

College & University
AUDITOR

Balancing New
Audit Techniques

ALSO INSIDE

Implications of Sarbanes-Oxley
Lessons Learned
Wireless Auditing
ABACUS GAIN
International Exchanges

ACUA

Association of College & University Auditors

Volume 47, Number 3 / Winter 2003

Officers and Directors

PRESIDENT

Seth Kornetsky
Tufts University
Somerville, MA
(617) 627-2068
seth.kornetsky@tufts.edu

VICE PRESIDENT

Patrick V. Reed
University of California
Oakland, CA
(510) 987-0477
patrick.reed@ucop.edu

IMMEDIATE PAST PRESIDENT

Robert Clark, Jr.
Georgia Institute of Technology
Atlanta, GA
(404) 894-4606
rob.clark@business.gatech.edu

SECRETARY/TREASURER

Mary M. Barnett
University of Richmond
Richmond, VA
(804) 289-8855
mbarnett@richmond.edu

BOARD MEMBERS-AT-LARGE

David P. Coury
Florida State University
Tallahassee, FL
(850) 644-6031
dpcoury@admin.fsu.edu

J. Richard Dawson
University of Texas at San Antonio
San Antonio, TX
(210) 458-4237
ddawson@utsa.edu

Nur Erenguc
University of Florida
Gainesville, FL
(352) 392-1391
nur@ufl.edu

M. Kevin Robinson
Auburn University
Auburn, AL
(334) 844-4389
robinmk@auburn.edu

Kim Turner
Texas Tech University System
Lubbock, TX
(806) 742-3220
kim.turner@ttu.edu

Committees

ACCOUNTING PRINCIPLES

Frank Bossle, Chair
Johns Hopkins University
Baltimore, MD
(443) 997-6391
fbossle@jhmi.edu

AUDIT COMMITTEE

Arlean Wehle, Chair
Tulane University
New Orleans, LA
(504) 865-5583
awehle@tulane.edu

BEST PRACTICE

Penny G. Howard, Chair
Longwood University
Farmville, VA
(434) 395-2283
phoward@longwood.edu

GOVERNMENTAL AFFAIRS

Mary Lee Brown, Chair
University of Pennsylvania
Philadelphia, PA
(215) 898-7958
marylee_brown@uphs.upenn.edu

MEMBERSHIP COMMITTEE

Kevin Robinson, Chair
Auburn University
Auburn, AL
(334) 844-4389
robinmk@auburn.edu

PROFESSIONAL EDUCATION

Nur Erenguc, Chair
University of Florida
Gainesville, FL
(352) 392-1391
nur@ufl.edu

Annual Conference Director
Helen C. Vanderland
Mary Washington College
Fredericksburg, VA
(540) 654-1042
hvanderl@mwc.edu

Midyear Seminar Director
Barbara Ratti
University of Central Florida
Orlando, FL
(407) 823-2889
bratti@mail.ucf.edu

PUBLICATIONS

J. Betsy Bowers, Chair
University of West Florida
Pensacola, FL
(850) 474-2636
bbowers@uwf.edu

WEB SERVICES

Walter Conway, Chair
Lehigh University
Bethlehem, PA
(610) 758-5013
walter.conway@lehigh.edu

Headquarters

ACUA
342 North Main Street
West Hartford, CT 06117
(860) 586-7561
(860) 586-7550 Fax
acua@acua.org
www.acua.org

College & University Auditor is the official publication of the Association of College & University Auditors and is published three times a year in West Hartford, CT. ACUA members are invited to submit letters and original articles to the editor. Go to www.acua.org and click on the "how to" button for further guidelines. The copy deadline for the next issue is **January 16, 2004**. Please send your copy electronically to the editor in Word 95 (or higher) or text file format. The editor reserves the right to reject, abridge or modify any advertising, editorial or other material.

Editor

J. Betsy Bowers, University of West Florida
bbowers@uwf.edu or (850) 474-2636

ACUAnews Editor

Sterling Roth,
Georgia State University
sroth@gsu.edu

Department Editors

Association News: Jeff Jarvis jjarvis@uci.edu
Member News: Sandra Fisher
safischer@creighton.edu

Contributing Editors

Association Outreach: Jeff Jarvis
jjarvis@uci.edu
Education: Kathleen Miller
kmiller4@weber.edu
Emerging Issues: Cheri Jones
Cjjone01@gwise.louisville.edu
Promoting IA: Sterling Roth
sroth@gsu.edu

Proofing Team

Chibuikwe Azuoru, *Southern University at New Orleans*
Cheryl Bell, *University of Florida*
Stacey Bozeman, *Auburn University*
Ken Chambers, *Florida State University*
Kathleen Clark, *Northern Illinois*
David Dixon, *Governors State University*
Virginia Key, *Montana State University*
Bev Llewellyn, *University of Montana*
Mary Ann MacKenzie, *Auburn University*
Richard Kilpatrick, *New Jersey Institute of Technology*

ACUA Management

Lorna M. Bolduc, *Executive Director*
Karen Breseman, *Association Administration*
Lebon Press, *Printing*

Send address changes to:

ACUA
342 North Main Street
West Hartford, CT 06117-2507

College & University AUDITOR

Vol. 47, No. 3

WINTER 2003

Contents

Features

The Implications of Sarbanes-Oxley	9
Lessons Learned from a Federal Audit	11
There's Something in the Air	13
ACUA's Third Triennial Benchmarking Survey	15
International Exchanges — An Australian Experience	24

Departments

From the Editor	4
From the President	5
Report from Headquarters	7

College & University Auditor is the official publication of the Association of College & University Auditors. It is published three times a year in West Hartford, CT as a benefit of membership. Articles in *College & University Auditor* represent the opinion of the authors and do not necessarily represent the opinion of governance, members, or the staff of the Association of College & University Auditors. Acceptance of advertising does not imply endorsement by ACUA. ©2003 Association of College & University Auditors.

Raise Your Hand & Volunteer

By Betsy Bowers, Editor



Once again, we are beginning another exciting year in ACUA's life. Our new president has presented us with opportunities to serve. I hope you will take a minute, read over the various volunteer opportunities and contact ACUA headquarters to tell them how you will serve.

Since our last issue of the *CandU Auditor*, we have also introduced an electronic newsletter, *ACUANews*. Hopefully, you will be able to enjoy the lighter side of internal auditing through this periodical. Thanks to Sterling Roth (Georgia State University) for accepting the challenge as the *ACUANews*' first editor. Yes, the Publications Committee handles the *CandU Auditor*, the *ACUANews* and will be working to help with the ACUA library content. Several colleagues have volunteered to serve as proofreaders, writers and editors. Does this interest you and do you have a few hours (4-6 per quarter) to devote to this? If so, please email me now! We can (and WILL) use you.

This issue is packed with articles to build your skills, from learning about how Sarbanes-Oxley affects higher education to the evolving audit environment

with wireless networks. Also, for those who have traveling in their veins, we have an article outlining the steps to make a job swap with an international colleague. Our Best Practices committee has also presented results from the ABACUS, part II. It is loaded with interesting information regarding our

perceptions and activities within our internal auditing operations.

As with the start of any new year, we reflect on the past year and try to establish goals for ourselves. I hope you will seriously consider ACUA involvement a personal goal and become more active with the roles and opportunities available.

Internal auditors make impressions in many ways. A dear friend recently gave me this wisdom, which I now share. You may not realize it, but it is true.

1. There are at least two people in this world that you would die for.
2. At least 15 people in this world love you in some way.
3. The only reason anyone would ever hate you is because they want to be just like you.
4. A smile from you can bring happiness to anyone, even if they do not like you.
5. Every night, SOMEONE thinks about you before they go to sleep.
6. You mean the world to someone.
7. You are special and unique.
8. Someone that you do not even know exists, loves you.
9. When you make the biggest mistake ever, something good comes from it.
10. When you think the world has turned its back on you, take a look around you.
11. Always remember the compliments you received. Forget about the rude remarks.

Happy new year, ACUA! Let's work together to make this a very memorable year.

Several colleagues have volunteered to serve as proofreaders, writers and editors. Does this interest you? Do you have a few hours to devote to this?

Increasing the Value of an ACUA Membership

By Seth Kornetsky, President



“Nashville–Pickin’ the Right Path, Working in Harmony” was the theme of our 2003 annual conference. For those of us who attended, the information presented on ethical leadership, enterprise-wide risk assessment, auditing practices, fraud investigations, compliance, health and research and

improving our behavioral skills provided us with several clear paths to enhance our professional value. David Coury and his cadre of track coordinators* truly outdid themselves with this outstanding program! Our dedicated ACUA headquarters staff created a seamless transition beginning with the conference registration process and ending with our Thursday farewells. My heartfelt thanks to you all!

As I reflect on the conference, its theme is also an appropriate one for our association. Your board is wrestling with several challenges and membership initiatives. Our ability to pick the right path will determine if we manage them correctly. One overriding challenge defines everything we do—sustaining the value of an ACUA membership.

So, what besides excellent annual conferences, midyear seminar programs, an audit program library and the tried and true ACUA-L might even enhance that value? If I were to wager a bet (yes, even auditors make a gamble now and then), I would say that the foremost value you get from an ACUA membership is information exchange. How might we better supplement our traditional activities in this area? In the last few years, we have experimented on a very small scale with regional and distance programming such as ACL training, NCAA compliance workshops and partnered with the

IIA to offer member discounts to their Web-based training program IIAOnlineCPE.

While we have made some progress, I think we can do a bit more, especially given the budget constraints many of our institutions are currently facing. One obvious answer is to offer a degree of distance learning. However, the challenge of providing ACUA-sponsored distance learning is daunting given that we are a volunteer organization. Distance learning resources are expensive. It also does not make sense for ACUA to provide distance learning on topics that can be found elsewhere — hence our agreement with service providers such as the IIA. However, I, along with the Board and the Professional Education Committee, believe that opportunities exist to provide Web-based training on topics specific to the higher education auditing environment. We began exploring the possibility at the Nashville conference by digitally taping two workshops that we hope to offer in the near future as streaming video from our Web site. Perhaps other opportunities will follow.

ACUA can only continue to make progress if a solid volunteer base is available to help us achieve our goals. I encourage you to visit our updated Web page to learn about the volunteer opportunities that are available to you to help your professional organization succeed.

In addition to the ACUA listserve, I believe that we can do more to provide a measure of structured information exchange that focuses on auditing in higher education and that incorporates notices concerning emerging issues and best practices. I think we are better positioned to act on these two strategic objectives than at any time in the past thanks to the recent redesign of our Web site. Several committees will be involved over the coming year to provide information on emerging issues and auditing practices that we hope to post for our members, specifically

Continued on page 6

Increasing the Value of an ACUA Membership

Continued from page 5

the Accounting Principles Committee, Best Practices Committee and the Governmental Affairs Committee. And of course, we will continue to provide the sustained level of quality articles provided in our publication, *College and University Auditor*.

Another challenge for us is defining ACUA's role in assisting our members in promoting internal auditing in higher education. Sarbanes-Oxley is providing a needed boost for some of us, but perhaps ACUA can also help. Accordingly, we are working on developing promotional materials that will point out the value of having a strong internal audit presence at colleges and universities. This information will be available at no cost to our members.

One other important challenge is to maintain an active and vibrant membership base. **Who should be recruited as members of our association and how should we be going about expanding it?** In certain quarters, the line is blurring between internal auditors, risk managers, compliance officers and individuals who are responsible for internal control environments. Does ACUA have something to offer these other professionals, and they us? And if so, should we be recruiting them? What might such individuals add to ACUA in terms of knowledge sharing and expanding our network of resources? To test the waters, we hope to distribute some promotional materials that may attract new members from these nontraditional auditing areas of colleges and universities. Besides this target group, there still exists a number of college and university auditors that have not joined ACUA. We plan to approach these individuals as well and demonstrate the value of membership.

In addition to these new initiatives, we must make good on one outstanding deliverable. Our revised NCAA auditing manual is long overdue. By the time you receive this issue of *CandU*, a RFP for completing this project will be in the process of being issued. We plan to have a revised manual available by early next year.

What else are we planning to enhance the value of your membership? Several committees are charged with the following:

- Soliciting and sharing best audit practices,
- Sharing the latest on regulatory and research compliance,
- Advising us on new accounting principles and higher education's adoption of certain Sarbanes-Oxley principles, and
- Monitoring and updating the functionality and currency of information on the ACUA Web page.

I ask for your patience as we roll out these new services and promotions. ACUA can only continue to make progress if a solid volunteer base is available to help us achieve our goals. I encourage you to visit our updated Web page (www.acua.org) under the Membership Information section to learn about the volunteer opportunities that are available to you to help your professional organization succeed.

It is a privilege to be able to serve as ACUA's president. That privilege comes with the responsibility to do my utmost to fulfill the association's stated objectives. I will do my best to move us forward and am always available to listen to your concerns and suggestions. My personal objective is to hear from many of you that an ACUA membership is well worth the cost of admission!

Reference

*2003 Annual Conference Track Coordinators (applause, applause...) were Beth Ballard, Charles Chaffin, Jennifer Chapman, Linda Ciprich, David Crawford, Phillip Hurd, Sandy Jansen, Amanda Jenami, Sherri Magnus, Tina Maier, Toni Messer, Terry Nolan, Joan Trimuel, Helen Vanderland, and Dale Wetzberger.

All those in favor of a truly independent risk consulting
and internal audit firm...

Sayi

protivitiSM
Independent Risk Consulting

The rules are changing... by the demands of Congress, stockholders and the SEC. You need expert, independent advice to help you manage the risks related to your business processes, internal controls and technology systems. Protiviti is the leading provider of internal audit and business and technology risk consulting services. Protiviti has senior professionals in every major market with integrity and unparalleled experience.

www.protiviti.com or call 1.888.556.7420

Business Risk

Technology Risk

Internal Audit

Providing a Variety of Educational Opportunities

By Lorna Bolduc, Executive Director

ACUA's strategic plan is heavily focused on providing our members with quality educational opportunities. It is our goal to continue offering six or seven, two-and-a-half day work shops at the midyear seminar and to offer a variety of 120-minute workshop sessions at the annual conference. Last year, through our strategic alliance with ACL, we offered two ACL training classes. Now, with an eye on Web-based training, we are exploring other educational opportunities.

Annual Conference Programming Exceptional

Our annual conference, traditionally held in September, has always provided solid programming and good networking. The Nashville conference was no exception. The program, even stronger than usual, received rave reviews from attendees. The networking opportunities abounded from the Sunday opening reception through the Wednesday night dinner dance.

The 2004 Annual Conference will be held in Arlington, VA, at the Marriott Crystal Gateway. This hotel is ideally located. Built above an underground shopping mall, it offers easy access to evening dining and entertainment activities. The hotel is also right on the Metro line for a quick trip into Washington, DC for sightseeing, dining and entertainment. Our annual conference director, Helen Vanderland, is already hard at work planning another strong educational program. Mark your calendars for September 19-23, 2004, and participate in one of ACUA's finest events.

In-depth Workshops at Midyear Seminar

Add March 14-17, 2004, to your calendar also. Our 2004 Midyear Seminar will be hosted at the Hyatt in Albuquerque, NM. This is a city I have not yet visited, but after a little investigation, I am convinced this location will be perfect for our event. There is Old Town, a well preserved Spanish plaza that is surrounded by restaurants, and shops selling rugs, Native American jewelry and crafts. Another site to explore is the Sandia Peak Tram that crosses Domingo Baca Canyon on the world's longest unsupported span, ascending the 2.7-mile journey to 10,378-foot Sandia Peak, where hiking trails through the Sandia Mountains lead to majestic views of Albuquerque and the Rio Grande Valley. In addition,

there are a variety of museums, an aquarium and the Albuquerque Botanic Garden. It sounds like a great place to fly in a day early, take in the sights and then settle into a few days of in-depth training. Program and registration information will be available at www.acua.org in December.

ACL Training at ACUA Member Prices

ACL training opportunities will continue to be part of our educational offerings. Our most recent class was held in Los Angeles, CA, on December 8-10, 2003, at a MicroTek facility, which specializes in hosting computer-based classes. ACUA attendees were impressed with the Atlanta MicroTek facility and with the training skills of the ACL presenter. Go to www.acua.org for registration information.

Educational Resources Online

There is no substitute for the in-person conferences and educational sessions. Part of our learning experience is the interaction between attendee and presenter, as well as networking with colleagues. ACUA is known for providing ample networking opportunities and also has a reputation for making everyone feel welcome and included. Although we cannot replicate that in-person experience online, we can provide quality Web-based educational opportunities for our members that are easy to use, cost effective and accessible. This is our next step in educational programming and our first offerings are already available. Handouts from select 2003 Annual Conference presentations are available for downloading by those who attended the conference. Available to all ACUA members are two videos, which were taped at the 2003 Annual Conference. To obtain these features, go to the Members Only section of the ACUA Web site for access.

We're About Education

Education will continue to be a large part of what ACUA is all about. We will continue to provide quality educational events, offering our members traditional training opportunities supplemented by alternative mediums such as online video courses.

If you have questions about any of our events or educational programs, send an e-mail to me at lbolduc@acua.org. I look forward to seeing you in Albuquerque and/or Arlington.

They trust your decisions.



Do you trust your data?

Compliance risks. Budget cuts. Resource constraints. Auditors and compliance officers in higher education must maximize efficiency to address these realities of today's tough financial environment. ACL Business Assurance solutions give you confidence that your data is accurate and reliable, your control systems are effective, and that all your transactions comply with today's reporting standards. Whether your concerns are tuition billing, grant compliance, or complex ERP system conversions, ACL can help you implement a continuous monitoring system that independently tests and validates your data and controls. As a result, you can provide management early warning of potential risks and control weaknesses before it's too late. Your management team and audit committee trust your decisions – make them with confidence.

Leading universities and colleges around the world rely on ACL's market-leading software and professional services expertise for data extraction and analysis, fraud detection, and continuous monitoring solutions. Shouldn't you?

Certainty. Clarity. Confidence. ACL delivers Business Assurance.

→ For a free white paper on *Controls Compliance and Continuous Monitoring: Achieving best practices for corporate governance and risk management*, visit www.acl.com/higher_ed

■ ■ ■ ACL.COM ■ INFO@ACL.COM

ACL is pleased to be a strategic partner with the Association of College and University Auditors (ACUA).



The Implications of Sarbanes-Oxley for Internal Auditors

By Michael Barone, PricewaterhouseCoopers, LLP



The Sarbanes-Oxley Act of 2002

The Sarbanes-Oxley Act (Sarbanes) was enacted on July 30, 2002, as a formal response to a series of major corporate and accounting scandals including Enron and WorldCom. Sarbanes, which applies to public companies, established a new paradigm for corporate accountability and raised the bar for audit committees and senior management. Audit committees have become increasingly proactive since the passage of Sarbanes. Chief executive officers and chief financial officers are required, among other matters, to certify their quarterly and annual financial statements (Section 302 of the Act) and to express an assurance that their company's internal control structure and procedures are effective for financial reporting (Section 404).

Sarbanes does not explicitly apply to not-for-profit institutions, including colleges and universities. However, some provisions of Sarbanes should be considered best practice for such organizations. Also, it is noteworthy that some states (e.g., New York) are considering legislation that would apply Sarbanes to not-for-profit institutions.

Sarbanes' Influence on the Higher Education Industry

While not yet required, Sarbanes is having a considerable influence in higher education governance and management. It is clearly the hot topic for audit committee and management discussion in 2003. Audit committees have been asking harder questions and raising their expectations around: (1) management's awareness of and accountability for the institution's business risks and the controls in place to mitigate risk, and (2) the scope, depth, independence and quality of the internal audit function.

While not yet required, Sarbanes is having a considerable influence in higher education governance and management. It is clearly the hot topic for audit committee and management discussion in 2003.

What Internal Audit Departments Should Be Doing Now

Sarbanes presents a very real opportunity for internal auditors to add greater value to the institutions they serve. Increasingly, audit committees expect internal audit to have a risk mentality, demonstrate good judgment and tact in assessing risks and controls, and communicate their findings and recommendations effectively. Most of all, audit committees want internal audit to be a credible, respected and effective function. Actions that you should already be taking include:

- Confirm an understanding of and meet audit committee and other stakeholder expectations.
- Ensure that internal audit reports are distributed to the highest level practical within the institution and ensure internal audit has direct access to the audit committee, particularly the committee chairperson.
- Ensure that the internal audit director has a private session with the audit committee at their meetings.
- Perform a risk assessment and develop a risk-based audit plan.
- View risk assessment as a continuous process and apply risk thinking in all audit activities.
- Ensure that the right skill sets are available to address specialized risk areas either on staff or through co-sourcing with an external service provider.
- Be a risk advisor to senior management.
- Ensure significant open audit issues are rigorously followed up to determine progress.
- Recognize, highlight and report on the big issues, separating them from insignificant matters.
- Demonstrate an understanding of the higher education industry and the business of the institution through all actions.
- Initiate an assessment of the internal audit function to get useful feedback on its effectiveness and recommendations, as appropriate, for enhancing the function.

Continued on page 10

Sarbanes-Related Action Steps

Internal audit can play a key role in any Sarbanes-related initiative—from gap analysis to advising management and the Board to documenting controls or testing controls.

- Read the legislation on the Sarbanes-Oxley Act of 2002 as well as some of the analyses of the Act (e.g., NACUBO's upcoming Accounting Principles Committee Advisory Report).
- Discuss Sarbanes with your colleagues on your campus and at other campuses and become knowledgeable about what other institutions are doing.
- Discuss the advisability of performing a gap analysis between Sarbanes' provisions and your institution's current practices with the audit committee.
- Consider developing recommendations for applying Sarbanes to your institution.
- Become familiar with Statement on Auditing Standards (SAS) 99, "Consideration of Fraud in a Financial Statement Audit," which discusses the need for auditors to exercise professional scepticism when considering the possibility that a material misstatement due to fraud could be present. Apply SAS 99 in internal audit procedures that relate to financial reporting.
- If the institution decides to formally adopt the Sarbanes 404 internal control provisions or if it is required to by future legislation, internal audit will need to consider the formal role it should play in the process. In the corporate sector, some internal audit functions are assisting management with the very significant task of documenting and testing the internal controls. In this role, internal audit is not independent from the process. Other internal audit functions have stayed on the sidelines during the documentation process and subsequently perform tests of the controls. In this role internal audit remains independent.

Internal audit can play a key role in any Sarbanes-related initiative—from gap analysis to advising management and the Board to documenting controls or testing controls. Sarbanes is likely to continue to be a hot topic in 2004.

About the Author

Mike Barone is a director with PricewaterhouseCoopers, LLP, based in Boston, MA. He is also an ACUA past president. You may contact him at: michael.j.barone@us.pwc.com.

The Audit Group

A Gold Level Sponsor

at **ACUA's** 2003
Annual Conference



THE AUDIT GROUP, INC.
No stone unturned

www.theauditgroup.com

John Weis
(800) 383-7963

INTERNAL AUDIT
SOLUTIONS FOR A CHANGING
WORLD

PRICEWATERHOUSECOOPERS

To learn more about how PricewaterhouseCoopers can help you improve performance in a rapidly changing world, please contact Michael Barone, National Director at 617-478-5049. Or e-mail us at pwc.internal.audit@us.pwcglobal.com

©2002 PricewaterhouseCoopers LLP. PricewaterhouseCoopers refers to the U.S. firm of PricewaterhouseCoopers LLP and other members of the worldwide PricewaterhouseCoopers organization.

Lessons Learned from a Federal Audit

By Marie Hunnicutt, University of South Florida

Lessons Learned

The Department of Health and Human Services Inspector General's Office staff arrived on the University of South Florida campus in 1999 following their receipt of a whistleblower call. No one at the university was especially concerned about the allegations received or the scope of work.



The few people who were aware of the review expected the auditors to complete their work in a matter of weeks. A few interviews, a few documents and the case would be closed. By the end of the first year, the review that began in a college on the edge of our main campus had expanded to the entire university and its costing practices. After four years, we are pleased to report this federal audit has now been settled. Many learning opportunities were highlighted in this process and the settlement amount of \$4.1 million represents just a portion of the total cost incurred. I experienced this audit in different roles during the course of the engagement and would like to provide my perspective on the lessons learned during this process.

Lesson 1: Promote Compliance

The University of South Florida's research awards have grown from \$84 million to \$254 million in a 10-year period. This research success and the institution's goals for future growth have played a significant role in the university's internal and external communications. While management was also committed to compliance, this commitment was not relayed to the university community in any formal way. To some, this lack of emphasis suggested a lack of institutional concern for research compliance, impacting the level of risk units and individuals were willing to assume.

Communications can and do play a critical role in setting the organizational tone. While a university will never provide the same marketing coverage to compliance as it does to its

operational successes, compliance must be discussed and encouraged if an institution is to provide the necessary culture.

Lesson 2: Document, Disseminate and Periodically Assess Policies and Procedures

How often have you heard that documenting policies and procedures is a nit picky audit exercise? The federal audit has made a significant difference in the university's perspective in this area. Unless your policies and procedures are committed to writing, faculty and staff may operate under the belief that there is no guidance or develop their own interpretation of university expectations. In some cases, you may find that guidance has been documented, but the various Web sites and sources for this information are not consistent or current. To avoid an absence of documentation or inconsistencies in policy and procedure, such guidance is critical to a successful compliance program.

Have you evaluated whether your policies are achieving the desired results? A university's administration, its researchers and its colleges may each have different perspectives on the value of a policy based on their access to funding, institutional incentives, risk appetite, etc. If there is lack of agreement on the policy or its benefits, you may find that the overall objective is not achieved. For example, assume your institution is maximizing the use of research dollars and requires all principal investigators to include scientific and program staff salaries on their award budget. This policy promotes using research funds for appropriate direct charges and reducing the risk of questioned costs on your project. Sounds like a good thing? A researcher, however, may view this policy as an initiative that increases risk. By requiring that faculty time be charged to a research project, you increase concerns that payroll may lapse when there is a break in research funding. To avoid unfunded payroll, some researchers will implement a solution to this new policy by modifying the budget after the award is received or by processing expenditure trans-

Continued on page 12

fers after payroll has been posted. While this policy appeared to accomplish organizational objectives, it did not change costing practices because the researcher's underlying concerns were not addressed. So, before you complete policy assessments, consider whether the underlying purpose was accomplished, the value constituent groups have assigned the policy, and the need for incentives, disincentives, or modifications to other university practices. A successful research policy is more challenging than it looks!

Lesson 3: Train and Educate

Your policies and procedures serve as the framework for achieving university objectives. If guidance is not shared throughout the organization, compliance efforts may only yield short-term or minimal benefits. Many institutions, including USF, have struggled with the decision to establish mandatory training programs for both faculty and staff. Prior to the federal audit, neither the faculty nor the administration believed that training should be extended beyond university staff. When federal auditors reviewed instances of non-compliance with key faculty and staff, lack of knowledge surfaced far too frequently.

With a greater understanding of the interrelationship between compliance, training and education, management is now discussing risk-based mandatory training. Our first mandatory faculty training program covering effort reporting compliance began six months ago. Yes, certain faculty refused to attend and complained bitterly about the training. Those individuals were in the minority. Based on management's identification of this training program as a condition of employment and inclusion of faculty who were closely involved with the audit, the university had a high level of faculty support and interest. Ongoing training and education programs will not address all of our compliance needs, but we expect to achieve the most rapid improvements in compliance through these efforts.

Lesson 4: Respond to Audit Issues as They Are Identified

We all know and appreciate an audit client who seriously considers findings and takes immediate action. Federal auditors feel the same way. While your university may not accept or agree with every finding identified, there will be issues that your institution identifies as valid. Consider developing a corrective action plan and beginning implementation efforts before the report is issued. A rapid response instills confidence and documents your commitment to compliance. For any issues that may result in repayments to the sponsor, your work could reduce questioned costs if your audit scope is extended to multiple fiscal years. This one step, more than any other, made the most positive impact on the outcome of our audit.

Lesson 5: Manage Your Audit

Managing an audit engagement must commence at the beginning. The challenge is identifying the initiation of these engagements. Sponsor reviews and visits will occur on a regular basis. If you have not been involved in such meetings, a research sponsor typically sends a written notice to a principal investigator or to the Research Office notifying them of upcoming work. The letter may describe these visits as a review, program assessment, monitoring engagement or program audit, but the nature of the communication will not necessarily provide an accurate depiction of the significance and scope of the work. What may begin as a few questions or request for document copies can expand into an audit or investigation of university practices and policies. Without appropriate facilitation and oversight, unofficial copies or erroneous information can be provided to the auditor or reviewer. Regrettably, once such an error is made, it is difficult to correct the problem.

When the federal audit began at the University of South Florida, internal audit staff was not involved and administrative staff overseeing the audit lacked the experience to adequately support the engagement. Some of the audit management errors made at the onset of the engagement could not be corrected despite our best efforts. Going forward, internal auditing will be monitoring sponsor audits to assure that the appropriate individuals are involved based on the nature of the engagement. Internal audit will also evaluate whether a process is in place to provide effective and timely information.

A final comment on the need for documentation supporting external audit management efforts. Each internal audit shop maintains files to document the work performed. Consider using these same standards to document your external audit engagement. Such records provide information on engagement progress, documents provided, conclusions made, and agreements reached. If the audit or the associated risk appears to be significant, devoting resources throughout the engagement can save substantial time after the audit has ended. Without readily accessible and complete audit records, your ability to effectively implement an audit solution and negotiate a settlement will be adversely impacted.

Conclusion

Ignoring the financial settlement component, the University of South Florida's federal audit experience has been of great value in effecting changes that will benefit the institution for years to come. Internal auditing can and should play a significant role in these engagements. We hope USF's lessons learned will benefit you before you have a federal audit learning opportunity.

About the Author

Marie Hunnicutt, CPA, is inspector general at the University of South Florida. You may reach her at marie@admin.usf.edu.

There's Something in the Air

By Phillip Hurd, Georgia Institute of Technology

I had an interesting experience recently; I was at the local coffee shop when I saw a sign that read, "Wireless Access Now Available." This has been a trend in coffee houses, airports, hotels, universities, and just about any place that has a large complement of people visiting. Being the IT geek that I am, I never go anywhere without my laptop. After ordering my coffee, I headed back out to the truck and flipped on my portable to see just what type of service my favorite coffee shop had to offer. As soon as my PC booted, I changed the protocol on my PC to request an Internet (IP) address automatically from any available wireless network. I would like to note that I did this from my truck, which was a good 200 yards from the coffee shop. It took only a few seconds to find the signal from a wireless network. Much to my amazement, my PC found six wireless networks in the area. With the coffee shop being at a mall, I found several anchor stores as well as two of the more prominent restaurants in the area also had wireless networks available. Only one of these networks had any required security logins. I looked through the networks available and soon found what I believed was the coffee shop's network. My PC requested the IP address and received it with no problem. I, being security conscious, have a software firewall on my PC at all times. As soon as I logged in, I noticed immediately that I was being scanned from a varying number of IP addresses. I quickly realized that not only did I have access to the Internet, but I also had access to the coffee shop's local network. I could see servers, printers and point of sale systems. I checked and discovered that the coffee house had not put in any Internet access restrictions. All of the ports that tend to cause problems for people (135, 134, etc.) were open. It was a virtual playground for anyone and everyone. I ran a quick scan of my own PC and discovered that attacks were currently underway from a number of IP addresses. Less than eight minutes had elapsed since logging



on. Although I did not, I could have hijacked any of the systems. Fortunately, my security held, but this experience related to a larger issue.

We, as institutions of higher education, have the responsibility to provide services to our students, clients, alumni, and the community we represent. One service that is growing rapidly across our nation is wireless access to the Internet. While providing many benefits to our campus communities, there are inherent dangers with wireless access. As the incident above notes, the installation of just one wireless access point expanded the border of that network 1,000 feet. Local electronic shops sell wireless access points that will plug right into your network, are easily configurable, and will provide numerous users quick access. Most of these off-the-shelf units are inexpensive and will have a wireless range of a few hundred feet to well over 1,000 feet. If not properly configured, these off-the-shelf units will allow anyone and everyone to access your network. In addition, they will assign an IP address that is in the valid range for your university. Think about the following scenario. Ten users need access to your network, but you only have five network ports in your office. An easy solution is to go to the local electronic shop and buy an off-the-shelf wireless access point. You return with the merchandise, plug it into your network, configure it for access, and then turn it on. Many laptop PCs now come with a wireless access card built in and will automatically obtain an IP address when available from a wireless network. Now you have solved your problem. All your users can get access via a wireless hub and can continue to work uninterrupted at a reasonable speed. However, the problem is that even the most basic off-the-shelf wireless routers will fire a gaping hole right into your network because most off-the-shelf routers only come with Wired Equivalent Privacy (WEP), also known as the 802.11 security protocol. WEP is usually configurable with 128- or 256-bit key encryption and this protocol generally gives users a false sense of security. If no compensating

Continued on page 14

controls are in place, your network quickly becomes vulnerable. Anyone who wanted into your network could get in, since the wireless access point is broadcasting all the information it routes. Think of it in terms of hiring a radio station to broadcast all of the private business of your office. Since most universities now have wireless networks or are in the process of designing wireless networks, this would be a good time for the auditors to get involved and ensure that there are appropriate security controls in place. Let's look at a primary security control that is built in for wireless networks.

WEP

WEP is a standard that is built into the 802.1X wireless protocol, which has emerged as the industry standard to date. Researchers at the University of California at Berkeley are quick to point out that the protocol has inherent risk (<http://www.isaac.cs.berkeley.edu/isaac/wep-faq.html>). To summarize the article, if a device broadcasts the encryption key (the code that decrypts the information stream being broadcast) then anyone listening in can easily copy that code and decipher any information. If you prefer a more technical description of the security flaws in the 802.11 protocols and WEP, please visit <http://www.cs.umd.edu/~waa/wireless.html>. The WEP security protocol delivers only limited security and should be used only in combination with other controls such as service authentication, intrusion detection systems and network segregation strategies.

How to Audit Wireless Security

One of the most intriguing devices I have encountered is a laser that, when properly aimed and focused, will pick up the sound vibrations off a window and translate them into voice. These lasers are very difficult to detect and give fairly accurate renderings of the conversations being held. For this reason, at all secure facilities there are no windows or glass surfaces, and a detector is usually available. This is not much different than the laser radar detectors that our law enforcement agents use on the streets. For less than \$100, you can buy a detector that will quickly point out whether you are in an officer's crosshairs. Wireless networks are not any different. To protect the universities we serve, we must employ tools that will allow detection of wireless networks and the security that rides on them. Since many universities employ different wireless security configurations and audits differ in scope, a few tools that could be used on any audit will be highlighted in this article. These tools are all available via the Internet at little or no cost. They also are readily available to all hackers, crackers, professors, high school kids, commu-

This tool essentially can listen to any wireless network, identify the encryption keys, decipher them, and then allow you to view the data stream and see the information that is being passed across it.

nists, children, elderly people, terrorists, freedom fighters, the U.S. Government, and of course, you.

Netstumbler

Netstumbler is a low cost tool available for the Windows operating system or its sister

system, the Pocket PC. Moments after downloading this tool, you will be able to see any wireless network, its strength and most of its pertinent attributes. Simply by walking around a university, or any other place that has a wireless network, you will be able to map the borders, identify the security protocols and access points, and monitor data streams. For this tool, visit www.netstumbler.com.

AirSnort

Earlier I mentioned that if you could copy the key being broadcast, you could easily break the encryption on a wireless network. AirSnort is a tool to do just that. This tool essentially can listen to any wireless network, identify the encryption keys, decipher them, and then allow you to view the data stream and see the information that is being passed across it. This is pretty interesting, considering that at some point credit card numbers, bank account numbers, routing numbers, birthdays, Social Security numbers, and other private information will likely be transmitted across a wireless network either at your university or at the receiving institution. This tool alone shows the need for additional compensating controls on a wireless network. For this tool visit <http://sourceforge.net/projects/airsnort>.

Summary

Wireless networks are available across our nation. Most that I have had experience with are not secure enough to transmit private information. Wireless networks are also complex. This article has touched only on the very basic built-in protocols, industry standards and the most readily available low cost tools to audit these networks. Especially after September 11, our need for security is paramount. Wireless networks are the way to the future. As auditors, we must employ our skills to ensure that these networks are secure for professors, researchers, administrative personnel, and other interested parties. Because this article was limited in scope, if you would like more information or have comments, please e-mail me directly.

About the Author

Phillip Hurd, CISSP, CISA, CBM is associate director IS auditing at Georgia Institute of Technology. You may contact him at phillip.hurd@business.gatech.edu.

ABACUS GAIN 2002 *More Results from* *ACUA's Third Triennial Benchmarking Survey*

By Steve Jung, Best Practices Committee

The previous issue of *CandU Auditor* presented the initial results from ACUA's 2002 ABACUS (Analytical Benchmarking for Auditors in the College and University Sector) survey, carried out in conjunction with the IIA's Global Auditing Information Network (GAIN) internal audit benchmarking program.



The previous article highlighted results from the first two categories (A and B) below:

- A. General Institutional Statistics
- B. Costs and Staffing
- C. Audit Committee
- D. Customer Satisfaction
- E. Chief Auditing Executive (CAE)
- F. Annual and Long Range Planning
- G. Activities Audited
- H. Audit Life Cycle and Resource

- I. IT Auditing
- J. Successful Auditing Practices

In this article, the former chair of the Best Practices Committee is pleased to highlight some of the most interesting and potentially useful results from the other categories of questions asked in the 2002 survey (C through H and J). Note that data from category I (IT Auditing) has not been summarized extensively here.

Reminder About Survey Participation

Readers will recall that 181 ACUA member institutions (43 private, 107 public, 13 international and 18 statewide systems) participated in the ABACUS GAIN 2002 survey (approximately 45 percent of our 400 institutional members). Table 1 provides summary data on the ACUA member institutions that participated in the survey.

As in the initial article, we have omitted here the data from the 18 statewide systems of higher education because their organization and functions are sufficiently dissimilar from those of the other institutional respondents so as to invalidate any comparisons that might be drawn. Note, however, that

Continued on page 16

Table 1: Characteristics of Respondent Institutions

Institution Type	N	Average Annual Revenues	Average Total Assets	Average Annual Expenses	Average FTE Employment	Average FTE Student Enrollment
Private	43	\$802,673,746	\$2,939,213,180	\$787,539,712	6,867	11,517
Public	107	\$604,507,831	\$1,059,464,058	\$572,950,094	5,516	20,778
Non-US	13	\$245,561,007	\$471,744,590	\$251,378,927	3,192	30,863
Systems	18	\$1,338,677,811	\$7,786,833,804	\$1,300,710,518	18,390	61,161
	181					

Footnotes

¹ Also serves as Director of Internal Audit and Institutional Compliance at Stanford University, Stanford, California.

² Currently Penny Howard, phoward@longwood.edu, (434) 395-2283.

we are willing to make these data available, sans identifying information, for any ACUA member who wishes to do benchmarking within this specialized subset (or other subsets). See the last paragraph of this article for instructions on how to obtain the data.

Other Operational Practices for Respondent Internal Audit Departments

Quality Assurance Reviews (QAR). The ABACUS GAIN 2002 questionnaire asked respondents to indicate whether their institutions had undertaken quality assurance reviews within the previous three years. The results by type of institution are provided in Table 2.

The largest percentage of institutions having undertaken a review is in the public sector, and these reviews on average consumed considerably more staff effort than in the private or non-U.S. sectors. However, it is worth noting that four of the 21 public institutions that had undergone peer reviews were not satisfied with the results of those reviews.

Staff Training. Respondents were asked to provide information on the amount of professional development training (internal and external courses) budgeted and actually completed by members of the internal audit department staff during the previous year. The results by type of institution are provided in Table 3.

For U.S. institutions, both training budgeted and training completed averaged close to 50 hours per year. Interestingly, this average held constant for internal auditing departments of all sizes.

Contracting for Services. Table 4 provides a summary of the extent to which respondents reported contracting with external third parties for internal auditing work. The practice is not widespread, but it is far more prevalent in private and non-U.S. institutions (35 percent and 38 percent, respectively) than in the public sector (13 percent). A significant portion of the annual internal auditing budget (e.g., 25 percent on average in the private sector) is spent for contracting in those institutions that do contract for services.

Audit Committees

One of the most dramatic differences between private and public sector institutions is revealed in the ABACUS GAIN 2002 questionnaire responses on existence of an audit committee, as shown in Table 5.

Almost all of the private and non-U.S. respondents indicated that their institution had an audit committee, while this was true of only 60 percent of the public sector respondents. This finding likely stems from the fact that many publicly supported institutions are governed by an elected or appointed board that has not created a separate audit committee.

Table 6 provides a summary of responses to questions regarding the role of internal audit and significant areas of risk

as viewed by the audit committees of those institutions that reported having such a committee.

There appears to be almost universal agreement among audit committees that internal audit's role includes being an independent appraiser of internal controls and very high agreement that the role includes that of independent appraiser of compliance with laws and regulations. The risk area of highest significance to audit committees was loss of assets and fraud (especially in the public sector). At the other end of the spectrum, few committees reportedly see internal audit's role as that of a developer of personnel for other financial operations or consider wire transfers to constitute a significant area of risk.

Table 7 provides some other indicators of the audit committee composition and practices of the ABACUS GAIN 2002 respondent institutions that had such committees.

Table 8 offers some insight into the nature of the information typically provided to the audit committees by chief audit executives (CAEs).

Other than data on audits performed and significant audit findings, there is remarkably little consistency among the respondents in terms of information reportedly provided to their audit committees.

Customer Satisfaction Measurement Practices

Table 9 provides a summary of respondents' reported use of customer satisfaction surveys by type of institution. Slightly less than half of the schools in each sector use such surveys and for U.S. schools, public and private, the use is typically formal, after every report.

The ABACUS GAIN 2002 questionnaire asked for the current title of the CAE of each responding department. By far the most widely used title was director, used at 84 percent, 72 percent and 77 percent of private, public and non-U.S. institutions, respectively. Also used were such titles as manager, chief auditor, inspector general and, in one instance within each of the three sectors, vice president. All but a handful of respondents in all sectors indicated that the CAE position at their institution was "career," not "rotational."

Table 10 provides additional data on the characteristics of the CAEs of institutions represented in the survey. Clearly, chief internal auditors in higher education are an experienced group and, on average, long serving in their profession and their current roles.

Table 11 presents a summary of CAE responses to the question "What does management expect from internal auditing?" The word everything springs to mind when looking at these numbers, although clearly compliance and risk assessment are paramount expectations for top management of the respondent institutions.

Table 12 provides an overview of the risk assessment process used by respondent institutions. This data shows that

Continued on page 19

Table 2: Quality Assurance Review (QAR) Experience							
Institution Type	N of Respondents	Had a QAR in last 3 years	% Having QAR	Average Person-Days	Average Cost of QAR	Satisfied w/ QAR?	% Satisfied
Private	43	2	5%	9.5	\$30,000	2	100%
Public	107	21	20%	107.3	\$23,759	17	81%
Non-US	13	2	15%	7.0	\$9,199	2	100%

Table 3: Professional Development			
Institution Type	Annual Hours Training Budgeted	Annual Hours Training Actual	
Private	49.7	55.1	
Public	47.0	49.9	
Non-US	43.3	32.3	

Table 4: Contracting for Audit Services			Table 5: Existence of an Audit Committee	
Institution Type	Some Internal Auditing Work Contracted	Avg % of Annual Budget Spent on Contracting for Those Using Contracting	Institution Type	Have an Audit Committee
Private	35%	25%	Private	98%
Public	13%	11%	Public	60%
Non-US	38%	41%	Non-US	92%

Table 6: Role and View of Audit Committee				
Institution Type (N of Respondents)	Private (42)	Public (64)	Non-US (12)	
Role of Internal Audit As Viewed By the Audit Committee				
Independent Appraiser of Financial Information	74%	78%	83%	
Independent Appraiser of Operational Efficiency	76%	89%	83%	
Independent Appraiser of Compliance with Laws & Regulations	90%	91%	92%	
Independent Appraiser of Internal Controls	100%	100%	100%	
Personnel Developer for Other Financial or Operational Roles	17%	9%	17%	
Significant Areas of Risk As Viewed By the Audit Committee				
Information System Penetration	74%	77%	58%	
Fraud	79%	92%	75%	
Wire Transfers	19%	9%	0%	
Contract Administration	40%	50%	58%	
Loss of Assets	86%	91%	75%	
Threat of Lawsuits	50%	45%	50%	
Environmental Concerns	38%	28%	33%	
Other	21%	30%	17%	

Institution Type	N of Respondents w/ Audit Committee	AC Has Written Charter	AC Chaired by Outside Director	AC Has Written Member Rotation Policy	AC Has Private Sessions w/ CAE	CAE Satisfied w/ Frequency of Access
Private	42	74%	86%	38%	97%	90%
Public	64	50%	53%	28%	86%	89%
Non-US	12	67%	92%	33%	100%	92%

Institution Type (N of Respondents)	Private (42)	Public (64)	Non-US (12)
Percent of Audit Plan Completed	76%	81%	75%
Expense Budget	19%	23%	17%
Actual Expense vs. Budgeted Expense	7%	20%	0%
Productivity Measures	33%	48%	17%
Benchmark Comparisons	24%	25%	8%
Organizational Structure	60%	64%	58%
Risk Assessment Results	83%	81%	75%
Assessment of Control Environment	36%	39%	67%
Subsidiary Control Environment	17%	22%	17%
Coordination with External Auditor	64%	59%	67%
Significant Audit Findings	86%	92%	100%
Audits Performed	86%	97%	92%
Frauds/Conflicts of Interest Noted	60%	80%	75%
Compliance Monitoring	62%	59%	67%
Other	14%	22%	33%

Institution Type	Use Client Satisfaction Surveys	If Use Surveys, Formal?	If Use Surveys, After Every Report?
Private	42%	89%	89%
Public	44%	79%	85%
Non-US	46%	67%	50%

Institution Type	Avg Yrs w/ Institution	Avg Yrs Held Position	Avg Yrs in Internal Auditing	Avg Yrs Other Experience
Private	9.2	7.4	15.5	10.0
Public	10.7	7.8	15.4	10.1
Non-US	7.8	5.7	12.7	16.1

most have some form of formal risk assessment process, featuring a defined audit universe averaging in the range of 220 to 260 activities and 45 to 65 business units. Interestingly, respondents in all types of institutions indicated that on average they were able to audit only about 15 percent of their audit universe each year!

Table 13 illustrates the extent to which respondents reported use of a set of GAIN-defined “significant risk factors” in their risk analysis for those institutions that reported having a risk assessment process. Risks associated with loss, institutional reputation, and change in operations and organizations were cited by a large majority of respondents across all institution types.

Table 14 illustrates the factors used by respondents in determining which audits to include in their annual audit plan. By far the most common factors are management requests and auditor judgment, with fewer using a formal audit planning model, a cycle approach and management interviews.

The ABACUS GAIN 2002 questionnaire also asked about the duration of respondents’ audit plans. On average, private, public and non-U.S. institutions averaged 2.4, 2.0, and 2.6 years, respectively.

Adoption/Use of Formal Internal Control Models

Table 15 provides a summary of two ABACUS GAIN 2002 questions addressing use of one of the “three C” models formulated in the last decade to promote wider understanding and enhancement of internal controls in organizations: COSO (U.S.), COCO (Canada), and Cadbury (UK). Formal adoption percentages are low, ranging from eight percent to twenty-three percent, but actual use in audit activities was somewhat higher, ranging from 30 percent to 40 percent.

Audit Activity Measures

Staff Time Allocation. Table 16 provides a summary of respondents’ estimates of the percentage of internal audit staff time actually allocated to various audit and other activities by type of institution. Of particular interest is the relatively low level of time allocated to such activities as control self assessment (CSA) (three percent and under), organization-wide quality efforts (three percent and under), and re-engineering (seven percent and under), indicating that these management assistance techniques are not at this time having a deep impact on higher education internal auditing.

Audit Reports by Type. Table 17 provides a similarly organized summary of the percentage of audit reports by type

Each issue brought to management in the project report must be a true risk issue. Internal auditors have traditionally focused on compliance with rules, policies, procedures, guidelines, etc. This focus has led to inclusion of issues that have extremely limited overall risk.

of audit activity. Notable from this table is the relatively high percentage of audit reports in operational auditing (35 percent to 42 percent) and integrated auditing (29 percent to 33 percent).

Types of Audits Undertaken. Respondents were asked to indicate the frequency with which their departments undertook certain types

of audits. The results by type of institution are provided in Table 18, (see page 20). In Table 18, **H** signifies that the respondents reported undertaking the specified type of audit with High frequency, **M** indicates Moderate frequency, and **L** indicates Low frequency or never. It is not surprising that audits relating to adequacy of internal controls predominate in the high frequency category.

Increases or Decreases in Staff Size. Perhaps the ultimate gauge of audit activity is whether or not the size of the department is increasing. ABACUS GAIN 2002 looked at this phenomenon from the perspective of both increasing and decreasing staff size. Table 19 shows that the majority of audit departments in the survey did NOT change in size during 2002.

The survey also asked, for those departments that were increasing or decreasing in size, the percentage of change. For private institutions, the average changes were 29 percent increase, 32 percent decrease; for public institutions, 36 percent increase, 27 percent decrease; for non-U.S., 43 percent increase (none decreased).

Audit Life Cycle. The ABACUS GAIN 2002 survey asked respondents to report on the percentage of their total time devoted directly to auditing that was spent in planning, including survey, risk analysis, and audit program preparation; fieldwork including entrance and exit conferences; and report preparation, including review, issuance, and follow up. Results by type of institution are illustrated in Table 20a.

Table 20b summarizes data on the average duration of the audit phases reported in Table 20a.

Commonly Used Practices. The survey sought to determine what proportion of respondents use certain other typical practices of the trade that are common in internal auditing. Table 21 provides a summary of responses to these items.

Reporting Process. Finally, the survey asked respondents to report on certain qualitative aspects of their audit reporting process. The results are summarized in Table 22, illustrating some interesting differences between the three types of institutions.

Continued on page 23

Table 11: CAE's View of Management Expectations of Internal Auditing				
	Institution Type	Private	Public	Non-US
Compliance Assistance		98%	97%	85%
Risk Assessment		93%	80%	100%
Internal Financial Consulting		70%	74%	54%
Internal Operational Consulting		79%	87%	92%

Table 12: Risk Assessment					
Institution Type	% w/ Formal Risk Assessment Process	% w/ Defined Audit Universe	Avg Total Activities in Audit Universe	Avg Business Units in Audit Universe	Avg % of Audit Universe Audited Annually
Private	93%	77%	257.7	64.8	16%
Public	83%	70%	238.9	45.5	16%
Non-US	85%	77%	220.0	52.8	13%

Table 13: Significant Factors Used in Risk Assessment				
	Institution Type	Private	Public	Non-US
Degree of Manual Intervention		30%	33%	45%
Degree of Automation		40%	45%	55%
Confidence in Management		78%	76%	73%
Extent of Major Changes in Ops, Org		83%	89%	82%
Reputational Sensitivity		90%	93%	100%
Assets		73%	65%	82%
Profits		10%	16%	9%
Sales		35%	40%	27%
Employee Turnover		43%	49%	45%
Loss Potential		95%	90%	91%
Other		40%	43%	18%

Table 14: Factors Used in Selecting Audits				
	Institution Type	Private	Public	Non-US
Management Requests		95%	95%	85%
Auditor Judgment		91%	91%	85%
Management Interviews		67%	72%	62%
Formal Audit Planning Model		58%	50%	77%
Cycle Approach		49%	64%	46%
Other		5%	12%	15%

Table 15: Use of COSO, COCO, Cadbury Internal Control Models		
Institution Type	% Carried Out	
	% Formally Adopted Control Model	Audits Using Control Model
Private	23%	40%
Public	18%	35%
Non-US	8%	31%

Table 16: Average Actual Allocation of Audit Staff Time			
Institution Type	Private	Public	Non-US
Regular (Non IT) Auditing	44%	43%	43%
IT Auditing	12%	10%	11%
Fraud Investigation	5%	10%	6%
Special Projects for Management	12%	13%	11%
Assistance to External Auditors	8%	5%	3%
Audit Engagement Administration	10%	9%	9%
Re-engineering	5%	3%	7%
Organization-Wide Quality Efforts	1%	2%	3%
Control Self Assessment (CSA)	2%	1%	3%
Internal Control Programs	2%	2%	5%
Training	4%	4%	3%
Absences	11%	11%	11%
Travel	1%	1%	4%
Other	2%	7%	6%

Table 17: Types of Audit Reports Issued			
Institution Type	Private	Public	Non-US
Financial	23%	24%	20%
Operational	42%	35%	39%
Compliance	22%	29%	16%
Information Technology	16%	12%	20%
Integrated Auditing	30%	29%	33%
Other	9%	15%	9%

Table 19: Audit Staff Size Trends		
Institution Type	% Increasing Staff Size	% Decreasing Staff Size
Private	14.0%	14.0%
Public	11.0%	14.0%
Non-US	15.0%	0.0%

Table 18: Frequency of Audits Conducted				
	Institution Type	Private	Public	Non-US
Financial Audits				
Adequacy of Internal Accounting Controls		H	H	H
Accuracy, Reliability, & Completeness of Financial Records		H	H	M
Usefulness of Financial Reporting for Management Control & Decision Making		M	M	M
Impact of Changes in Accounting Rules or Regulations		L	M	L
Interim Quarterly Financial Results Reported Externally		L	L	L
Operational Audits				
Management Controls		H	H	H
Human Resources		M	M	M
Capital Expenditures		M	M	M
Operating Efficiency		H	M	H
Business Contingency Planning		M	M	M
Long-term Contracts & Purchase Agreements		M	M	M
Safeguarding of Assets		H	H	H
Accomplishment & Effectiveness of Established Objectives & Goals		M	M	M
Logistics Management		L	M	M
Facilities Management		M	M	M
Marketing		L	L	L
Processing Improvement & Quality Programs		M	M	M
Compliance Audits				
Code of Ethics		M	M	M
Other Non-financial Policies & Procedures		H	H	H
Procedures for Preventing or Uncovering Illegal or Questionable Payments		M	M	M
Laws & Regulations Including Health & Safety Programs		M	M	M
Generally Accepted Accounting Principles (GAAP)		M	M	M
Store/Field		L	M	M
IT & System Audits				
General IT Controls (Physical Security, Disaster Recovery & Access Controls)		M	M	M
System Security		M	M	M
Existing Business Application Systems, Including Post-installation Audits		M	M	M
New IT Application Systems Development Projects		M	M	M
Improvements to Existing IT Application Systems		M	M	M
Software Licensing (Possible Use of Unlicensed Software)		M	M	M
Telecommunications controls		M	M	M
Controls & Other Aspects of Local Area Networks		M	M	M
Controls Over Use of PCs		M	M	M
Prevention of Viruses		M	M	M
End-user Computing		M	M	M
Electronic Data Interchange		M	M	L
Applications Change Controls		M	M	M
Major System Integration Projects		M	M	L
Information Management		M	M	M
Strategic Information Plans		L	M	M
Data Warehousing		M	M	L
Electronic Commerce		M	M	M

Best Practices

The ABACUS GAIN 2002 survey collected large amounts of information about what respondents viewed as successful internal auditing practices. The presentation of these data in tabular form in this article is impractical. Therefore, the author has worked with ACUA to make summary data on these responses available through the ACUA Web site (www.acua.org). To access these data, just go to the Web site and click on the link to “ABACUS GAIN 2002 Best Practices Data.”

ABACUS GAIN 2002 Data Available for Additional Secondary Analyses

Another reminder: The ABACUS GAIN 2002 data, minus names of institutions, are available for secondary benchmarking analyses by any ACUA member institution upon request to the chair of the Best Practices Committee.² Requests will be honored for any subset of institutions numbering more than ten, which is the minimum group size imposed by the ACUA Board to maintain anonymity.

Table 20a: Distribution of Direct Audit Effort					
Institution Type		Private	Public	Non-US	
Planning and Preparation		19.3%	22.6%	19.6%	
Fieldwork		60.7%	58.1%	57.1%	
Reporting and Follow Up		20.0%	19.3%	23.3%	

Table 20b: Average Time (Days) Devoted to Types of Effort					
Institution Type		Private	Public	Non-US	
Start of Audit to End of Fieldwork		54.6	60.2	37.8	
End of Fieldwork to Issuance of Draft Report		21.4	21.6	15.0	
Issuance of Draft Report to Issuance of Final Report		23.2	18.9	23.2	

Table 21: Commonly Used Practices					
Institution Type	% w/ Policies & Procedures		% w/ Promotional	% Doing Formal Audit	% Having Full or Partial Access to the
	Manual	% w/ Formal Charter	Brochure	Follow Up	Web
Non-US					
Private	72%	91%	33%	79%	98%
Public	80%	87%	29%	88%	96%
Non-Us	46%	92%	38%	100%	100%

Table 22: Characteristics of Audit Reports			
Institution Type	Average Length of Final Reports (Pages)	% Including an Executive Summary	% Including Auditee Responses
	Private	11.4	84%
Public	7.7	64%	85%
Non-US	18.8	92%	69%

International Exchanges – An Australian Experience

By Joy Taylor, MBA, CPA, and Dennis Taylor, CA

International exchanges and stints abroad are fairly common with students and faculty but administrators, like internal auditors, can experience this type of learning opportunity too. Drawing on the authors' own experiences in Australia, England and the United States, helpful suggestions for planning and participating in an international exchange and associated study tours will be identified. Additionally, similarities and differences found between public universities and internal audit offices in the United States (in particular Tennessee) and Australia will be discussed.

Participation in an international exchange between two respective internal audit offices affords an excellent

opportunity to enhance auditing, accounting and management skills in a different environment. Exchange programs allow participants to make a positive contribution to host universities and return to their home institutions with new knowledge and broadened professional experience. Exchanges offer a very useful and positive experience with mutually beneficial outcomes to individual participants and their respective universities. In an age

of increased focus on globalization and cultural diversity, international exchanges provide an excellent opportunity for gaining practical knowledge and exposure to other cultures and different business practices and perceptions.

Participating in professional organizations, networking with colleagues and researching programs abroad help identify exchange opportunities. Your own university's international programs office is a good resource. Exchanges should begin with an official invitation and can be coordinated directly through individual participants and their universities and/or in combination with professional associations.

Exchange durations vary but the recommended length is a minimum of three to six months. Exchanges for 12 months



are considered too long, as they are difficult to manage. The extended length adds to complications with work assignments while on exchange, employment status, travel visas, income tax issues, accommodations and other arrangements related to being away from home an extended period.

A memorandum of understanding or written agreement, signed by executive levels of both universities, should outline the operational details of the exchange. Details contained in the exchange agreement should include participants, duration, work responsibilities, official study tour of appropriate organizations in the host country and any other relevant terms of the exchange.

A formal work program mutually agreed upon and approved by executive levels at both universities is a must for the success of the exchange. The work assignment should be designed to include areas of particular interest and areas where both parties can benefit in sharing knowledge. The work program should also include time to officially visit other local universities and appropriate public and private sector organizations and professional associations for networking and research.

Whether costs are fully funded or shared by the university or individual, an exchange budget is essential. Travel-related costs are normally the biggest expense, especially in cases where participants not only swap work places but homes as well. Routine living expenses while away are usually paid by the participants but could be higher than normal due to foreign currency exchange rates and differences in lifestyles. Some personal expenses are legitimate tax deductions, which can reduce the impact of the personal cost of an exchange, but the reader is cautioned that host/home institutions do not appreciate getting caught up in inquiries by tax authorities.

Other elements of an exchange include mentors, reports and perceptions. Exchange participants should have a mentor at the host institution. A suitable mentor can greatly assist in the transition into the new work environment, provide guidance on business protocols, assist in networking, and generally be an excellent learning resource.

Most importantly, participants should timely produce reports and share their experiences upon returning home. A key element of an exchange is promoting positive perceptions

Continued on page 25

Exchange programs allow participants to make a positive contribution to host universities and return to their home institutions with new knowledge and broadened professional experience.

by others. Failure to report on the exchange experience often leads to others seeing the exercise as nothing but a junket.

Prepare before you go. Research the culture and environment of the country you are visiting as well as the host institution. General knowledge of the country's government, politics, history, religion and economy are some of the basic information you need to gather. You will face differences in cultures, attitudes and business practices, so gaining some understanding of and appreciation for the diversity before going abroad will assist in the transition to the new environment. While traveling and working abroad, it is important to remember you are, in effect, representing your country. The way you act and behave is the way foreigners will view your native land.

You will need knowledge about the cost of living differences and the impact of exchange rates on funding and travel costs. Before traveling, get visa issues completely resolved and inquire about medical coverage in the host country and with your health provider to ensure you are covered. Additionally, you need a basic understanding of tax issues related to income and deductions while abroad to avoid problems later. Climate and dress codes in other countries also differ, so travel with the right clothes. For example, Americans wear more casual attire at the office and to business meetings. Business dress tends to be more formal in Australia where suits and ties are still the norm. Also, the seasons are opposite to North America's seasons.

So what was the American perception of the Australian experience? Basically, auditing is auditing. Similarities and differences can be seen in the internal audit offices in the United States and Australia, depending on size of unit and financial resources available. Similarities were seen in the issues facing higher education in both countries: government funding cuts, the need to look for alternative revenue sources, streamlining and downsizing operations, empowering staff, competition for students, retention of students, staff compensation issues, privatization and/or outsourcing functions.

Similarities were seen in the issues facing higher education in both countries: government funding cuts, the need to look for alternative revenue sources, streamlining and downsizing operations, empowering staff, competition for students, retention of students, staff compensation issues, privatization and/or outsourcing functions.

Audit issues were also similar. No differences in available technology were seen, with one notable exception. Distance education seemed more prevalent in the United States at the time. This is odd since Australia is historically known for radio schools for outlying rural areas.

Several differences were observed between the two countries that could impact audit approaches. These include benchmarking, audit productivity, control environments, audit committees, funding, athletics, public records and communications. Prevalent techniques seen in Australia include benchmarking (everything) and contracting/outsourcing audit resources. Americans are less likely to contract internal audit

services. Americans compare and research what others are doing, but because of the number of institutions in America and perceived differences between them are less likely to adopt a common standard. Note: Australia has fewer than 50 universities *all of which are public*, compared to hundreds in the United States.

Based on the number of audits on the annual programs,

audit productivity appears greater in Australia. Consequently, audit scope may be narrower. Alternatively, what constitutes an audit, for reporting purposes, may be defined differently. Americans have fewer items on their annual plans, and thus fewer formal reports, but the audits are more comprehensive.

Public American universities appear to have stronger control environments and more structure than do those in Australian universities. However, statutory independent corruption commissions have led to codes of conduct and fraud control policies in Australia. Public universities in the United States are generally more cost conscious and frugal than their Australian counterparts (e.g., with respect to travel expenses).

Having independent audit committees increases the accountability of internal audit units in Australian universities. Although American public universities may have oversight by a governing board and state comptroller/auditor, there is often no independent audit committee.

American public higher education is funded differently than that in Australia. Public universities in the United States are funded primarily by state appropriations and student fees, with resources coming from federal government for research, grants and contracts, and student financial aid programs. Student work programs benefit American universities by providing financial assistance to undergraduate students. In Australia, appropriations come from the Federal government rather

Having independent audit committees increases the accountability of internal audit units in Australian universities. Although American public universities may have oversight by a governing board and state comptroller/auditor, there is often no independent audit committee.

than the states. However, Australian universities are state authorities subject to state government policy. Australian students pay tuition and fees through Higher Education Contribution Schemes, a unique concept with deferred collection handled by the Australian Taxation Office. American universities could benefit from implementing such a concept.

In the United States, athletics is a major component of university operations and campus life, impacting financial resources, public relations, recruitment and alumni support. Australia does not have the same level of athletics involvement; there, sports are more recreational.

Freedom of information and public records is more open in America than Australia (e.g., an Australian employee may be terminated for accessing comparative salary information to support a request for a raise). Salary information in America is a matter of public record in many states; accessing it is a common practice.

And you thought you spoke English? Even though English is spoken in both countries, communication may be difficult at times, with significant differences in understanding and interpretation. Although the definitions of many words are the same in both countries' dictionaries, common use in daily communications is different. Some examples of common use by Australians as compared to the American preferred language (in parentheses) are: scheme (plan), rationalize (streamline), made redundant (laid off), devolution (decentralization), and anomaly (variance). Spelling may also be different and don't forget about date formats. Like the British, Australians always reverse the order of the month and date compared to the standard American format.

Outcomes and achievements of the exchange were many. Participants performed audits and issued reports, sharing their audit knowledge with the respective universities. They conducted research on better practices and new ideas. The approaches thus revealed led to reflection and application back at the home institutions.

Outcomes and achievements of the exchange were many. Participants performed audits and issued reports, sharing their audit knowledge with the respective universities.

An appreciation for cultural diversity was also gained. Exchanges are truly a great life learning experience.

About the Authors

Joy, a CPA and MBA and previously director of Internal Audit at East Tennessee State University, did a three-month professional development exchange to the University of New South Wales (UNSW) in Sydney, Australia and subsequently worked in the Enterprise Risk Services Division of Deloitte Touche Tohmatsu in Sydney. Dennis is a Chartered Accountant and previous director of Internal Audit at both the University of Sydney and UNSW. Dennis did a 12-month placement to PriceWaterhouse International and later a 12-month exchange at the University of Oxford, England and has experienced America through two study tours. Both worked recently in state government in Raleigh, North Carolina; however, they have returned to Sydney, Australia, to resume careers there.

Editor's Note: Joy and Dennis met during Joy's exchange to Australia and were married one year later. You may contact them at: joyt4@hotmail.com.

Construction Costs Can Stay on Budget.

With Tofias PC's Construction Cost Review Services, you can avoid skyrocketing project costs. We identify costs that are not in compliance with contracts and other areas of "hidden profit".

Tofias specializes in providing educational institutions across the nation with cost-saving services during the pre-construction and construction phase of projects.

◆ Please contact Marshall Goldberg or Tom Viehl at 888-761-8835.

 **TOFIAS** PC

Accountants & Consultants

350 MASSACHUSETTS AVE., CAMBRIDGE, MA 02139

Construction Cost Reviews

Accounting, Auditing & Taxation

Valuation & Litigation Services

Lender & Investor Services

Turnaround & Interim Management Consulting

Employee Benefits

Human Resources

Personal Financial Planning

CAMBRIDGE

NEW BEDFORD

WWW.TOFIAS.COM

888.761.8835

ACUA's 47th Annual Conference

Sept. 14-18, 2003

Nashville, TN



Dale Henry (top left), motivational speaker and humorist, gave attendees a lot to think about and drove the points home with funny stories.

Rick Whitfield (above), vice president, University of Pennsylvania, presented on the challenges faced by leaders at colleges and universities.

Michael Hoffman (left), executive director, Center for Business Ethics at Bentley College spoke about ethical leadership.

The member excellence awards were presented prior to Tuesday's general session. David Coury (top photo) receives from Rob Clark, president, the ACUA Excellence in Service Award. David Crawford (bottom photo) receives from Rob Clark, the ACUA Outstanding Professional Contributions Award. ACUA presents these prestigious awards annually and selects the recipients from a field of nominations submitted by the ACUA membership.



Rob Clark presents the gavel to the incoming president, Seth Kornetsky



Attendees had a great time participating in the presidential initiation for Seth Kornetsky who took office during the Annual Business Meeting.

Seth Kornetsky, 2004 president, makes his inaugural address unveiling goals for the coming year.



Conference attendees surround immediate past president and dinner dance DJ, Rob Clark (left) and ACUA's 2004 president, Seth Kornetsky (right) as they pose for the camera.



2004 Midyear Seminar Highlights

March 14 - 17 2004 | Hyatt Regency Albuquerque | Albuquerque, New Mexico

Take the trail to the Land of Enchantment

New Mexico is the Land of Enchantment and Albuquerque will certainly enchant you with its culture, historic sites, and scenic beauty.

Pursue the path of in-depth learning

Fundamentals of Auditing University Departments and Service Organizations

The ideal seminar for new auditors or auditors new to the university setting

Audit Reports Today

Writing effective audit reports that meet the needs of today's readers

Is That the Truth? Interviewing Techniques for Auditors

How to obtain reliable information and detect vocal or non-verbal indicators of deception in an audit or investigation interview

Role of Internal Audit in Enterprise Risk Management

Tools, techniques and best practices for being proactive in addressing the risk issues that face their universities

Building IT Audit Tools for Unix and Windows

Designing programs/tools to audit Unix and Windows security

Research Administration and Federal Compliance

Gaining expertise in the hot issues of compliance, including effort reporting, financial reporting, cost accounting, cost sharing, lab safety, human subjects and animal use in research.

Introductory ACL for Windows

Special three-day course in an interactive, hands-on environment presented by an ACL-certified trainer (laptop required)

Enjoy enchanting Albuquerque and nearby areas

Albuquerque

- Sandia Peak Tramway and their High Finance chalet restaurant
- Old Town district
- Nob Hill for clubs, galleries, bookstores, sidewalk cafes, and more
- New Mexico Museum of Natural History and Science
- National Atomic Museum chronicling nuclear research and warfare
- The Night Life: Martini Grille, 4200 Central Avenue NE; OPM, 211 Gold Avenue SW; and Pulse, 4100 Central Avenue, SE

Nearby

- Santa Fe, state capitol noted for culture, museums, and art galleries
- Taos, a high-desert refuge for celebrities and artisans with shops and galleries, plus Taos Pueblo, a world heritage site
- Madrid, old mining town with craft shops and museum
- Acoma Pueblo, oldest continuously inhabited city in the U.S.
- Bandolier National Monument

For more details, go to www.acua.org. If you still have questions, call headquarters at (860) 586-7561 or send e-mail to acua@acua.org.