Internal Audit Department

OC Board of Supervisors'

ORANGE COUNTY

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 FEBRUARY 2008

This report includes the results of our review of $89 million in vendor invoices paid in January 2008. We identified 5 potential duplicate vendor payments amounting to $3,594. To date we have identified $713,703 in duplicate vendor payments, of which $675,226 has been recovered.

AUDIT NO: 2713-H
REPORT DATE: FEBRUARY 29, 2008

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Letter from Director Peter Hughes

Transmittal Letter

AUDIT NO. 2713-H **FEBRUARY 29, 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 February 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 $675,226.

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,

Dr. Peter Hughes, CPA, Director
Internal Audit Department

ATTACHMENT

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
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Foreperson, Grand Jury
Darlene J. Bloom, Clerk of the Board of Supervisors

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EXECUTIVE 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 February 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 **5** duplicate payments made to vendors, totaling **$3,594 or .004%** of the **$89 million** of vendor invoices processed during January 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 **95%** on these duplicate payments that we have brought to their attention since the inception of the CAAT routines.

- Retiree/Extra Help Hours:
  We identified thirty-one (31) working retirees who exceeded the 960 hour limit for fiscal year 2006/2007. The excess hours ranged from 1.50 to 119.5 hours, with only one individual exceeding 80 hours (one pay period).

- Deleted Vendors:
  No findings.

Value-Added Information:

Based on the to-date recoveries of $675,226 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 69 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.

Audit Highlight

Based on the to-date recoveries of $675,226 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.

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.

1. CAAT Performed: Duplicate Payments

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

A. Results

We identified five (5) duplicate payments totaling $3,594 or .004% of the $89 million of vendor invoices processed during January 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 95% 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	13	$30,964	53	$309,872	9	$6,171
January 2007	22	$14,514	1	$147	18	$13,764	3	$603
February 2007	18	$19,993	1	$1,400	13	$14,148	4	$4,445
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	0	$0	7	$6,008	3	$4,365
June 2007	9	$7,431	0	$0	2	$2,498	7	$4,933
July 2007	4	$8,037	0	$0	2	$7,741	2	$296
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	0	$0	3	$555	4	$1,855
February 2008	5	$3,594	0	$0	0	$0	5	$3,594
TOTAL	**433**	**$772,239**	**53**	**$58,536**	**327**	**$675,226**	**53**	**$38,477**

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 February 2008, 16,864 invoices for $89,125,348 were added to this data sub-set representing January 2008 transactions. Currently, the data sub-set includes 638,281 invoices totaling $7,309,996,624. The total data file from which the sub-set is derived includes 2,018,174 records totaling $13,131,711,111.

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:

We identified thirty-one (31) working retirees who exceeded annual hour limits during FY 06-07. The excess hours ranged from 1.50 hours to 119.5 hours. For all but one, the excess was less than 80 hours (one pay period).

The 31 retirees exceeding annual limits were greater than the prior 5 fiscal years, which ranged from 2 to 14 retirees. We also identified several individuals who consecutively exceeded annual limits in the past few years.

On February 7, 2008, we met with Human Resources to discuss risks to the County regarding retirees exceeding mandated limits. We also discussed the following suggestions that Human Resources agreed to consider:

- Obtain County Counsel opinion regarding the liability and consequences to the County for working retirees exceeding government code imposed limits, and recommended action the County should take when limits are exceeded.

- To make the monitoring process easier for County departments/agencies, Human Resources designate the 12 month period for the annual limits as Pay Period 13 (7/6/07) through Pay Period 12 (7/4/08), rather than the fiscal year (7/1/07 to 6/30/08). This period better aligns with County timekeeping reports.

- Human Resources research and discuss with the Auditor-Controller a modification to the Virtual Timekeeping Interface (VTI) system to automatically issue warnings to working retirees and their supervisors when approaching hour limits and possibly prohibit submission of timesheets once annual limits have been reached.

This closes out our work on this routine for FY 06-07.

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 are rewriting the CAAT routine to accommodate the new data format. We hope to have the routine functioning soon.

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 February 2008 with no significant findings.

Attachments:

Provided to the Auditor-Controller: dated 2/15/08 – 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.