REPORT OF THE SECRETARY OF STATE

ON THE EXAMINATION AND EVALUATION OF AN OPTICAL SCAN ELECTRONIC VOTE TALLYING SYSTEM

In May of 1990 BRC of Berkeley, California requested examination and certification of an Optical Scan/mark sense precinct ballot card reader system under RCW 29.33.041 and 29.34.090. The hardware and software for this system is marketed under the name BRC Optech III P Eagle and A.E.R.O. election management system. The A.E.R.O. software was previously certified for use with the Optech III P also marketed by BRC.

The Optech III Pe is a precinct optical scan/mark sense ballot card reader. The reader interprets ballots and records vote totals onto a computer "prom pack chip". The prom pack chip module is then attached to an IBM-PC compatible computer for accumulation of results and report generation. The PC runs the A.E.R.O. software. There is a printer attached to the PC for printing results. The software is menu driven and allows the user to describe all aspects of an election in preparation for ballot counting. The user enters all office descriptions, positions, precinct combinations, ballot types, and any statistical information such as registered voter totals. The A.E.R.O. is used to produce the programming on the prom pack chip module, which is then used to count ballots in the card reader.

On July 10, 1990 a public hearing was held to demonstrate the BRC system. Representing the Vendor were Randy Rodriguez and Bonnie Cuellar, Representing the Office of the Secretary of State were Gary McIntosh, Director of Elections, David Elliott, Assistant Director of Elections, and Erika Aust, Election Assistant. The meeting was also attended by members of the public. The vendor made a presentation of the Optech III Pe and a test election was conducted using a group of test decks prepared by the Office of the Secretary of State. After the test was conducted the vendor answered questions from the Secretary of State staff and the public.

FINDINGS OF THE SECRETARY OF STATE

Upon review of the staff evaluation of the BRC Optech III Pe vote tallying system, the presentation by the vendor, and the results of the tests performed during and following the public hearings on this system, the secretary of state finds that the system satisfies the requirements of RCW 29.34.090 when used in the manner described below.

This system does not have the capability to automatically detect write-in votes, on a ballot, in a manner consistent with Washington State law. In order to record a write-in vote using the Optech III system, a voter must complete an arrow next to the write-in blank in addition to writing in the name of the candidate of their choice. RCW 29.01.180 states that a voter "need only specify the name of the candidate in the appropriate location on the ballot in order to be counted." A Voter, using this system, that writes-in a candidate name but fails to complete the arrow next to the write-in blank will not have this write-in vote recorded. Additionally, if a voter votes for a candidate by completing the arrow next to the candidate's name, and also writes in a name in the write-in blank, but fails to complete the arrow, they have created an overvote, but the Optech III Pe will incorrectly record a vote for the regular candidate. The design of the Optech reader, and the requirements of Washington State law, necessitate the use of one of three special procedures on the part of the user to assure proper tallying and results.

These procedures are as follows:

1)The system may be used as a central counting system if each ballot is manually inspected before tabulation, for write-in votes that may not have completed arrows next to them. It is recommended that the canvassing board of any county using this system adopt written procedures governing this process; or

2)The system may be used as a poll site tabulation device if all ballots are inspected during the period subsequent to the election and prior to certification. The inspection of each ballot will be made to find any write-in votes that do not have the accompanying completed arrow. Election results must be updated to include any additional write-ins and to also overvote and adjust totals for any ballot that is found to be an overvote and not a valid vote for a candidate. It is recommended that the canvassing board of any county using this system adopt written procedures governing this process; or

3)The system may be used as a poll site tabulation device if all ballots are inspected by election board workers prior to tabulation. The voter would not feed his/her ballot to the Optech III Pe. The voter would place his/her ballot in either a sealed ballot container or the front "emergency slot" on the metal storage area of the device. Ballots would accumulate this way while the polls are open. After closing the polls for the day the ballots would be inspected as a group, thus preserving voter anonymity. The inspection would search for write-ins that lacked the accompanying completed arrow. The reader would then be activated and all ballots counted. It is recommended that the canvassing board of any county using this system adopt written procedures governing this process.

Therefore, under the provisions of RCW 29.33.041, the BRC Optech III Pe vote tallying system is conditionally approved for use in Washington State as an optical scan/mark sense ballot card vote tallying system. This equipment should be used with a device or devices capable of suppressing current surges, voltage fluctuations, and any other line disturbances.

Certified on this September 20, 1990

RALPH MUNRO
Secretary of State