TEST DECKS – JUNE 2024

Testing of tabulating equipment. The person in charge of the election normally conducts several tests of the automatic tabulating equipment as required by state law or administrative rule. The tests normally are conducted by processing a preaudited group of ballots in a test deck marked to record a predetermined number of valid votes for each candidate and each measure. We recommend the following testing schedule, the first test should be done at least 30 days before an election, so that if errors are discovered there is time for correction. Once the first test passes without any errors, then the second test, usually the public accuracy test is performed, where members of the public can have input to any issues or questions they may have. The third test should be conducted before the ballots are tallied the night of the election. A forth test should be done any time there is a recount. All four tests should use the same testing ballots across the board to maintain the constant of what we are testing.

A tally sheet should be created prior to the machine count to fully show how the sample of ballots is marked and what the machine vote totals must be to prove an errorless count. If more than one ballot style is used in the election, a test deck should be made for each ballot style that is unique in any way. The test deck(s) should include for each office and ballot question:

(1) One or more ballots with a vote for each candidate and each side of a ballot question;

(2) One or more ballots which have votes in excess of the number allowed by law for each office and question; and

(3) One or more ballots which contain an undervote.

(4) All candidates and ballot questions should have a unique number of votes used, and must not be repeated or used again anywhere on the ballot. Each race should utilize a unique prime number within the race that is unique and not repeated or used again anywhere on the ballot.

At least twenty-five test ballots should be included in the total of all test decks as the minimum. Individual test decks for individual ballots should be of sufficient size to prove the accuracy of the system. If absentee ballots are to be received folded, at least ten percent of the test ballots in any individual test deck should be similarly folded. The person conducting the test of the tabulating equipment should date and sign the printout, verifying that the results of the machine's printed paper vote totals exactly match the tally sheet from which the sample of ballots was marked. The test deck(s), tally sheet, and signed printout are usually considered election materials and should be secured and retained with the official ballots.

The test procedure should include the processing of at least one ballot completely blank to verify that the machine is correctly configured according to state laws and administrative rules.

If more than one tabulating machine is to be used in the election, each machine should be fully tested according to the ballot(s) which each machine will be used to count in the election.

A traditional ballot that voters fill out oval, and the pre-printed ballots with bar codes should be considered as two different ballot styles in a precinct, and should be tested separately for programming accuracy.

In addition to these tests, any test deck may be processed any time before or after completion of the official count.

See Below for Prime Number Chart:

Race	Candidate Issue A	Candidate Issue B	Candidate Issue C	Candidate Issue D	Candidate Issue E		Max Marked Ballots Used	Max Marked Ballots Used
	Prime Number Test Deck							
	Prime Number Required to be used in each race on ballot	**Numbers can only be used once on the ballot**						
Group A Simple Elections 2 Options (No Write-In)								
2 Option Race Base (No Write-In – 25 Ballot Test)							**2 Ovals**	**2 Ovals**
Race 1	3	18					21	21
Race 2	5	16					21	21
Race 3	7	14					21	21
Race 4	11	10					21	21
Race 5	13	8					21	21
Race 6	17	4					21	21
2 Option Race Base (No Write-In – 50 Ballot Test + Above Chart 25)								
Race 7	23	6					29	29
Race 8	29	12					41	41
Race 9	31	15					46	46
Race 10	37	9					46	46
Group B Simple Elections 2 Options (with Write-In)								
3 Option Race Base							**2 Ovals**	**3 Ovals**
Race 1	3	36	20				39	59
Race 2	5	35	18				40	58
Race 3	7	34	16				41	57
Race 4	11	33	15				44	59
Race 5	13	32	14				45	59
Race 6	17	30	12				47	59
Race 7	19	28	10				47	57
Race 8	23	27	9				50	59
Race 9	29	26	8				51	63
Race 10	31	24	6				55	61

Race	Candidate Issue A	Candidate Issue B	Candidate Issue C	Candidate Issue D	Candidate Issue E	Max Marked Ballots Used	Max Marked Ballots Used
Group C Simple Elections 2-4 Options (with Write-In)							
2-5 Option Races						2 Ovals	Max Ovals
Race 1(5)	3	52	27	12	9	55	103(5)
Race 2(5)	5	51	15	20	10	56	101(5)
Race 3(4)	7	50	26	18		57	101(4)
Race 4(4)	11	49	32	16		60	104(4)
Race 5(4)	13	48	33	8		61	102(4)
Race 6(3)	17	46	39			63	102(3)
Race 7(3)	19	45	38			64	102(3)
Race 8(3)	23	44	36			67	103(3)
Race 9(3)	29	42	35			71	106(3)
Race 10(3)	31	40	34			71	105(3)
	*Over vote and under vote test ballots are needed for each race and should be run as a separate test from this baseline test.						

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9	Option 10	Max Marked Ballots Used
Group D Simple Elections 2-9 Options (with Write-In)											
2-10 Option Races											
Race 1(10)	5	4	6	8	9	10	12	14	16	15	99
Race 2(3)	23	20	21								64
Race 3(2)	19	28									47
Race 4(3)	17	24	25								66

	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9	Option 10	Option 11	Max Marked Ballots Used
Group E Simple Elections 2-10 Options (with Write-In)												
2-11 Option Races												
Race 1(11)	5	4	6	8	9	10	12	14	16	15	18	117
Race 2(3)	23	20	21									64
Race 3(2)	19	28										47
Race 4(3)	17	24	25									66
Race 5(3)	11	30	26									67
Race 6(3)	7	32	27									66

Prime Number	2	3	4	5	6	7	8	9	10	11	12	13		Total Ballot Positions
5	4	6												3
7	8	9	10											7
11	12													9
13	14	15	16											13
17	18													15
19	20	21	22											19
23	24	25	26	27	28									25
29	30													27
31	32	33	34	35	36									33
37	38	39	40											37
41	42													39
43	44	45	46											43
47	48	49	50	51	52									49
53	54	55	56	57	58									55
59	60													57
61	62	63	64	65	66									63
67	68	69	70											67
71	72													69
73	74	75	76	77	78									75
79	80	81	82											79
83	84	85	86	87	88									85
89	90	91	92	93	94	95	96							93
97	98	99	100											97
101	102													99
103	104	105	106											103
107	108													105
109	110	111	112											109
113	114	115	116	117	118	119	120	121	123	124	125	126		122

	For Extra candidates for a race recycle and reuse the numbers.	
	Revised 6/17/2024	