

ISAs that contain reference to Computer Assisted Audit Techniques

Below are additional details of references to computer assisted audit techniques as referenced in paragraph 18 in **Agenda Item 6-A**.

ISA 240, *The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements***Requirements**

Audit Procedures Responsive to Assessed Risks of Material Misstatement Due to Fraud at the Assertion Level

30. In accordance with ISA 330 (paragraph 6), the auditor shall design and perform further audit procedures whose nature, timing and extent are responsive to the assessed risks of material misstatement due to fraud at the assertion level. (Ref: Para. A37–A40)

Application and Other Explanatory Material

Audit Procedures Responsive to Assessed Risks of Material Misstatement Due to Fraud at the Assertion Level (Ref: Para. 30)

- A37. The auditor's responses to address the assessed risks of material misstatement due to fraud at the assertion level may include changing the nature, timing and extent of audit procedures in the following ways:

- The nature of audit procedures to be performed may need to be changed to obtain audit evidence that is more reliable and relevant or to obtain additional corroborative information. This may affect both the type of audit procedures to be performed and their combination. For example:
 - Physical observation or inspection of certain assets may become more important or the auditor may choose to use **computer-assisted audit techniques** to gather more evidence about data contained in significant accounts or electronic transaction files.
 - The auditor may design procedures to obtain additional corroborative information. For example, if the auditor identifies that management is under pressure to meet earnings expectations, there may be a related risk that management is inflating sales by entering into sales agreements that include terms that preclude revenue recognition or by invoicing sales before delivery. In these circumstances, the auditor may, for example, design external confirmations not only to confirm outstanding amounts, but also to confirm the details of the sales agreements, including date, any rights of return and delivery terms. In addition, the auditor might find it effective to supplement such external confirmations with inquiries of non-financial personnel in the entity regarding any changes in sales agreements and delivery terms.
- The timing of substantive procedures may need to be modified. The auditor may conclude that performing substantive testing at or near the period end better addresses an assessed risk of material misstatement due to fraud. The auditor may conclude that, given the assessed risks of intentional misstatement or manipulation, audit procedures to extend audit conclusions from an interim date to the period end would not be effective. In contrast, because an intentional

misstatement – for example, a misstatement involving improper revenue recognition – may have been initiated in an interim period, the auditor may elect to apply substantive procedures to transactions occurring earlier in or throughout the reporting period.

- The extent of the procedures applied reflects the assessment of the risks of material misstatement due to fraud. For example, increasing sample sizes or performing analytical procedures at a more detailed level may be appropriate. Also, computer-assisted audit techniques may enable more extensive testing of electronic transactions and account files. Such techniques can be used to select sample transactions from key electronic files, to sort transactions with specific characteristics, or to test an entire population instead of a sample.

Appendix 2

Examples of Possible Audit Procedures to Address the Assessed Risks of Material Misstatement Due to Fraud

The following are examples of possible audit procedures to address the assessed risks of material misstatement due to fraud resulting from both fraudulent financial reporting and misappropriation of assets. Although these procedures cover a broad range of situations, they are only examples and, accordingly they may not be the most appropriate nor necessary in each circumstance. Also the order of the procedures provided is not intended to reflect their relative importance.

Consideration at the Assertion Level

Specific responses to the auditor's assessment of the risks of material misstatement due to fraud will vary depending upon the types or combinations of fraud risk factors or conditions identified, and the classes of transactions, account balances, disclosures and assertions they may affect.

The following are specific examples of responses:

- Visiting locations or performing certain tests on a surprise or unannounced basis. For example, observing inventory at locations where auditor attendance has not been previously announced or counting cash at a particular date on a surprise basis.
- Requesting that inventories be counted at the end of the reporting period or on a date closer to period end to minimize the risk of manipulation of balances in the period between the date of completion of the count and the end of the reporting period.
- Altering the audit approach in the current year. For example, contacting major customers and suppliers orally in addition to sending written confirmation, sending confirmation requests to a specific party within an organization, or seeking more or different information.
- Performing a detailed review of the entity's quarter-end or year-end adjusting entries and investigating any that appear unusual as to nature or amount.
- For significant and unusual transactions, particularly those occurring at or near year-end, investigating the possibility of related parties and the sources of financial resources supporting the transactions.
- Performing substantive analytical procedures using disaggregated data. For example, comparing sales and cost of sales by location, line of business or month to expectations developed by the auditor.

- Conducting interviews of personnel involved in areas where a risk of material misstatement due to fraud has been identified, to obtain their insights about the risk and whether, or how, controls address the risk.
- When other independent auditors are auditing the financial statements of one or more subsidiaries, divisions or branches, discussing with them the extent of work necessary to be performed to address the assessed risk of material misstatement due to fraud resulting from transactions and activities among these components.
- If the work of an expert becomes particularly significant with respect to a financial statement item for which the assessed risk of misstatement due to fraud is high, performing additional procedures relating to some or all of the expert's assumptions, methods or findings to determine that the findings are not unreasonable, or engaging another expert for that purpose.
- Performing audit procedures to analyze selected opening balance sheet accounts of previously audited financial statements to assess how certain issues involving accounting estimates and judgments, for example, an allowance for sales returns, were resolved with the benefit of hindsight.
- Performing procedures on account or other reconciliations prepared by the entity, including considering reconciliations performed at interim periods.
- Performing **computer-assisted techniques**, such as data mining to test for anomalies in a population.
- Testing the integrity of computer-produced records and transactions.
- Seeking additional audit evidence from sources outside of the entity being audited.

Specific Responses—Misstatement Resulting from Fraudulent Financial Reporting

Examples of responses to the auditor's assessment of the risks of material misstatement due to fraudulent financial reporting are as follows:

Revenue Recognition

- Performing substantive analytical procedures relating to revenue using disaggregated data, for example, comparing revenue reported by month and by product line or business segment during the current reporting period with comparable prior periods. **Computer-assisted audit techniques** may be useful in identifying unusual or unexpected revenue relationships or transactions.
- Confirming with customers certain relevant contract terms and the absence of side agreements, because the appropriate accounting often is influenced by such terms or agreements and basis for rebates or the period to which they relate are often poorly documented. For example, acceptance criteria, delivery and payment terms, the absence of future or continuing vendor obligations, the right to return the product, guaranteed resale amounts, and cancellation or refund provisions often are relevant in such circumstances.
- Inquiring of the entity's sales and marketing personnel or in-house legal counsel regarding sales or shipments near the end of the period and their knowledge of any unusual terms or conditions associated with these transactions.
- Being physically present at one or more locations at period end to observe goods being shipped or being readied for shipment (or returns awaiting processing) and performing other appropriate sales and inventory cutoff procedures.

- For those situations for which revenue transactions are electronically initiated, processed, and recorded, testing controls to determine whether they provide assurance that recorded revenue transactions occurred and are properly recorded.

Inventory Quantities

- Examining the entity's inventory records to identify locations or items that require specific attention during or after the physical inventory count.
- Observing inventory counts at certain locations on an unannounced basis or conducting inventory counts at all locations on the same date.
- Conducting inventory counts at or near the end of the reporting period to minimize the risk of inappropriate manipulation during the period between the count and the end of the reporting period.
- Performing additional procedures during the observation of the count, for example, more rigorously examining the contents of boxed items, the manner in which the goods are stacked (for example, hollow squares) or labeled, and the quality (that is, purity, grade, or concentration) of liquid substances such as perfumes or specialty chemicals. Using the work of an expert may be helpful in this regard.
- Comparing the quantities for the current period with prior periods by class or category of inventory, location or other criteria, or comparison of quantities counted with perpetual records.
- Using **computer-assisted audit techniques** to further test the compilation of the physical inventory counts – for example, sorting by tag number to test tag controls or by item serial number to test the possibility of item omission or duplication.

Appendix 3

Examples of Circumstances that Indicate the Possibility of Fraud

The following are examples of circumstances that may indicate the possibility that the financial statements may contain a material misstatement resulting from fraud.

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Problematic or unusual relationships between the auditor and management, including:

- Denial of access to records, facilities, certain employees, customers, vendors, or others from whom audit evidence might be sought.
- Undue time pressures imposed by management to resolve complex or contentious issues.
- Complaints by management about the conduct of the audit or management intimidation of engagement team members, particularly in connection with the auditor's critical assessment of audit evidence or in the resolution of potential disagreements with management.
- Unusual delays by the entity in providing requested information.
- Unwillingness to facilitate auditor access to key electronic files for testing through the use of **computer-assisted audit techniques**.
- Denial of access to key IT operations staff and facilities, including security, operations, and systems development personnel.

- An unwillingness to add or revise disclosures in the financial statements to make them more complete and understandable.
- An unwillingness to address identified deficiencies in internal control on a timely basis.

ISA 300, *Planning an Audit of Financial Statements*

Appendix

Considerations in Establishing the Overall Audit Strategy

This appendix provides examples of matters the auditor may consider in establishing the overall audit strategy. Many of these matters will also influence the auditor's detailed audit plan. The examples provided cover a broad range of matters applicable to many engagements. While some of the matters referred to below may be required by other ISAs, not all matters are relevant to every audit engagement and the list is not necessarily complete.

Characteristics of the Engagement

- The financial reporting framework on which the financial information to be audited has been prepared, including any need for reconciliations to another financial reporting framework.
- Industry-specific reporting requirements such as reports mandated by industry regulators.
- The expected audit coverage, including the number and locations of components to be included.
- The nature of the control relationships between a parent and its components that determine how the group is to be consolidated.
- The extent to which components are audited by other auditors.
- The nature of the business segments to be audited, including the need for specialized knowledge.
- The reporting currency to be used, including any need for currency translation for the financial information audited.
- The need for a statutory audit of standalone financial statements in addition to an audit for consolidation purposes.
- Whether the entity has an internal audit function and, if so, whether, in which areas and to what extent, the work of the function can be used, or internal auditors can be used to provide direct assistance, for purposes of the audit.
- The entity's use of service organizations and how the auditor may obtain evidence concerning the design or operation of controls performed by them.
- The expected use of audit evidence obtained in previous audits, for example, audit evidence related to risk assessment procedures and tests of controls.
- The effect of information technology on the audit procedures, including the availability of data and the expected use of **computer-assisted audit techniques**.
- The coordination of the expected coverage and timing of the audit work with any reviews of interim financial information and the effect on the audit of the information obtained during such reviews.
- The availability of client personnel and data.

ISA 315 (Revised), *Identifying and Assessing the Risks of Material Misstatement Through Understanding the Entity and Its Environment*

Requirements

The information system, including the related business processes, relevant to financial reporting, and communication

18. The auditor shall obtain an understanding of the information system, including the related business processes, relevant to financial reporting, including the following areas:
- (a) The classes of transactions in the entity's operations that are significant to the financial statements;
 - (b) The procedures, within both information technology (IT) and manual systems, by which those transactions are initiated, recorded, processed, corrected as necessary, transferred to the general ledger and reported in the financial statements;
 - (c) The related accounting records, supporting information and specific accounts in the financial statements that are used to initiate, record, process and report transactions; this includes the correction of incorrect information and how information is transferred to the general ledger. The records may be in either manual or electronic form;
 - (d) How the information system captures events and conditions, other than transactions, that are significant to the financial statements;
 - (e) The financial reporting process used to prepare the entity's financial statements, including significant accounting estimates and disclosures; and
 - (f) Controls surrounding journal entries, including non-standard journal entries used to record non-recurring, unusual transactions or adjustments. (Ref: Para. A89–A93)

Application and Other Explanatory Material

Journal entries

- A90. An entity's information system typically includes the use of standard journal entries that are required on a recurring basis to record transactions. Examples might be journal entries to record sales, purchases, and cash disbursements in the general ledger, or to record accounting estimates that are periodically made by management, such as changes in the estimate of uncollectible accounts receivable.
- A91. An entity's financial reporting process also includes the use of non-standard journal entries to record non-recurring, unusual transactions or adjustments. Examples of such entries include consolidating adjustments and entries for a business combination or disposal or non-recurring estimates such as the impairment of an asset. In manual general ledger systems, non-standard journal entries may be identified through inspection of ledgers, journals, and supporting documentation. When automated procedures are used to maintain the general ledger and prepare financial statements, such entries may exist only in electronic form and may therefore be more easily identified through the use of computer-assisted audit techniques.

ISA 330, *The Auditor's Responses to Assessed Risks*

Requirements

Audit Procedures Responsive to the Assessed Risk of Material Misstatement at the Assertion Level

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7. In designing the further audit procedures to be performed, the auditor shall:
- (a) Consider the reasons for the assessment given to the risk of material misstatement at the assertion level for each class of transactions, account balance, and disclosure, including:
 - (i) The likelihood of material misstatement due to the particular characteristics of the relevant class of transactions, account balance, or disclosure (that is, the inherent risk); and
 - (ii) Whether the risk assessment takes account of relevant controls (that is, the control risk), thereby requiring the auditor to obtain audit evidence to determine whether the controls are operating effectively (that is, the auditor intends to rely on the operating effectiveness of controls in determining the nature, timing and extent of substantive procedures); and (Ref: Para. A9–A18)

Nature and Extent of Tests of Controls

10. In designing and performing tests of controls, the auditor shall:
- (a) Perform other audit procedures in combination with inquiry to obtain audit evidence about the operating effectiveness of the controls, including:
 - (i) How the controls were applied at relevant times during the period under audit;
 - (ii) The consistency with which they were applied; and
 - (iii) By whom or by what means they were applied. (Ref: Para. A26–A29)

Application and Other Explanatory Material

Extent

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A16. The use of **computer-assisted audit techniques (CAATs)** may enable more extensive testing of electronic transactions and account files, which may be useful when the auditor decides to modify the extent of testing, for example, in responding to the risks of material misstatement due to fraud. Such techniques can be used to select sample transactions from key electronic files, to sort transactions with specific characteristics, or to test an entire population instead of a sample.

Other audit procedures in combination with inquiry (Ref: Para. 10(a))

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A27. The nature of the particular control influences the type of procedure required to obtain audit evidence about whether the control was operating effectively. For example, if operating effectiveness is evidenced by documentation, the auditor may decide to inspect it to obtain audit evidence about operating effectiveness. For other controls, however, documentation may not be available or relevant.

For example, documentation of operation may not exist for some factors in the control environment, such as assignment of authority and responsibility, or for some types of control activities, such as control activities performed by a computer. In such circumstances, audit evidence about operating effectiveness may be obtained through inquiry in combination with other audit procedures such as observation or the use of **CAATs**.

ISA 550, *Related Parties*

Requirements

Identification of Previously Unidentified or Undisclosed Related Parties or Significant Related Party Transactions

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22. If the auditor identifies related parties or significant related party transactions that management has not previously identified or disclosed to the auditor, the auditor shall:

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- (c) Perform appropriate substantive audit procedures relating to such newly identified related parties or significant related party transactions; (Ref: Para. A36)

Application and Other Explanatory Material

Substantive Procedures Relating to Newly Identified Related Parties or Significant Related Party Transactions (Ref: Para. 22(c))

A36. Examples of substantive audit procedures that the auditor may perform relating to newly identified related parties or significant related party transactions include:

- Making inquiries regarding the nature of the entity's relationships with the newly identified related parties, including (where appropriate and not prohibited by law, regulation or ethical rules) inquiring of parties outside the entity who are presumed to have significant knowledge of the entity and its business, such as legal counsel, principal agents, major representatives, consultants, guarantors, or other close business partners.
- Conducting an analysis of accounting records for transactions with the newly identified related parties. Such an analysis may be facilitated using **computer-assisted audit techniques**.

Verifying the terms and conditions of the newly identified related party transactions, and evaluating whether the transactions have been appropriately accounted for and disclosed in accordance with the applicable financial reporting framework.