INTERNAL AUDIT DEPARTMENT

COUNTY OF ORANGE

2005 Recipient of the Institute of Internal Auditors Award for Excellence

Integrity ◆ Objectivity ◆ Independence

Monthly Report on Computer-Assisted Audit Techniques (CAAT)

For the Month of October 2005

REPORT NUMBER: 2518-J **REPORT DATE: November 9, 2005**

County Internal Auditor:	**Peter Hughes, Ph.D., CPA, CITP**
Deputy Internal Auditor:	**Eli Littner, CPA, CIA**
Audit Manager:	**Autumn McKinney, CPA, CIA**
Senior Auditor:	**Carol Swe, CPA, CIA**

Monthly Report on
Computer-Assisted Audit Techniques
(CAAT)

For the Month of October 2005

TABLE OF CONTENTS

Transmittal Letter i

EXECUTIVE SUMMARY 1

CAAT Program: 2

1. CAAT Performed: Duplicate Payments 3
   - A. Results: 3
   - B. Background: 3
2. CAAT Performed: Employee Vendor Match 3
   - Status: 3
3. CAAT Performed: Retiree/Extra Help Hours 3
   - Status: 4
4. CAAT Performed: Direct Deposits 4
   - Status: 4
5. CAAT Performed: Deleted Vendors 4
   - Results: 4

Appendix A: Report Item Classifications 5

COUNTY OF ORANGE
INTERNAL AUDIT DEPARTMENT

2005 Recipient of the Institute of Internal Auditors Award for Excellence

Integrity • Objectivity • Independence

County Internal Auditor
DR. PETER HUGHES
Ph.D., MBA, CPA, CIA, CFE, CITP

MAILING ADDRESS:
400 CIVIC CENTER DRIVE WEST
BUILDING 12, ROOM 232
SANTA ANA, CALIFORNIA 92701

TELEPHONE: (714) 834-5475
FAX: (714) 834-2880
EMAIL: peter.hughes@ocgov.com
WEBSITE: www.ocgov.com/audit/

ELI LITTNER
CPA, CIA, CFE, CFS CISA
DEPUTY INTERNAL AUDITOR

MICHAEL J. GOODWIN
CPA, CIA
AUDIT MANAGER

ALAN MARCUM
MBA, CPA, CIA, CFE
AUDIT MANAGER

AUTUMN MCKINNEY
CPA, CIA, CGFM
AUDIT MANAGER

Transmittal Letter

Report No. 2518-J

November 9, 2005

TO: Members, Board of Supervisors

FROM: Peter Hughes, Ph.D., CPA
County Internal Auditor

SUBJECT: Monthly Report on Computer-Assisted Audit Techniques (CAAT)

We have completed the October 2005 report of the results of our Computer-Assisted Audit Techniques (CAAT). The report is attached for your information.

Please note, beginning with January 2005, we are implementing a more structured and rigorous Follow-Up audit process to ensure audit findings and recommendations are adequately resolved, in response to suggestions made by the Audit Oversight Committee (AOC) and Board of Supervisors. The AOC and BOS expect audit recommendations will typically be implemented within six months and often sooner for significant and higher risk issues. At the request of the AOC, we are to bring to their attention any audit findings and recommendations still not addressed, resolved, or implemented after our Follow-Up. The AOC requests that such open issues appear on the agenda at their next scheduled meeting for their discussion. **For the CAATs, we do not perform a separate Follow-Up audit. We perform the CAAT work monthly and incorporate a Follow-Up component each month to monitor the progress of issues identified in the prior month**.

In addition, as the County Internal Auditor, effective December 14, 2004, I make a monthly audit status presentation to the BOS where I detail any significant and material audit findings released in reports during the prior month. Accordingly, the results of this review will be included in a future summary to the Board.

Because of these visible changes to our Follow-Up and reporting process, the Internal Audit Department is available to partner with all departments and agencies so they can successfully implement or address difficult audit findings and recommendations. Please feel free to call me should you wish to discuss any aspect of our audit report, recommendations, or follow-up process.

The Internal Audit Department is an independent audit function reporting directly to the Orange County Board of Supervisors.

We would like to acknowledge the courtesy and cooperation extended to us by the personnel of the Auditor-Controller's Office and the Human Resources Department. As always, I remain available to answer any questions you may have. Please contact me directly or Eli Littner, Deputy Internal Auditor, at (714) 834-5899, or Autumn McKinney, Audit Manager, at (714) 834-6106, if we can be of further assistance.

Attachments

Other recipients of this report:
Members, Audit Oversight Committee
Thomas G. Mauk, County Executive Officer
David Sundstrom, Auditor-Controller
Robert Leblow, Manager, Auditor-Controller/Claims & Disbursing Section
Bill Malohn, A-C/Information Technology/CAPS G/L System Support
Dianna Garcia, Director, Human Resources and Employee Relations
Gloria Phillips, Senior Analyst, Human Resources
Dennis Edwards, Director, CEO/Purchasing
Foreperson, Grand Jury
Darlene J. Bloom, Clerk of the Board of Supervisors

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.

Results (for the Month of October 2005):
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 2 duplicate payments made to vendors, totaling **$2,218**, which are being pursued by the Auditor-Controller.
- Working Retirees: Seven retirees exceeded hour limits for fiscal year 2004/2005. Our review is still in process.
- Deleted Vendors: No findings.

MONTHLY CAAT REPORT

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, biannually, or annually.

1. CAAT Performed: Duplicate Payments

We used a CAAT routine to identify potential duplicate payments made to vendors during September 2005.

A. Results:

Two potential duplicate payments totaling $2,218 were identified in the September 2005 data. 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	$99,982	17	$5,469	76	$85,138	10	$9,375
2003	50	$33,304	5	$10,089	32	$19,263	13	$3,952
2004	33	$105,778	7	$2,990	22	$95,215	4	$7,573
January 2005	1	$8,400	0	$0	1	$8,400	0	$0
February 2005	9	$35,671	1	$77	7	$1,417	1	$34,177
March 2005	3	$242	0	$0	3	$242	0	$0
April 2005	6	$4,713	1	$591	5	$4,122	0	$0
May 2005	3	$2,288	0	$0	1	$56	2	$2,232
June 2005	13	$12,997	0	$0	12	$12,852	1	$145
July 2005	14	$6,999	0	$0	10	$4,842	4	$2,157
August 2005	13	$2,135	0	$0	11	$806	2	$1,329
September 2005	1	$1,000	0	$0	1	$1,000	0	$0
October 2005	2	$2,218	0	$0	0	$0	2	$2,218
TOTAL	**251**	**$315,727**	**31**	**$19,216**	**181**	**$233,353**	**39**	**$63,158**

B. Background:

This CAAT routine concentrates on a sub-set of vendor invoices paid by the County that possess 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 October 2005, 14,509 invoices for $151,404,841 were added to this data sub-set representing September 2005 transactions. Currently, the data sub-set includes 1,196,396 invoices totaling $9,838,800,794. The total data file from which the sub-set is derived includes 5,256,251 records totaling $16,913,763,451.

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 annually. The 9 items identified this year have been resolved to HR's satisfaction.

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 was 960 hours (maximum allowed for regular retirees) or 720 hours (maximum for early retirees) during fiscal year 2003/2004.

Status:
We are in the process of reviewing HR current monitoring procedures and status of working retirees for fiscal year 2004/2005. Seven retirees, including one early retiree, exceeded the hour limits for fiscal year 2004/2005. We met with Human Resources on September 6, 2005, to discuss the exceptions and process enhancements to help avoid future occurrences. We are currently waiting for a County Counsel opinion to help clarify this issue.

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:
Postponed as some of the information needed to perform this CAAT is not yet available. Auditor-Controller/Information Technology staff provided additional data in April 2005; however, it was not sufficient for us to perform this routine successfully. We are working with Auditor-Controller staff to determine an effective method of obtaining the data needed to perform this routine.

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 October 2005 with no significant findings.

Attachments:
Provided to the Auditor-Controller: dated 10/21/05 – 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 that can result in significant 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 that represent a significant deficiency in the design or operation of processes or internal controls.
- **Control Findings:** Audit findings that require management's corrective action to implement or enhance processes and internal controls.