721—22.51(52) Memory cards. A memory card is a small, removable device containing data files of the election definition programmed for use in voting equipment for each election. For all voting equipment, the following security measures are required:

22.51(1) *Serial number.* Each memory card shall have a serial number printed on a readily visible label. The label shall include the name of the county.

22.51(2) *Inventory.* Memory cards owned by the county and retained in the custody of the county commissioner shall be maintained under perpetual inventory, with a record of inventory activity. The commissioner shall maintain a similar record of relevant actions if the memory cards are acquired from a vendor for each election. The record of inventory activity shall reflect:

- a. The date each memory card was acquired;
- b. Each use of each memory card in an election;
- *c*. Each maintenance activity to a memory card, such as changing the battery;
- d. Any problems or errors detected while using the memory card during its life;

e. Records of the disposal of any memory cards at the end of their useful life or upon return to the vendor for maintenance or warranty claims.

22.51(3) Custody.

a. In counties where the commissioner has the necessary software and equipment to program the memory cards locally, the commissioner shall maintain a memory card log for each election as required in subrule 22.51(4) during the period when the memory cards are removed from storage, prepared for an election, and until they are sealed into a voting device. Only county employees and precinct election officials, as applicable, authorized by the county's security policy shall be permitted to handle the memory cards. No one individual should be alone with the unsecured memory cards at any time. If a person who is not authorized by the security policy to have access to the memory cards transports them to another location, such as a warehouse, the memory cards shall be enclosed in a transport container with a tamper-evident seal.

b. In counties where the commissioner purchases programming services from a vendor, the memory cards shall be shipped to and from the vendor by a shipping service that employs tracking numbers. The memory cards shall be enclosed in a package sealed with a numbered, tamper-evident seal. Programmed memory cards shall be shipped in a package sealed with a numbered, tamper-evident seal from the vendor to the commissioner. If the seal is not intact upon arrival, the commissioner shall immediately contact the vendor for replacement cards. Only county employees authorized by the county's security policy (and precinct election officials, as applicable) shall be permitted to handle the memory cards. No one individual should be alone with the unsecured memory cards at any time.

22.51(4) *Memory card log.* For each election, the commissioner shall create a log to record the serial numbers of each memory card, the voting device into which the memory card was installed, the serial number of the seal, the ballot style and the precinct to which the machine is assigned. The log shall be in substantially the same form as Form A or Form B, as applicable:

Form A

State of Iowa

Election Log: Memory Cards for _____ County

Use this form in counties where the memory cards are programmed locally.

Mem	Memory card chain of custody record for: Election to be held//2										/20
	Memory Card Serial #	Precinct and/or Polling Place	Programmed By		Installed in Machine #	Installed Installation By	Seal Number	Card Returned from Polls			
			Date	Time			Date	Time		By	Date

Memory Card Serial #	Precinct and/or Polling Place	Programmed By		Installed in Machine #	Installed By	Insta	llation	Seal Number	Retu	ard irned Polls
		Date	Time			Date	Time		By	Date
										\vdash

Form B*

State of Iowa

Election Log: Memory Cards for _____ County

Use this form if a vendor programs the memory cards.

Memory Card Serial #	Precinct and/or Polling Place	Sent for Programming		Installed in Machine #	Installed By	Installation		Seal Number	Card Returned from Polls	
		Date Out	Date In			Date	Time		By	Dat
										+
										1
										┼──

*Form B continues on next page.

Form B (cont'd)

Memory Card Shipping Record for _____ County

Shipped for programming:

Record each card number before packing to ship, and check out each card number on the chain of custody record. Enclose a photocopy of the Memory Card Record with the cards.

ped by:	-		Date:// Time::a.m./p.m
	Print name	Signature	
ped to:			Shipped via:
			Tracking number:
Instru	ctions to ve	endor	
Check in	each card numbe	er on the enclosed cha	in of custody record when unpacking cards.
Check in	each card numbe	er on the enclosed cha	in of custody record when unpacking cards.
By:			in of custody record when unpacking cards.
By: Print n	ame	Signature	Date:/ Time:: a.m./p.m.
By: Print n	ame	Signature emoved from this inve	
By: Print n • If n carc • Rep	ame nemory cards are re d(s) on the Memor placement card(s) i	Signature emoved from this inve y Card Record. f issued should be add	Date:// Time:: a.m./p.m.
By: Print n e If n carc e Rep new	ame nemory cards are ro d(s) on the Memor placement card(s) i v card. A serial num	Signature emoved from this inve y Card Record. f issued should be add mber will be assigned	Date:/Time::a.m./p.m.

Received by County Election Department on Date: __/__/

Was the package sealed? _____ Was the seal intact? _____ Notes: _____

Keep the memory cards in secure storage after they are received and until they are installed in the voting equipment.

22.51(5) *Preparation and installation.* When memory cards are installed, they shall be sealed immediately into the machine using a numbered, tamper-evident seal. Appropriate log entries shall be completed.

22.51(6) *Replacing seals or memory cards.* If a seal is accidentally broken or a memory card is replaced for any reason, the issuance of a new seal and the entry into the log shall be witnessed by more than one person. The facts of the incident and the names of the individuals who detected and resolved it shall be recorded.

22.51(7) *Opening the polls.* Immediately before the polls open on election day, the precinct election officials shall turn on the voting equipment and print the report showing that all counters are set at zero.

22.51(8) *Verification log.* The commissioner shall provide to each precinct a precinct verification log with the ballot record and receipt. The verification log shall provide places for precinct election officials to record or check the following information before the polls open and again before leaving the polling place at the end of the day:

- *a.* Seal numbers from the voting equipment; and
- b. Condition of seals on ballot containers.

22.51(9) *Election day.*

a. Before the polls are opened, the precinct election officials shall verify the required information in the verification log and sign the log.

b. After the polls are closed, the precinct election officials shall verify the required information in the verification log and sign the log before leaving the polling place.

c. If the precinct election officials remove the memory cards from the voting equipment, the officials shall first print the results report from the voting equipment.

22.51(10) *Return of memory cards.* If the precinct election officials remove the memory cards from the voting equipment on election night, they shall return to the commissioner the memory cards and the seals used to secure them in a sealed envelope or other container. All officials of the precinct shall witness the statement on the envelope or other container. The label on the envelope or other container shall be in substantially the following form:

Memory Cards

Election Date: ______
Precinct: _____

This envelope contains Memory Cards and memory card access seals from this precinct.

Machine Number	Memory Card #	Memory Card Seal #			

[Signatures of all precinct election officials shall be included on the label.]

22.51(11) Storage. If the memory cards are returned inside the voting equipment to the commissioner, the machine serial numbers and the seal numbers shall be verified against the verification log described in subrule 22.51(8). When the memory cards are removed, their serial numbers shall also be verified against the verification log returned by the precinct's election officials. The memory card audit log shall be retained for the time period required by Iowa Code section 50.19.

22.51(12) *Results verified.* Before the conclusion of the canvass of votes, the individual results reports from the precincts, as signed by the precinct election officials at the polls on election night, shall be compared to the election results compiled for the canvass (either manually or electronically) to verify that transmitted and accumulated totals match the results witnessed by the election officials. Any discrepancies in these totals shall be reconciled before the supervisors conclude the canvass.

22.51(13) *Retention of programmed memory cards.* The election information on all memory cards used for an election shall be retained on the memory cards until after the time to file requests for recounts and election contests has passed. If a contest is pending, the memory cards shall be retained until the contest is resolved. Before the memory cards are permanently erased, the commissioner shall print the memory card audit log from each card.

22.51(14) *Retention of program information.* The commissioner shall retain all instructions and other written records of the process for programming the memory cards and the memory card audit logs for the period required by Iowa Code section 50.19. The contents of memory cards and other electronic records of the election process shall be collected and retained in an electronic or other medium and stored with the other election records for the time period required by Iowa Code section 50.19.