Adjutant General's office.
- Permits the Governor, for Reserve use, to requisition equipment from the U.S. Department of Defense and make available state armory facilities, equipment, and other premises and property.
- Specifies that members of the Reserve are entitled to the same liability protections as members of the Ohio organized militia.
- Appropriates \$100,000 for fiscal year 2019 and \$550,000 for fiscal year 2020 to the Adjutant General to operate the Reserve.

Homeland Security Advisory Council

- Makes the Secretary of State a member of the Homeland Security Advisory Council in the Department of Public Safety.

Secretary of State – chief information security officer

- Requires the Secretary of State to appoint a chief information security officer to advise the Secretary on matters of information security.

Audits of election results

- Requires a board of elections to audit the official results of every election.
- Provides the minimum requirements and a timeline for the audit, and requires the Secretary of State to prescribe certain procedures for the audit.
- Specifies that the audit must use either a risk-limiting audit protocol or a percentage-based audit protocol.
- Requires the audit to be open to observers appointed under the Election Law, the media, and members of the public.

Detailed Analysis

Ohio Cyber Reserve

Generally

The bill requires the Governor to organize and maintain Ohio civilian cyber security reserve forces, to be known as the Ohio Cyber Reserve. The Reserve must be able to be expanded and trained to educate and protect state, county, and local governmental agencies; critical infrastructure, including election systems; businesses; and Ohio citizens from cyber attacks. The Governor must expand the Reserve as needed in the case of an emergency proclaimed by the Governor or caused by illicit actors or imminent danger.

Under the bill, the Reserve is to be part of the Ohio organized militia under the Adjutant General's department. Under current law, the Ohio organized militia generally consists of the Ohio National Guard, the Ohio Naval Militia, and the Ohio Military Reserve. Members of the Ohio Cyber Reserve are to be civilian volunteers of the Ohio organized militia.¹ The bill permits the Ohio Cyber Reserve to become a civilian component of the Ohio National Guard, but it does not authorize the Ohio Cyber Reserve to be called or ordered into the military service of the United States.²

¹ R.C. 5922.01, 5923.01(A) and (B), 5923.03(D), and 5924.01.

² R.C. 5922.04.

Membership

Admittance

The bill requires members of the Ohio Cyber Reserve to be U.S. citizens or legal permanent residents, and prohibits any person who has been expelled or dishonorably discharged from the Armed Forces from being accepted into the Reserve. Applicants are subject to an appropriate background check, in accordance with rules adopted by the Governor and Adjutant General, before admittance into the Reserve.³

State active duty

Under the bill, the Governor, as Commander-in-Chief of the Ohio organized militia, may order individuals or units of the Ohio Cyber Reserve to state active duty to perform duty or training as the Governor determines necessary. Under state active duty, Reserve members function as civilian members of the Ohio organized militia and have the protections afforded by the federal "Servicemembers Civil Relief Act" and the federal "Uniformed Services Employment and Reemployment Rights Act."⁴ The bill requires that whenever the Reserve, or any part thereof, is ordered out for active service, the Ohio Code of Military Justice is in full force in respect to those forces.⁵

Rates of pay

The bill requires the Adjutant General to establish and revise the rates of pay for members of the Ohio Cyber Reserve while on state active duty. Continuing law generally requires members of the Ohio organized militia to receive the same pay and allowances as like officers and enlisted personnel in the Armed Forces when the militia is ordered to state active duty. While performing any drill or training, members of the Ohio Cyber Reserve must serve in an unpaid volunteer status.⁶

Removal or resignation

The Governor may accept the resignation of any member of the Ohio Cyber Reserve at any time. Additionally, members serve at the pleasure of the Governor and may be removed from the Reserve in accordance with rules adopted by the Governor. The Governor may require reimbursement for training, equipment, and uniforms if a member does not serve the full term of the membership agreement and the inability to serve out the term was not due to disability or a similar disabling medical condition.⁷

Adoption of rules

The bill permits the Governor to adopt rules consistent with the bill's provisions governing the Reserve's membership, organization, administration, equipment, and

³ R.C. 5922.05.

⁴ R.C. 5922.01 and 5922.08.

⁵ R.C. 5922.06 and 5924.01.

⁶ R.C. 5922.01 and 5923.12.

⁷ R.C. 5922.07.

maintenance. A copy of the rules must be available to the public in the Adjutant General's office.⁸

Equipment requisition

Under the bill, the Governor may requisition equipment from the U.S. Department of Defense for Reserve use. Additionally, the Governor may make available for Reserve use state armory facilities, equipment, and other state premises and property.⁹

Liability protection

The bill specifies that members of the Ohio Cyber Reserve are not liable for any negligent acts performed within the scope of their duties. Under continuing law, members of the Ohio organized militia are entitled to the same liability protection.¹⁰

Appropriation

The bill appropriates \$100,000 for fiscal year 2019 and \$550,000 for fiscal year 2020 to the Adjutant General to operate the Ohio Cyber Reserve.¹¹

Homeland Security Advisory Council

The bill makes the Secretary of State a member of the Homeland Security Advisory Council. Currently, the Director of Public Safety appoints all of the members of the Council. Under continuing law, the Council is responsible for advising the Director on homeland security, including homeland security funding efforts. The Director must appoint state and local government officials to the Council who have homeland security or emergency management responsibilities and who represent first responders. Members of the Council serve without compensation.¹²

Secretary of State – chief information security officer

Under the bill, the Secretary of State must appoint a chief information security officer to advise the Secretary on matters of information security and to perform other duties assigned by the Secretary.¹³

Audits of election results

Audit procedure

The bill requires a board of elections to audit the official results of every election no earlier than six business days after the results are declared and to complete the audit by the 21st day after they are declared. If a board conducts a recount under the Election Law, the

⁸ R.C. 5922.02.

⁹ R.C. 5922.03.

¹⁰ R.C. 5923.37(A).

¹¹ Sections 3, 4, and 5 of the bill.

¹² R.C. 5502.011.

¹³ R.C. 111.09.

board must conduct the audit immediately after the board certifies the results of the recount and complete the audit by the 14th day after the board certifies the results of the recount.

Under the bill, the Secretary of State must prescribe the procedures for conducting an audit, which must include the following:

- The board must audit at least three contested races, questions, or issues that appear on the ballot at an election, as directed by the Secretary. If less than three contested races, questions, or issues appear on the ballot, the board must audit every contested race, question, or issue that appeared on the ballot.
- Every ballot that was included in the canvass of election results must be eligible for audit, including regular ballots cast the day of the election, absent voter's ballots, and provisional ballots.
- The board must conduct the audit using either a risk-limiting audit protocol or a percentage-based audit protocol (see "**Audit protocols**," below).

An audit is conducted by hand counting ballots. If the county uses direct recording electronic voting machines (touchscreen machines that electronically record the votes cast), the voter verified paper audit trail produced by the machine is considered the ballot for hand counting purposes.

The bill requires the board to certify the audit results to the Secretary within five days of completing it. The Secretary must make the audit results available on the Secretary's official website. If the results of a completed audit indicate that the canvass or previously declared official election results must be amended, the board must promptly do so.

The board must give public notice of the times and places, in accordance with the Open Meetings Law, for conducting an election audit. Briefly, the Open Meetings Law requires a public body to give at least 24 hours advance notice of each special meeting to all news media that have requested notification. The Open Meetings Law also requires a public body to promptly prepare, file, and maintain minutes of all meetings and to make those minutes available for public inspection.

The board also must allow observers appointed under the Election Law, the media, and members of the public to observe the audit and inspect public records that are relevant to the audit. Only board members or designated employees are allowed to handle a ballot during the auditing process. Additionally, the bill permits the board to limit the number of persons from the general public who may observe the audit due to the physical space where the audit is occurring or other practical restraints. However, the board may not prevent any appointed observer or the media from observing the audit.¹⁴

¹⁴ R.C. 121.22, not in bill, 3505.21 and 3505.331.

Audit protocols

Risk-limiting audit protocol

In a risk-limiting audit, unlike in a percentage-based audit, the actual number of ballots to be hand counted (audited) in a particular race is calculated using a statistical formula and varies based on the margin of victory for the race in the initial results, how many counting errors are discovered during the course of the audit, and the risk limit set for the audit. The bill refers to this protocol as using statistical methods to limit to acceptable levels the risk of certifying an incorrect outcome for a particular race, question, or issue.

The risk limit, expressed as a percentage, represents the chance that, if the initial results declared the wrong winner in a race, the audit will not detect that error. For example, with a 10% risk limit, if the initial results indicated the wrong winner, there is at most a 10% chance that the audit will not catch the mistake and at least a 90% chance that the audit will correct the error. The lower the risk limit an audit uses, the more ballots must be hand counted. If the risk limit is 0%, meaning that there is no risk of an incorrect election result going uncorrected by the audit, then the election officials must hand count every ballot cast in the race. The bill requires the Secretary of State to determine the risk limit to be used.

The protocol requires a bipartisan team of election officials to physically examine and hand count randomly sampled ballots. The officials must continue to hand count randomly sampled ballots until the results of the hand count provide sufficiently strong evidence (based on the risk limit) that a hand count of all of the ballots would confirm the declared election result or until all of the ballots have been counted, whichever occurs first.

If the race to be audited was decided by a large margin and the first several ballots hand counted are consistent with the initial results recorded by the voting equipment, the number of ballots the election officials must hand count might be significantly smaller than in a percentage-based audit. Conversely, if the race was decided by a small margin or the initial hand counting reveals some errors, the election officials might be required to hand count more ballots than they would in a percentage-based audit, and with a small enough margin or enough errors discovered, the officials might even be required to hand count all ballots cast in the race.¹⁵

Percentage-based audit protocol

A percentage-based audit protocol requires a bipartisan team of election officials to physically examine and hand count a number of randomly sampled ballots equal to a given percentage of the total number of ballots cast in the county at that election. After the officials complete the audit, the board must calculate the accuracy rate for each audited race, question, or issue. For example, if 1,000 ballots were cast in a race, and the election officials must hand count 5% of those ballots, 50 ballots would be hand counted. If the officials discovered that the voting equipment incorrectly counted five of those ballots, the accuracy rate would be 90% (100% - (5/50)).

¹⁵ R.C. 3505.331(B)(3)(a). See also Mark Lindeman & Philip B. Stark, *A Gentle Introduction to Risk-Limiting Audits*, IEEE Security & Privacy, September-October 2012, at 42, prepublication copy available at stat.berkeley.edu/~stark/Preprints/gentle12.pdf.

If any accuracy rate is less than the acceptable accuracy rate provided by the Secretary, the board must escalate the audit by requiring bipartisan teams of election officials to physically examine and hand count a second set of randomly sampled ballots equal to a given percentage of the total number of ballots cast in the county at that election. The second set of ballots should not include any ballots from the first set of audited ballots. After the second set of ballots is audited, the board must calculate the combined accuracy rate for both audited sets of ballots. Continuing the above example, if the hand count of a second set of 50 ballots in that race revealed three inaccurately counted ballots, the accuracy rate for the second set would be 94% (100% - (3/50)), and the combined accuracy rate would be 92% (100% - (8/100)).

If the accuracy rate, after completing a second, escalated audit, is less than the acceptable combined accuracy rate provided by the Secretary, the Secretary may require the board to order bipartisan teams of election officials to physically examine and hand count all ballots cast for that race, question, or issue.¹⁶

Current procedures

While the existing statute does not require post-election audits, the Secretary of State currently requires the boards of elections to conduct those audits by directive for every general election held in an even-numbered year and for every presidential primary election. The bill's requirements for conducting an audit are the same as the Secretary's.¹⁷

The Secretary has required the boards to conduct post-election audits at least since 2010, based on the terms of a settlement agreement that expired in 2015. The agreement ended a federal lawsuit in which the plaintiffs argued that Ohio's election administration procedures violated the Fourteenth Amendment to the U.S. Constitution.¹⁸

History

Action	Date
Introduced	02-13-19

S0052-I-133/ks

¹⁶ R.C. 3505.331(B)(3)(b) and (D)(2).

¹⁷ Ohio Secretary of State, *Ohio Election Official Manual*, Chapter 9, Section 1.03, available at sos.state.oh.us/globalassets/elections/directives/2017/dir2017-14_eom_ch_09.pdf.

¹⁸ *League of Women Voters of Ohio v. Brunner*, Case No. 3:05-CV-7309, Order enforcing settlement agreement, Exhibit B at 7 (N.D. Ohio June 19, 2009), available at moritzlaw.osu.edu/electionlaw/litigation/documents/LWVBlackwell-Order-6-19-09.pdf.