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National Technical Systems Environmental & Dynamics Lab 1601 Dry Creek Dr. #2000 Longmont, CO 80503

Date: 10 MAY 2019

Customer: Pro V&V, Inc. 700 Boulevard South Huntsville, AL 35802

#### Purchase Order Number: 2019-006

A.	TEST:	Power Variation Testing
B.	TEST ITEMS:	Voting Scanner Machine See page 4 for Test Item Identification
C.	SPECIFICATIONS:	1. Quotation Number OP0517642-0 2. ISO 17025:2005 (NTS Quality)

#### D. <u>RESULTS:</u>

This is to certify that the Voting Scanner Machine samples were subjected to testing according to the above specifications.

See Page 4 for Summary of Test Results. The test samples were returned to Pro V&V, Inc for post-tests and final evaluation.

Test data, an equipment list, and photographs are attached.

Greg Gagne, Technical Writer

Bob Polverari, Technical Reviewer

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## **REVISIONS**

Revision	Reason for Revision	Date
NR	Initial Release	10 May 2019



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### **TEST ITEM IDENTIFICATION**

Quantity	Sample Description	Part Name	Serial Numbers	
2	Voting Scanner Machine	Interscan HiPro	0078K28	
2			0080K28	
2	Voting Scanner Machine	ICP2	FAL18480494	
			FAL18480510	

### SUMMARY OF TEST RESULTS

Upon completion of testing, the test sample was removed from the test fixture and subjected to a visual inspection. The Test Samples were returned to Pro V&V, Inc.

### **Power Variation Testing**

Testing was started on 29 April 2019 and completed on 03 May 2019 by exposing four (4) test samples to testing in accordance with Quotation Number OP0517642-0 and MIL-STD-810G, as described in the table below. Testing was performed as indicated in the Test Log on the following page.

Test	Description
Variation	24-hr operation with power cycled accordingly over 85 hours with NTS support provided 24-hrs daily for first 85 hours per Method 502.2 and 501.2.

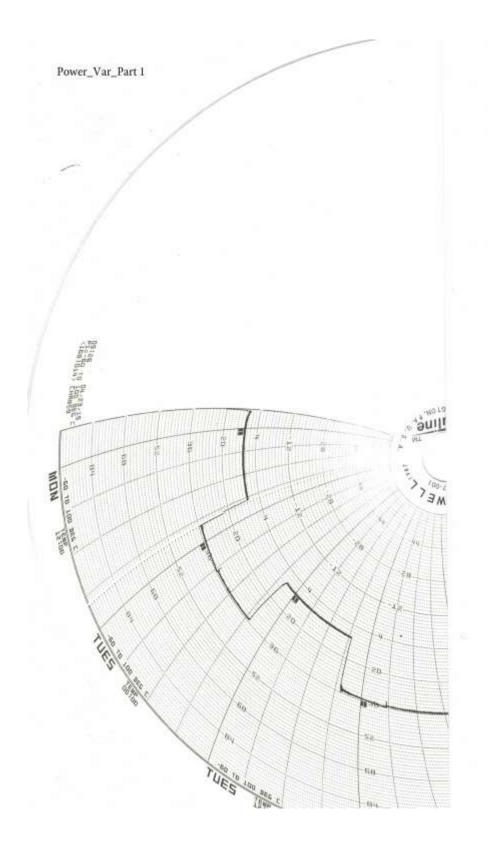


### TEST LOG

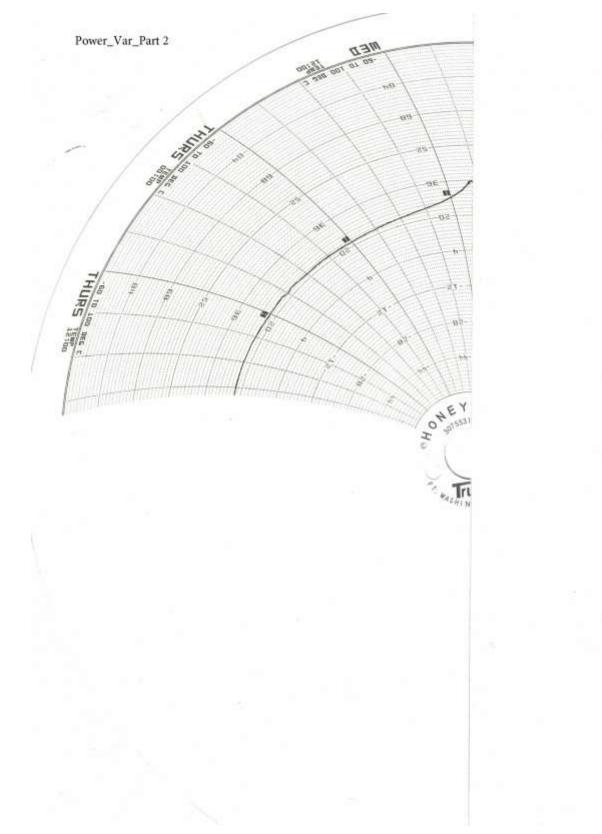
TEST 1	emperat	ure Power Variation Test			MJO	PR097523	
CUSTOM	CUSTOMER Pro V&V P/N N/A S/N See Below			See Below			
TEST ITE	M See	Below (Qty-2 of each type)					
SPECIFIC	CATION	MIL-STD-810D			PAR	۹	
DATE	TIME		LOG EN	TRIES		INITI	IALS
04/29/19	10:50	Set VAC to 117vlts & ramp to +10c				RS	SP
	11:00	Start dwell at 117vlts & +10c for 4hrs				RS	SP
	15:00	Lower VAC to 105vlts & dwell for 4hrs	8			с	:L
	19:00	Raise VAC to 129vlts & dwell for 4hrs	6			КІ	М
	23:00 Lower VAC to 117vlts & Raise temperature to +35c & dwell for 4hrs						Μ
04/30/19	03:00	Lower VAC to 105vlts & dwell for 4hrs	8			KI	М
	07:00	Raise VAC to 129vlts & dwell for 4hrs	5			G	М
	11:00	Lower VAC to 117vlts & Lower tempe	erature to +	10c & dwell for 4hr	S	С	Ľ
	15:00	Lower VAC to 105vlts & dwell for 4hrs	3			С	Ľ
	19:00 Raise VAC to 129vlts & dwell for 4hrs						М
	23:00 Lower VAC to 117vlts & Raise temperature to +35c & dwell for 4hrs					К	М
05/01/19	03:00	Lower VAC to 105vlts & dwell for 4hrs	3			к	М
	07:00	Raise VAC to 129vlts & dwell for 4hrs	5			G	М
	11:00	Lower VAC to 117vlts & ramp to +23c ambient				RS	SP
	11:00	0 Temp and power variation portion of test has completed					SP
11:00 Test will continue to run at +23c ambient for another 37hrs					к	М	
05/03/19	17:15	Lab took a brief power loss UUT's did power off but recovered when powered back on			ack on Ki	М	
05/03/19	24:00	All Testing complete for a total of 85h	rs			к	М
		Note:All test pass or fail determination	ns decided	by Pro V&V Inc.			
		Part Name & S/N's Below					
		Interscan HiPro, S/N - 0078K28					
		Interscan HiPro, S/N - 0080K28					
		ICP2, S/N - FAL18480494					
		ICP2, S/N - FAL18480510					
		TEST BY Kerry Martin			DATE	05/03/19	
PAGE 1	<b>OF</b> 1				GOV'T QA	AR N/A	



TEST DATA









## TEST SETUP





### **TEST EQUIPMENT**

Test Title:	Temperature Por	wer Variation Test				
Customer:	Pro V&V Inc		Date	<b>:</b> 04/29/19		
Part				PR097523	3	
Name:	See Below		MJO No	.:		
Part No.:	N/A		P.O. No	.:		
Serial No.:	See Below		NTS Eng	.:		
Test						
Spec:	MIL-STD-810D		Revisior	n:		
Eq	uipment	Manufacture / Model	NTS I.D. #	Cal. Date	In-Service	Due Date
Chamber 59	9	N/A	1733	N/A	Yes	N/A
Controller		Watlow F4	1653	09/21/18	Yes	09/21/19
Chart Recor	rder	Honeywell	1654	09/21/18	Yes	09/21/19
Part Name	& S/N's Below					
Interscan HiPro		S/N - 0078K28				
Interscan Hi	iPro	S/N - 0080K28				
ICP2		S/N - FAL18480494				
ICP2		S/N - FAL18480510				
	Test By: Kerry Martin Date: 05/03/19					03/19
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# **END OF REPORT**