

#18496
STATE OF MINNESOTA
DEPARTMENT OF STATE
FILED
DEC 22 1966
James A. Johnson
Secretary of State

REPORT OF
MINNESOTA VOTING MACHINE COMMISSION
MADE DECEMBER 21, 1966 ON THE LICENSING
OF THE IBM VOTOMATIC SYSTEM FOR PERMANENT USE

On August 23, 1965 International Business Machines Corporation filed with the Minnesota Voting Machine Commission its application for examination of the Harris IBM Votomatic System.

Subsequently, the Minnesota Voting Machine Commission licensed the Harris IBM Votomatic System for experimental use in the cities of Bloomington, Minnesota and Coon Rapids, Minnesota.

The license extended to the municipal elections held in Bloomington and Coon Rapids on November 2, 1965, the state-wide primary election on September 13, 1966 and the state-wide general election on November 8, 1966.


The individual members of the Commission and their representatives observed the operation of the system at the polling places within the two above named municipalities and at the counting centers located therein. In addition, exhaustive written material and presentations were submitted by the municipalities involved and representatives of the applicant.

On the basis of the examination conducted by the Commission, the conclusions of which are contained in its memorandum filed and incorporated herewith as part of the report,

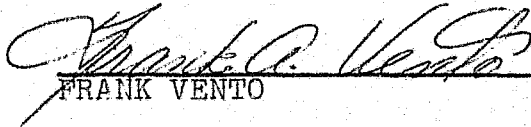
IT IS THE OPINION OF THE MINNESOTA VOTING MACHINE COMMISSION that the system as presented fails to comply with the requirements of the law and, in the opinion of the Commission, fails to meet its minimum requirements with regard to its ability to accurately and efficiently register the will of the electors.

NOW, THEREFORE, pursuant to the foregoing the applica-
tion of International Business Machines Corporation for a
permanent license for the Harris IBM Votomatic System is in
all respects denied.

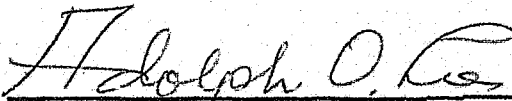
MINNESOTA VOTING MACHINE COMMISSION



ROBERT W. MATTSON
Attorney General and Chairman



FRANK VENTO



ADOLPH O. LEE

#18446
O.D.

MEMORANDUM

The Commission has thoroughly examined the proposed system, both in the polling place and at the counting center. It finds that the system fails to meet the specific statutory criteria in the following respects:

I. It fails to permit every elector to vote for all candidates and propositions for whom or upon which he is legally entitled to vote.

A. At the primary election the Commission observed that fully 5% of the total ballots cast on the partisan ballot were rejected by the automatic tabulating equipment.

IBM and representatives of the municipalities involved have advised us that the 5% figure represents the total of all those voters whose ballots were rejected because they crossed party lines and those voters who cast no votes on the partisan ballot.

The Commission has been advised by the City of Bloomington that the vast majority of the 5% figure above mentioned were voters who erroneously crossed party lines on the partisan ballot and thereby had their votes rejected. The applicant afforded little or no protection to the elector against inadvertently voiding his ballot in this respect.

B. A vast number of ballots were imperfectly punched by the elector. Each voting booth is equipped with a metal stylus. The IBM punch card which is used as a ballot is punched in appropriate places by the elector in order to have his vote recorded. Any manner of imperfect punching, e.g., the leaving of a tiny scrap of paper, or "burr," on the ballot card, will cause the computer (which counts the ballots) to reject the card completely. When the machine rejects in this manner,

the counting process stops, and the faulty ballot card must be located and removed before the count proceeds.

The faulty cards are separated and examined by the judges. If the voter's intent can be determined, they are then repunched by the judges and the IBM representatives. If the voter's intent cannot be determined, the ballot is not counted. In Bloomington the Commission noted the following:

	<u>PRIMARY</u>	<u>GENERAL</u>
Total votes cast with IBM Votomatic in Bloomington	9,500	19,192
Total ballots reproduced	102	233

Of the 102 ballots which were reproduced in the Bloomington primary, at least 31 were a result of the counting machine tearing and mutilating the cards. In addition, the Commission noted a great number of cards torn and mutilated by the machine in the November general election. The Commission recognizes that the Bloomington Judges made every effort to ascertain the voter's intent; this was, of necessity, speculative in many instances. The Commission feels that the inherent danger in requiring judges to guess the intent of a voter by examining a mutilated ballot causes the system to fall below the Commission's standards.

The Commission has also noted that the ratio of ballots reproduced to total ballots cast increased from the primary election to the general election.

Moreover, the repunching of ballot cards consumes an inordinate amount of time. In Bloomington, during

the primary election on September 13, 1966, the count of 9,500 ballots was not completed until 4:00 P. M. September 14, 1966. In the Bloomington general election, November 8, 1966, the vote count commenced at 8:45 P. M., but was not concluded until 5:30 A. M. November 9, 1966. The Commission must note that the efficiency of the judges cannot help but be impaired by a marathon such as this.

C. The additional steps involved in computing vote totals by the use of computers greatly increase the chance for error. During the experiment, computer equipment was borrowed from industries within the municipality together with technical personnel necessary to operate the computer. The very use of a complicated computer and lay-judges in this situation greatly impairs the ability of the judges to guard against fraud and error.

II. It fails to reject by means of the automatic tabulating equipment all votes for any office or measure when the number of votes cast therefor exceeds the number which the voter is entitled to cast.

In situations where a voter elects to exercise his privilege of writing in a candidate's name, the card-punched ballot must be examined by hand to determine whether or not an overvote has occurred. The Commission notes that the examination of an IBM card is more difficult than examining a paper ballot. This, in the Commission's opinion, greatly enhances the opportunity for error.

On the basis of the aforementioned, it is the opinion of the Commission that the application should be denied. The Commission feels, however, that the underlying theory behind Votomatic is sound and, although it cannot be approved at this time, required improvements in the system could reasonably be undertaken by the applicant. With this in mind, the Commission invites IBM to reapply.