Audit Division

The MIT Audit Division delivers audit services through a risk-based program of audit coverage, including process audits, targeted reviews, and advisory services. These efforts, in coordination with the Institute's external auditors, PricewaterhouseCoopers, provide assurance to management and to the Audit Committee of the MIT Corporation that good business practices are adhered to, adequate internal controls are maintained, and assets are properly safeguarded.

The Audit Division's scope of services is equal to the full extent of MIT's auditable activities. Audit resources are prioritized and allocated using a model of risk evaluation for defined entities at the Institute.

The Audit Division is fully attentive to the support and service of its primary customer, the Audit Committee of the Corporation. In accordance with its charter, the Audit Committee meets three times a year. This schedule lends momentum to the Audit Division's goals for monitoring internal controls and supporting the Institute's risk management processes.

The Audit Division emerged stronger from a period of turnover. Fully staffed, the Audit Division employs 18 professional staff (16.9 full-time equivalents), including the Institute Auditor. Core resources are organized into two distinct functions: Audit Operations and the Research Administration Compliance Program (RACP).

Audit Operations, comprising 12 professional staff (10.8 full-time equivalents), carries out a priority-based program of audits and reviews to evaluate the effectiveness of management's systems of controls over financial, operational, and compliance risks within the Institute's activities, including information technology controls. This group is directed by the associate director, business and technology audit services.

Since its formation in 2004, RACP provides ongoing research administration compliance monitoring by four staff members (2.8 full-time equivalents) who report to the associate audit director for operational and compliance risk management. RACP's efforts have two key elements: department-level site visits, designed to assess internal controls within the departments, labs, and centers (DLCs) and provide research compliance support to DLC staff; and ongoing compliance monitoring, which includes DLC-level monitoring and Institute-wide reviews. Through delivery of these advisory services, RACP represents an outreach effort to the Institute's numerous and varied DLCs. The relationships developed extend from the schools' assistant deans out through the DLC administrative and support staff.

The Audit Division also houses a specialized function called Professional Standards and Strategy (0.8 full-time equivalent), led by an experienced member of the division with the title assistant audit director. Working with the Institute auditor and the audit management team, this function guides the division in setting policy and direction to help us achieve our long-term goal of assuring that MIT's audit function is world-class.

In December 2007, the Institute auditor, jointly with the vice president for information services and technology (IS&T), acquired resources and began to provide administrative direction to a program designed to address risks associated with personally identifiable information. The program work, described below under "Program on Personally Identifiable Information," is led by an experienced individual, formerly a director in IS&T, with broad knowledge of Institute processes and culture; the program director's work is enhanced by close involvement of senior staff from both the Audit Division and IS&T.

Accomplishments

Audit Operations

The primary objective of Audit Operations is to perform reviews and evaluations of the Institute's business processes and to provide management with assurance that controls are functioning as intended. Accordingly, we strive to perform this work in accordance with *The International Standards for the Professional Practice of Internal Auditing* issued by the Institute of Internal Auditors (IIA). These standards require that we maintain independence when conducting our reviews throughout the Institute. This is achieved through the independent reporting line to the Audit Committee, and by not assuming operational roles or undertaking responsibility for designing or implementing controls.

Audit Operations substantially completed its fiscal 2008 audit plan as of June 30, 2008. The 2008 Audit Plan comprised 35 internal audit/advisory engagements of various Institute business processes. We were able to add 14 engagements to our original plan, originating from a variety of sources. Among these additions were a review of the financial capacity of the selected construction manager for a large capital project, small investigations to assist administrative officers in two DLCs; a targeted but comprehensive test of SAP-Payroll data accuracy, a comprehensive advisory review of Lincoln Laboratory's raw stock physical and book inventory, and targeted reviews of certain revenue-producing activities in the Sloan School of Management.

Other completed engagements included evaluation and testing of controls in MIT Medical's billing process, the financial management of the athletics facilities, MIT's parking program administration, student and staff education loans receivable administration, and the faculty loan program. Audit Plan time is also devoted to ongoing review for capital construction cost recovery opportunities; this program continues to yield benefits well in excess of the resources and related costs employed to identify excessive and unallowable costs. Finally, we continue to invest time in increasing our understanding of the Lincoln Lab enterprise, its risk profile, and our approach to delivery of audit services.

Research Compliance Administration Program

We have reached an important milestone in this program: near completion of a full cycle of areas planned for review, based upon research volume. As of May 31, this program reviewed 98% of MIT's on-campus federal expenditures, in connection with site visits to 40 DLCs. This program has accomplished its primary goals of achieving brisk coverage of DLC compliance, and providing support to their control structures. At this time we plan to assess how we can improve on and expand the established model. Additionally

we will evaluate the systemic trends presented from the site visit observations, and work with senior administrators to determine pathways to improved compliance in areas where desired targets are not being met.

We are beginning to incorporate additional steps into the RACP model, beginning with industrial research award, and monitoring for gift compliance. It was anticipated when RACP was launched three years ago that this could be the foundation for a shifting set of topics which require review for compliance at the local level. While federal research will continue to be the topic of greatest interest, others will be added/removed as we progress.

Personnel Updates

Audit Staff Changes/Promotions

Due to turnover in 2007, four staff openings existed in August 2007; these positions were filled by January 2008. These circumstances provided the opportunity to upgrade the quality of personnel to meet increasingly greater expectations of the Institute's management and the auditing profession. New hires in this time frame included an internal candidate from the Office of Sponsored Programs, the rehire of a senior information technology audit specialist, and two senior auditors with substantial experience in the public accounting arena. An additional position was created to hire an experienced part-time senior auditor to complement an existing senior auditor who elected a part-time schedule. Additionally, a term appointment was created to staff the Program on Personally Identifiable Information. Collectively, these hires increased substantially the average number of years of audit experience, the number of professional certifications, and the diversity of the division.

Concurrent with these staffing decisions, audit management decided to restructure responsibilities within the Audit Division to recognize the growth of certain individuals within their roles and create new responsibilities for them to operate at a higher level. Accordingly, effective November 1 we promoted Elvira (Elvie) Mahoney and Vesna Zaccheo to a new role, audit services manager. In this role, Elvie and Vesna will each manage a portfolio of audit relationships and assignments, and become direct points of Audit Division contact for operating management at MIT. Additionally, Kevin Gregory is now construction audit services manager, handling cost recovery audit activities for MIT's \$850 million capital construction program. John Dvorak and Paul Champommier are now information technology (IT) audit project leaders, designating their key roles in operational and business audits. Finally, Michael Bowers has assumed a title consistent with his dual roles of directing the division's Audit Operations and managing overall IT activities of and for the Audit Division—associate director, business and technology audit services. Each of these individuals is an asset of the Audit Division and of the Institute as a whole, and we are fortunate to have this depth of experience to go forward.

Professional Development

We emphasize professional development by all our staff. Members of the audit staff find opportunities for training in their discipline and affiliate with industry peers through conferences, seminars, and group meetings. Peer-group affiliation was an important theme in 2008. The Institute auditor is a member of the "Little 10+" association of Ivy

League and other peer institutions, which meets semiannually. The fifth annual meeting of the manager-level group representing the same "Little 10+" institutions took place in October 2007, paving the way for future intercollegiate collaboration among audit groups. In addition, IT staff representing the same group of institutions convened this year. These meetings each provided a forum for exchanging ideas and determining approaches to common problem areas.

Two members of the audit senior management team recently attended the IIA's annual International Conference. Three keynote speakers and dozens of other industry professionals spoke on topics such as enterprise risk management; tone at the top (ethics and governance); the evolution of audit partnership with management; effective risk assessment methodologies; articulating a definition of business objectives, risks, and controls; the benefits of increased outreach to business process owners and stakeholders; the need to work harder at relationship building; and continuous auditing and monitoring. The audit management team, as part of our continuous improvement operating model, will review current practices to identify opportunities for improvement based on what they learned at the conference.

As part of the Institute's initiative to ensure the proper basic training of individuals involved in research administration, all members of the Audit Division were required to complete all eight STARweb training modules. This goal was successfully met by January 31, 2008.

Michael Bowers continues another two-year term as Audit Committee chair of the Association of College and University Auditors.

Presentations at Industry Conferences, and Other Venues

Three members of the RACP gave a presentation on MIT's audit approach to research administration compliance at the 6th annual Conference for Effective Compliance Systems in Higher Education, sponsored by the Society of Corporate Compliance and Ethics. This conference is attended by over 500 compliance professionals from colleges and universities.

During MIT's Independent Activities Period, one of our information technology audit project leaders, John Dvorak, arranged and hosted two sessions on protecting sensitive information. The session featured staff from IS&T, the Audit Division, and individuals representing current initiatives to protect personal information such as credit card and social security numbers; each presented current efforts to help MIT be better stewards of sensitive and private information. The sessions were well attended, reflecting a strong interest in and ownership of protecting this type of information.

Related Initiatives and Administrative Matters

Program on Personally Identifiable Information

A program to examine and promote mitigation of risk associated with obtaining and maintaining social security numbers of staff, students, alumni, and others was launched in December 2007. Program resources were obtained and are managed under the joint

guidance of the vice president for information services and technology and the Institute auditor, the cosponsors of this initiative. In addition to the two appointees deployed for this work, staff within the cosponsoring areas are contributing time and expertise. For administrative convenience, the program costs are housed within the Audit Division. Program methodology involves outreach, process analysis, change management, benchmarking, and development of guidelines and best practices.

This program has adopted a risk-mitigation framework that seeks to minimize collection of social security numbers, minimize "touch points" (individuals with access), protect social security numbers in the custody of MIT's systems and operations, and securely destroy records containing social security numbers if not needed. Work is proceeding within the elements of this framework to reduce the Institute's exposure to malicious or inadvertent loss or compromise of private, personally identifiable information. Measurable progress has occurred, particularly in the areas of reducing access to and minimizing collection of social security numbers. Outreach efforts are also noteworthy; nearly every DLC has been represented at meetings concerning the program's objectives, and in many cases had direct involvement with the program staff. An additional goal of the program will be collaborative development of guidelines to help ensure the sustainability of the current initiative.

Code of Business Conduct

Recent amendments to the US General Services Administration's Federal Acquisition Regulation include a requirement for a code of business conduct and ethics to be provided to staff involved in research contracts in excess of \$5 million. A working group comprising representatives of the offices of the General Counsel, Vice President for Finance, and Sponsored Programs, the Department of Human Resources, and the Audit Division are engaged in addressing the needs of this requirement. A draft document specific to this need has been developed for thoughtful discussion and review, and will be vetted for broader implementation through appropriate channels.

Update on Audit Management System and Audit Division Website

The Audit Division has been successfully running the Pentana Audit Management System (PAWS) for two years. Its full integration encompasses risk rating and subsequent identification of business processes and units for review at a universe level; data capture and reporting of business objectives, risks, and controls; work paper generation and archiving; report writing; and issue tracking. PAWS will further enhance the Audit Division's ability to report meaningful information to the Audit Committee and senior Institute management, and already provides integrity to the division's audit data management activities.

An initiative to redesign the Audit Division website was launched during the year. Programming is completed and content is being developed. The new website will offer interactive features and will become the foundation for issuance of audit reports and Audit Committee reporting.

Current Goals and Objectives

The Audit Division continues to strive toward the following inward- and outward-looking goals:

Audit Coverage

- Prioritization of services: Provide effective audit coverage of the Institute's
 activities (including affiliate and auxiliary areas) in order to assure management
 that controls designed to achieve important business objectives are adequate.
 Prioritize activities and areas representing material expenditures or investments
 and/or significant exposure, as well as those that have not received prior or
 recent audit coverage. Provide coverage throughout the risk-rated universe.
- Management requests: Respond to and prioritize requests from management for audit services as resources permit. Strive for a broad span of audit services to help build a greater understanding of the Institute's extraordinary diversity of activities. Seek a rich blend of advisory and audit assurance services.
- Coordination of services: Coordinate the RACP and Operations initiatives in the Audit Plan—RACP efforts are classified as advisory services, reflecting planned audit coverage by the integration of site visits, quarterly monitoring, data mining, and continuous compliance testing of industrial and international awards and agreements.
- Partnership with management: Work in a collaborative fashion on controlenhancing activities. Seek alignment of work with management's goals. Become a consultant to new, emerging initiatives. Provide support through advisory audit services as opportunities allow.

Audit Methodology

- Focus on achievement of business objectives: Strengthen our ability to pinpoint business objectives and evaluate related controls helping to mitigate risks and enhance achievement of business objectives.
- Build and maintain relationships: Seek and build on opportunities to develop
 and strengthen relationships throughout the Institute's business areas,
 including academic administration. Use these opportunities to become more
 knowledgeable of business processes and emerging initiatives, thus informing
 our risk assessment practices and facilitating the audit planning process and
 prioritization of resources.
- Educate through relationships: Leverage relationships to educate business process owners and stakeholders about risk and control responsibilities and benefits.

Benchmarking and Development

- Performance management: Continue to work toward adherence to the division's operational standards, as these standards are designed to promote a world-class audit function. Design a "balanced scorecard" to benchmark comprehensively, to manage audit services, and to measure improvement in key performance areas.
- Staff development: Maintain current levels of employee development activities, including encouraging the pursuit of relevant certifications, cost-effective training opportunities, and participation in industry conferences and seminars.

Time in the Audit Plan has been allocated to the achievement of these goals, which are owned principally by the management of the division and are articulated to staff members at Division staff meetings, periodic retreats, and in the conduct of daily work. These goals are also discussed with senior administration and the Audit Committee.

Deborah L. Fisher Institute Auditor

More information about the MIT Audit Division can be found at http://web.mit.edu/audiv/www/.