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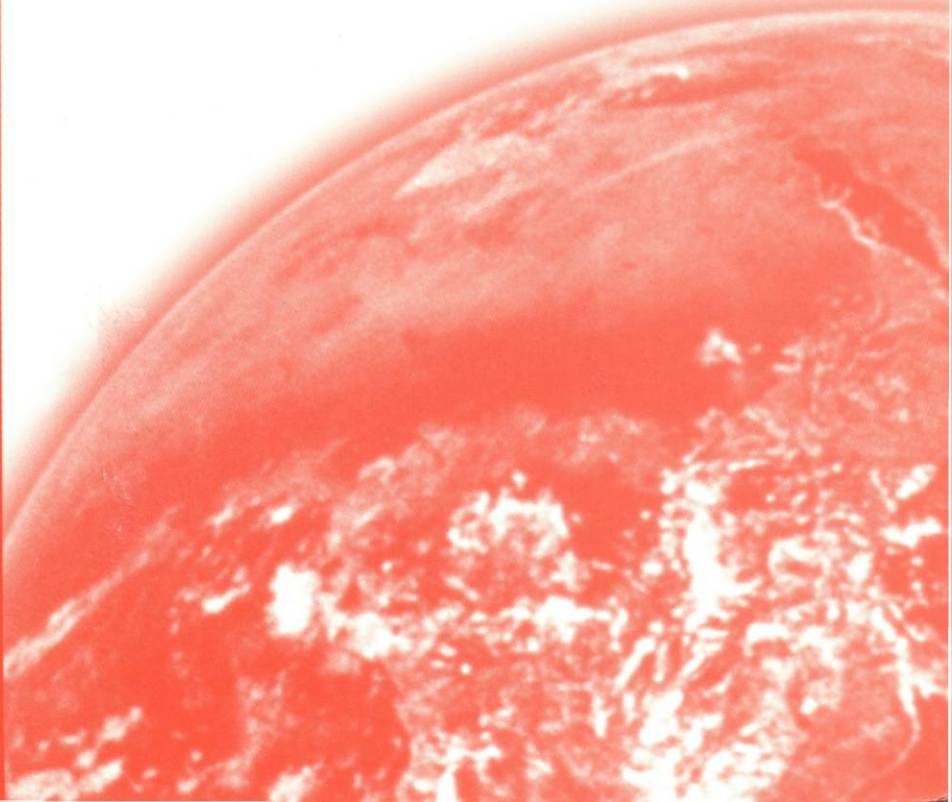
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AICPA

AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

the
year 2000
1999
ISSUE

*Current Accounting
and Auditing Guidance*



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AICPA

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Introduction

This publication provides a brief overview of the Year 2000 Issue and summarizes the applicable accounting, disclosure, and auditing standards. It also describes the responsibilities of various parties, clarifies the auditor's role, provides guidance on communications with clients, and describes disclosure considerations and certain practice management matters that auditors may wish to consider in connection with the Year 2000 Issue.

Although this publication discusses certain authoritative guidance, other guidance in this publication is nonauthoritative. Therefore, auditors are encouraged to refer to the authoritative standards and apply them in the context of their specific circumstances. Because the understanding of the potential effects of the Year 2000 Issue is evolving continually, additional guidance may be provided in the future.

The primary focus of this publication is on how the Year 2000 Issue affects auditors; however, practitioners offering compilation and review services may find some of the information in this publication useful. Practitioners also may wish to refer to the AICPA's *Compilation and Review Alert—1997/98*, which discusses the Year 2000 Issue as it relates to those engagements.

Because the Year 2000 Issue has been well publicized, this publication is not intended to provide a comprehensive description of that Issue. A list of sources of information about the Year 2000 Issue is provided in appendix C of this publication.

WHAT IS THE YEAR 2000 ISSUE?

The Year 2000 Issue consists of two shortcomings of many electronic data processing systems that make them unable to process year-date data accurately beyond the year 1999. It is a broad business and operational problem, as well as an accounting systems problem.

The first shortcoming is that, in the past, computer programmers have consistently abbreviated dates by eliminating the first two digits of the year under the assumption that these two digits would always be 19. Thus, January 1, 1965, became 01/01/65. Unless corrected, this shortcut is expected to create widespread problems when the clock strikes 12:00:01 A.M. on January 1, 2000. On that date, some computer programs may recognize the date as January 1, 1900, and process data inaccurately or stop processing altogether.

The second shortcoming is that the algorithm used in some computers for calculating leap years is unable to detect that the year 2000 is a leap year. Therefore, systems that are not year 2000 compliant may not register the additional day, and date calculations may be incorrect.

The Year 2000 Issue also may affect computer applications before January 1, 2000. Failures are expected to occur when systems attempt to perform calculations into the year 2000 (for example, some entities may not be able to process a credit card that expires in the year 2000 or beyond).

In addition, some software programs use several dates in the year 1999 to mean something other than the date. Examples of such dates are 01/01/99, 09/09/99, and 12/31/99. As systems process information using these dates, they may produce erratic results or stop functioning.

With planning and timely action by management, problems associated with the Year 2000 Issue may be mitigated or avoided.

HOW SERIOUS IS THE YEAR 2000 ISSUE?

If you consider that hardware devices that are date dependent and *any* software program that calculates, compares, or sorts information based on date fields may be affected, you can begin to understand the potential magnitude of the Year 2000 Issue. If you further consider the extent to which entities and individuals around the world rely on technology and interact with each other electronically, the picture becomes very clear—the Year 2000 Issue has global implications. The Year 2000 Issue has the potential to affect large and small businesses, public and nonpublic companies, not-for-profit organizations, academia, and federal, state, and local governments. The Year 2000 Issue therefore affects many interested parties, including shareholders, customers, pension managers, policy makers, and regulators.

Not surprisingly, the costs that entities can expect to incur to correct the Year 2000 Issue may be substantial. The Gartner Group, an international information technology advisory and market research firm, has estimated the global costs to make software year 2000 compliant to be between \$300 billion and \$600 billion through 1999.

In addition to the costs of making software year 2000 compliant, entities should understand that the risk of litigation relating to the Year 2000 Issue is substantial.

TO WHAT EXTENT MIGHT THE YEAR 2000 ISSUE AFFECT AN ENTITY?

The Year 2000 Issue may affect software that is used to control operating equipment, operating systems, database and other information systems, and hardware that is dependent on microchips. The largest area of exposure for

many entities is thought to be mainframes, because many of these use older software programs. For other entities, the largest area of exposure may be their operational activities (including production, service, and security activities).

An entity should consider whether the Year 2000 Issue will adversely affect its suppliers' ability to manufacture or make timely deliveries of products or key components of the entity's products. It also should consider whether the Year 2000 Issue will adversely affect service providers that perform activities that have been outsourced to them. Additionally, if an entity's systems electronically communicate with other entities' systems (for example, through electronic data interchange or electronic funds transfers), the entity should consider the effect of the Year 2000 Issue on these communications.

In summary, the Year 2000 Issue has the potential to affect any entity's accounting and information systems, the ability to manufacture its products or to deliver its services, and other aspects of its day-to-day operations on or before the year 2000. In a September 24, 1997, press release, the Gartner Group disclosed that approximately 40 percent of entities affected by the Year 2000 Issue have not progressed beyond the initial stages of their compliance projects and will "likely experience significant mission-critical failures by the year 2000." Therefore, entities must assess their year 2000 preparedness well in advance of January 1, 2000, and make year 2000 compliance a priority. If an entity has not yet begun to evaluate the possible effects of the Year 2000 Issue on its systems, new and old, it should begin the process immediately and implement corrective measures as soon as possible. The compliance efforts should include assessing the possible effects of the Year 2000 Issue on an entity's significant vendors and customers and taking any necessary actions.

WHO IS RESPONSIBLE FOR ADDRESSING THE YEAR 2000 ISSUE?

It is the responsibility of an entity's management to assess and remediate the effects of the Year 2000 Issue on

an entity's systems. This responsibility extends beyond the systems that produce financial information. It encompasses all systems, including those that are part of the entity's operational activities, such as safety, environment, production, machine control, service, and security activities. Management also is responsible for considering the effect that other entities' noncompliant systems may have on its operations and information system. The board of directors (or others with equivalent authority or responsibility) has a responsibility to oversee the activities of management to ensure that the Year 2000 Issue is receiving appropriate attention from management.

Regulators also have responsibilities involving a broad range of issues, including public health and safety, and the safety and soundness of financial services and other institutions. Thus, they too have a direct interest in the Year 2000 Issue. A September 25, 1997, news release included Comptroller of the Currency Eugene A. Ludwig's remark that the Office of the Comptroller of the Currency would "not hesitate to use any and all supervisory tools and enforcement powers to ensure that banks meet the safety and soundness challenge posed by the [y]ear 2000." He also indicated that "every bank must meet its timetable for compliance, whether data processing is performed in-house or by an external vendor."

WHAT ARE THE IMPLICATIONS OF THE YEAR 2000 ISSUE FOR THE AUDITOR?

The auditor has a responsibility to plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud. Thus, the auditor's responsibility relates to the detection of material misstatement of the financial statements being audited, whether caused by the Year 2000 Issue or by some other cause. The Audit Issues Task Force (AITF) of the AICPA's Auditing Standards Board has approved for issuance an interpretation of AU section 311, *Planning and Supervision*, address-

ing the Year 2000 Issue. The full text of the interpretation appears in the section of this publication titled "Auditing and the Year 2000 Issue." Auditors also may wish to consider the nonauthoritative guidance provided in this publication when planning and performing audits of financial statements in the years leading up to the year 2000.

The AITF is developing guidance on the application of Statement on Auditing Standards (SAS) No. 59, *The Auditor's Consideration of an Entity's Ability to Continue as a Going Concern* (AICPA, *Professional Standards*, vol. 1, AU sec. 341), to the Year 2000 Issue. It expects to issue this guidance, whether in the form of interpretations or otherwise, by June 1998.

ADDITIONAL QUESTIONS REGARDING THE YEAR 2000 ISSUE

Additional questions that auditors and others may have regarding the Year 2000 Issue include the following:

- What are the reporting and disclosure requirements under generally accepted accounting principles (GAAP)?
- What are the reporting and disclosure requirements under the Securities and Exchange Commission's (SEC) rules and regulations?
- What is the auditor's responsibility for disclosures related to the Year 2000 Issue in audited financial statements or management's discussion and analysis (MD&A) of financial condition and results of operations?
- How should the auditor prepare for audits of financial statements of the years preceding the year 2000?
- Should the auditor communicate to the client his or her professional responsibility regarding the Year 2000 Issue?
- Is the Year 2000 Issue a matter that auditors are required by professional standards to communicate to their clients?

-
- Should the auditor consider the Year 2000 Issue in conjunction with his or her client acceptance and continuation procedures?

The following sections of this document address the issues raised in these questions. Auditors also may wish to monitor developments in national and international laws and in regulatory guidance relating to the Year 2000 Issue. Those wishing to learn more about the Year 2000 Issue should refer to some of the resources listed in appendix C of this publication.

Financial Reporting

This section provides an overview of current authoritative accounting literature and how it relates to the Year 2000 Issue. The discussion addresses accounting for the costs of modifying computer software for the Year 2000 Issue, revenue and loss recognition principles, possible impairment issues that may result from the Year 2000 Issue, and disclosure considerations under AICPA Statement of Position (SOP) 94-6, *Disclosure of Certain Significant Risks and Uncertainties*.

It should be remembered that management is responsible for preparing financial statements in accordance with GAAP (or an other comprehensive basis of accounting), including adequate disclosures.

ACCOUNTING FOR THE COSTS OF ADDRESSING THE YEAR 2000 ISSUE

The Emerging Issues Task Force (EITF) of the Financial Accounting Standards Board (FASB) has issued guidance on accounting for the costs of modifying computer software for the year 2000. EITF Issue No. 96-14, *Accounting for the Costs Associated with Modifying Computer Software for the Year 2000*, states the following:

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Many computer systems process transactions based on storing two digits for the year of a transaction (for example, "96" for 1996), rather than a full four digits. A significant

number of the computer systems based on two-digit years are not programmed to consider the start of a new century, unless they have been recently modified. Systems that process year 2000 transactions with the year "00" may encounter significant processing inaccuracies and even inoperability. Many companies will incur significant costs to make the needed software changes.

This Issue is limited to the upgrading of existing internal-use software for the year 2000 and does not address purchases of hardware or software that replace existing software that is not year 2000 compliant. This Issue also does not address impairment or amortization issues relating to existing assets.

The issue is how to account for the external and internal costs specifically associated with modifying internal-use computer software for the year 2000.

EITF [CONSENSUS]

The Task Force reached a consensus that external and internal costs specifically associated with modifying internal-use software for the year 2000 should be charged to expense as incurred.

STATUS

At the July 23-24, 1997 meeting, the SEC Observer stated that the SEC staff has been asked to clarify a recent SEC *Report to Congress* regarding the year 2000. This report notes that the Task Force has addressed the accounting for this issue and concluded that costs incurred to modify computer software to correct year 2000 problems should be expensed as incurred. This report also refers to Statement 5 as guidance for loss contingencies that might result from a failure of an entity's computer system in the year 2000. It has been suggested that this reference to Statement 5 suggests that the staff would permit or require accrual of expected future costs to modify software for year 2000 problems. That suggestion is not correct.

The SEC Observer noted that expected future costs to modify software for year 2000 problems are not a current liability under Statement 5 and that the reference to Statement 5 in the *Report to Congress* should not be used to override the guidance provided by the Task Force. The staff would object to the accrual of the costs of year 2000 modifications before those costs are incurred.

No further EITF discussion is planned.

REVENUE AND LOSS RECOGNITION

Revenue recognition principles for software transactions are set forth in SOP 91-1, *Software Revenue Recognition*. SOP 97-2, *Software Revenue Recognition*, supersedes SOP 91-1 and is effective for transactions entered into in fiscal years beginning after December 15, 1997, with earlier application encouraged. The new SOP provides guidance on the amount and timing of revenue recognition in arrangements in which certain specific factors may be present, including uncertainty of customer acceptance, customer cancellation privileges, and multiple elements, such as upgrades, enhancements, and postcontract customer support. Entities should be aware that the Year 2000 Issue could affect one or more of these factors and have an unexpected effect on the timing of revenue recognition.

The Year 2000 Issue also may create product-warranty or product-defect liability and product-return issues for software and hardware vendors or software providers, as well as for other vendors that sell products containing software. These vendors should consider FASB Statement of Financial Accounting Standards No. 5, *Accounting for Contingencies*, paragraphs 24 through 26, if there are product-warranty or product-defect liability issues, and FASB Statement No. 48, *Revenue Recognition When Right of Return Exists*, for the product-return issue.

Software developers may enter into arrangements to address the Year 2000 Issue for other entities for a fee. They should evaluate any such arrangements that are being accounted for under SOP 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts*. If a contract is expected to result in a loss, the vendor should record a provision for the entire loss in the period in which the loss becomes evident.

FASB Statement No. 86, *Accounting for the Costs of Computer Software to Be Sold, Leased, or Otherwise Marketed*, is the authoritative standard on accounting for costs incurred to produce or purchase software that is to be sold,

leased, or otherwise marketed. Only certain costs qualify for capitalization under this standard. In accordance with the guidance in Statement No. 86, a write-down of capitalized software development costs or an acceleration of amortization may be necessary if estimated future gross sales are lower than expected because of the Year 2000 Issue.

POSSIBLE IMPAIRMENT ISSUE

Inventories of hardware devices that are not year 2000 compliant are subject to the lower of cost or market test described in Accounting Research Bulletin 43, *Restatement and Revision of Accounting Research Bulletins*, chapter 4, paragraph 8.

The Year 2000 Issue may be an indicator of the impairment of fixed assets containing software or hardware components (for example, microchips) and for capitalized costs of software developed or obtained for internal use that has not been modified to be year 2000 compliant. FASB Statement No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of*, provides guidance on evaluating, recognizing, measuring, and disclosing impairment losses for such assets. The AICPA Accounting Standards Executive Committee's proposed SOP, *Accounting for the Costs of Computer Software Developed or Obtained for Internal Use*, refers to FASB Statement No. 121 concerning recognition and measurement of impairment of capitalized costs of internal-use software. The Year 2000 Issue also could affect the estimated useful lives used to calculate the depreciation and amortization of these assets.

DISCLOSURES UNDER SOP 94-6

Practitioners should be aware that SOP 94-6, *Disclosure of Certain Significant Risks and Uncertainties*, may require additional disclosures related to the Year 2000 Issue. Dis-

closure may be required in areas such as impairment or amortization of capitalized software costs, inventory valuation, long-term-contract accounting, warranty reserves, reserves for sales returns and allowances, or litigation if, based on the facts and circumstances existing at the date of the financial statements, it is reasonably possible that the amounts reported in the financial statements could change by a material amount within one year from the date of the financial statements.

Year 2000 Issue Disclosure Considerations: Public and Nonpublic Entities

Given the significant nature of the Year 2000 Issue and the publicity and attention it has received, investors, creditors, customers, vendors, regulators, and other users of financial statements will probably be interested in matters relating to this Issue. Public companies are required to follow the disclosure requirements established by the SEC, and, as discussed below, the SEC staff has issued guidance concerning disclosures about the Year 2000 Issue. The disclosures required by the SEC should be presented outside of the entity's financial statements. All other entities, including nonpublic companies, not-for-profit organizations, governmental entities, and others, are encouraged to assess whether disclosures about the Year 2000 Issue, similar to those required by the SEC, would be useful to users of their financial statements. Such disclosures might be included in annual reports to shareholders and others, in other communications that would be distributed to the users of entities' financial statements, or in unaudited or audited notes to entities' financial statements.

On October 8, 1997, the SEC's Divisions of Corporation Finance and Investment Management issued *Staff Legal Bulletin No. 5*. With respect to public companies, the Bulletin states that—

Companies should review, on an ongoing basis, whether they need to disclose anticipated costs, problems and uncertainties associated with Year 2000 consequences, particularly in their filings with the Commission. Public companies may have to disclose this information in Commission filings because:

- the form or report may require the disclosure, or
- in addition to the information that the company is specifically required to disclose, the disclosure rules required disclosure of any additional material information necessary to make the required disclosure not misleading.²

The following is a discussion of certain requirements.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Companies should include disclosure in their "Management's Discussion and Analysis of Financial Condition and Results of Operations" if:

- the cost of addressing the Year 2000 issue is a material event or uncertainty that would cause reported financial information not to be necessarily indicative of future operating results or financial condition,³ or
- the costs or the consequences of incomplete or untimely resolution of their Year 2000 issue represent a known material event or uncertainty that is reasonably likely to affect their future financial results, or cause their reported financial information not to be necessarily indicative of future operating results or future financial condition.

DESCRIPTION OF BUSINESS

If Year 2000 issues materially affect a company's products, services, or competitive conditions, companies may need to disclose this in their "Description of Business."⁴ In

² Securities Act Rule 408, Exchange Act Rule 12b-20, and Exchange Act Rule 14a-9. Companies also should consider the anti-fraud provisions of the Securities Act and the Exchange Act. These anti-fraud requirements apply to statements and omissions both in Commission filings and outside of Commission's filings. Securities Act Section 17(a), Exchange Act Section 10(b), and Exchange Act Rule 10b-5.

³ Item 303 of Regulations S-K and S-B. The Commission provided interpretive guidance regarding the disclosure by Item 303 in Securities Act Release No. 6835.

⁴ Item 101 of Regulations S-K and S-B.

determining whether to include disclosure, companies should consider the effects of the Year 2000 issue on each of their reportable industry segments.

FORM 8-K

A company's Year 2000 costs or consequences may reach a level of importance that prompts it to consider filing a Form 8-K. At their option, companies would file these reports under Item 5 of Form 8-K. In considering whether to file a Form 8-K, companies should be particularly mindful of the accuracy and completeness of information in registration statements filed under the Securities Act which incorporate by reference Exchange Act reports, including Form 8-Ks.⁵

ACCOUNTING CONSIDERATIONS

The Emerging Issues Task Force considered the issue of how to properly reflect the costs of modifying computer software for Year 2000 projects in the financial statements. In July 1996, the EITF concluded that these costs should be charged to expense as they are incurred.⁶

With respect to investment companies and investment advisers, the Bulletin states—

Under the Investment Advisers Act of 1940 and the Investment Company Act of 1940, investment advisers and investment companies may be required to make appropriate disclosure to clients and shareholders if operational or financial obstacles are presented by the Year 2000 issue. Disclosure of the Year 2000 issue is necessary if it is materially misleading to shareholders to omit the information.

The Investment Company Act provides that it is unlawful for investment companies to omit from registration statements and other public filings "any fact necessary in order to prevent the statements made therein, in light of the circumstances under which they were made, from being materially misleading."⁷ Open-end investment companies ("mutual funds") are required by Item 5(b) of Form N-1A to describe in their registration statements the experience of their invest-

⁵ General Instruction B.4 of Form 8-K.

⁶ Emerging Issues Task Force of the Financial Accounting Standards Board Issue No. 96-14: Accounting for the Costs Associated with Modifying Computer Software for the Year 2000, July 18, 1996.

⁷ Section 34(b) of the Investment Company Act of 1940.

ment advisers and the services that the advisers provide. In response to this item, investment companies may need to disclose the effect that the Year 2000 issue would have on their advisers' ability to provide the services described in their registration statements.

The anti-fraud provisions of the Investment Advisers Act generally impose on investment advisers an affirmative duty, consistent with their fiduciary obligations, to disclose to clients or prospective clients, all material facts.⁸ In addition, investment advisers are required to disclose to any client or prospective client all material facts about "[a] financial condition of the adviser that is reasonably likely to impair the ability of the adviser to meet contractual commitments to clients, if the adviser has discretionary authority (express or implied) or custody over such client's funds or securities. . . ."⁹ Therefore, if the Year 2000 issue affects the adviser in a way that would be material to clients or presents a material threat to an investment adviser's financial ability to satisfy its obligations under advisory agreements, the adviser would be required to disclose such material facts to its clients, including any investment company clients, and prospective clients.

Illustrative MD&A disclosures appear in appendix A of this publication.

⁸ Sections 206(1) and (2) of the Investment Advisers Act of 1940. See SEC v. Capital Gains Research Bureau, Inc., U.S. 180 (1963)

⁹ Section 206(4) of the Investment Advisers Act of 1940 and Rule 206(4)-4 thereunder.

Auditing and the Year 2000 Issue

Auditors cannot be expected or required to be proficient in areas or disciplines that are remote from their main competencies of accounting and auditing. The effects of the Year 2000 Issue can be widespread throughout an entity and may be far removed from the accounting system. Often the most significant effects will relate to the efficiency of an entity's operating functions and may not have any direct material effect on the fair presentation of the financial statements in accordance with GAAP.

AUDITING INTERPRETATION

In October 1997, the AITF approved for issuance an interpretation of the auditing standards that addresses the Year 2000 Issue. The AITF is developing guidance on the application of SAS No. 59 to the Year 2000 Issue and expects to issue it, whether in the form of interpretations or otherwise, by June 1998.

Following is the full text of the interpretation that was recently approved for issuance. It will reside in the professional standards as an interpretation of AU section 311, *Planning and Supervision* (AICPA, *Professional Standards*, vol. 1, AU sec. 9311.38-.47).

Introduction—Many computerized systems, including both hardware and software applications, use only two digits, rather than four, to record the year in a date field. These systems may recognize the year 2000, which is entered into the computer as 00, as the year 1900 or some other date,

resulting in errors when the dates are used in computations and comparisons. In addition, some computerized systems do not properly perform calculations with dates beginning in 1999 because these systems use the digits "99" in date fields to represent something other than the year 1999. Such problems are known as the Year 2000 Issue. The Year 2000 Issue may manifest itself before, on, or after January 1, 2000, and its effects on operations and financial reporting may range from minor errors to catastrophic systems failure.

Question—In an audit of financial statements conducted in accordance with generally accepted auditing standards, what is the auditor's responsibility regarding the Year 2000 Issue?

Interpretation—The auditor has a responsibility to plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud. Thus, the auditor's responsibility relates to the detection of material misstatements of the financial statements being audited, whether caused by the Year 2000 Issue or by some other cause.

Management is responsible for the financial statements and, because of the widespread publicity the Year 2000 Issue has received, generally should be aware of the Year 2000 Issue. Management also should have knowledge about the systems used by the entity in operations and in preparation of the financial statements. An auditor does not have a responsibility to detect current or future effects of the Year 2000 Issue on operational matters that do not affect the entity's ability to prepare financial statements in accordance with generally accepted accounting principles (or an other comprehensive basis of accounting).

Question—How does the Year 2000 Issue affect the planning for an audit of financial statements conducted in accordance with generally accepted auditing standards?

Interpretation—When an auditor is considering the methods the entity uses to process accounting information pursuant to the provisions of AU section 311.09[1], the auditor may determine that it is necessary to consider whether data processing errors caused by the Year 2000 Issue could result in a material misstatement of the financial statements under audit. The results of the consideration may affect the auditor's assessed level of control risk, testing of internal control, and substantive procedures. An audit of financial

statements conducted in accordance with generally accepted auditing standards does not contemplate that the auditor would need to assess whether data processing errors caused by the Year 2000 Issue could result in material misstatement of financial statements in periods subsequent to the period being audited.

The extent to which the auditor considers the Year 2000 Issue requires professional judgment. If the auditor concludes that he or she should consider whether the Year 2000 Issue could result in a material misstatement of the financial statements currently under audit, either alone or in combination with other factors, ordinarily the auditor would undertake that consideration in the context of AU section 311.09, which discusses the auditor's consideration of the methods the entity uses to process accounting information, and AU section 319.19[2], which discusses the auditor's responsibility to obtain an understanding of each of the five components of internal control sufficient to plan the audit.

Question—During the course of an audit, the auditor may become aware that, in some period after the period being audited, the Year 2000 Issue could, as discussed in AU section 325.02[3], “adversely affect the organization’s ability to record, process, summarize, and report financial data consistent with the assertions of management in the financial statements.” For example, during an audit of financial statements for the year ending December 31, 1997, an auditor may become aware that the entity’s computer programs, which are correctly processing current data, would not function correctly if used to process data in the year 2000. In this situation, is the potential significant internal control deficiency in the year 2000 a reportable condition as of December 31, 1997?

Interpretation—No. The computer programs are correctly processing current data, and are not currently affecting the organization’s ability to prepare financial statements. The potential internal control deficiency becomes a reportable condition only when, in the auditor’s judgment, it could adversely affect the organization’s ability to record, process, summarize and report financial data consistent with the assertions of management in the financial statements.

As discussed in AU section 325.03[4], the auditor also may identify matters that, in his or her judgment, are not reportable conditions but that the auditor nonetheless may choose to communicate. The example discussed in [the *Question*] is a type of matter the auditor may wish to communicate for the benefit of management.

AUDIT ENGAGEMENT IMPLICATIONS OF MODIFIED AND NEW SYSTEMS

As a result of addressing the Year 2000 Issue, many entities will modify their systems or install new systems. This increases the risk of misstatement in the financial statements because of the following:

- Modified and new systems may contain new defects unrelated to the Year 2000 Issue.
- New systems may not function as intended.
- The environment in which the systems are modified and the new systems are installed may not be adequately controlled. This in turn may create the risk of unauthorized activity that can result in theft of data, misappropriation of assets, and fraudulent financial reporting.

Although each of the preceding factors is of a kind encountered frequently by an auditor, the magnitude of the Year 2000 Issue and the need to resolve it by a specific date may greatly increase the overall risk of misstatement. Because year 2000 systems modifications and new systems installations are currently in progress or will be in progress by late 1997 or in 1998, auditors may need to evaluate the effect of these factors in their audit plans in 1997 and 1998.

The significant number of new and modified client systems also may require that auditors perform tests of controls to support an assessed level of control risk below the maximum, or when auditors are unable to reduce audit risk sufficiently by performing only substantive tests. Auditors who use software programs to extract and analyze data from clients' information systems also will want to ensure that their software is year 2000 compliant.

AUDITOR CONSIDERATION OF YEAR 2000 ISSUE DISCLOSURES

In view of the publicity that the Year 2000 Issue has received, some entities might want to make disclosures

regarding their systems' year 2000 readiness. Auditors should be extremely cautious about being associated with assertions that clients' systems are year 2000 compliant or guarantees that systems will become compliant by a specified date.

There are several kinds of disclosures about the Year 2000 Issue that an entity might make:

- Disclosures required by GAAP
- Disclosures required by the SEC that are presented outside the financial statements
- Voluntary disclosures included within or accompanying the basic financial statements

Disclosure matters for public and nonpublic entities are described in the previous section of this publication. The following discussion focuses on the auditor's responsibility regarding disclosures required by the SEC and that are presented outside the financial statements, and voluntary disclosures regarding the Year 2000 Issue by nonpublic companies.

Disclosures Outside the Financial Statements by Publicly Held Entities. Auditors have a responsibility pursuant to SAS No. 8, *Other Information in Documents Containing Audited Financial Statements* (AICPA, *Professional Standards*, vol. 1, AU sec. 550), to read management's disclosures presented outside the financial statements, pursuant to the SEC's requirements, and to consider whether such other information, or the manner of its presentation, is materially inconsistent with information, or the manner of its presentation, in the financial statements. If the auditor concludes that there is a material inconsistency, or if the auditor becomes aware of information that he or she believes is a material misstatement of fact that is not a material inconsistency, he or she has certain responsibilities regarding the other information. Auditors should refer to SAS No. 8 in such circumstances.

Year 2000 Issue Disclosures by Nonpublic Entities. If voluntary disclosures about the Year 2000 Issue are includ-

ed in the notes to the audited financial statements of a non-public entity, the auditor should determine whether he or she has obtained sufficient competent evidential matter regarding the information disclosed. The auditor may conclude that voluntary disclosures regarding the Year 2000 Issue should be made outside of the financial statements or labeled as unaudited, especially if such disclosures contain subjective or forward-looking information. The auditor's responsibility with respect to these disclosures depends on whether the disclosures appear in an auditor-submitted document or a client-submitted document. The auditor's responsibilities in each of these situations are as follows:

Unaudited disclosures in a client-submitted document. If disclosures about the Year 2000 Issue are presented outside the financial statements in annual reports of nonpublic entities, annual reports of organizations for charitable or philanthropic purposes, or other documents to which the auditor, at the client's request, devotes attention, the auditor is responsible for reading and considering the information pursuant to SAS No. 8.

Unaudited disclosures in an auditor-submitted document. The auditor should refer to SAS No. 29, *Reporting on Information Accompanying the Basic Financial Statements in Auditor-Submitted Documents* (AICPA, *Professional Standards*, vol. 1, AU sec. 551). If the auditor concludes, on the basis of facts known to him or her, that any accompanying information is materially misstated in relation to the basic financial statements taken as a whole, SAS No. 29, paragraph 9, states that "the auditor should discuss the matter with the client and propose appropriate revision of the accompanying information." If the client will not revise the accompanying information, "the auditor should either modify his [or her] report on the accompanying information and describe the misstatement or refuse to include the information in the document."

ENDNOTES

1. AU section 311.09 states that “[t]he auditor should consider the methods the entity uses to process accounting information in planning the audit because such methods influence the design of the internal control. The extent to which computer processing is used in significant accounting applications, as well as the complexity of that processing, may also influence the nature, timing, and extent of audit procedures. Accordingly, in evaluating the effect of an entity’s computer processing on an audit of financial statements, the auditor should consider matters such as—
 - a. The extent to which the computer is used in each significant accounting application.
 - b. The complexity of the entity’s computer operations, including the use of an outside service center.
 - c. The organizational structure of the computer processing activities.
 - d. The availability of data. Documents that are used to enter information into the computer for processing, certain computer files, and other evidential matter that may be required by the auditor may exist only for a short period or only in computer-readable form. In some computer systems, input documents may not exist at all because information is directly entered into the system. An entity’s data retention policies may require the auditor to request retention of some information for his review or to perform audit procedures at a time when the information is available. In addition, certain information generated by the computer for management’s internal purposes may be useful in performing substantive tests (particularly analytical procedures).
 - e. The use of computer-assisted audit techniques to increase the efficiency of performing audit procedures. Using computer-assisted audit techniques may also provide the auditor with an opportunity to apply certain procedures to an entire population of accounts or transactions. In addition, in some accounting systems, it may be difficult or impossible for the auditor to analyze certain data or test specific control procedures without computer assistance.”

AU section 311.09 defines *significant accounting applications* as “those that relate to accounting information that can materially affect the financial statements the auditor is auditing.” It also refers readers to SAS No. 70, *Reports on the Processing of Transactions by Service Organizations* (AICPA, *Professional Standards*, vol. 1, AU sec. 324), SAS No. 56, *Analytical Procedures* (AICPA, *Professional Standards*, vol. 1, AU sec. 329), and the AICPA Audit and Accounting Guide, *Computer-Assisted Audit Techniques*, for guidance in these areas.
2. SAS No. 55, *Consideration of Internal Control in a Financial Statement Audit* (AICPA, *Professional Standards*, vol. 1, AU sec. 319), paragraph 19, states that “[i]n all audits, the auditor should obtain

an understanding of each of the five components of internal control sufficient to plan the audit by performing procedures to understand the design of controls relevant to an audit of financial statements, and whether they have been placed in operation. In planning the audit, such knowledge should be used to—

- Identify types of potential misstatement.
 - Consider factors that affect the risk of material misstatement.
 - Design substantive tests.”
3. SAS No. 60, *Communication of Internal Control Related Matters Noted in an Audit* (AICPA, *Professional Standards*, vol. 1, AU sec. 325), paragraph 2, states that “[d]uring the course of an audit, the auditor may become aware of matters relating to internal control that may be of interest to the audit committee. The matters that this section requires for reporting to the audit committee are referred to as *reportable conditions*. Specifically, these are matters coming to the auditor’s attention that, in his judgment, should be communicated to the audit committee because they represent significant deficiencies in the design or operation of internal control, which could adversely affect the organization’s ability to record, process, summarize, and report financial data consistent with the assertions of management in the financial statements. Such deficiencies may involve aspects of the five internal control components of (a) the control environment, (b) risk assessment, (c) control activities, (d) information and communication, and (e) monitoring.” It also specifies that the section does not affect the reporting of material weaknesses noted in an engagement to report on an entity’s internal control, and that the auditor should also consider matters coming to his or her attention that relate to interim financial reporting outside the entity in the communication contemplated by the section. It further states that internal control “refers to the controls established to provide reasonable assurance that specific entity objectives will be achieved.”
 4. SAS No. 60, paragraph 3, states that “[t]he auditor may also identify matters that, in his judgment, are not reportable conditions as defined in [AU section 325.02]; however, the auditor may choose to communicate such matters for the benefit of management (and other recipients, as appropriate).”

Auditor Communications With the Client Regarding the Year 2000 Issue

Audit clients may turn to their auditors for information on the Year 2000 Issue. Through communications with their clients, CPAs can raise their clients' level of awareness of the Year 2000 Issue so that senior managements, audit committees, and boards of directors understand—

- The Year 2000 Issue and its magnitude.
- Their responsibility to assess and remediate the Year 2000 Issue.
- The auditor's responsibility and role with respect to the Year 2000 Issue.

An important part of any firm's risk management program related to the Year 2000 Issue is its timely and ongoing communication with the client's management. To avoid misunderstandings about the auditors' responsibilities with respect to the Year 2000 Issue, an auditor may find it necessary to specifically set forth his or her responsibilities under current auditing standards in communications with the client during audits leading up to the year 2000. Communications with the client may be in the form considered most appropriate by the auditor. Some forms of communication that auditors may wish to consider are—

- Audit engagement letters.
- Management letters and other direct correspondence.
- Discussions with management and the audit committee.
- Brochures, pamphlets, newsletters, and articles.

Managements and audit committees may not understand that the auditor is not required to report potential future internal control problems as “reportable conditions” if such problems do not affect the period under audit. Therefore, it is important for auditors to communicate with clients about the auditor’s professional responsibility with respect to the Year 2000 Issue to clarify the difference between the criteria for the required reporting of “reportable conditions” and those for comments included in communications that are delivered as part of overall client service.

The remainder of this section describes communications with managements and audit committees and also provides sample wording for such communications.

ENGAGEMENT LETTER

Because clients may not understand that an audit of financial statements conducted in accordance with generally accepted auditing standards cannot be relied upon to disclose information about the potential effects of the Year 2000 Issue, auditors may wish to include information about this subject in the understanding they establish with their clients. Statement of Quality Control Standards No. 2, *System of Quality Control for a CPA Firm’s Accounting and Auditing Practice* (AICPA, *Professional Standards*, vol. 2, QC sec. 20.16), requires CPA firms to establish policies and procedures to provide for obtaining an understanding with the client regarding the service to be performed. In addition, newly issued SAS No. 83, *Establishing an Understanding With the Client* (1), requires auditors to obtain such an understanding, including the objectives and limitations of an audit of financial statements. Auditors may wish to address the Year 2000 Issue in connection with obtaining that understanding and may consider adding such wording as the following to their engagement letter:

Because many computerized systems use only two digits to record the year in date fields (for example, the year 1998 is recorded as 98), such systems may not be able to process

dates accurately in the year 2000 and after. The effects of this problem will vary from system to system and may adversely affect an entity's operations as well as its ability to prepare financial statements.

An audit of financial statements conducted in accordance with generally accepted auditing standards is not designed to detect whether a company's systems are year 2000 compliant. Further, we have no responsibility with regard to the Company's efforts to make its systems, or any other systems, such as those of the Company's vendors, service providers, or any other third parties, year 2000 compliant or provide assurance on whether the Company has addressed or will be able to address all of the affected systems on a timely basis. These are responsibilities of the Company's management. However, for the benefit of management, we may choose to communicate matters that come to our attention relating to the Year 2000 Issue.

COMMUNICATIONS WITH AUDIT COMMITTEES

Auditors may wish to discuss the Year 2000 Issue with a client's audit committee (or individual or group with similar responsibilities) to make sure they understand the Year 2000 Issue and its magnitude. Paragraph 6 of SAS No. 61, *Communications With Audit Committees*, (AICPA, *Professional Standards*, vol. 1, AU sec. 380) provides that—

An audit performed in accordance with generally accepted auditing standards may address many matters of interest to an audit committee. For example, an audit committee is usually interested in internal control and in whether the financial statements are free of material misstatement. In order for the audit committee to understand the nature of the assurance provided by an audit, the auditor should communicate the level of responsibility assumed for these matters under generally accepted auditing standards. It is also important for the audit committee to understand that an audit conducted in accordance with generally accepted auditing standards is designed to obtain reasonable, rather than absolute, assurance about the financial statements.

Because the Year 2000 Issue may affect an entity's internal control, an auditor may wish to advise an entity's audit

committee that because an audit is not intended to provide assurance on the effectiveness of internal control, an audit of financial statements in accordance with generally accepted auditing standards does not provide any assurance with respect to the Year 2000 Issue.

MANAGEMENT LETTER

Through inquiries of client personnel, an auditor may obtain information about a client's understanding of the Year 2000 Issue and, if applicable, the progress of its year 2000 compliance efforts. The auditor may wish to communicate to senior management and the audit committee the results of such inquiries and any observations regarding the Year 2000 Issue. However, auditors should be cautious in these communications not to imply that they are providing assurance on year 2000 compliance. Appendix B of this publication contains a series of questions that auditors may ask when obtaining an understanding of a client's or potential client's year 2000 readiness.

Following is an illustrative management letter comment regarding the Year 2000 Issue. Any such communication should be tailored to the client's specific circumstances.

The Year 2000 Issue results from a computer's inability to process year-date data accurately beyond the year 1999. Except in recently introduced year 2000 compliant programs, computer programmers consistently have abbreviated dates by eliminating the first two digits of the year, with the assumption that these two digits would always be 19. Thus January 1, 1965, became 01/01/65. Unless corrected, this shortcut is expected to create widespread problems when the clock strikes 12:00:01 A.M. on January 1, 2000. On that date, some computer programs may recognize the date as January 1, 1900, and process data inaccurately or stop processing altogether.

The Year 2000 Issue is likely to affect computer applications before January 1, 2000, when systems currently attempt to perform calculations into the year 2000. Furthermore, some software programs use several dates in the year 1999 to mean something other than the date. Examples of

such dates are 01/01/99, 09/09/99, and 12/31/99. As systems process information using these dates, they may produce erratic results or stop functioning.

The Year 2000 Issue presents another challenge—the algorithm used in some computers for calculating leap years is unable to detect that the year 2000 is a leap year. Therefore, systems that are not year 2000 compliant may not register the additional day, and date calculations may be incorrect.

We recommend that you take the necessary actions to immediately begin to identify, modify, and test all systems that may be negatively affected by the Year 2000 Issue, particularly mission-critical systems. This program should be monitored closely to ensure completion before mission-critical systems begin to fail. Such failures may be evident before January 1, 2000. If the company fails to take timely and appropriate action, it may experience costly and significant application-program failures that could prevent it from performing its normal processing activities. Depending on the extent of system failures, noncompliance could have catastrophic consequences for the company.

Also, the company should implement additional verification procedures to test the accuracy of information received from its vendors, service providers, bankers, customers, and other third-party organizations with whom it exchanges date-dependent information, because these organizations also must become year 2000 compliant. The company also should satisfy itself that vendors, service providers, bankers, customers, and other third-party organizations will not experience problems relating to the Year 2000 Issue that could affect the company's operations or cash flows.

Depending on the entity's reliance on date-dependent systems and the state of preparedness for the year 2000, the auditor also may wish to address certain additional matters relating to the Year 2000 Issue in his or her management letter. Some of these situations are that—

- The client has not begun to address the Year 2000 Issue.
- The client recognizes the Issue but needs to develop a year 2000 compliance program.
- The client recognizes the Issue but needs to assess the effect of the Year 2000 Issue on its systems.

- The client needs to consider the budget and resource implications of its plan.
- The client currently is not meeting its year 2000 compliance project timetables.

ENDNOTES

1. SAS No. 83 is effective for engagements for periods ending on or after June 15, 1998.

Practice Management Issues

The Year 2000 Issue affects not only the client's operations and financial reporting activities, but also the way in which auditors manage their business risk and allocate their resources. Previous sections of this publication, and appendix B, describe the auditor's audit risk and provide sample communications and inquiries that may help establish an understanding of management's and the auditor's respective responsibilities, and determine the extent of management's consideration of and action regarding the Year 2000 Issue. This section presents some matters related to the Year 2000 Issue that auditors may wish to consider in managing their business risk.

CLIENT ACCEPTANCE

As part of the client evaluation process, auditors may make inquiries of the prospective client's management concerning the Year 2000 Issue. These inquiries should be sufficient to gain a general understanding of senior management's and the board of director's (or audit committee's) awareness of the Year 2000 Issue and the status of the prospective client's activities to address the Issue.

CLIENT CONTINUATION

The risk of an audit client's failure in its remedial efforts also may affect the auditor's overall engagement risk associated with his or her role as auditor of the entity's financial

statements. In connection with his or her continuing evaluation of audit clients, an auditor may wish to—

- Make inquiries to provide the engagement team with a general understanding of the effect of the Year 2000 Issue, the status of activities to remediate such effect, and the level to which senior management or the board of directors (or the audit committee) is participating in or aware of the activities.
- Consider and assess engagement risk based on the information obtained through the aforementioned inquiries. In general, engagement risk may increase as the client's dependence on technology and the complexity of that technology as well as on outside service providers and other third parties increases. The extent to which management is addressing the Year 2000 Issue also affects engagement risk.

Additionally, if a client refuses to respond to inquiries regarding the Year 2000 Issue, that fact should be considered in evaluating client continuance.

PRACTICE MANAGEMENT IMPLICATIONS OF MODIFIED AND NEW SYSTEMS

The volume of a client's year 2000 software modifications and new system installations combined with the need to make an auditor's audit software year 2000 compliant may have a direct and significant effect on the way practitioners allocate their human and other resources in the next several years. Auditors may find it desirable to develop new computer audit applications and to test modified systems earlier than might otherwise be necessary, thereby allocating resources over a longer period. Auditors also may need to consider hiring new personnel with the necessary expertise or make other arrangements to obtain the required skills, such as training existing personnel. Therefore, auditors will need to exercise care in projecting their staffing needs for the next several years to maintain audit quality and the ability to adequately respond to the challenges presented by the Year 2000 Issue.

Other Issues

COMPILATION, REVIEW, AND BOOKKEEPING SERVICES

CPAs who provide compilation, review, and bookkeeping services to clients may wish to determine whether clients are aware of the Year 2000 Issue and the potential effects on their business operations. CPAs who provide such services using their own systems also may wish to consider whether their systems are year 2000 compliant.

PROFESSIONAL LIABILITY INSURANCE

Practitioners who apply for professional liability insurance will most certainly be questioned about how they are handling the Year 2000 Issue within their firm and with their clients. Entities planning to apply for or renew their liability insurance policies can expect to see year 2000 questions on the application form.

Appendix A

Illustrative MD&A Disclosures

Based on an informal survey of 1996 annual reports, only a small percentage of publicly held companies included Year 2000 Issue disclosures in their financial statements. The SEC staff has since issued *Staff Legal Bulletin No. 5*, setting forth guidance for Year 2000 Issue disclosures for publicly held companies; therefore, it is expected that more companies will be making such disclosures. The Bulletin is described in a preceding section of this publication. Following are examples of actual 1996 MD&A disclosures in filings of publicly held companies (dollar amounts and company names omitted).

COMPANY A

In January 1996, the Company began converting its computer systems to be year 2000 compliant (e.g., to recognize the difference between '99 and '00 as one year instead of negative 99 years). At December 31, 1996, approximately 40 percent of the Company's systems were compliant, with all systems expected to be compliant by the end of 1998. The total cost of the project is estimated to be \$XXX million and is being funded through operating cash flows. The Company is expensing all costs associated with these system changes. As of December 31, 1996, \$XXX million had been expensed.

COMPANY B

Based on a preliminary study, the Company expects to spend approximately \$XXX million to \$YYY million from 1997 through 1999 to modify its computer information systems enabling proper processing of transactions relating to the year 2000 and beyond. The Company continues to evaluate appropriate courses of corrective action, including re-

placement of certain systems whose associated costs would be recorded as assets and amortized. Accordingly, the Company does not expect the amounts required to be expensed over the next three years to have a material effect on its financial position or results of operations. The amount expensed in 1996 was immaterial.

COMPANY C

The Company, like most owners of computer software, will be required to modify significant portions of its software so that it will function properly in the year 2000. Preliminary estimates of the total costs to be incurred prior to 2000 range from \$XXX million to \$YYY million. Maintenance or modification costs will be expensed as incurred, while the costs of new software will be capitalized and amortized over the software's useful life.

COMPANY D

Management has initiated an enterprise-wide program to prepare the Corporation's computer systems and applications for the year 2000. The Corporation expects to incur internal staff costs as well as consulting and other expenses related to infrastructure and facilities enhancements necessary to prepare the systems for the year 2000. Testing and conversion of system applications is expected to cost approximately \$XXX million to \$YYY million over the next three years. A significant proportion of these costs are not likely to be incremental costs to the Corporation, but rather will represent the redeployment of existing information technology resources.

COMPANY E

In 1997, the Company will commence, for all of its systems, a year 2000 date conversion project to address all necessary code changes, testing, and implementation. Project completion is planned for the middle of 1999 at an estimated total cost of approximately \$XXX million. The Company expects its year 2000 date conversion project to be completed on a timely basis. However, there can be no assurance that the systems of other companies on which the Company's systems rely also will be timely converted or that any such failure to convert by another company would not have an adverse effect on the Company's systems.

COMPANY F

The Company is aware of the issues associated with the programming code in existing computer systems as the millennium (year 2000) approaches. The “year 2000” problem is pervasive and complex as virtually every computer operation will be affected in some way by the rollover of the two-digit year value to 00. The issue is whether computer systems will properly recognize date-sensitive information when the year changes to 2000. Systems that do not properly recognize such information could generate erroneous data or cause a system to fail.

The Company is utilizing both internal and external resources to identify, correct or reprogram, and test the systems for the year 2000 compliance. It is anticipated that all reprogramming efforts will be complete by December 31, 1998, allowing adequate time for testing. To date, confirmations have been received from the Company’s primary processing vendors that plans are being developed to address processing of transactions in the year 2000. Management has not yet assessed the year 2000 compliance expense and related potential effect on the Company’s earnings.

COMPANY G

Like any other company, advances and changes in available technology can significantly affect the business and operations of the Company. For example, a challenging problem exists as many computer systems worldwide do not have the capability of recognizing the year 2000 or years thereafter. No easy technological “quick fix” has yet been developed for this problem. The Company is expending significant resources to assure that its computer systems are reprogrammed in time to effectively deal with transactions in the year 2000 and beyond. This “Year 2000 Computer Problem” creates risk for the Company from unforeseen problems in its own computer systems and from third parties with whom the Company deals on financial transactions worldwide. Such failures of the Company and/or third parties’ computer systems could have a material impact on the Company’s ability to conduct its business, and especially to process and account for the transfer of funds electronically.

COMPANY H

The Company has conducted a comprehensive review of its computer systems to identify the systems that could be

affected by the Year 2000 Issue and is developing an implementation plan to resolve the issue. The Year 2000 Issue is the result of computer programs being written using two digits rather than four to define the applicable year. Any of the Company's programs that have time-sensitive software may recognize a date using "00" as the year 1900 rather than the year 2000. This could result in a major system failure or miscalculations. The Company presently believes that, with modifications to existing software and conversions to new software, the Year 2000 problem will not pose significant operational problems for the Company's computer systems as so modified and converted. However, if such modifications and conversions are not completed timely, the Year 2000 problem may have a material impact on the operations of the Company.

Appendix B

Questionnaire

To provide client service and to assist in client communications, auditors may wish to be aware of the steps their clients are taking to address the Year 2000 Issue. The following illustrative questions may help auditors obtain an understanding of their client's year 2000 compliance efforts and, at the same time, increase client awareness of the importance of the Year 2000 Issue. The list of questions is not meant to be comprehensive. Additionally, auditors may want to tailor the questionnaire to the specific industry in which their clients operate.

These questions ordinarily would be addressed to the person or persons responsible for the year 2000 compliance project within a client's organization, but they also may be useful in addressing the Issue with senior-level management.

Does the company have a year 2000 compliance project? Yes ___ No ___

If yes, please provide the following information about the project:

PROJECT PLANNING AND PROGRAM MANAGEMENT

Project Start Date _____

Where is the entity in the process?

<input type="checkbox"/> Planning Phase	<input type="checkbox"/> Assessment Phase
<input type="checkbox"/> Conversion Phase	<input type="checkbox"/> Implementation

Does the project address domestic and global compliance? Yes ___ No ___

Does the project address potential information technology (IT) exposure? Yes ___ No ___

Does the project address non-IT exposure (i.e., card key systems, elevators, etc.) Yes ___ No ___

Is the project on schedule? Yes ___ No ___

If no, explain the complications:

Does the project have executive sponsorship? Yes ___ No ___

Indicate the level:

___ President

___ CFO

___ CIO

___ Controller

Does year 2000 awareness exist throughout the organization (e.g., the IT department, user community, building services)? Yes ___ No ___

Is the year 2000 budget separate from the information systems (IS) budget? Yes ___ No ___

Is the year 2000 budget included within the IS budget? Yes ___ No ___

If included in the IS budget, does a process exist or will one be established to rank year 2000 work according to priority within the context of the total budget? Yes ___ No ___

What is the estimated cost of compliance?

What is the anticipated project completion date? _____

Do you have a detailed project plan? Yes ___ No ___

Has a task force or group been created to address the issue? Yes ___ No ___

Is the task force considering enterprise-level issues as well as the impact on computer systems? Yes ___ No ___

How many people are included on the task force? _____

Does the task force include both internal and external resources? Yes ___ No ___

Have accountabilities been clearly delineated between external and internal resources? Yes ___ No ___

Are procedures in place to deal with “off-shore” resources? Yes ___ No ___

Have contingency plans been established to mitigate the risks associated with the project not being completed on time? Yes ___ No ___

If yes, please describe:

Have a program management office and project plan been created? Yes ___ No ___

Have the right resources and skill sets been identified and assigned? Yes ___ No ___

Have critical milestones been established to indicate that current initiatives are on target? Yes ___ No ___

APPROACH

Has an application inventory been created? Yes ___ No ___

Have tools been used to determine which code has been executed in the last year? Yes ___ No ___

Has business risk for inventoried systems been defined? Yes ___ No ___

Has a business risk rating been assigned to various suites of applications? Yes ___ No ___

Have global implications been taken into account? Yes ___ No ___

What is the compliance approach being taken by the client as to their computer systems?

- | | |
|--|--|
| <input type="checkbox"/> Replace many of the systems | <input type="checkbox"/> Modify them to be year 2000 compliant |
| <input type="checkbox"/> Depends on the system | <input type="checkbox"/> Undecided at this point |

How is the problem being dealt with?

- Are year fields in data files being expanded?
 Is program code being modified to deal with the problem?

Has the client evaluated the need to convert historical data? Yes ___ No ___

Does the client have any year 2000 assessment and conversion tools? Yes ___ No ___

If so, please list:

<i>Tool</i>	<i>Primary Function</i>
_____	_____
_____	_____
_____	_____
_____	_____

TESTING PROCEDURES

Are there documented enterprise-wide standards for testing? Yes ___ No ___

What percentage of applications are under standards? _____

Do the users currently participate in test data preparation and execution? Yes ___ No ___

Are the users aware they will be involved in test preparation and execution for the year 2000? Yes ___ No ___

Are users aware they will be performing year 2000 testing along with their usual tasks? Yes ___ No ___

APPLICATION STATUS

Indicate how many applications are at each stage of the year 2000 compliance process.

- Compliant: _____
- In process: _____
- Planned: _____
- No plans: _____
- Do not need
to be compliant: _____
- Other: _____

Is there sufficient hardware available for the year 2000 project, especially for the testing? Yes ___ No ___

Is another contingency being considered? Yes ___ No ___

Have negotiations begun? Yes ___ No ___

EXTERNAL VENDORS AND AGENTS

Are you working with any of the vendors listed below on year 2000 issues? Include any other types of vendors working on year 2000 issues for your organization.

- Hardware vendors
- Operational suppliers
- Application software vendors
- System software vendors
- Other vendors/financial services firms

Identify any of the external parties listed below with whom you are working on the Year 2000 Issue. Include any other types of external parties as well.

- Customers
- Counterparties
- Banks and other financial institutions
- Government and regulatory agencies
- Electronic data interchange (EDI)
- Other agents and clearing and executing facilities

Appendix C

Sources of Information About the Year 2000 Issue

The AICPA's Web site (<http://www.aicpa.org/yellow/ypy2000.htm>) offers links to year 2000 sites. Some sites and a list of books on the Year 2000 Issue are listed in this Appendix. The inclusion of these references in this publication does not constitute an endorsement by the AICPA, its committees, or staff of the sources or contents of the materials found therein.

YEAR 2000 WEB SITES

<i>CIO Magazine</i>	http://www.cio.com/forums/year2k.html
Comlinks	http://www.comlinks.com
<i>ComputerWorld</i>	http://www.computerworld.com/year2000
Federal Financial Institutions Examination Council	http://www.ffiec.gov/y2k
Federal Reserve Board	http://www.frbsf.org/fiservices/cdc
Management Support Technology	http://www.mstnet.com/year2000
Mitre Company	http://www.mitre.org/research/y2k
The National Bulletin Board for the Year 2000	http://www.it2000.com
The Year 2000 Resource	http://www.deweerd.org/year2000
Year 2000 MCRB	http://www.year2k.com
Year 2000 (Peter de Jager's site)	http://www.year2000.com

WEB SITES OFFERING DIRECT LINKS TO THEIR YEAR 2000 WEB PAGES

Datamation	http://www.datamation.com
General Services Administration	http://www.itpolicy.gsa.gov
Information Technology Association of America	http://www.ita.org
U.S. Department of Interior (Select "Year 2000" under "Customer Services")	http://www.doi.gov

WEB SITE OFFERING ACCESS TO YEAR 2000 INFORMATION

Users must conduct a search for year 2000 once in the site.

The Gartner Group	http://www.gartner.com
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BOOKS ON THE YEAR 2000 ISSUE

de Jager, Peter, and Richard Bergeon. *Managing '00: Surviving the Year 2000 Computing Crisis*. New York: John Wiley & Sons, Inc., 1997.

Keogh, James Edward, and Stephen C. Ruten. *Solving the Year 2000 Problem*. Boston: Academic Press, Inc., 1997.

Miller, Stewart S. *Year 2000 Solutions: A Manager's Guide to the Impending Collapse of Every IT System*. New York: Springer-Verlag New York, Inc., 1997.

Ragland, Bryce. *The Year 2000 Problem Solver: A Five-Step Disaster Prevention Plan*. New York: McGraw Hill Companies, 1996.

Smith, Sandi. *Solving the Year 2000 Dilemma*. New York: American Institute of CPAs, 1997.

Ulrich, William M., and Ian S. Hays. *The Year 2000 Software Systems Crisis: Challenge of the Century*. Upper Saddle River, N.J.: Prentice Hall, 1997.

