

# National Technical Systems Test Report for Electromagnetic Interference (EMI) Testing of the ExpressVote 2.1

**Prepared For**

Pro V&V, Inc. | 6705 Odyssey Dr NW Ste C | Huntsville, AL 35806

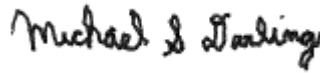
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A handwritten signature in black ink, appearing to read "Greg Gagne".

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Greg Gagne  
Technical Writer

A handwritten signature in black ink, appearing to read "Michael Darling".

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Michael Darling  
EMI Department Manager



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**Revision History**

<b>Rev.</b>	<b>Description</b>	<b>Issue Date</b>
0	ITR-PR120980-00	10/29/2020

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### 1.0 Introduction

This document presents the test procedures used and the results obtained during the performance of an Electromagnetic Interference test program. The test program was conducted to assess the ability of the specified Equipment Under Test (EUT) to successfully satisfy the requirements listed in Section 2.0.

### 2.0 References

The following references listed below form a part of this document to the extent specified herein.

- Pro V&V, Inc. Purchase Order(s) 2020-004, dated 07/01/2020
- National Technical Systems (NTS) Quote(s) OP0554725, dated 06/24/2020
- NTS Corporate Quality Policy Manual, Revision 9, dated 9/20/2018
- ISO/IEC 17025:2017(E) *General Requirements for the Competence of Testing and Calibration Laboratories*, dated 11/1/2017
- Test Specification: EAC 2005 VVSG

### 3.0 Product Selection and Description

Pro V&V, Inc. selected and provided the test sample(s) to be used as the Equipment Under Test. Details below:

**Table 3.0-1: Product Identification - Equipment Under Test (EUT)**

Item	Qty.	Name/Description	Part Number	Serial Number
1	1	ExpressVote 2.1	ExpressVote 2.1	EV0219400585

### 3.1 Security Classification

Non-classified

### 4.0 General Test Requirements

#### 4.1 Test Equipment

NTS-provided equipment is calibrated according to ISO/IEC 17025:2017(E) and calibration is traceable to the National Institute of Standards and Technology (NIST). Calibration records are maintained on file at NTS.

#### 4.2 Measurement Uncertainties

Measurement uncertainty data is available upon request.

#### 4.3 Notice of Deviation

In accordance with NTS' quality procedures, when the EUT is observed to exceed or display susceptibility, a Notice of Deviation (NOD) document is generated by the technician performing the test. This NOD documents the requirement, how the EUT deviated from the requirement, and allows room for resolution of the deviation.

This document is reviewed and approved by the NTS Program Manager or Engineer and the NTS Quality Assurance Representative, and then forwarded to the customer contact. Once mitigated (or passed over), the steps taken to correct the deviation (or simply instruction from the customer to continue testing) are recorded in the NOD and a copy of the NOD is integrated into the body of the report, in the appropriate location.



## 5.0 Test Descriptions and Results

**Table 5.0-1: Summary of Test Information & Results**

Section	Test	Specification	Test Facility	Test Date	Part #	Serial #	Test Result*
5.1	Electrostatic Discharge	EAC 2005 VVSG	Longmont	09/14/2020 - 09/14/2020	ExpressVote 2.1	EV0219400585	Complied
5.2	Surge Immunity	EAC 2005 VVSG	Longmont	09/11/2020 - 09/11/2020	ExpressVote 2.1	EV0219400585	Complied
5.3	Voltage Dips and Inter- ruptions	EAC 2005 VVSG	Longmont	09/09/2020 - 09/09/2020	ExpressVote 2.1	EV0219400585	Complied

\*The decision rule used to state compliance is in accordance with the test specification used for testing. Unless otherwise noted, testing was performed in accordance with the latest published version of test specification at time of test.



5.1 Electrostatic Discharge

**Electrostatic Discharge per IEC / EN 61000-4-2**

Manufacturer:	Pro V&V, Inc. ES&S	Project Number:	PR120980-00
Customer Representative:	Michael Walker	Test Area:	GP #2
Model:	ExpressVote 2.1 (Configuration 2)	S/N:	EV0219400585
Standard Referenced:	EAC 2005 VVSG	Date:	September 14, 2020
Temperature:	19°C	Humidity:	32%
Input Voltage:	120Vac/60Hz	Pressure:	846 mb
Configuration of Unit:	Counting Ballots		
Test Engineer:	T. Wittig		

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Test Location	Voltage Level (kV)	Polarity		Number of Pulses	Pulses Per Second	Comments	Criteria Met	Pass / Fail
		+	-					
Indirect Discharge Points								
VCP	8	x	x	10	1	Front Side	A	Pass
VCP	8	x	x	10	1	Left Side	A	Pass
VCP	8	x	x	10	1	Right Side	A	Pass
VCP	8	x	x	10	1	Back Side	A	Pass
HCP	8	x	x	10	1	Edge of HCP at Front of UUT	A	Pass
Contact Discharge Points - <b>RED</b> Arrows.								
Figure A2	8	x	x	10	1		A	Pass
Figure A3	8	x	x	10	1		A	Pass
Figure A4	8	x	x	10	1		A	Pass
Figure A5	8	x	x	10	1		A	Pass
Figure A6	8	x	x	---	---	No contact discharges found	---	---
Figure A7	8	x	x	---	---	No contact discharges found	---	---
Figure A8	8	x	x	---	---	No contact discharges found	---	---
Air Discharge Points - <b>BLUE</b> Arrows.								
Figure A2	2, 4, 8, 15	x	x	10	1		A	Pass
Figure A3	2, 4, 8, 15	x	x	10	1		A	Pass
Figure A4	2, 4, 8, 15	x	x	10	1		A	Pass
Figure A5	2, 4, 8, 15	x	x	---	---	No air discharges found	---	---
Figure A6	2, 4, 8, 15	x	x	10	1		A	Pass
Figure A7	2, 4, 8, 15	x	x	---	---	No air discharges found	---	---
Figure A8	2, 4, 8, 15	x	x	10	1		A	Pass

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**Electrostatic Discharge per IEC / EN 61000-4-2**

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Manufacturer: Pro V&V, Inc. ES&S  
Customer Representative: Michael Walker  
Model: ExpressVote 2.1 (Configuration 2)  
Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
Test Area: GP #2  
S/N: EV0219400585  
Date: September 14, 2020

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Figure A1. Electrostatic Discharge Test Setup.

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## Electrostatic Discharge per IEC / EN 61000-4-2

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Manufacturer: Pro V&V, Inc. ES&S  
Customer Representative: Michael Walker  
Model: ExpressVote 2.1 (Configuration 2)  
Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
Test Area: GP #2  
S/N: EV0219400585  
Date: September 14, 2020

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Figure A2. Electrostatic Discharge Test Points



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### Electrostatic Discharge per IEC / EN 61000-4-2

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Manufacturer: Pro V&V, Inc. ES&S  
Customer Representative: Michael Walker  
Model: ExpressVote 2.1 (Configuration 2)  
Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
Test Area: GP #2  
S/N: EV0219400585  
Date: September 14, 2020

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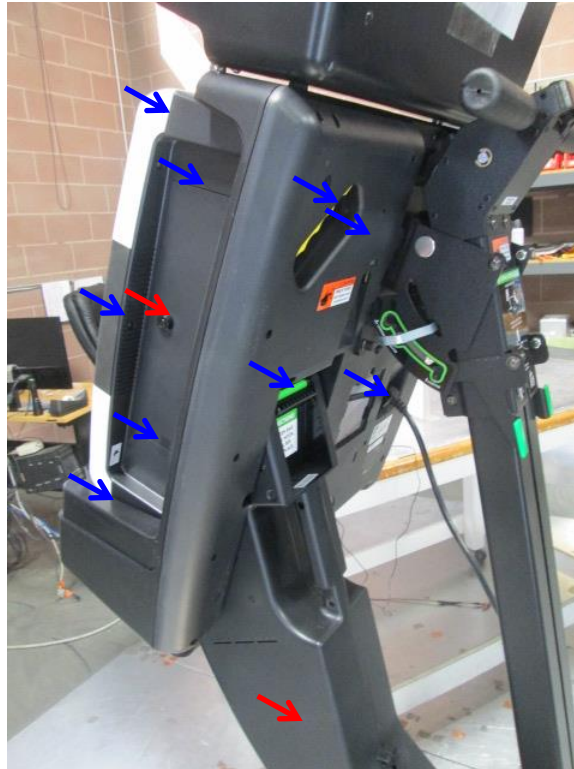


Figure A3. Electrostatic Discharge Test Points

### Electrostatic Discharge per IEC / EN 61000-4-2

Manufacturer: Pro V&V, Inc. ES&S  
 Customer Representative: Michael Walker  
 Model: ExpressVote 2.1 (Configuration 2)  
 Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
 Test Area: GP #2  
 S/N: EV0219400585  
 Date: September 14, 2020

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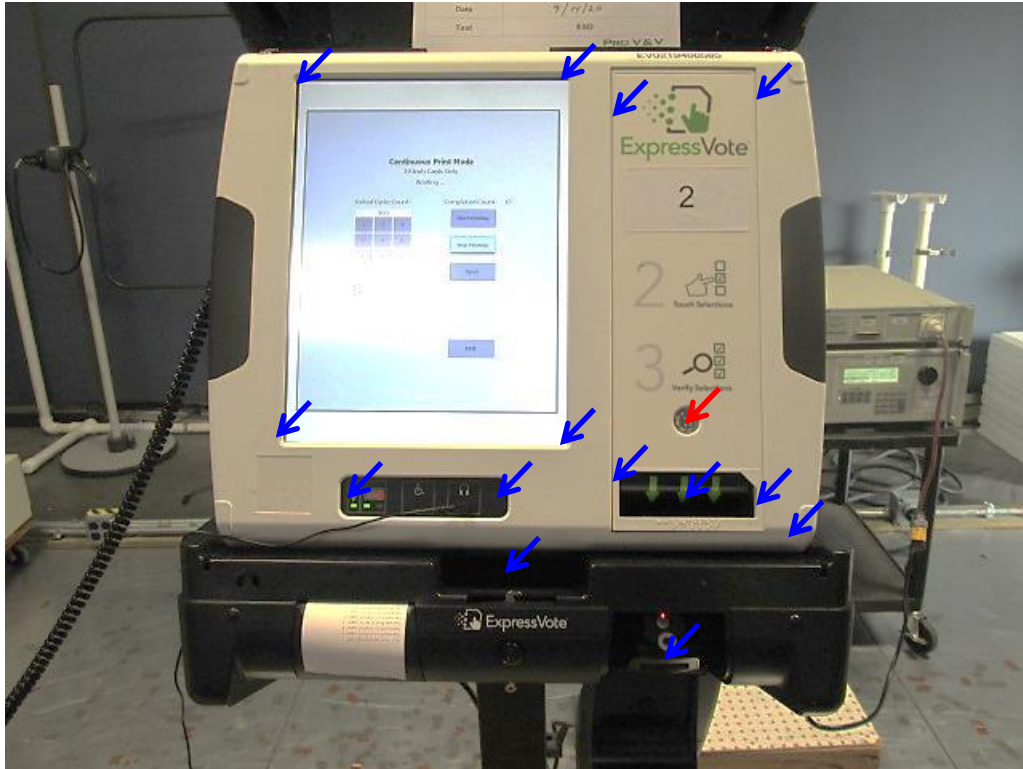


Figure A4. Electrostatic Discharge Test Points

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**Electrostatic Discharge per IEC / EN 61000-4-2**

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Manufacturer: Pro V&V, Inc. ES&S  
Customer Representative: Michael Walker  
Model: ExpressVote 2.1 (Configuration 2)  
Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
Test Area: GP #2  
S/N: EV0219400585  
Date: September 14, 2020

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Figure A5. Electrostatic Discharge Test Points

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### Electrostatic Discharge per IEC / EN 61000-4-2

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Manufacturer: Pro V&V, Inc. ES&S  
Customer Representative: Michael Walker  
Model: ExpressVote 2.1 (Configuration 2)  
Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
Test Area: GP #2  
S/N: EV0219400585  
Date: September 14, 2020

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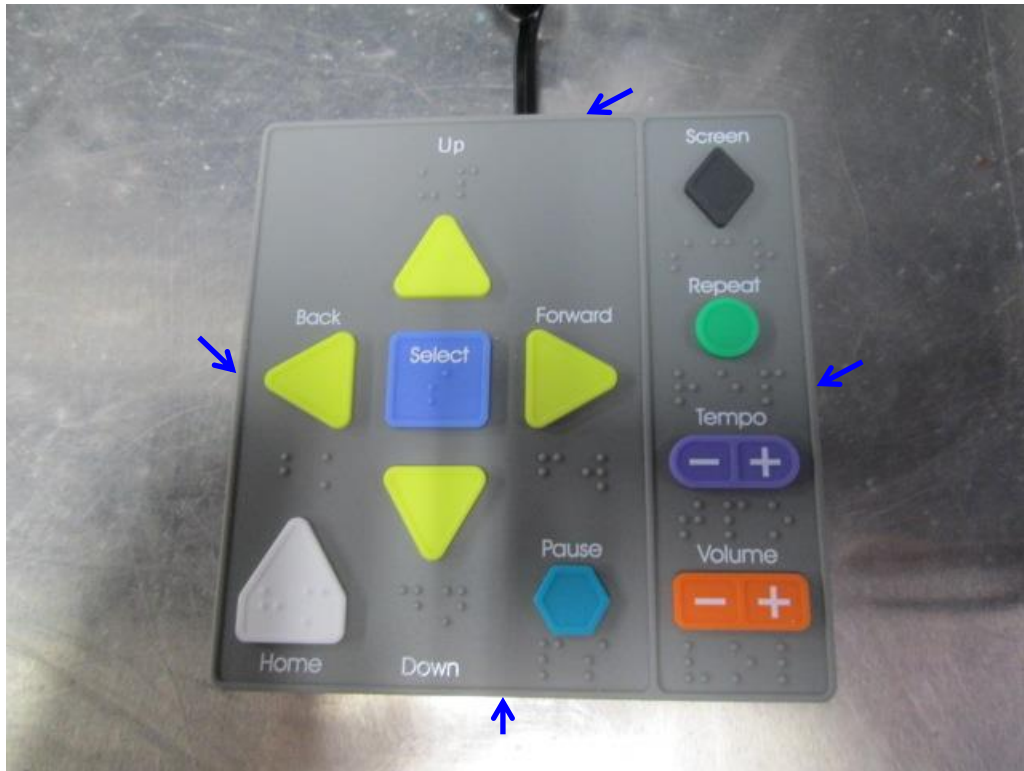


Figure A6. Electrostatic Discharge Test Points

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**Electrostatic Discharge per IEC / EN 61000-4-2**

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Manufacturer: Pro V&V, Inc. ES&S  
Customer Representative: Michael Walker  
Model: ExpressVote 2.1 (Configuration 2)  
Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
Test Area: GP #2  
S/N: EV0219400585  
Date: September 14, 2020

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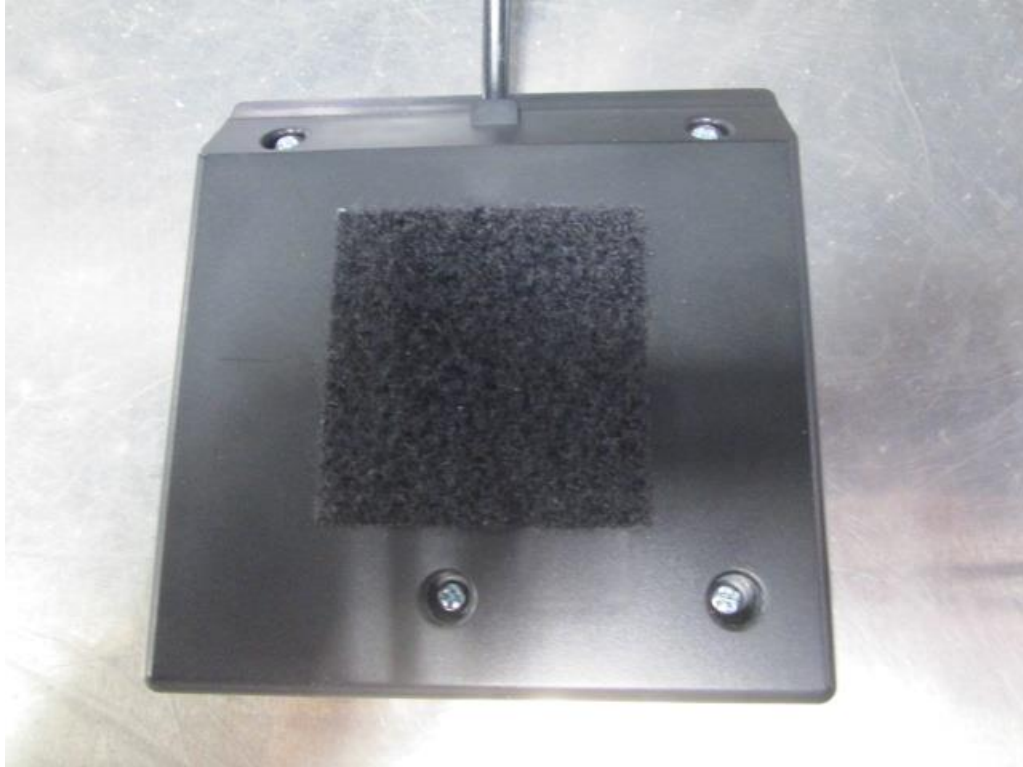


Figure A7. Electrostatic Discharge Test Points

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**Electrostatic Discharge per IEC / EN 61000-4-2**

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Manufacturer: Pro V&V, Inc. ES&S  
Customer Representative: Michael Walker  
Model: ExpressVote 2.1 (Configuration 2)  
Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
Test Area: GP #2  
S/N: EV0219400585  
Date: September 14, 2020

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Figure A8. Electrostatic Discharge Test Points



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## Electrostatic Discharge per IEC / EN 61000-4-2

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Manufacturer:	Pro V&V, Inc. ES&S	Project Number:	PR120980-00
Customer Representative:	Michael Walker	Test Area:	GP #2
Model:	ExpressVote 2.1 (Configuration 2)	S/N:	EV0219400585
Standard Referenced:	EAC 2005 VVSG	Date:	September 14, 2020

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### Test Equipment List

ID Number	Manufacturer	Model #	Serial #	Description	Cal Date	Cal Due
1041	Fluke	83-3	70130434	Multimeter/Frequency Meter	06/29/2020	06/29/2021
1296	California Instruments Corporation	5001IX208-150/300	S59159	5k VA AC Power Source (WCO95675)	08/20/2020	08/20/2021
1333	EMC Partner	ESD3000	395	ESD Test System, including ESD3000DN1-1540 30kV Ad	12/19/2019	12/19/2020
1901	EXTECH	445703	0617	Hygrometer-Thermometer (WC059899)	06/29/2020	06/29/2021



5.2 Surge Immunity

**Surge Immunity per IEC / EN 61000-4-5**

Manufacturer:	Pro V&V, Inc./ES&S	Project Number:	PR120980-00
Customer Representative:	Michael Walker	Test Area:	GP 2
Model:	ExpressVote 2.1 (Configuration 2)	S/N:	EV0219400585
Standard Referenced:	EAC 2005 VVSG	Date:	September 11, 2020
Temperature:	22°C	Humidity:	32%
Input Voltage:	120Vac/60Hz	Pressure:	840 mb
Configuration of Unit:	Counting Ballots		
Test Engineer:	Mike Tidquist		

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Voltage (kV)	Polarity		L 1	L 2	L 3	N	P E	Phase (deg)	Number of Pulses	Delay (sec)	Comments	Criteria Met	Pass / Fail
	+	-											
0.5	x		x			x		0	5	30	Differential Mode	A	Pass
0.5		x	x			x		0	5	30		A	Pass
0.5	x		x			x		90	5	30		A	Pass
0.5		x	x			x		90	5	30		A	Pass
0.5	x		x			x		180	5	30		A	Pass
0.5		x	x			x		180	5	30		A	Pass
0.5	x		x			x		270	5	30		A	Pass
0.5		x	x			x		270	5	30		A	Pass
0.5	x		x			x	x	0	5	30	Common Mode Line	A	Pass
0.5		x	x			x	x	0	5	30		A	Pass
0.5	x		x			x	x	90	5	30		A	Pass
0.5		x	x			x	x	90	5	30		A	Pass
0.5	x		x			x	x	180	5	30		A	Pass
0.5		x	x			x	x	180	5	30		A	Pass
0.5	x		x			x	x	270	5	30		A	Pass
0.5		x	x			x	x	270	5	30		A	Pass
0.5	x		x			x	x	0	5	30	Common Mode Neutral	A	Pass
0.5		x				x	x	0	5	30		A	Pass
0.5	x					x	x	90	5	30		A	Pass
0.5		x				x	x	90	5	30		A	Pass
0.5	x					x	x	180	5	30		A	Pass
0.5		x				x	x	180	5	30		A	Pass
0.5	x					x	x	270	5	30		A	Pass
0.5		x				x	x	270	5	30		A	Pass
1.0	x		x			x		0	5	60	Differential Mode	A	Pass





### Surge Immunity per IEC / EN 61000-4-5

Manufacturer:	Pro V&V, Inc./ES&S	Project Number:	PR120980-00
Customer Representative:	Michael Walker	Test Area:	GP 2
Model:	ExpressVote 2.1 (Configuration 2)	S/N:	EV0219400585
Standard Referenced:	EAC 2005 VVSG	Date:	September 11, 2020
Temperature:	22°C	Humidity:	32%
Input Voltage:	120Vac/60Hz	Pressure:	840 mb
Configuration of Unit:	Counting Ballots		
Test Engineer:	Mike Tidquist		

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Voltage (kV)	Polarity		L 1	L 2	L 3	N	P E	Phase (deg)	Number of Pulses	Delay (sec)	Comments	Criteria Met	Pass / Fail
	+	-											
1.0		x	x			x		0	5	60		A	Pass
1.0	x		x			x		90	5	60		A	Pass
1.0		x	x			x		90	5	60		A	Pass
1.0	x		x			x		180	5	60		A	Pass
1.0		x	x			x		180	5	60		A	Pass
1.0	x		x			x		270	5	60		A	Pass
1.0		x	x			x		270	5	60		A	Pass
1.0	x		x				x	0	5	45	Common Mode Line	A	Pass
1.0		x	x				x	0	5	45		A	Pass
1.0	x		x				x	90	5	45		A	Pass
1.0		x	x				x	90	5	45		A	Pass
1.0	x		x				x	180	5	45		A	Pass
1.0		x	x				x	180	5	45		A	Pass
1.0	x		x				x	270	5	45		A	Pass
1.0		x	x				x	270	5	45		A	Pass
1.0	x					x	x	0	5	45	Common Mode Neutral	A	Pass
1.0		x				x	x	0	5	45		A	Pass
1.0	x					x	x	90	5	45		A	Pass
1.0		x				x	x	90	5	45		A	Pass
1.0	x					x	x	180	5	45		A	Pass
1.0		x				x	x	180	5	45		A	Pass
1.0	x					x	x	270	5	45		A	Pass
1.0		x				x	x	270	5	45		A	Pass
2.0	x		x			x		0	5	30	Differential Mode	A	Pass
2.0		x	x			x		0	5	30		A	Pass
2.0	x		x			x		90	5	30		A	Pass



### Surge Immunity per IEC / EN 61000-4-5

Manufacturer:	Pro V&V, Inc./ES&S	Project Number:	PR120980-00
Customer Representative:	Michael Walker	Test Area:	GP 2
Model:	ExpressVote 2.1 (Configuration 2)	S/N:	EV0219400585
Standard Referenced:	EAC 2005 VVSG	Date:	September 11, 2020
Temperature:	22°C	Humidity:	32%
Input Voltage:	120Vac/60Hz	Pressure:	840 mb
Configuration of Unit:	Counting Ballots		
Test Engineer:	Mike Tidquist		

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Voltage (kV)	Polarity		L 1	L 2	L 3	N	P E	Phase (deg)	Number of Pulses	Delay (sec)	Comments	Criteria Met	Pass / Fail
	+	-											
2.0		x	x			x		90	5	30		A	Pass
2.0	x		x			x		180	5	30		A	Pass
2.0		x	x			x		180	5	30		A	Pass
2.0	x		x			x		270	5	30		A	Pass
2.0		x	x			x		270	5	30		A	Pass
2.0	x		x				x	0	5	60	Common Mode Line	A	Pass
2.0		x	x				x	0	5	60		A	Pass
2.0	x		x				x	90	5	60		A	Pass
2.0		x	x				x	90	5	60		A	Pass
2.0	x		x				x	180	5	60		A	Pass
2.0		x	x				x	180	5	60		A	Pass
2.0	x		x				x	270	5	60		A	Pass
2.0		x	x				x	270	5	60		A	Pass
2.0	x					x	x	0	5	60	Common Mode Neutral	A	Pass
2.0		x				x	x	0	5	60		A	Pass
2.0	x					x	x	90	5	60		A	Pass
2.0		x				x	x	90	5	60		A	Pass
2.0	x					x	x	180	5	60		A	Pass
2.0		x				x	x	180	5	60		A	Pass
2.0	x					x	x	270	5	60		A	Pass
2.0		x				x	x	270	5	60		A	Pass

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### Surge Immunity per IEC / EN 61000-4-5

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Manufacturer: Pro V&V, Inc./ES&S  
Customer Representative: Michael Walker  
Model: ExpressVote 2.1 (Configuration 2)  
Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
Test Area: GP 2  
S/N: EV0219400585  
Date: September 11, 2020

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Figure D1. Surge Immunity Test Setup – AC Mains \_ I/O Cable.

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**Surge Immunity per IEC / EN 61000-4-5**

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Manufacturer: Pro V&V, Inc./ES&S  
Customer Representative: Michael Walker  
Model: ExpressVote 2.1 (Configuration 2)  
Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
Test Area: GP 2  
S/N: EV0219400585  
Date: September 11, 2020

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Figure D2. Surge Immunity Test Setup – AC Mains.



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### Surge Immunity per IEC / EN 61000-4-5

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Manufacturer: Pro V&V, Inc./ES&S  
Customer Representative: Michael Walker  
Model: ExpressVote 2.1 (Configuration 2)  
Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
Test Area: GP 2  
S/N: EV0219400585  
Date: September 11, 2020

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### Test Equipment List

ID Number	Manufacturer	Model #	Serial #	Description	Cal Date	Cal Due
1013	KeyTek	EMC Pro	0008347	Advanced EMC Immunity Tester	09/22/2019	09/22/2020
1041	Fluke	83-3	70130434	Multimeter/Frequency Meter	06/29/2020	06/29/2021
1184	KeyTek	CEWare	4.0	KeyTek EMCPro Control Software for EFT, Surge, H-F	NA	NA
1372	Tektronix	TDS2002B	C103489	Oscilloscope, 60 MHz, 2-channel (WC059683)	06/29/2020	06/29/2021
1901	EXTECH	445703	0617	Hygrometer-Thermometer (WC059899)	06/29/2020	06/29/2021



**5.3 Voltage Dips and Interruptions**

**Voltage Dips and Interrupts per IEC / EN 61000-4-11**

Manufacturer:	Pro V&V, Inc.ES&S	Project Number:	PR120980-00
Customer Representative:	Michael Walker	Test Area:	GP 2
Model:	ExpressVote 2.1 (Configuration 2)	S/N:	EV0219400585
Standard Referenced:	EAC 2005 VVSG	Date:	September 9, 2020
Temperature:	19°C	Humidity:	32%
Input Voltage:	120Vac/60Hz	Pressure:	846 mb
Configuration of Unit:	Counting Ballots		
Test Engineer:	Mike Tidquist		

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% Nominal	No. of Cycles	Phase Angle (deg)				Time between dropouts (sec)	Number of tests	Comments	Criteria Met	Pass / Fail
		0	90	180	270					
70%	0.6	x				10	3		A	Pass
70%	0.6		x			10	3		A	Pass
70%	0.6			x		10	3		A	Pass
70%	0.5				x	10	3		A	Pass
40%	6.0	x				10	3		A	Pass
40%	6.0		x			10	3		A	Pass
40%	6.0			x		10	3		A	Pass
40%	6.0				x	10	3		A	Pass
40%	60.0	x				10	3		A	Pass
40%	60.0		x			10	3		A	Pass
40%	60.0			x		10	3		A	Pass
40%	60.0				x	10	3		A	Pass
0%	300	x				10	3		A	Pass
0%	300			x		10	3		A	Pass
Line Voltage Variation tests										
129Vac Line Voltage Variations (+7.5% of nominal 120V) 2hrs.									A	Pass
105Vac Line Voltage Variations (-12.5% of nominal 120V) 2 Hrs.									A	Pass
Surges of +15% line variations of nominal voltage (138V) 2 Hrs.									A	Pass
Surges of -15% line variations of nominal voltage (102V) 2 Hrs.									A	Pass

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## Voltage Dips and Interrupts per IEC / EN 61000-4-11

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Manufacturer: Pro V&V, Inc.ES&S  
Customer Representative: Michael Walker  
Model: ExpressVote 2.1 (Configuration 2)  
Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
Test Area: GP 2  
S/N: EV0219400585  
Date: September 9, 2020

PR120980-00-4-11.doc

FR0100

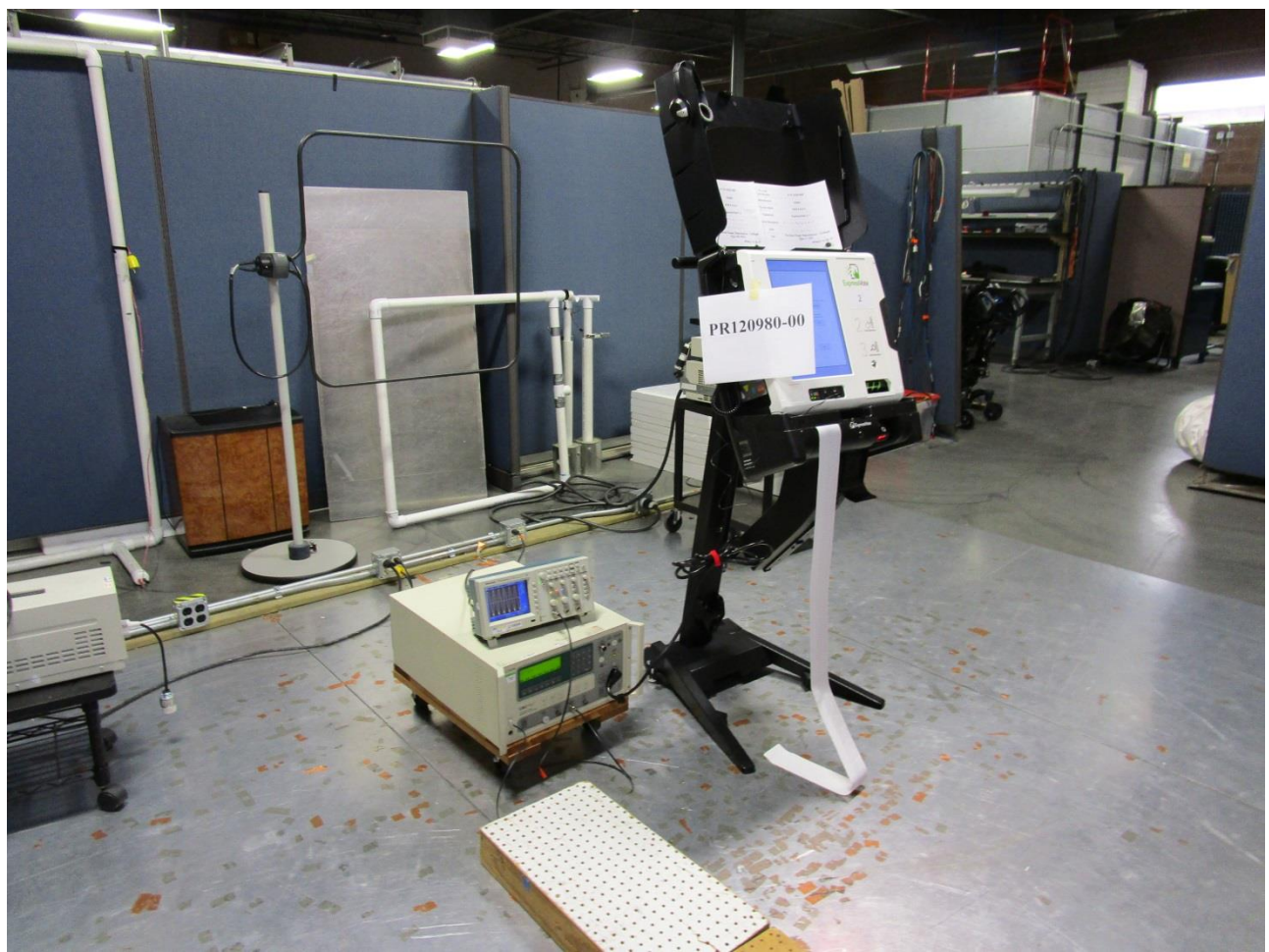


Figure G1. Voltage Dips and Interrupts Test Setup.

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## Voltage Dips and Interrupts per IEC / EN 61000-4-11

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Manufacturer: Pro V&V, Inc.ES&S  
Customer Representative: Michael Walker  
Model: ExpressVote 2.1 (Configuration 2)  
Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
Test Area: GP 2  
S/N: EV0219400585  
Date: September 9, 2020

PR120980-00-4-11.doc

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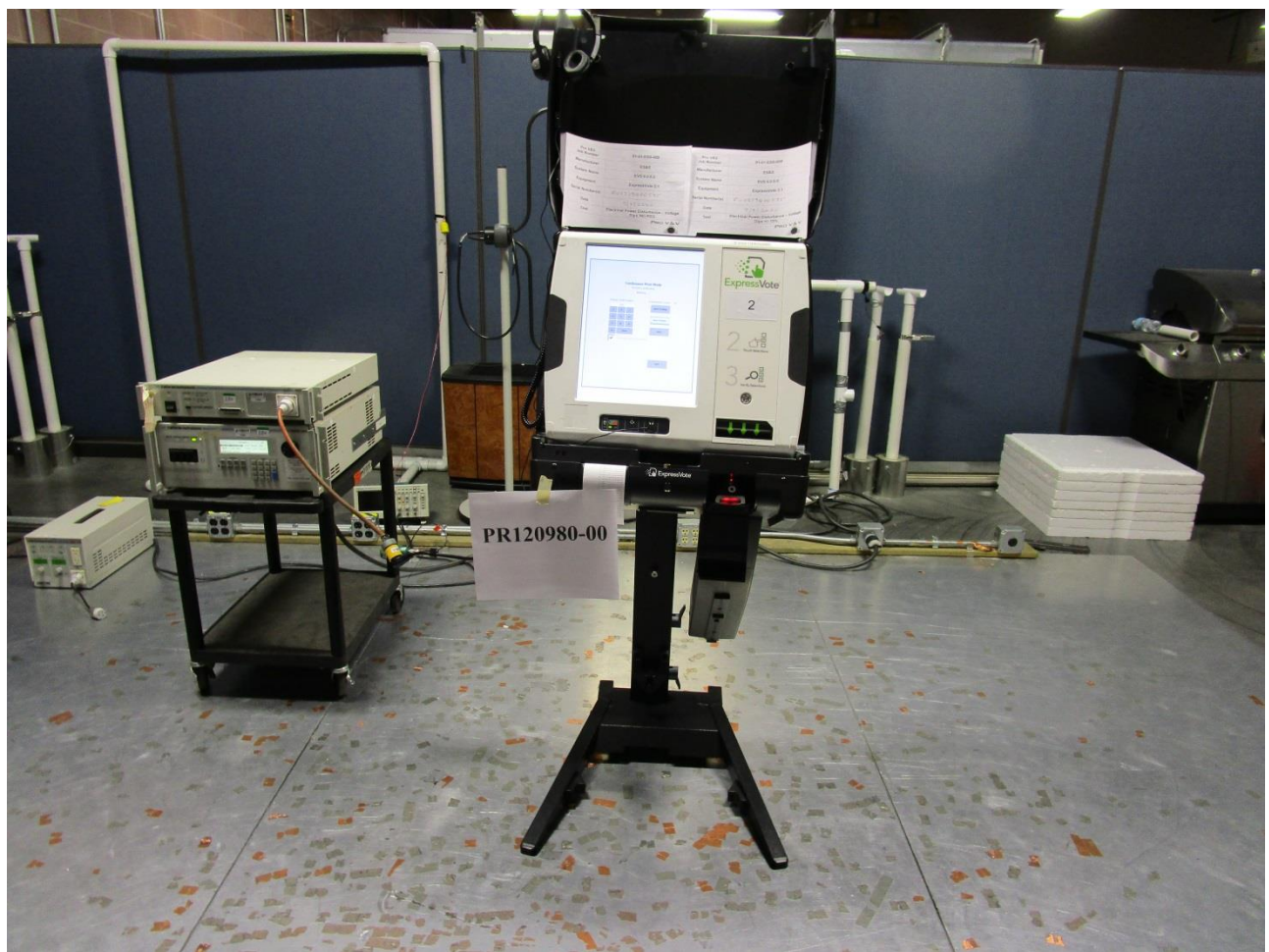


Figure G2. Line Voltage Variations Test Setup.





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## Voltage Dips and Interrupts per IEC / EN 61000-4-11

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Manufacturer: Pro V&V, Inc.ES&S  
Customer Representative: Michael Walker  
Model: ExpressVote 2.1 (Configuration 2)  
Standard Referenced: EAC 2005 VVSG

Project Number: PR120980-00  
Test Area: GP 2  
S/N: EV0219400585  
Date: September 9, 2020

PR120980-00-4-11.doc

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### Test Equipment List

ID Number	Manufacturer	Model #	Serial #	Description	Cal Date	Cal Due
1013	KeyTek	EMC Pro	0008347	Advanced EMC Immunity Tester	09/22/2019	09/22/2020
1041	Fluke	83-3	70130434	Multimeter/Frequency Meter	06/29/2020	06/29/2021
1184	KeyTek	CEWare	4.0	KeyTek EMCPro Control Software for EFT, Surge, H-F	NA	NA
1296	California Instruments Corporation	5001IX208-150/300	S59159	5k VA AC Power Source (WCO95675)	08/20/2020	08/20/2021
1371	Tektronix	TDS2002B	C103483	Oscilloscope, 60 MHz, 2-channel	02/24/2020	02/24/2021
1901	EXTECH	445703	0617	Hygrometer-Thermometer (WC059899)	06/29/2020	06/29/2021



6.0 Test Log

**EMI Test Log**

Manufacturer: Pro V&V, Inc./ES&S	Project Number: PR120980-00
	B91114
Model: ExpressVote 2.1(Configuration 2)	S/N: EV0219400621
	EV0219400585
Customer Representative: Michael Walker	
Standard Referenced: FCC Class B, EAC 2005 VVSG	

FR0105

**Ground Planes / CALC**

Test	Test Code	Date	Event	O T	Time (hrs)	Result	Initials
4-11		September 9, 2020 0930-1130	Voltage Dips and Interruptions (Inc./Red. of Nom. Voltage) Electric power increases of 7.5% and reductions of 12.5% of nominal specified power. 120/60 VAC 129Vac Line Voltage Variations (+7.5% of nominal 120V) 2hrs.		2.0	Pass	MT
4-11		1130-1330	Voltage Dips and Interruptions (Inc./Red. of Nom. Voltage) Electric power increases of 7.5% and reductions of 12.5% of nominal specified power. 120/60 VAC 105Vac Line Voltage Variations (-12.5% of nominal 120V) 2 Hrs.		2.0	Pass	MT
4-11		1330-1530	Voltage Dips and Interruptions (Surge of +/- 15%) Surge of +/- 15% line variation of nominal line voltage 120/60 VAC Surges of +15% line variations of nominal voltage (138V) 2 Hrs.		2.0	Pass	MT
4-11		September 10, 2020 0800-1000	Voltage Dips and Interruptions (Surge of +/- 15%) Surge of +/- 15% line variation of nominal line voltage 120/60 VAC Surges of +15% line variations of nominal voltage (102V) 2 Hrs.		2.0	Pass	MT
<b>Distance from EUT power input to EMC pro is 30 inches</b>							
4-11		1000-1100	Voltage Dips and Interruptions 70% nom, 0.6 cycles / 40% nom, 6 cycles & 1 sec. / 0% nom, 300 cycles 120/60 VAC		1.0	Pass	MT
Per Client testing is done for today 9-10-2020							
4-5		September 11, 2020 0800-1330	Surge Immunity Mains: +/- 2kV CM, +/- 2kV DM, (0, 90, 180, 270) 120/60 VAC		5.5	Pass	MT
4-2		September 14, 2020	Electrostatic Discharge +/- 8kV Contact, +/-2, 4, 8, 15kV Air 120/60 VAC		4.0	Pass	TW



**End of Report**