

# Internal Audit Department

O R A N G E C O U N T Y

## MONTHLY PERFORMANCE REPORT OF COMPUTER-ASSISTED AUDIT TECHNIQUES (CAAT) FOR DUPLICATE VENDOR PAYMENTS AND OTHER PERIODIC ROUTINES

(Cited as a Best Practice by the Institute of Internal Auditors)

FOR THE MONTH OF  
MARCH 2008

Our review of \$96 million vendor disbursements processed during February 2008 found that the majority of invoices were paid only once. We identified 6 potential duplicate vendor payments amounting to \$2,812. To date we have identified \$708,163 in duplicate vendor payments, of which \$678,589 has been recovered.

AUDIT NO: 2713-I  
REPORT DATE: MARCH 28, 2008

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Deputy Director: Eli Littner, CPA, CIA, CISA  
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**Internal Audit Department**

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*Providing Facts and Perspectives Countywide*

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**OC Fraud Hotline (714) 834-3608**

# Letter from Director Peter Hughes



## Transmittal Letter



**AUDIT No. 2713-I      MARCH 28, 2008**

**TO:** David Sundstrom, Auditor-Controller  
Carl Crown, Director, Human Resources  
Department  
Ronald C. Vienna, County Purchasing  
Agent, CEO/Purchasing

**SUBJECT:** Monthly Performance Report of Computer-Assisted Audit Techniques (CAAT) for Duplicate Vendor Payments and Other Periodic Routines

We have completed the March 2008 report of the results of our Computer-Assisted Audit Techniques (CAAT). The final report is attached for your information. Recoveries to date from duplicate vendor payments are \$678,589.

Each month I submit an **Audit Status Report** to the Board of Supervisors (BOS) where I detail any material and significant audit issues released in reports during the prior month and the implementation status of audit recommendations as disclosed by our Follow-Up Audits. Accordingly, the results of this audit will be included in a future status report to the BOS.

As always, the Internal Audit Department is available to partner with your staff so that they can successfully implement or mitigate difficult audit recommendations. Please feel free to call me should you wish to discuss any aspect of our audit report.

We appreciate the courtesy and cooperation extended to us by the personnel of the Auditor-Controller's Office and the Human Resources Department. If we can be of further assistance, please contact me, Eli Littner, Deputy Director at (714) 834-5899, or Autumn McKinney, Senior Audit Manager at (714) 834-6106.

Respectfully Submitted,

A handwritten signature in blue ink that reads "Peter Hughes".

Dr. Peter Hughes, CPA, Director  
Internal Audit Department

## ATTACHMENT

# Letter from Director Peter Hughes



Distribution Pursuant to Audit Oversight Committee Procedure No. 1:

Members, Board of Supervisors  
Members, Audit Oversight Committee  
Thomas G. Mauk, County Executive Officer  
Robert Leblow, Senior Manager, Auditor-Controller/Claims & Disbursing Section  
Bill Malohn, A-C/Information Technology/CAPS G/L System Support  
Shelley Carlucci, Assistant Director, Human Resources/Administration  
Bob Leys, Assistant Director, Human Resources/Services and Support  
Rosie Santiesteban, Admin. Manager, Human Resources/Administration  
Joan Villanueva, Admin. Manager, Human Resources/Administration  
Laurence McCabe, Admin. Manager II, Human Resources  
Foreperson, Grand Jury  
Darlene J. Bloom, Clerk of the Board of Supervisors

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*Audit No. 2713-I*

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## CAAT SUMMARY

### Description of CAAT Program:

The CAAT Routines (Computer Assisted Audit Techniques) are automated queries applied to large amounts of electronic data searching for specified characteristics. Resulting exceptions or findings are forwarded to the appropriate department for validation and/or resolution. Depending on the department's review, the exceptions may or may not be a finding. Often there is additional data needed to validate the exception that is only known at the department level. These CAAT routines are not an audit because we have not audited the underlying business processes or internal controls.

### Results (for the Month of March 2008):

No material weaknesses or significant issues identified. See Appendix A for a description of report item classifications.

### Control Findings:

#### ➤ Duplicate Payments to Vendors:

We identified **6** duplicate payments made to vendors, totaling **\$2,812** or **.003%** of the **\$96 million** of vendor invoices processed during February 2008. Our prior research indicates that the duplicate payments are typically caused by compounded human clerical error.

We have communicated the duplicate payments to the Auditor-Controller. The Auditor-Controller continues to investigate all duplicate payments and is pursuing collection. Currently, the Auditor-Controller has a recovery rate of about **96%** on these duplicate payments that we have brought to their attention since the inception of the CAAT routines.

#### ➤ Deleted Vendors:

No findings.

### Value-Added Information:

Based on the to-date recoveries of \$678,589 from the duplicate vendor payment routine, these computer assisted routines have paid for themselves and are returning monies to the County that may otherwise be lost. To date, we have issued 70 performance reports for the computer assisted routines.



## MONTHLY PERFORMANCE REPORT OF COMPUTER-ASSISTED AUDITING TECHNIQUES (CAAT) FOR DUPLICATE VENDOR PAYMENTS AND OTHER PERIODIC ROUTINES

### CAAT Program:

This report details the monthly activity from the Computer-Assisted Auditing Techniques (known by the acronym CAAT). We use a proprietary, best practices and industry recognized software product to help us in this process. We are keeping the details of our process and the vulnerabilities identified to a general discussion because of the risks associated with disclosing specific details of our financial and accounting processes.

The CAATs are automated queries applied to large amounts of electronic data searching for specified characteristics. The CAATs differ from our traditional audits in that the CAATs can query 100% of a data universe whereas the traditional audits typically test but a sample of transactions from the population.

For example, each month we download the monthly disbursement activity from the County's data warehouse into a cumulative vendor payment database that we have created. Then, we query 100% of the database looking for payments with the same invoice number and the same amount. We then subject the resulting matches to further review and analysis (such as obtaining and reviewing copies of the paid invoices) to determine if a duplicate payment was made. We then forward resulting findings to the Auditor-Controller for validation and recovery.

We also work with the departments to identify internal control enhancements with the purpose of preventing future occurrences of the type of findings identified by the CAATs.

We currently perform five CAAT routines described below utilizing selected payroll and vendor data. Depending on the nature of the CAAT, we perform them monthly, annually, or periodically as needed.

#### Audit Highlight

Based on the to-date recoveries of \$678,589 from the duplicate vendor payment routine, these computer assisted routines have paid for themselves and are returning monies to the County that may otherwise be lost.



## 1. CAAT Performed: Duplicate Payments

We used a CAAT routine to identify potential duplicate payments made to vendors during February 2008.

### A. Results

We identified six (6) duplicate payments totaling \$2,812 or .003% of the \$96 million of vendor invoices processed during February 2008. We have communicated the duplicate payments to the Auditor-Controller. The Auditor-Controller continues to investigate all duplicate payments and is pursuing collection. Currently, the Auditor-Controller has a recovery rate of about 96% on these duplicate payments that we have brought to their attention since the inception of the CAAT routines.

The table below summarizes the duplicate payment activity to date:

CAAT Report	Total		Not Duplicates		Recovered		In Process	
	#'s	\$'s	#'s	\$'s	#'s	\$'s	#'s	\$'s
2002	103	\$99,981	19	\$10,334	79	\$87,188	5	\$2,459
2003	50	\$33,306	7	\$10,175	38	\$20,606	5	\$2,525
2004	33	\$105,779	7	\$2,990	24	\$101,460	2	\$1,329
2005	67	\$80,162	2	\$668	62	\$75,486	3	\$4,008
2006	75	\$347,007	14	\$32,289	54	\$310,019	7	\$4,699
January 2007	22	\$14,514	1	\$147	18	\$13,764	3	\$603
February 2007	18	\$19,993	2	\$2,725	13	\$14,148	3	\$3,120
March 2007	5	\$25,160	1	\$841	3	\$22,695	1	\$1,624
April 2007	4	\$406	0	\$0	4	\$406	0	\$0
May 2007	10	\$10,373	1	\$1,060	8	\$8,064	1	\$1,249
June 2007	9	\$7,431	1	\$1,249	3	\$2,810	5	\$3,372
July 2007	4	\$8,037	1	\$118	2	\$7,741	1	\$178
August 2007	6	\$10,456	0	\$0	5	\$10,039	1	\$417
September 2007	6	\$1,496	1	\$600	5	\$896	0	\$0
October 2007	0	\$0	0	\$0	0	\$0	0	\$0
November 2007	7	\$1,618	1	\$417	6	\$1,201	0	\$0
December 2007	2	\$516	0	\$0	2	\$516	0	\$0
January 2008	7	\$2,410	2	\$1,149	3	\$555	2	\$706
February 2008	5	\$3,594	2	\$2,126	1	\$995	2	\$473
March 2008	6	\$2,812	0	\$0	0	\$0	6	\$2,812
<b>TOTAL</b>	<b>439</b>	<b>\$775,051</b>	<b>62</b>	<b>\$66,888</b>	<b>330</b>	<b>\$678,589</b>	<b>47</b>	<b>\$29,574</b>

### B. Background

This CAAT routine concentrates on a sub-set of vendor invoices paid by the County that possesses certain common attributes. The sub-set excludes one-time payments (such as election worker pay, jury duty pay, etc.) as well as recurring payments (periodic payments to the same payee for the same amount such as welfare, family support, etc.).





During the month of March 2008, 16,992 invoices for \$95,527,429 were added to this data sub-set representing February 2008 transactions. Currently, the data sub-set includes 655,273 invoices totaling \$7,405,524,054. The total data file from which the sub-set is derived includes 2,063,644 records totaling \$13,432,319,092.

Our prior research has indicated that the duplicate payments are typically caused by a compounded human clerical error.

## 2. CAAT Performed: Employee Vendor Match

We used a CAAT routine to identify employees that share a similar address as a vendor. This may identify employees buying goods or issuing contracts to themselves or a related vendor.

### Status:

This routine is performed periodically as necessary. There is no current work in progress for this item.

## 3. CAAT Performed: Retiree/Extra Help Hours

We used a CAAT routine to identify retirees working as extra help in excess of contracted or mandated limits. Our criteria are 960 hours (maximum allowed for regular retirees) or 720 hours (maximum for early retirees) during the fiscal year (FY).

### Status:

This routine is performed annually. There is no current work in progress for FY 07-08.

## 4. CAAT Performed: Direct Deposits

We used a CAAT routine to review for multiple employee paychecks directly deposited to the same bank account. This may identify employees paid twice in the same pay period or fictitious employees.

### Status:

We have been unable to successfully rewrite this CAAT routine to accommodate the new data format. During the three-year period in which we performed this routine on a monthly basis, our analysis did not identify any employees paid twice in the same pay period or payments on fictitious employees. As such, we will not invest additional resources to implement this routine at this time. We will remove this routine from our monthly CAAT analysis.



## 5. CAAT Performed: Deleted Vendors

We used a CAAT to identify Vendors that have been deleted or removed from the Vendor Master List. For deleted vendors, we verify that there has been no recent activity for that vendor.

### Results:

This CAAT was applied in March 2008 with no significant findings.

### Attachments:

Provided to the Auditor-Controller: dated 3/11/08 – A-C/Claims & Disbursing Section.



## Appendix A: Report Item Classifications

For purposes of reporting our audit observations and recommendations, we have classified audit report items into three distinct categories:

- ▶ **Material Weaknesses:**  
Audit findings or a combination of Significant Issues that can result in financial liability and exposure to a department/agency and to the County as a whole. Management is expected to immediately address “Material Weaknesses” brought to their attention.
- ▶ **Significant Issues:**  
Audit findings or a combination of Control Findings that represent a significant deficiency in the design or operation of processes or internal controls. Significant Issues do not present a material exposure throughout the County. They generally will require prompt corrective actions.
- ▶ **Control Findings and/or Efficiency/Effectiveness Issues:**  
Audit findings that require management’s corrective action to implement or enhance processes and internal controls. Control Findings and Efficiency/Effectiveness issues are expected to be addressed within our follow-up process of six months, but no later than twelve months.