



**30th Annual
National Conference
San Francisco, CA**

2014 Professional Practices Program

Electronic Assisted Signature Verification Process

County Clerk, Harris County, Texas

Submitted by:

Stan Stanart

County Clerk, Harris County, Texas

P.O. Box 1525

Houston, TX 77251

Phone: 713-755-6411

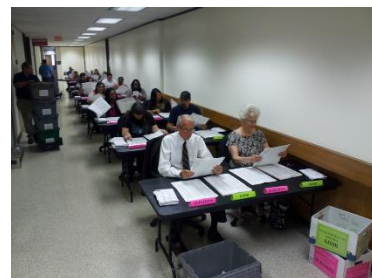
SStanart@cco.hctx.net

www.cclerk.hctx.net

Electronic Assisted Signature Verification Process Professional Practice Paper

Harris County Clerk, Harris County, Texas

“Houston, we have a problem” – In the 2008 Presidential Election, the number of mail ballots mailed and returned significantly stressed Harris County’s mail ballot system. All areas of the mail ballot system, data entry, printing ballots, filing space, storage of supplies, Signature Verification Committee (SVC) and Early Voting Ballot Board (EVBB) were pushed to the limit. To meet the volume of ballots and required deadlines, additional temporary clerks, SVC and EVBB members were hired, occupying all available workspace including the hallways. As a result, it became imperative to find a solution for the space, time and money concerns.



The first step in developing a more efficient mail ballot system was to determine the volume of mail ballots projected for the next two Presidential Elections. In Harris County, voters may vote early in person, on Election Day, or by mail if 65 or older, disabled, or out of County. In 2008, with over 180,000 registered voters 65 or older, 79K ballots were mailed with 67K returning. In 2012, with 300,000 registered voters 65 or older, 92K ballots were mailed with 75K returning. Our projections showed we needed to grow our capacity quickly to support up to 450,000 registered voters 65 or older for the 2016 Presidential Election. After applying the percentage of 65 and over voters who actually voted by mail, we established a goal to design a system that could support over 150,000 mail ballot voters.

To remedy the situation, we quickly identified that the most labor intensive steps were the sorting and filing of the voter’s jackets, applications and returned mail ballots. By Texas Election Code, the mail ballot application must be kept in a jacket along with the Ballot. Our clerks were visiting the file cabinets multiple times throughout the mail balloting process. The **first visit** was to file the voter application in precinct order and alpha order within precincts in a jacket. The **second visit** was to match the returned mail ballot to the corresponding application. The jacket with application and ballot were then stored in the vault. The **third visit** was to deliver the jackets with application and returned mail ballot to the Signature Verification Committee and/or Early Voting Ballot Board. The **fourth visit** was to re-file the jackets in precinct order and alpha order within precincts in preparation for the next election or for storage.

It was apparent that, adding electronic recording technology to the signature verification process was essential. To achieve this goal, new state legislation was required.

Through local legislators, we initiated legislation that was passed in 2011 allowing the electronic recording of ballot materials, applications, electronic delivery of materials recorded electronically and enabling the SVC and EVBB to use an electronic copy of a mail ballot envelope and the voter’s mail ballot application in making the signature comparison.

Sec. 87.126. ELECTRONIC RECORDING OF BALLOT MATERIALS AND APPLICATIONS.

(a) The **early voting clerk may electronically record** applications for a ballot to be voted by mail, jacket envelopes, carrier envelopes, and ballots.

Sec. 87.0211. ELECTRONIC DELIVERY OF MATERIALS RECORDED ELECTRONICALLY.

If ballot materials and ballot applications are recorded electronically as provided by Section 87.126, the early voting clerk **may deliver those materials to the early voting ballot board through electronic means.**

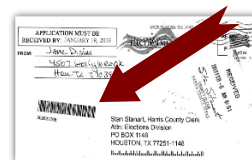
Sec. 87.027. SIGNATURE VERIFICATION COMMITTEE.

m) If ballot materials or ballot applications are recorded electronically as provided by Section 87.126, **the signature verification committee may use an electronic copy of a carrier envelope certificate or the voter’s ballot application in making the comparison under Subsection (i).**

The new legislation paved the way for development of our Electronic Assisted Signature Verification Process (EASVP). EASVP eliminated three of the four visits to the filing cabinets, saving clerks significant time and reducing the filing cabinet space. Below are the steps outlining the EASVP our vendor incorporated into the VOTEC Election Management And Compliance System (VEMACS). It also dramatically reduced the time for the SVC and EVBB to do their review.

Step 1 – Applications Received

A pre-generated bar code label is placed on the application. Applications are scanned into VEMACS and application images are reviewed and linked to the voter’s record.



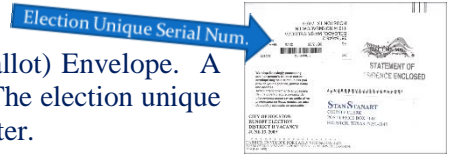
Step 2 – Applications Scanned With Batch Cover Sheet

A scan batch cover sheet is produced for each batch of 25 applications. The applications are attached to the batch cover sheet and filed in batch number order in file cabinets.



Step 3 – Ballots and Ballot Materials Are Generated

An election unique serial number and bar code is printed on each Carrier (mail ballot) Envelope. A window envelope contains the carrier envelope, the ballot, and balloting material. The election unique serial number is scanned to capture the time and date the ballot was mailed to the voter.



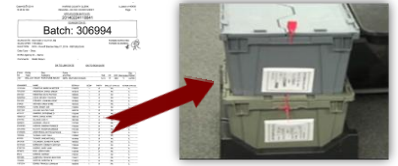
Step 4 – Returned Carrier Envelope Scanned

The returned carrier envelope contains the voter’s signature and privacy envelope containing the voted ballot. As the returned carrier envelope is scanned, the unique election serial number is read and the image is linked to the voter’s record.



Step 5 – Carrier Envelopes Scan Batch Cover Sheet

A scan batch cover sheet is produced for each batch of 25 carrier envelopes. The carrier envelope scan batch cover sheet has a unique batch number and lists the voter’s name, certificate number and a status of pending review. Each batch of mail ballots is placed in a numbered sealed tub and stored in the vault.



Behind the Scenes – Linking of Data and Images

VEMACS links the applications image, carrier envelopes image, application batch numbers and carrier envelope batch numbers.



VEMACS links the application signatures and the carrier envelope signatures into the Ballot Board Review Processing System.



VEMACS becomes the electronic jacket and filing cabinet.



Step 6 – Images by batch are reviewed by the Signature Verification Committee and Early Voting Ballot Board

Teams of two review the application signatures and the carrier envelope signatures. The team determines to accept, question, or reject the signatures. After the team has reviewed each of the voter’s signatures in the batch, a report is generated with the voter’s name, certificate number, the decision of the team and the batch number.

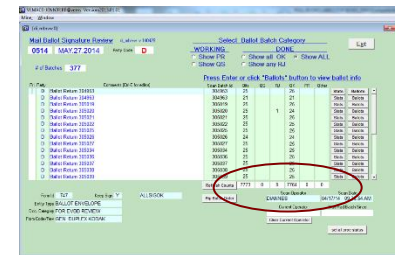


Step 7 – Audit and Separation of Accepted and Rejected Carrier Envelopes

The VEMACS system, as designed, provided great auditing and tracking of accepted and rejected ballots. The accepted ballots are separated from the rejected ballots in each batch. Accepted ballots are transmitted to the Early Voting Clerk to be counted.

Benefits of the Electronic Assisted Signature Verification Process

- ✓ Increase employee productivity
- ✓ Elimination of handwork by clerks
 - Sorting jackets in alpha order within each precinct
 - Sorting Carrier Envelopes in alpha order within each precinct
 - Matching Carrier Envelopes with jackets to send to SVC and EVBB
 - Processing jackets received from SVC and EVBB to file for the next election or prepare for storage
- ✓ Signature Verification Committee and Early Voting Ballot Board no longer re-file tubs of jackets
 - The amount of paper handled and viewed has been significantly reduced with each election
- ✓ Cost savings for just one major election
 - **Approximately \$106,000 in savings for ONE November election**
- ✓ Ability to audit the entire process. This was not available in the paper system
- ✓ An electronic assisted verification procedure can be implemented at any volume level
- ✓ Cost savings after one election could offset the initial cost of the equipment
- ✓ Reduction in processing time and office workload is **PRICELESS**



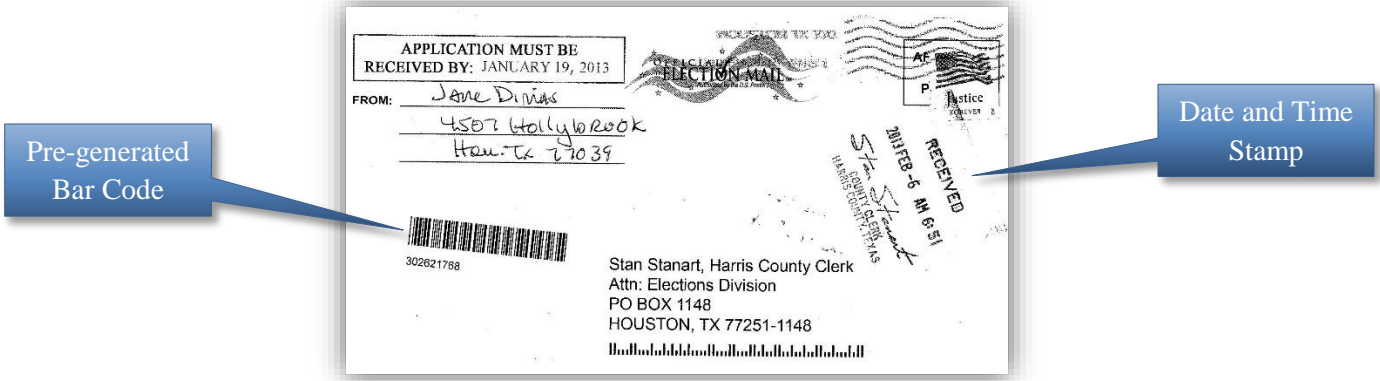
The Apollo 13 Astronauts were safely returned to earth by the ingenuity of NASA Houston Engineers. The solution to Houston’s Harris County’s BBM growth lead to the Electronic Assisted Signature Verification Process, led by a County Clerk/Engineer who once worked at Houston’s NASA Johnson Space Center.

Electronic Assisted Signature Verification Process Supporting Document

Harris County Clerk, Harris County, Texas

Step 1 – Applications Received, time stamped and bar coded.

A pre-generated bar code label is placed on the application; the bar code is generated through our election management system VEMACS. Applications are scanned into VEMACS and application images are reviewed and linked to the voter's record.

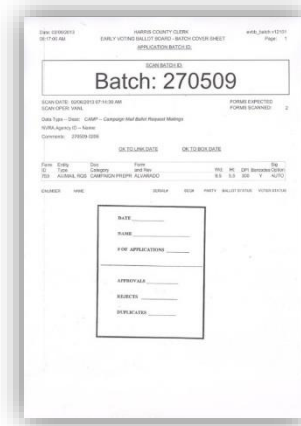


Pre-generated Bar Code

Date and Time Stamp

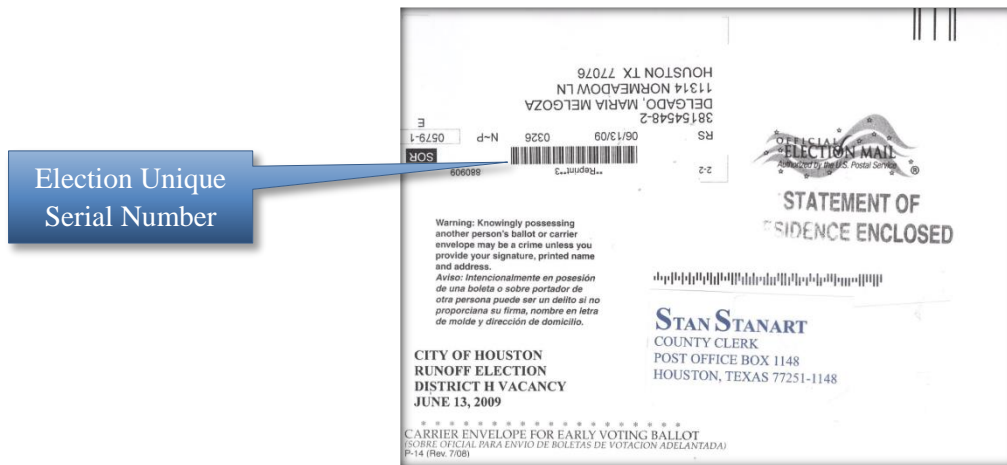
Applications are scanned into VEMACS and the application images are reviewed and linked to the voter's record.

Step 2 – Applications Scanned With Batch Cover Sheet



A scan batch cover sheet is produced for each batch of 25 applications.

Step 3 – Ballots and Ballot Materials Are Generated



Election Unique Serial Number

An election unique serial number and bar code is printed on each Carrier Envelope.

Step 4 – Returned Carrier Envelope Scanned



The returned carrier envelope contains the voter’s signature and privacy envelope with the cast ballot. When the carrier envelope is scanned, the unique election serial number is read and the image is linked to the voter’s record.

Step 5 – Carrier Envelopes Scan Batch Cover Sheet

102802 AM
 HARRIS COUNTY CLERK
 BIDDING - BATCH COVER SHEET
 APPLICATION BATCH ID:
 20140224110641
 Page: 1

SCAN BATCH ID:
Batch: 306994

SCAN DATE: 05/10/14 10:27 AM
 SCAN OPER: THELMAO
 ELECTION: 0014 - Recall Election May 27, 2014 - REPUBLICAN
 Date Type - Desc:
 NVRA Agency ID - Name
 Comments: Batch Return

FORMS EXPECTED
 FORMS SCANNED

FORM	ENVI	DOC	FORM	YRS	HE	DFI	BRAND	DATE
747	BALLOT ENVE	FOR EVBB REVIE	GEN DUPLX KODAK	12.3	17	302	Y	AUTO

OK TO LINK DATE	OK TO BKG DATE

OK NUMBER	NAME	SERIAL#	SDOP	PARTY	BALLOT STATUS	VOTER STATUS
1091840	COBBETT, MARILEE TETZNER	170479	1	N	PR	A
1092000	ANDERSON, CAROL GREEN	170479	1	N	PR	A
2013822	MEDINA, DAVID PATRICK	188849	1	N	PR	A
2003822	FELIX, BEVERLY SWANSON	170480	1	N	PR	A
2013822	FEBRERY, JOHN MICHAEL	181082	1	N	PR	A
219242	MENDEZ, DEVIN SENE	180440	1	N	PR	A
0784202	SUN, DANNY ZHE	170644	1	N	PR	A
2017040	COLLIER, WALTER TAYLOR	180620	1	N	PR	A
4010131	GANDER, CATHERINE D	170249	1	N	PR	A
1001112	KIMM, CAROL WYNN	188850	1	N	PR	A
2191793	ALLISON, CORY	180389	1	N	PR	A
3004879	KANARUK, JONAS	171303	1	N	PR	A
0784202	KARLOS, SANDRA FRANCES	170480	1	N	PR	A
2012912	ELAGOT, VALMA BALDORCE	171039	1	N	PR	A
219242	ANDERSON, WALTER PATRICK	170480	1	N	PR	A
100399	THOMAS, DAVID SAUL	170480	1	N	PR	A
0784202	TOUCH, ANNE MICHAEL	170480	1	N	PR	A
2019108	LAUNDEN, JORNETA WARD	166440	1	N	PR	A
0784202	GARDNER, KATHY NATHAN	170480	1	N	PR	A
0784202	SANNEY, MARY ANNE	170480	1	N	PR	A
2019010	HEB, JERRY PAUL	170480	1	N	PR	A
04312	HANSEN, KARLLETT	170480	1	N	PR	A
0017000	SAMPSON, FRANCIS HERBERT	170480	1	N	PR	A
1102042	HUSTON, CHRISTOPHER	170480	1	N	PR	A
1102042	EBARR, FRANCIS JEROME	180440	1	N	PR	A



A scan batch cover sheet is produced for each batch of 25 carrier envelopes. Each batch is placed in a numbered sealed tub and placed in the vault.

Behind the Scenes – Linking of Data and Images

APPLICATION FOR BALLOT BY MAIL FROM HARRIS COUNTY, TEXAS - PLEASE PRINT OR TYPE
 NAME: DELA WILLIAM BISHAM
 ADDRESS: 7914 SILVERDALE DRIVE HOUSTON TX 77066
 DATE OF BIRTH: 10/24/1929
 COUNTY: HOUSTON TX
 I CERTIFY THAT THE INFORMATION GIVEN IN THIS APPLICATION IS TRUE AND I UNDERSTAND THAT GIVING FALSE INFORMATION IS A CRIME.

SIGNATURE OF VOTER: DeLa William Bisham
 SIGNATURE OF WITNESS: Ben William Bisham
 SIGNATURE OF ASSISTANT: Ben William Bisham

VOTER ID NUMBER: 31903071

Warning: Knowingly presenting another person's ballot or carrier envelope may be a crime unless you provide your signature, printed name and address.

INSTRUCTIONS TO VOTER: Complete all applicable spaces. The carrier envelope must be signed by the voter in the appropriate space. If the voter is unable to sign, the voter's mark must be witnessed by the voter's signature, printed name, and address in the space provided.

INSTRUCTIONS FOR THE ASSISTANT: If you assisted the voter in any way with the ballot or witnessed the signature of the voter on the carrier envelope, you must sign the following section. If you are going to transport the carrier envelope in the mail for the voter or deliver it to a witness at another location, you must provide your signature, printed name, and address in the space provided.

PRINTED NAME, SIGNATURE AND ADDRESS OF ASSISTANT, WITNESS OR PERSON HANDLING BALLOT OR CARRIER ENVELOPE:

NAME: Ben William Bisham
 SIGNATURE: [Signature]
 ADDRESS: 7914 Silverdale Drive Houston TX 77066



+



=

Signatures from Application & Carrier Envelope are linked. VEMACS DB is now the Jacket & Filing Cabinet.

Step 6 – Images by batch are reviewed by the Signature Verification Committee and Early Voting Ballot Board



Teams of two review the application signatures and the carrier envelope signatures. The team determines whether to accept, question, or reject the signatures. After the team has reviewed each of the voter's signatures in the batch, a report is generated with the voter's name, certificate number, the decision of the team and the batch number.

Step 7 – Audit and Separation of Accepted and Rejected Carrier Envelopes

Party	Scan Batch Id	Rts	QS	RJ	DK	PRI	Other	Status	Ballots
D	Ballot Return 304953	25			25			Stats	Ballots
D	Ballot Return 304963	21			21			Stats	Ballots
D	Ballot Return 305019	25			25			Stats	Ballots
D	Ballot Return 305020	25		1	24			Stats	Ballots
D	Ballot Return 305021	25			25			Stats	Ballots
D	Ballot Return 305022	25			25			Stats	Ballots
D	Ballot Return 305025	25			25			Stats	Ballots
D	Ballot Return 305026	24			24			Stats	Ballots
D	Ballot Return 305027	25			25			Stats	Ballots
D	Ballot Return 305034	25			25			Stats	Ballots
D	Ballot Return 305036	25			25			Stats	Ballots
D	Ballot Return 305037	25			25			Stats	Ballots
D	Ballot Return 305038	25			25			Stats	Ballots
D	Ballot Return 305039	25			25			Stats	Ballots
Refresh Counts		7773	0	9	7764	0	0		

Ability to Audit the Entire Process

Benefits of the Electronic Assisted Signature Verification Process

- ✓ Increase employee productivity
- ✓ Elimination of handwork by clerks
 - Sorting jackets in alpha order within each precinct
 - Sorting Carrier Envelopes in alpha order within each precinct
 - Matching Carrier Envelopes with jackets to send to SVC and EVBB
 - Processing jackets received from SVC and EVBB to file for the next election or prepare for storage
- ✓ Signature Verification Committee and Early Voting Ballot Board no longer re-file tubs of jackets
 - The amount of paper handled and viewed has been significantly reduced with each election
- ✓ Cost savings for just one major election
 - **Approximately \$106,000 in savings for ONE November election**
- ✓ Ability to audit the entire process. This was not available in the paper system
- ✓ An electronic assisted verification procedure can be implemented at any volume level
- ✓ Cost savings after one election could offset the initial cost of the equipment
- ✓ Reduction in processing time and office workload is **PRICELESS**