U.S. ELECTION ASSISTANCE COMMISSION



Voting System Testing and Certification Program 1201 New York Avenue, NW, Suite 300 Washington, DC. 20005

EAC Certified System Technical Advisory – ESS2011-03

EAC System(s) Affected:	ES&S Unity 3.2.1.0
Component(s) Affected:	DS200
Version(s) Affected:	DS200 firmware version 1.4.3.11 (Unity 3.2.1.0)
Advisory Release Date:	July 28, 2011
Summary:	During local acceptance testing a DS200 Ballot Scanner failed to count a marked ballot position resulting in a lost vote.

Advisory:

Jurisdictions currently with, or considering upgrading/purchasing, the Election Systems & Software (ES&S) Unity 3.2.1.0 voting system should be aware that during local acceptance testing of the Unity 3.2.1.0 system, a DS200 Ballot Scanner failed to count a marked ballot position resulting in a lost vote.

Issue Description:

During testing on the Unity 3.2.1.0, a DS200 did not count a valid mark for a race. The anomaly was discovered when county testers reviewed the printed election summary report for the DS200 unit. The count for a single contest did not match the expected results. The test was performed to verify that ES&S had corrected a previous anomaly with similar symptoms. The county testers were using a 17" ballot with contests concentrated in the lower sections of the ballot (see Appendix A).

Root Cause:

In discussion with the EAC, ES&S stated that they have only been able to replicate this issue in testing by removing the plastic guides and physically altering the ballot (cutting of a corner).

EAC Comments:

In an effort to understand the issue the EAC focused on reviewing ballot images from several states and previous test campaigns. The review included 11", 14", 17" and 19" ballots. In the course of the review, the EAC found various degrees of ballot image distortion; with the 17" ballot having the largest degree of skew (see Appendix B). The EAC is working with jurisdictions, VSTLs and the manufacturer to understand and resolve this issue.

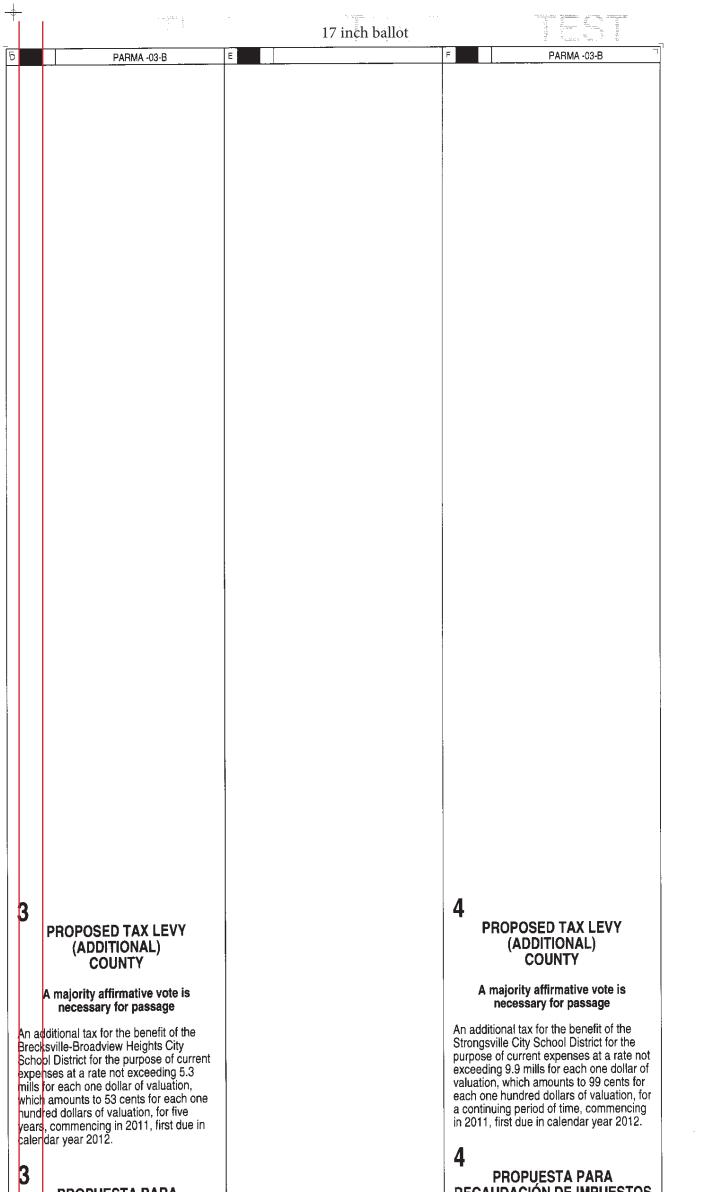
Recommended Procedures:

No recommend procedures at this time.

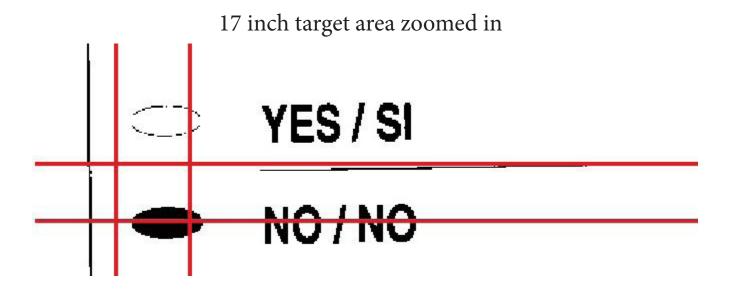
Notice Questions:

Please direct any question on this notice to the Election Assistance Commission Testing and Certification Division at 202-566-3100.

Appendix A – Image of ballot with dropped vote



3 PROPUEST RECAUDACIÓN D (ADICIO COND/	DE IMPUESTOS		PROPUESTA PARA DACIÓN DE IMPUESTOS (ADICIONAL) CONDADO	
Se requiere un vote mayoría para su Un impuesto adicional Distrito Escolar de la C Brecksville-Broadview de cubrir los gastos ac 5.3 milésimos por cada valoración, lo cual repi centavos por cada ciel valoración, por cinco a en el 2011, con su prir el año calendario del 2	o afirmativo por a aprobación que beneficiará al Diudad de Heights con el fin etuales sin exceder a dólar de resenta 53 n dólares de años, comenzando mer vencimiento en	May Un impue Distrito E: Strongsvi actuales cada dóla represent dólares d continuo, su primer	uiere un voto afirmativo por yoría para su aprobación esto adicional que beneficiará al scolar de la Ciudad de lle con el fin de cubrir los gastos sin exceder 9.9 milésimos por ur de valoración, lo cual ta 99 centavos por cada cien e valoración, por un período comenzando en el 2011, con vencimiento en el año o del 2012.	
🗢 YES/SI			YES / SI	
NO / NO		 	NO / NO	
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Appendix B – Examples of ballot Images

11 inch ballot

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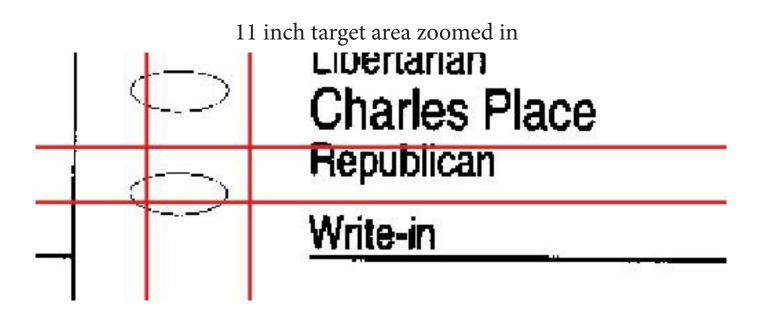
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A Lincoln Hills	B	
Straight Party	Representative in Congress Vote for one	Associate Judge of Court of Appea Vote for one
American	Ben Baker	Ala Dee Smith
Communist	American Edwin Lewis	American Calvin Marino
	Communist Frank L. Matthews	Communist David Cox
Democrat	Constitution Gale Smith	Constitution Eugene Ruff
Green	Democrat James A. Clark	Democrat Kerry Jones
	Green Ken Anderson	Green Mildred Dudo
	Labor Leo Cross	
Republican	Libertarian Theodore Judd	Libertarian Thomas Reiss
l	Republican	Republican
President of the United Sta	Write-in	Write-in
Vote for one	State Assembly	County Commisioner
Barbara Barrett Hicks	Vote for one	County Commisioner Vote for one
American Edris Thomas	Betty Williams	Drant Cillari
Communist Fiero Finn	American Elizabeth Mack	Brent Gilley American
Constitution Gail Keefe	Communist	Elizabeth Piazza
Democrat	Constitution	Franklin Margo
Green	Democrat	Gene Tillman Democrat
Labor	Green	James Collins Green
Libertarian	Kenneth Interlicchio	Kerry Jones
Sam Patel Republican	Libertarian	Lewis Tese Libertarian
Write-in	Theodore Kopp Republican	Tony Grzanich Republican
	<u>Write-in</u>	Write-in
United States Senator Vote for one		
	State Supreme Court Justice Vote for one	County Comptroller Vote for one
Barry Josey		
Edwin Best Communist	Bruce Willis American	Brian Edwards
Floyd W. Schisler Constitution	Ernst Lynch	Eric Sheehy Communist
Gail Ross	Glenn T Combs Constitution	George A. Fisk Constitution
Jack Hall	Herbert Schweppenhauser	
Keith Satterwhite		Lewis Touhay
Laurie St Laurent		Green Mary L. Daniel
Tetty Rogiers	Philip Thorrp Libertarian	Nyda E Hamblin
<u>Write-in</u>	Eugene Kessler	Charles Place
	Republican Write-in	Republican Write-in
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-		14 inch ballot	1 1	
	Hillwood	В	с	
11	Straight Party	Representative in Congress Vote for one	Asso	ciate Judge of Court of Appeals Vote for one
	🔿 American	Ben Baker	\bigcirc	Ala Dee Smith American
	Communist	Edwin Lewis Communist	\bigcirc	Calvin Marino
		Frank L. Matthews	\bigcirc	Communist David Cox Constitution
21	Democrat	Gale Smith	\bigcirc	Eugene Ruff Democrat
	◯ Green	James A. Clark	\bigcirc	Kerry Jones
	Labor	Ken Anderson	\circ	Green Mildred Dudo
	C Libertarian		\circ	Labor Philip Thorrp Libertarian
	C Republican	Theodore Judd Republican	\bigcirc	Libertarian Thomas Reiss Republican
		Write-in	$- \bigcirc$	Write-in
	President of the United States	a		
		State Assembly Vote for one		County Commisioner Vote for one
	Barbara Barrett Hicks			
40	Communist	Betty Williams	\bigcirc	Brent Gilley American
41	Constitution	Elizabeth Mack	\bigcirc	Elizabeth Piazza Communist
42	Gail Keefe Democrat	Frank Pearson Constitution	0	Franklin Margo Constitution
43	Imran Rashid Green	Gary Klemann Democrat	\bigcirc	Gene Tillman Democrat
	Jack "Duke" Brodisky	James Ayers Green	\bigcirc	James Collins Green
	Kay Raab	Kenneth Interlicchio	\bigcirc	Kerry Jones Labor
	Sam Patel Republican	Leon Lewis	\circ	Lewis Tese Libertarian
	Write-in	C Theodore Kopp Republican	\circ	Tony Grzanich Republican
		<u>Write-in</u>		<u>Write-in</u>
	United States Senator Vote for one			
51		State Supreme Court Justice Vote for one		County Comptroller Vote for one
	Barry Josey	Vote for one		vote for one
	Edwin Best	Bruce Willis	\bigcirc	Brian Edwards American
	Floyd W. Schisler Constitution	Ernst Lynch Communist	\bigcirc	American Eric Sheehy Communist
	Gail Ross	Glenn T Combs	\bigcirc	George A. Fisk Constitution
	Jack Hall Green	Herbert Schweppenhauser Democrat	\bigcirc	Helena Slack Democrat
	Keith Satterwhite	Linda Hall Green	\bigcirc	Lewis Touhay Green
	Laurie St Laurent	Micheal McClelland	\bigcirc	Green Mary L. Daniel Labor
	Tetty Rogiers Republican	Philip Thorrp Libertarian	\bigcirc	Nyda E Hamblin Libertarian
	Write-in	Eugene Kessler Republican	\bigcirc	Charles Place Republican
		Write-in		Write-in
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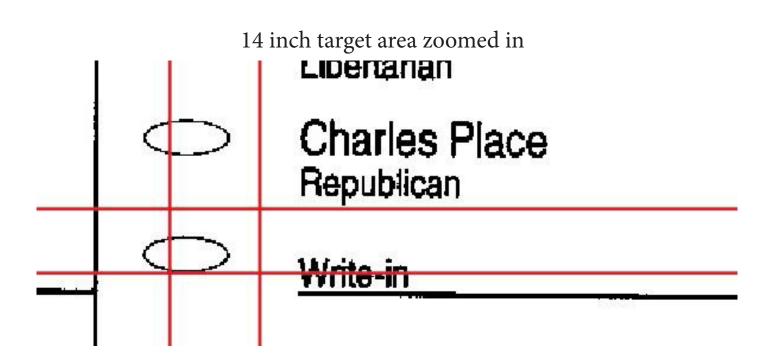
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-19 inch ballot С Davis Hills B Ā Straight Party County Comptroller Vote for one State Assembly 11 Vote for one Betty Williams American Brian Edwards \bigcirc American \bigcirc American Elizabeth Mack Eric Sheehy \bigcirc Communist Communist Communist George A. Fisk Constitution Frank Pearson \bigcirc Constitution Constitution \bigcirc Gary Klemann Helena Slack 21 Democrat Democrat Democrat \bigcirc Lewis Touhay James Ayers Green Green Green \bigcirc \bigcirc Kenneth Interlicchio Mary L. Daniel Labor Labor Labor \bigcirc Leon Lewis \bigcirc Nyda E Hamblin Libertarian Libertarian Libertarian \supset **Charles Place** \bigcirc Theodore Kopp Republican Republican Republican \bigcirc \square Write-in Write-in President of the United Statesa Vote for one County Assessor Vote for one State Supreme Court Justice Vote for one **Barbara Barrett Hicks** American 40 Edris Thomas \bigcirc **Bruce Willis** \bigcirc **Brian Getz** American American Communist Ernst Lynch Communist Ernest Snyder Fiero Finn \bigcirc 41 _ Constitution Communist \bigcirc **Glenn T Combs** Gerald Danson Gail Keefe \bigcirc 42 Democrat Constitution Constitution Herbert Devine Herbert Schweppenhauser Imran Rashid \bigcirc 43 \bigcirc Democrat Democrat Green \bigcirc Linda Hall Linda Gapp Jack "Duke" Brodisky \bigcirc Labor Green Green Micheal McClelland Micheal H Walker Kay Raab \supset \bigcirc Libértarian Labor Labor Philip Rebis Libertarian Sam Patel \bigcirc **Philip Thorp** \square Republican Libertarian Eugene Kessler Republican William Sullivan Republican \bigcirc \sim - -<u>Write-in</u> \bigcirc \bigcirc Write-in Write-in **United States Senator** Vote for one Associate Judge of Court of Appeals Vote for one **Councilman District 2** 51 Vote for one Barry Josey American Arthur Salamack Edwin Best Ala Dee Smith \bigcirc \bigcirc Communist American Non Partisan \bigcirc Carter McGaw Floyd W. Schisler **Calvin Marino** Constitution Communist Non Partisan $\overline{}$ \bigcirc **Derek Persons Gail Ross** David Cox Democrat Constitution Non Partisan \bigcirc \bigcirc Elizabeth Piazza **Jack Hall Eugene Ruff** Non Partisan Green Democrat Franklin Margo Non Partisan \bigcirc \bigcirc Keith Satterwhite Kerry Jones Labor Green Louis Konte, Jr Non Partisan Mildred Dudo \supset Laurie St Laurent Labor Libertarian Philip Thorrp Libertarian Mary L. Daniel **Tetty Rogiers** Republican

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			Write-in		
	Representative in Congress Vote for one				Councilman District 5 Vote for one
			County Commisioner Vote for one		
	Ben Baker American			\bigcirc	Arnold Krill Non Partisan
	Edwin Lewis Communist		Brent Gilley American		Chistopher R. Richardso Non Partisan
	Frank L. Matthews Constitution	\square	Elizabeth Piazza Communist	\square	Delores DeVan Non Partisan
	Gale Smith Democrat	\square	Franklin Margo Constitution	\square	Ernest Snyder Non Partisan
	James A. Clark Green		Gene Tillman Democrat	\bigcirc	George A. Fisk Non Partisan
	Ken Anderson Labor	\square	James Collins Green	()	H elena Slack Non Partisan
	Leo Cross Libertarian		Kerry Jones Labor	\square	Imran Rashid Non Partisan
	Theodore Judd Republican		Lewis Tese Libertarian	\bigcirc	<u>Write-in</u>
	Write-in	\bigcirc	Tony Grzanich Republican		
		\square	Write-in		
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Thomas Reiss

Republican

Write-in

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Write-in

