Auditing for Fraud Detection

Course #5700B/QAS5700B

Course Material
AUDITING FOR FRAUD DETECTION

NOTICE

This course and test have been adapted with permission from material written by Dr. Jack Robertson, PhD, CPA, CFE as presented in the text Fraud Examination for Managers and Auditors. This course is sold with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional advice and assumes no liability whatsoever in connection with its use. Since tax laws are constantly changing, and are subject to differing interpretations, we urge you to do additional research and consult appropriate experts before relying on the information contained in this course to render professional advice.

No portion of this work may be reproduced or transmitted in any form or by any means electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system without the written permission of the publisher.

© Professional Education Services, LP 2010
Introduction

The responsibility for detecting fraud largely has fallen to the accounting profession. This course is an ideal introduction for beginners in the field of fraud examination and fraud-aware auditing.

Within the course internal control procedures are examined. Case studies are used throughout to exemplify issues surrounding independent audits of financial statements in terms of a fraud-detection perspective.

Chapter 1 has been designed to heighten your familiarity with the nature, signs, prevention, detection and reaction to fraud that can enable you to perform financial statement audits with awareness of fraud possibilities.

Chapter 2 defines and explains internal controls as they affect financial recordkeeping and reporting. It provides an overview of internal control theory mainly from the perspective of external auditors.

Chapters 3 through 7 address the different accounting cycles to show the variety of issues which are involved with each cycle and how an auditor may be able to detect fraud in those cycles.

Chapter 3 addresses cash collections and receivables (the revenue and collection accounting cycle) which covers sales, sales returns, accounts receivable, account write-offs, and cash collections. Chapter 4 deals with cash disbursements and payables (the acquisition and expenditure accounting cycle) which cover purchasing, receiving, accounts payable, and cash disbursements.

Chapter 5 covers the payroll accounting cycle which includes activities from hiring and firing to pay distribution. Chapter 6 relates to the production accounting cycle which covers the activities related to internal cost accounting for manufacture of products.

Finally, Chapter 7 takes a look at the finance and investment accounting cycle covering investments, liabilities and equities. This cycle covers several types of transactions that are typically large and infrequent.

The goal in this course is to give practical guidance and enhance managers' and auditors' and financial professionals’ abilities to recognize, prevent, and detect financial frauds in organizations. The primary interest is spreading the word about fraud examination and enabling more people to be able to fight fraud effectively.

Professional Education Services, LP has developed and publishes this course with appreciation and acknowledgement of the following individuals. This course material has been adapted from original material with the permission of Jack C. Robertson, PhD, CPA, CFE and C.T. Zlatkovich Centennial Professor of Accounting, The University of Texas at Austin. Portions of the chapters have been adapted from Auditing, eighth edition, by Jack C. Robertson © Richard D. Irwin Company, a McGraw-Hill company, 1976, 1979, 1982, 1985, 1988, 1990, 1993, 1996, used with permission.
AUDITING FOR FRAUD DETECTION

TABLE OF CONTENTS

Chapter 1: Fraud Awareness Auditing

Introduction 1-1
Definitions Related to Fraud 1-2
Conditions that Make Fraud Possible, Even Easy 1-6
Fraud Prevention 1-8
Fraud Detection 1-11
Schemes and Detection Procedures 1-15
Documents, Sources and “Extended Procedures” 1-22
After Discovering a Fraud 1-32
Practical Case Problems 1-34
Case Study: Thank Goodness It’s Friday 1-35
Case Study: The Phantom of the Inventory 1-38
Case Study: Is This the Perfect Crime? 1-41
Chapter Summary Outline 1-43
Review Questions and Suggested Solutions 1-45

Chapter 2: Overview of Internal Control

Introduction 2-1
Management versus Auditor Responsibility 2-5
Reasons for Internal Control Evaluation 2-6
Financial Reporting Control – The Auditor’s Evaluation Process 2-8
Control Environment and Risk Assessment 2-9
Information and Communication – The Accounting System 2-9
Monitoring 2-11
Control Activities 2-11
Transaction Processing Control Objectives and Activities 2-12
Performing Test of Controls Audit Procedures 2-19
Control Evaluation and Cost-Benefit 2-20
Chapter Summary Outline 2-22
Review Questions and Suggested Solutions 2-24
# Table of Contents (cont.)

**Chapter 3: Cash Collections and Receivables**

- Revenue and Collection Cycle: Typical Activities 3-1
- Audit Evidence in Management Reports and Data Files 3-6
- Special Note: The Existence Assertion 3-7
- Special Note: Using Confirmations 3-9
- Special Note: Audit of Bank Reconciliations with Attention to Lapping and Kiting 3-16
- Bank Transfer Schedule and “Proof of Cash” 3-21
- Audit Cases: Substantive Audit Procedures 3-23
- Case 3.1: The Canny Cashier 3-25
- Case 3.2: The Taxman Always Rings Twice 3-28
- Case 3.3: Bill Often, Bill Early 3-31
- Case 3.4: Thank Goodness It’s Friday 3-34
- Chapter Summary Outline 3-38
- Review Questions and Suggested Solutions 3-40

**Chapter 4: Cash Disbursements and Payables**

- Acquisition and Expenditure Cycle: Typical Activities 4-1
- Audit Evidence in Management Reports 4-4
- Special Note: The Completeness Assertion – Search for Unrecorded Liabilities 4-6
- Special Note: Physical Inventory Observation 4-8
- Audit Cases: Substantive Audit Procedures 4-11
- Case 4.1: Printing (Copying) Money 4-13
- Case 4.2: Real Cash Paid to Phony Doctors 4-16
- Case 4.3: Receiving the Missing Oil 4-19
- Case 4.4: Go For the Gold 4-22
- Case 4.5: Retread Tires 4-25
- Case 4.6: Amortize Bang the Drum Slowly 4-28
- Case Study: Like A Son 4-33
- Case Study: The Bulging Desk Drawers 4-36
- Case Study: Audit Approach 4-39
- Chapter Summary Outline 4-42
- Review Questions and Suggested Solutions 4-44
## TABLE OF CONTENTS (cont.)

### Chapter 5: Payroll Accounting

- Payroll Cycle Typical Activities .......................................................... 5-1
- Audit Evidence in Management Reports and Files .............................. 5-5
- Audit Cases: Substantive Audit Procedures ....................................... 5-9
- Case 5.1: Time Card Forgeries ............................................................... 5-11
- Case 5.2: Cleverly Hidden Paychecks .................................................. 5-14
- Chapter Summary Outline ....................................................................... 5-17
- *Review Questions and Suggested Solutions* ........................................ 5-19

### Chapter 6: Cost Accounting

- Production Cycle Typical Activities ...................................................... 6-1
- Audit Evidence in Management Reports and Files .............................. 6-5
- Audit Cases: Substantive Audit Procedures ....................................... 6-8
- Case 6.1: Unbundled Before Its Time ..................................................... 6-9
- Case 6.2: When in Doubt, Defer! ............................................................ 6-13
- Chapter Summary Outline ....................................................................... 6-16
- *Review Questions and Suggested Solutions* ........................................ 6-17

### Chapter 7: Investments, Liabilities and Equities

- Finance and Investment Cycle: Typical Activities ............................... 7-1
- Control Over Accounting Estimates ..................................................... 7-9
- Assertions, Substantive Procedures, and Audit Cases ......................... 7-10
- Case 7.1: Unregistered Sale of Securities .............................................. 7-13
- Case 7.2: Tax Loss Carryforwards ......................................................... 7-15
- Long-Term Liabilities and Related Accounts ........................................ 7-17
- Case 7.3: Off Balance Sheet Inventory Financing ................................ 7-20
- Investments and Intangibles ................................................................. 7-22
- Case 7.4: A Consolidation by any Other Name .................................... 7-25
- Other Aspects of Clever Accounting and Fraud .................................. 7-27
- Practical Case Problems ......................................................................... 7-31
- Case Study: In Plane View ................................................................. 7-32
- Case Study: Sharp Hedge Clippers ....................................................... 7-34
- Chapter Summary Outline ...................................................................... 7-38
- *Review Questions and Suggested Solutions* ........................................ 7-41

Glossary

Index
CHAPTER 1
FRAUD AWARENESS AUDITING

Auditing for fraud can be very challenging. It has the aura of detective work – finding things people want to keep hidden. However, auditing and fraud examination are not easy. They should only be pursued by persons who have proper training and experience. Thus, fraud awareness for independent auditors and internal auditors is the focus of this chapter.

INTRODUCTION

This chapter is not intended to make you a fraud examiner or fraud auditor. Its purpose is to heighten your familiarity with the nature, signs, prevention, detection, and reaction to fraud that can enable you to perform financial statement audits with awareness of fraud possibilities.

Users of audited financial statements generally believe that one of the main objectives of audits is fraud detection. External auditors know the issue is very complex, and they fear the general view that their work should ferret out all manner of major and minor fraud and misstatement in financial statements. This difference in viewpoints is one of the chronic "expectation gaps" between external auditors and users of published financial statements.

Part of the gap arises from the ability and expertise needed to be a fraud examiner or fraud auditor. Most of the trained and experienced fraud examiners come from government agencies, such as the Internal Revenue Service (IRS), Federal Bureau of Investigation (FBI), U.S. Government Accountability Office (GAO), U.S. Securities and Exchange Commission (SEC), U.S. Department of Justice, and various police departments. Alumni of these agencies often practice as consultants and fraud examiners, but few of them enter public accounting to become financial statement auditors. So, what are most financial statement auditors to do? One option is to become more aware of fraud possibilities so they can perform a limited set of procedures and determine when it is necessary to call upon people with greater fraud examination expertise. Financial statement auditors need to understand fraud and potential fraud situations, and they need to know how to ask the right kinds of questions during an audit.
DEFINITIONS RELATED TO FRAUD

Several kinds of "fraud" are defined in laws, while others are matters of general understanding. Exhibit 1-1 shows some acts and devices often involved in financial frauds. Collectively, these are known as white-collar crime – the misdeeds done by people who wear ties to work and steal with a pencil or a computer terminal. In white-collar crime, there are ink stains instead of bloodstains.

EXHIBIT 1-1 An Abundance of Frauds
Fraud consists of knowingly making material misrepresentations of fact, with the intent of inducing someone to believe the falsehood and act upon it and, thus, suffer a loss or damage. This definition encompasses all the varieties by which people can lie, cheat, steal, and dupe other people.

Employee fraud is the use of fraudulent means to take money or other property from an employer. It usually involves falsifications of some kind – false documents, lying, exceeding authority, or violating an employer's policies. It consists of three phases: (1) the fraudulent act, (2) the conversion of the money or property to the fraudster's use, and (3) the cover-up.

Embezzlement is a type of fraud involving employees' or nonemployees' wrongfully taking money or property entrusted to their care, custody, and control, often accompanied by false accounting entries and other forms of lying and cover-up.

Larceny is simple theft – for example, an employee taking an employer's money or property that has not been entrusted to the custody of the employee.

Defalcation is another name for employee fraud, embezzlement, and larceny.

Management fraud is deliberate fraud committed by management that injures investors and creditors through materially misleading financial statements. The class of perpetrators is management; the class of victims is investors and creditors; and the instrument of perpetration is financial statements. Sometimes management fraud is called "fraudulent financial reporting."

Fraudulent financial reporting was defined by the National Commission on Fraudulent Financial Reporting (1987) as intentional or reckless conduct, whether by act or omission, that results in materially misleading financial statements.

The AICPA generally accepted auditing standards describe errors and fraud. Errors are unintentional misstatements or omissions of amounts or disclosures in financial statements. Fraud involves intentional misstatements or omissions in financial statements, including fraudulent financial reporting to deceive financial statement users (management fraud) and misappropriations of assets (defalcations) that cause material financial misstatements. Direct-effect illegal acts are violations of laws or government regulations by the company or its management or employees that produce direct and material effects on dollar amounts in financial statements.

Fraud auditing has been defined in courses conducted by the Association of Certified Fraud Examiners as: A proactive approach to detect financial frauds using accounting records and information, analytical relationships, and an awareness of fraud perpetration and concealment schemes.
CHARACTERISTICS OF FRAUDSTERS

White-collar criminals are not like typical bank robbers, who are often described as "young and dumb." Bank robbers and other strong-arm artists often make comic mistakes like writing the holdup note on the back of a probation identification card, leaving the getaway car keys on the convenience store counter, using a zucchini as a holdup weapon, and timing the holdup to get stuck in rush hour traffic. Then there's the classic about the robber who ran into his own mother at the bank (she turned him in!).

Burglars and robbers average about $400-$500 for each hit. Employee frauds average $20,000, on up to $500,000 if a computer is used. Yet, employee frauds are not usually the intricate, well-disguised ploys you find in espionage novels. Who are these thieves wearing ties? What do they look like? Unfortunately, they "look like" most everybody else, including you and me. They have these characteristics:

- Likely to be married.
- Member of a church.
- Educated beyond high school.
- No arrest record.
- Range in age from teens to over 60.
- Socially conforming.
- Employment tenure from 1 to 20 or more years.
- Usually act alone (70 percent of incidents).

White-collar criminals do not make themselves obvious, although there may be tell-tale signs, which will be described later as "red flags." Unfortunately, the largest frauds are committed by people who hold high executive positions, have long tenure with an organization, and are respected and trusted employees. After all, these are the people who have access to the largest amounts of money and have the power to give orders and override controls.

THE ART OF FRAUD AWARENESS AUDITING

Fraud examination work combines the expertise of auditors and criminal investigators. Some fraud examiners are fond of saying that their successes are the result of accident, hunches, or luck. Nothing can be further from the reality. Successes come from experience, logic, and the ability to see things that are not obvious (as Sherlock Holmes noticed the dog that did not bark). Fraud awareness auditing, broadly speaking, involves familiarity with many elements: the human element, organizational behavior, knowledge of common fraud schemes, evidence and its sources, standards of proof, and sensitivity to red flags.

WHO DOES IT?

Alex W was a 47-year-old treasurer of a credit union. Over a seven-year period, he stole $160,000. He was a good husband and the father of six children, and he was a highly reputed official of the credit union. His misappropriations came as a stunning surprise to his associates. He owed significant amounts on his home, cars, college for two children, two side investments, and five different credit cards. His monthly payments significantly exceeded his take-home pay.

Source: Association of Certified Fraud Examiners (ACFE), "Auditing for Fraud."
Independent auditors of financial statements and fraud examiners approach their work differently. While many differences exist, these are some of the most important and obvious ones:

- Financial auditors follow a program/procedural approach designed to accomplish a fairly standard job, while fraud examiners float in a mind-set of sensitivity to the unusual where nothing is standard.
- Financial auditors make note of errors and omissions, while fraud examiners focus as well on exceptions, oddities, and patterns of conduct.
- Financial auditors assess control risk in general and specific terms to design other audit procedures, while fraud examiners habitually "think like a crook" to imagine ways controls could be subverted for fraudulent purposes.
- Financial auditors use a concept of materiality (dollar size big enough to matter) that is usually much higher than the amounts that fraud examiners consider worth pursuing. Financial auditors use materiality as a measure of importance one year at a time, whereas fraud examiners think of a cumulative materiality. (Theft of $20,000 per year may not loom large each year, but after a 15-year fraud career, $300,000 is a considerable loss.)
- Financial audits are based on theories of financial accounting and auditing logic, while fraud examination has a theory of behavioral motive, opportunity, and integrity.

External and internal auditors get credit for finding about 20 percent of discovered frauds. Larger percentages are discovered by voluntary confessions, anonymous tips, and other haphazard means. Fraud examiners have a higher success rate because they are called in for a specific purpose when fraud is known or highly suspected.

Some aspects of audit methodology make a big difference in the fraud discovery success experience. Financial auditors often utilize inductive reasoning – that is, they sample accounting data, derive audit findings, and project ("induct") the finding to a conclusion about the population of data sampled. Fraud examiners often enjoy the expensive luxury of utilizing deductive reasoning – that is, after being tipped off that a certain type of loss occurred or probably occurred, they can identify the suspects, make observations (stakeouts), conduct interviews, eliminate dead-end results, and concentrate on running the fraudster to ground. They can conduct covert activities that are not in the financial auditors’ tool kit. The "expensive luxury" of the deductive approach involves surveying a wide array of information and information sources, eliminating the extraneous, and retaining the selection that proves the fraud.

### THE CASE OF THE EXTRA CHECKOUT

The district grocery store manager could not understand why receipts and profitability had fallen and inventory was hard to manage at one of the largest stores in her area. She hired an investigator who covertly observed the checkout clerks and reported that no one had shown suspicious behavior at any of the nine checkout counters. Nine? That store only has eight, she exclaimed! (The store manager had installed another checkout aisle, not connected to the cash receipts and inventory maintenance central computer, and was pocketing all the receipts from that register.)

Source: ACFE, "Auditing for Fraud."
**CONDITIONS THAT MAKE FRAUD POSSIBLE, EVEN EASY**

When can fraud occur? Imagine the probability of fraud being a function of three factors—motive, opportunity, and lack of integrity. When one or two of these factors weigh heavily in the direction of fraud, the probability increases. When three of them lean in the direction of fraud, it almost certainly will occur. As Bologna and Lindquist put it: Some people are honest all the time, some people (fewer than the honest ones) are dishonest all the time, most people are honest all the time, and some people are honest most of the time.

### MOTIVE

A motive is some kind of pressure experienced by a person and believed unshareable with friends and confidants. Psychotic motivation is relatively rare; but it is characterized by the "habitual criminal," who steals simply for the sake of stealing. Egocentric motivations drive people to steal to achieve more personal prestige. Ideological motivations are held by people who think their cause is morally superior, and they are justified in making someone else a victim. However, economic motives are far more common in business frauds than the other three.

---

**I COULDN'T TELL ANYONE**

An unmarried young woman stole $300 from her employer to pay for an abortion. Coming from a family that strongly disdained premarital sex, she felt her only alternative was to have the secret abortion. Once she realized how easy it was to steal, however, she took another $86,000 before being caught.


The economic motive is simply a need for money, and at times it can be intertwined with egocentric and ideological motivations. Ordinarily honest people can fall into circumstances where there is a new or unexpected need for money, and the normal options for talking about it or going through legitimate channels seem to be closed. Consider these needs to:

- Pay college tuition.
- Pay hospital bills for a parent with cancer.
- Pay gambling debts.
- Pay for drugs.
- Pay alimony and child support.
- Pay for high lifestyle (homes, cars, boats).
- Finance business or stock speculation losses.
- Report good financial results.
OPPORTUNITY

An opportunity is an open door for solving the unshareable problem in secret by violating a trust. The violation may be a circumvention of internal control policies and procedures, or it may be simply taking advantage of an absence or lapse of control in an organization. We have no police state where every person is shadowed by an armed guard. Everyone has some degree of trust conferred for a job, even if it is merely the trust not to shirk and procrastinate. The higher the position in an organization, the greater the degree of trust; and, hence, the greater the opportunity for larger frauds. Here are some examples:

- Nobody counts the inventory, so losses are not known.
- The petty cash box is often left unattended.
- Supervisors set a bad example by taking supplies home.
- Upper management considered a written statement of ethics but decided not to publish one.
- Another employee was caught and fired, but not prosecuted.
- The finance vice president has investment authority without any review.
- Frequent emergency jobs leave a lot of excess material just lying around.

SHE CAN DO EVERYTHING

Mrs. Lemon was the only bookkeeper for an electrical supply company. She wrote the checks and reconciled the bank account. In the cash disbursements journal, she coded some checks as inventory, but she wrote the checks to herself, using her own true name. When the checks were returned with the bank statement, she simply destroyed them. She stole $416,000 over five years. After being caught and sentenced to prison, she testified to having continuous guilt over doing something she knew was wrong.

Source: ACFE, "Auditing for Fraud."

LACK OF INTEGRITY

Practically everyone, even the most violent criminal, knows the difference between right and wrong. Unimpeachable integrity is the ability to act in accordance with the highest moral and ethical values all the time. Thus, it is the lapses and occasional lack of integrity that permit motive and opportunity to take form as fraud. But people normally do not make deliberate decisions to "lack integrity today while I steal some money." They find a way to describe (rationalize) the act in words that make it acceptable for their self-image. Here are some of these rationalizations:

- I need it more than the other person (Robin Hood theory).
- I'm borrowing the money and will pay it back.
- Nobody will get hurt.
- The company is big enough to afford it.
- A successful image is the name of the game.
- Everybody is doing it.
FRAUD PREVENTION

Accountants and auditors have often been exhorted to be the leaders in fraud prevention by employing their skills in designing "tight" control systems. This strategy is, at best, a short-run solution to a large and pervasive problem. Business activity is built on the trust that people at all levels will do their jobs properly. Control systems limit trust and, in the extreme, can strangle business in bureaucracy. Imagine street crime being "prevented" by enrolling half the population in the police force to control the other half! Managers and employees must have freedom to do business, which means giving them freedom to commit frauds as well. Effective long-run prevention measures are complex and difficult, involving the elimination of the causes of fraud by mitigating the effect of motive, opportunity, and lack of integrity.

MANAGING PEOPLE PRESSURES IN THE WORKPLACE

From time to time, people will experience financial and other pressures. The pressures cannot be eliminated, but the facilities for sharing them can be created. Some companies have "ethics officers" to serve this purpose. Their job is to be available to talk over the ethical dilemmas faced in the workplace and help people adopt legitimate responses. However, the ethics officers are normally not psychological counselors.

<table>
<thead>
<tr>
<th>THEY DESERVE EVERYTHING THEY GOT!</th>
</tr>
</thead>
</table>
| A controller of a small fruit packing company in California stole $112,000 from the company. When asked why, he said: "Nobody at the company, especially the owners, ever talked to me. They treated me unfairly, they talked down to me, and they were rude."

Source: ACFE, "Auditing for Fraud."

Many companies have "hot lines" for anonymous reporting of ethical problems. Reportedly, the best kind of hot line arrangement is to have the responding party be an agency outside the organization. In the United States, some organizations are in the business of being the recipients of hot line calls coordinating their activities with the management of the organization. The Association of Certified Fraud Examiners maintains a subscription hotline service called Ethics Line.

The most effective long-run prevention, however, lies in the practice of management by caring for people. Managers and supervisors at all levels can exhibit a genuine concern for the personal and professional needs of their subordinates and fellow managers, and subordinates can show the same concern for each other and their managers. Many companies facilitate this caring attitude with an organized Employee Assistance Program (EAP). EAPs operate in about nine percent of small companies and in about 39 percent of medium-size companies. They offer a range of counseling referral services dealing with substance abuse, mental health, family problems, crisis help, legal matters, health education, retirement, career paths, job loss troubles, AIDS education, and family financial planning.
When external auditors are engaged in the audit of financial statements, they must obtain an understanding of the company’s "control environment," which relates to the overall scheme of management activity in the company. Managements that consider carefully the people pressures in the workplace, using some of the devices mentioned above, have a good control environment and the beginnings of a good control system.

### HOW TO ENCOURAGE FRAUD

Practice autocratic management.
Manage by power with little trust in people.
Manage by crisis.
Centralize authority in top management.
Measure performance on a short-term basis.
Make profits the only criterion for success.
Make rewards punitive, stingy, and political.
Give feedback that is always critical and negative.
Create a highly hostile, competitive workplace.
Insist everything be documented with a rule for everything.


### CONTROL PROCEDURES AND EMPLOYEE MONITORING

Auditors would be aghast at an organization that had no control policies and procedures, and rightly so. Controls in the form of job descriptions and performance specifications are indeed needed to help people know the jobs they are supposed to accomplish. Almost all people need some structure for their working hours. An organization whose only control is "trustworthy employees" has no control. Unfortunately, "getting caught" is an important consideration for many people when coping with their problems. Controls provide the opportunity to get caught. Even the perception of the possibility of being caught can prevent employee theft and embezzlement.

Without going into much detail about controls, let it be noted that procedures for recognizing and explaining red flags are important for nipping frauds in the bud before they get bigger. Controls that reveal the following kinds of symptoms are necessary:

- Missing documents.
- Second endorsements on checks.
- Unusual endorsements.
- Unexplained adjustments to inventory balances.
- Unexplained adjustments to accounts receivable.
- Old items in bank reconciliations.
- Old outstanding checks.
- Customer complaints.
- Unusual patterns in deposits in transit.
WHEN A CUSTOMER COMPLAINS, LISTEN

A depositor told the S&L branch manager that there had been a $9,900 forged savings withdrawal from her account. She said she had recently made a $9,900 deposit at the branch and suspected the teller who had accepted the deposit. The teller was interviewed and admitted to forging and negotiating the savings withdrawal. He had obtained the depositor's mother's maiden name and birthplace (often used as identifier codes), fabricated a duplicate savings receipt book, and, posing as the depositor, went to another branch and made the withdrawal.

Source: ACFE, "Auditing for Fraud."

The problem with control systems is that they are essentially negative restrictions on people. The challenge is to have a bare minimum of useful controls and to avoid picky rules that are "fun to beat." The challenge of "beating the system," which can lead to bigger and better things, is an invitation to fraudulent types of behavior.

INTEGRITY BY EXAMPLE AND ENFORCEMENT

The key to integrity in business is "accountability" – that is, each person must be willing to put his or her decisions and actions in the sunshine. Many organizations begin by publishing codes of conduct. Some of these codes are simple, and some are very elaborate. Government agencies and defense contractors typically have the most elaborate rules for employee conduct. Sometimes they work, sometimes they do not. A code can be effective if the "tone at the top" supports it. When the chairman of the board and the president make themselves visible examples of the code, other people will then believe it is real. Subordinates tend to follow the boss’s lead.

Hiring and firing are important. Background checks on prospective employees are advisable. A new employee who has been a fox in some other organization's hen house will probably be a fox in a new place. Organizations have been known to hire private investigators to make these background checks. Fraudsters should be fired and, in most cases, prosecuted. They have a low rate of recidivism (repeat offenses) if they are prosecuted, but they have a high rate if not. Prosecution delivers the message that management does not believe that "occasional dishonesty" is acceptable.

WHERE DID HE COME FROM?

The controller defrauded the company for several million dollars. As it turned out, he was no controller at all. He didn't know a debit from a credit. The fraudster had been fired from five previous jobs where money had turned up missing. He was discovered one evening when the president showed up unexpectedly at the company and found a stranger in the office with the controller. The stranger was doing all of the accounting for the bogus controller.

Source: ACFE, "Auditing for Fraud."
FRAUD DETECTION

Since an organization cannot prevent all fraud, its auditors, accountants, and security personnel must be acquainted with some detection techniques. Frauds consist of the fraud act itself, the conversion of assets to the fraudster's use, and the cover-up. Catching people in the fraud act is difficult and unusual. The act of conversion is equally difficult to observe, since it typically takes place in secret away from the organization's offices (e.g., fencing stolen inventory). Many frauds are investigated by noticing signs and signals of fraud, then following the trail of missing, mutilated, or false documents that are part of the accounting records cover-up.

This chapter has already mentioned signs and signals in terms of red flags, oddities, and unusual events. Being able to notice them takes some experience, but this book can give some starting places.

RED FLAGS

Employee Fraud

Employee fraud can involve high-level executives and people below the top executive levels. Observation of persons' habits and lifestyle and changes in habits and lifestyles may reveal some red flags. Fraudsters of the past have exhibited these characteristics:

- Lose sleep.
- Drink too much.
- Take drugs.
- Become irritable easily.
- Can't relax.
- Get defensive, argumentative.
- Can't look people in the eye.
- Sweat excessively.
- Go to confession (e.g., priest, psychiatrist).
- Find excuses and scapegoats for mistakes.
- Work standing up.
- Work alone, work late.

Personality red flags are difficult because (1) honest people sometimes show them and (2) they often are hidden from view. It is easier to notice changes, especially when a person changes his or her lifestyle or spends more money than the salary justifies – for example, on homes, furniture, jewelry, clothes, boats, autos, vacations, and the like.

HIGH STYLE IN THE MAILROOM

A female mailroom employee started wearing designer clothes (and making a big deal about it). She drove a new BMW to work. An observant manager, who had known her as an employee for seven years and knew she had no outside income, became suspicious. He asked the internal auditors to examine her responsibilities extra carefully. They discovered she had taken $97,000 over a two-year period.

Source: ACFE, "Auditing for Fraud."
Often, auditors can notice telltale hints of the cover-up. These generally appear in the accounting records. The key is to notice exceptions and oddities, such as transactions that are: at odd times of the day, month, season; too many or too few; in the wrong branch location; in amounts too high, too low, too consistent, too different. Exceptions and oddities like these can appear:

- Missing documents.
- Cash shortages and overages.
- Excessive voids and credit memos.
- Customer complaints.
- Common names or addresses for refunds.
- Adjustments to receivables and payables.
- General ledger does not balance.
- Increased past due receivables.
- Inventory shortages.
- Increased scrap.
- Alterations on documents.
- Duplicate payments.
- Employees cannot be found.
- Second endorsements on checks.
- Documents photocopied.
- Dormant accounts become active.

**A LARGE HOUSEHOLD**

A benefit analyst with C. G. Insurance used her remote terminal in a Dade County, Florida, field claims office to defraud the company of $206,000 in 18 months. She used her position of trust and her knowledge of the claims system to execute the fraud by using false names to submit fictitious claims using the address of herself, her father, and her boyfriend. The repetition of the same claimant addresses eventually tipped off the insurance company's security department.


**Management Fraud (Fraudulent Financial Reporting)**

Fraud that affects financial statements and causes them to be materially misleading often arises from the perceived need to "get through a difficult period." The difficult period may be characterized by cash shortage, increased competition, cost overruns, and similar events that cause financial difficulty. Managers usually view these conditions as "temporary," believing they can be overcome by getting a new loan, selling stock, or otherwise buying time to recover. In the meantime, falsified financial statements are used to "benefit the company."
These conditions and circumstances have existed along with frauds in the past:

- Management decisions dominated by an individual or a small group.
- Managers' attitudes about accounting are very aggressive.
- Managers and employees tend to be evasive responding to audit inquiries.
- Managers engage in frequent disputes with auditors.
- Management has engaged in audit opinion shopping.
- Managers display significant disrespect for regulatory bodies.
- Managers place much emphasis on earnings projections.
- Managers' compensation depends on accounting practices.
- Management's business reputation is poor.
- Company has a weak internal control environment.
- Company profit lags the industry.
- Company depends on debt financing and needs to obtain capital.
- Company organization is decentralized without much monitoring.
- Company has bank relations or operations in tax haven jurisdictions.
- Company has a going concern problem (near bankruptcy).
- Company has difficult accounting measurement and presentation issues.
- Company has significant transactions or balances difficult to audit.
- Company has significant and unusual related-party transactions.
- Company is in a period of rapid growth,
- Company accounting personnel are lax or inexperienced in their duties.
- Company employs inexperienced managers.

By both fraud and "creative accounting," companies have caused financial statements to be materially misleading by (1) overstating revenues and assets, (2) understating expenses and liabilities, and (3) giving disclosures that are misleading or that omit important information. Generally, fraudulent financial statements show financial performance and ratios that are better than current industry experience or better than the company's own history. Sometimes the performance meets exactly the targets announced by management months earlier.

**OVERSTATED REVENUE, RECEIVABLES, AND DEFERRED COSTS**

Cali Computer Systems, Inc., sold franchises enabling local entrepreneurs to open stores and sell Cali products. The company granted territorial franchises; in one instance recording revenue of $800,000 and in another $580,000. Unfortunately, the first of these "contracts" for a territorial franchise simply did not exist, and the second was not executed and Cali had not performed its obligations by the time it was recorded. In both cases, the imaginary revenue was about 40 percent of reported revenues. These franchises were more in the nature of business hopes than completed transactions.

Cali was supposed to deliver computer software in connection with the contracts and had deferred $277,000 of software development cost in connection with the programs. However, this software did not work, and the contracts were fulfilled with software purchased from other suppliers.

Because of the double-entry bookkeeping system, fraudulent accounting entries always affect two accounts and two places in financial statements. Since many frauds involve improper recognition of assets, there is a theory of the "dangling debit," which is an asset amount that can be investigated and found to be false or questionable. Frauds may involve the omission of liabilities, but the matter of finding and investigating the "dangling credit" is normally very difficult. It "dangles" off the books. Misleading disclosures also present difficulty, mainly because they involve words and messages instead of numbers. Omissions may be hard to notice, and misleading inferences may be very subtle.

A client's far-removed illegal acts may cause financial statements to be misleading, and external auditors are advised to be aware of circumstances that might indicate them. The AICPA has given these signs and signals of the potential for illegal acts (SAS 54, AU 317):

- Unauthorized transactions.
- Government investigations.
- Regulatory reports of violations.
- Payments to consultants, affiliates, employees for unspecified services.
- Excessive sales commissions and agent's fees.
- Unusually large cash payments.
- Unexplained payments to government officials.
- Failure to file tax returns, to pay duties and fees.

**INTERNAL CONTROL**

An important feature of internal control is the separation of these duties and responsibilities: (1) transaction authorization, (2) recordkeeping, (3) custody of, or access to, assets, and (4) reconciliation of actual assets to the accounting records. Generally, a person who, acting alone or in a conspiracy, can perform two or more of these functions also can commit a fraud by taking assets, converting them, and covering up. (Other control features are explained in Chapter 2.)

Fraud awareness auditing involves perceptions of the controls installed (or not installed) by a company, plus "thinking like a crook" to imagine ways and means of stealing. When controls are absent, the ways and means may be obvious. Otherwise, it might take some scheming to figure out how to steal from an organization.
THE TRUSTED EMPLOYEE

A small business owner hired his best friend to work as his accountant. The friend was given full unlimited access to all aspects of the business and was completely responsible for the accounting. Five years later, the owner finally terminated the friend because the business was not profitable. Upon taking over the accounting, the owner's wife found that cash receipts from customers were twice the amounts formerly recorded by the accountant “friend.” An investigation revealed that the friend had stolen $450,000 in cash sales receipts from the business, while the owner had never made more than $16,000 a year. (The friend had even used the stolen money to make loans to the owner and to keep the business going!)

NO LOCKS ON THE DOOR

Perini Corporation kept blank checks in an unlocked storeroom, where every clerk and secretary had access. Also in the storeroom was the automatic check signing machine. The prenumbered checks were not logged and restricted to one person. The bookkeeper was very surprised to open the bank statement one month and find that $1.5 million in stolen checks had been paid on the account.

Source: ACFE, "Auditing for Fraud."

SCHEMES AND DETECTION PROCEDURES

In this section of the chapter, we will try a new approach. Instead of discussing lists of schemes and detection procedures in the abstract, we will have a series of cases. They will follow a standard format in two major parts: (1) Case Situation, and (2) Audit Approach.

The first three cases deal with employee fraud, and the last two deal with management fraud.

With the first three cases, you can practice on being able to: Describe some common employee fraud schemes and explain some audit and investigation procedures for detecting them.

With the last two cases, you can practice on learning how to: Describe some common financial reporting fraud features and explain some audit and investigation procedures for detecting them.

Additional problems are presented at the end of the chapter which give the case situation and allow you the opportunity to write the audit approach section.
CASE 1.1: CASE OF THE MISSING PETTY CASH

Problem
Petty cash embezzlement.

Method
The petty cash custodian (1) brought postage receipts from home and paid them from the fund, (2) persuaded the supervisor to sign blank authorization slips the custodian could use when the supervisor was away, and used these to pay for fictitious meals and minor supplies, (3) took cash to get through the weekend, replacing it the next week.

Paper Trail
Postage receipts were from a distant post office station the company did not use. The blank authorization slips were dated on days the supervisor was absent. The fund was cash short during the weekend and for a few days the following week.

Amount
The fund was small ($500), but the custodian replenished it about every two working days, stealing about $50 each time. With about 260 working days per year and 130 reimbursements, the custodian was stealing about $6,500 per year. The custodian was looking forward to getting promoted to general cashier and bigger and better things!

AUDIT APPROACH

Objective
Obtain evidence of the existence of the petty cash fund and validity of petty cash transactions.

Control
A supervisor is assigned to approve petty cash disbursements by examining them for validity and signing an authorization slip.

Test of Controls
Audit for transactions authorization and validity. Select a sample of petty cash reimbursement check copies with receipts and authorization slips attached; study them for evidence of authorization and validity (vouching procedures). Notice the nature and content of the receipts. Obtain supervisor’s vacation schedule and compare dates to authorization slip dates.

Audit of Balance
On Friday, count the petty cash and receipts to see that they add up to $500. Then, count the fund again later in the afternoon. (Be sure the second count is a surprise and that the custodian and supervisor sign off on the count working paper so the auditor will not be accused of theft.)

Discovery Summary
Knowing the location of the nearby post office branch used by the company, the auditor noticed the pattern of many receipts from a distant branch, which was near the custodian’s apartment. Several authorizations were dated during the supervisor’s vacation, and he readily admitted signing the forms in blank so his own supervisor “wouldn’t be bothered.” The second count on the same day was a real surprise, and the fund was found $65 short.
CASE 1.2: THE LAUNDRY MONEY SKIM

**Problem**
Stolen cash receipts skimmed from collection. Albert owned and operated 40 coin laundries around town. As the business grew, he could no longer visit each one, empty the cash boxes, and deposit the receipts. Each location grossed about $140 to $160 per day, operating 365 days per year. (Gross income about $2 million per year.)

**Method**
Four part-time employees each visited 10 locations, collecting the cash boxes and delivering them to Albert's office, where he would count the coins and currency (from the change machine) and prepare a bank deposit. One of the employees skimmed $5 to $10 from each location visited each day.

**Paper Trail**
None, unfortunately. The first paper that gets produced is Albert's bank deposit, and the money is gone by then.

**Amount**
The daily theft does not seem like much, but at an average of $7.50 per day from each of 10 locations, it was about $27,000 per year. If all four of the employees had stolen the same amount, the loss could have been about $100,000 per year.

**AUDIT APPROACH**

**Objective**
Obtain evidence of the completeness of cash receipts – that is, that all the cash received is delivered to Albert for deposit.

**Control**
Controls over the part-time employees were nonexistent. There was no overt or covert surprise observation and no times when two people went to collect cash (thereby needing to agree, in collusion, to steal). There was no rotation of locations or other indications to the employees that Albert was concerned about control.

**Test of Controls**
With no controls, there are no tests of control procedures. Obviously, however, "thinking like a crook" leads to the conclusion that the employees could simply pocket money.

**Audit of Balance**
The "balance" in this case is the total revenue that should have been deposited, and auditing for completeness is always difficult. Albert marked a quantity of coins with an etching tool and marked some $1 and $5 bills with ink. Unknown to the employees, he put these in all the locations, carefully noting the coins and bills in each.

**Discovery Summary**
Sure enough, a pattern of missing money emerged. When confronted, the employee confessed.
CASE 1.3: THE WELL-PADDED PAYROLL

Problem
Embezzlement with fictitious people on the payroll.

Method
Maybelle had responsibility for preparing personnel files for new hires, approval of wages, verification of time cards, and distribution of payroll checks. She "hired" fictitious employees, faked their records, and ordered checks through the payroll system. She deposited some checks in several personal bank accounts and cashed others, endorsing all of them with the names of the fictitious employees and her own.

Paper Trail
Payroll creates a large paper trail with individual earnings records, W-2 tax forms, payroll deductions for taxes and insurance, and Form 941 payroll tax reports. She mailed all the W-2 forms to the same post office box.

Amount
Maybelle stole $160,000 by creating some "ghosts," usually 3 to 5 out of 112 people on the payroll and paying them an average of $256 per week for three years. Sometimes the ghosts quit and were later replaced by others. But she stole "only" about 2 percent of the payroll funds during the period.

AUDIT APPROACH

Objective
Obtain evidence of the existence and validity of payroll transactions.

Control
Different people should be responsible for hiring (preparing personnel files), approving wages, and distributing payroll checks. "Thinking like a crook" leads an auditor to see that Maybelle could put people on the payroll and obtain their checks.

Test of Controls
Audit for transaction authorization and validity. Random sampling might not work because of the small number of ghosts. Look for the obvious. Select several weeks' check blocks, account for numerical sequence (to see whether any checks have been removed), and examine canceled checks for two endorsements.

Audit of Balance
There may be no "balance" to audit for existence/occurrence, other than the accumulated total of payroll transactions, and the total may not appear out of line with history because the fraud is small in relation to total payroll and has been going on for years. Conduct a surprise payroll distribution; follow up by examining prior canceled checks for the missing employees. Scan personnel files for common addresses.

Discovery Summary
Both the surprise distribution and the scan for common addresses provided the names of 2 or 3 exceptions. Both led to prior canceled checks (which Maybelle had not removed and the bank reconciler had not noticed), which carried Maybelle's own name as endorser. Confronted, she confessed.
CASE 1.4: FALSE SALES, ACCOUNTS RECEIVABLE, AND INVENTORY

Problem
Overstated sales and accounts receivable caused overstated net income, retained earnings, current assets, working capital, and total assets.

Method
Q.T. Wilson was a turnaround specialist who took the challenge at Mini Marc Corporation, a manufacturer of computer peripheral equipment. He set high goals for sales and profits. To meet these goals, managers shipped bricks to distributors and recorded some as sales of equipment to retail distributors and some as inventory out on consignment. No real products left the plant for these "sales." The theory was that actual sales would grow, and the bricks would be replaced later with real products. In the meantime, the distributors may have thought they were holding consignment inventory in the unopened cartons.

Paper Trail
All the paperwork was in order because the managers had falsified the sales and consignment invoices, but they did not have customer purchase orders for all the false sales. Shipping papers were in order, and several shipping employees knew the boxes did not contain disk drives.

Amount
Prior to the manipulation, annual sales were $135 million. During the two falsification years, sales were $185 million and $362 million. Net income went up from a loss of $20 million to $23 million (income), then to $31 million (income); and the gross margin percent went from 6 percent to 28 percent. The revenue and profit figures outpaced the industry performance. The accounts receivable collection period grew to 94 days, while it was 70 days elsewhere in the industry.

AUDIT APPROACH

Objective
Obtain evidence about the existence and valuation of sales, accounts receivable, and inventory.

Control
Company accounting and control procedures required customer purchase orders or contracts evidencing real orders. A sales invoice was supposed to indicate the products and their prices, and shipping documents were supposed to indicate actual shipment. Sales were always charged to a customer's account receivable.

Test of Controls
There were no glaring control omissions that "thinking like a crook" would have pointed to fraud possibilities. Sensitive auditors might have noticed the high tension created by concentration on meeting profit goals. Normal selection of sales transactions with vouching to customer orders and shipping documents might turn up a missing customer order. Otherwise, the paperwork would seem to be in order. The problem lay in the managers' power to override controls and instruct shipping people to send bricks. Most auditors do not ask the question: "Have you shipped anything, other than company products, this year?"
CASE 1.4: FALSE SALES, ACCOUNTS RECEIVABLE, AND INVENTORY CONTINUED

Audit of Balance
Confirmations of distributors’ accounts receivable may have elicited exception responses. The problem was to have a large enough confirmation sample to pick up some of these distributors or to be skeptical enough to send a special sample of confirmations to distributors who took the "sales" near the end of the accounting period. Observation of inventory should include some inspection of goods not on the company's premises.

Discovery Summary
The overstatements were not detected. The confirmation sample was small and did not contain any of the false shipments. Tests of detail transactions did not turn up any missing customer orders. The inventory out on consignment was audited by obtaining a written confirmation from the holders, who apparently had not opened the boxes. The remarkable financial performance was attributed to good management.

CASE 1.5: OVERSTATE THE INVENTORY, UNDERSTATE THE COST OF GOODS SOLD

Problem
Overstated inventory caused understated cost of goods sold; overstated net income and retained earnings; overstated current assets, working capital, and total assets.

Method
A division manager at Doughboy Foods wanted to meet his profit goals and simply submitted overstated quantities in inventory reports. The manager (a) inserted fictitious count sheets in the independent auditors' working papers, (b) handed additional count sheets to the independent auditors after the count was completed saying "these got left out of your set," and (c) inserted false data into the computer system that produced a final inventory compilation (even though this ploy caused the computer-generated inventory not to match with the count sheets).

Paper Trail
In general, management reports should correspond to accounting records. The manager's inventory reports showed amounts larger than shown in the accounts. He fixed the problem by showing false inventory that was "not recorded on the books."

Amount
The food products inventory was overstated by $650,000. Through a two-year period, the false reports caused an income overstatement of 15 percent in the first year and would have caused a 39 percent overstatement the second year.
CASE 1.5 (continued): OVERSTATE THE INVENTORY, UNDERSTATE THE COST OF GOODS SOLD

AUDIT APPROACH

Objective
Obtain evidence of the existence, completeness, and valuation of inventory.

Control
Inventory counts should be taken under controlled conditions, but not under the control of managers who might benefit from manipulation. (However, if these managers are present, auditors should nevertheless be prepared to perform the audit work.) Inventory-takers should be trained and follow instructions for recording quantities and condition.

Test of Controls
Auditors should attend the inventory-taker training sessions and study the instructions for adequacy. Observation of the inventory-taking should be conducted by managers and by auditors to ensure compliance with the instructions.

Audit of Balance
For evidence of existence, select a sample of inventory items from the perpetual records and test-count them in the warehouse. For evidence of completeness, select a sample of inventory items in the warehouse, test-count them, and trace them to the final inventory compilation. For evidence of valuation, find the proper prices of inventory for one or both of the samples, calculate the total cost for the items, and compare to their amounts recorded in the books. Compare book inventory amounts to management reports. Control the working papers so only members of the audit team have access.

Analytical procedures gave some signals. The particular manager's division had the lowest inventory turnover rate (6.3) among all the company divisions (comparable turnover about 11.1) and its inventory had consistently increased from year to year (227 percent over the two-year period).

Discovery Summary
In the second year, when the manager handed over the count sheets "that got left out of your set," the auditor thanked him, then went to the warehouse to check them out. Finding them inaccurate, she compared book inventories to his management reports and found an overstatement in the reports. This prompted further comparison of the computer-generated inventory with the count sheets and more evidence of overstated quantities on 22 of the 99 count sheets.
DOCUMENTS, SOURCES, AND "EXTENDED PROCEDURES"

References are often made in the auditing literature to "extended procedures," but they are rarely defined and listed. Authorities are afraid that a list will limit the range of such procedures, so "extended procedures" is generally left undefined as an open-ended set to refer vaguely to "whatever is necessary in the circumstances." This section describes some of the "extended procedures" and warns that (1) some auditors may consider them ordinary and (2) other auditors may consider them unnecessary in any circumstances. They are useful procedures in either event.

CONTENT OF COMMON DOCUMENTS

Auditing textbooks often advise beginner auditors to "examine checks," and to "check the employees on a payroll." It helps to know something about these common documents and the information that can be seen on them.

Information on a Check

Exhibit 1-2 describes the information found on a typical check. Knowledge of the codes for Federal Reserve districts, offices, states, and bank identification numbers could enable an auditor to spot a crude check forgery. Similarly, a forger's mistakes with the optional identification printing or the magnetic check number might supply a tip-off. If the amount of a check is altered after it has cleared the bank, the change would be noted by comparing the magnetic imprint of the amount paid to the amount written on the check face. The back of a check carries the endorsement(s) of the payees and holders in due course; the date and the name and routing number of the bank where the check was deposited; and the date, identification of the federal reserve office, and its routing number for the federal reserve check clearing. (Sometimes there is no federal reserve clearing identification when local checks are cleared locally without going through a Federal Reserve office.) Auditors can follow the path of a canceled check by following the banks where it was deposited and cleared. This route may or may not correspond with the characteristics of the payee. (For example, ask why a check to a local business in Texas was deposited in a small Missouri bank and cleared through the St. Louis Federal Reserve office.)
EXHIBIT 1-2 How to Read a Canceled Check and Endorsement

Optional Identification

Bank identification (city) / Last digit(s) of parent bank identification

First four digits of routing number

ABC Company
123 Main Street, Ste A
Any City, Any State 12345

Pay to the Order of Professional CPA Service $ 5,000

Main Street Bank
City, State, Zip Code

For __ Tax Preparation Fee ________________

As satisfied client

Routing Number identifies drawee bank - number sequentially provides information for the:
Federal Reserve district (bank location)
Federal Reserve district (clearing location)
Federal Reserve (state)
Bank identification number (parent bank)
EDP check digit

For Deposit Only Professional CPA Services Acct No. 102038

US National Bank
San Antonio, TX 114911266
Feb 14 2007

Payee Endorsement
Bank where deposited
(Prepared check)
(Federal Reserve Bank Clearing
Account)
Information on a Bank Statement

Most of the information shown on a bank statement is self-explanatory. However, auditors should not overlook the usefulness of some of the information: the bank’s count and dollar amount of deposits and checks can be compared to the detail data on the statement; the account holder’s federal business identification number is on the statement, and this can be used in other data bases (for individuals, this is a place to get a person's Social Security number); and the statement itself can be studied for alterations.

Common information found on a bank statement includes:

- Bank information
- Company information
- Account number
- Last Statement Date
- Last Statement Balance
- Number of Credits
- Number of Debits
- This Statement Date
- This Statement Balance
- Minimum Balance
- Average Balance
- Deposits
- Other Credits
- Checks Cleared
- Other Debits

Valid Social Security Numbers

In the United States, Social Security numbers have become a universal identification number. They can be useful to auditors when checking the personnel files and the validity of people on the payroll. Here are some characteristics of SSNs:

- Every SSN consists of three groups of digits, three digits followed by two, followed by four (XXX-XX-XXXX). No group contains consecutive zeros, so 000-XX-XXXX, XXX-00-XXXX, and XXX-XX-0000 are not valid numbers.
- The first three digits give the "area," indicating the state or territory where the number was issued. Numbers are usually issued at an early age, so the number might identify the state of birth. (Careful, however; the Social Security Administration may sometimes use numbers assigned to one geographic area for another.) By reference to the Social Security Number Table below, you can see that certain three-digit area numbers have not been issued (as of 1990): 588, 627-699, and 729-999. The numbers from 700 to 728 were issued for the Railroad Retirement system years ago and probably belong to older workers. However, some of these numbers are issued as a courtesy to foreign visitors and foreign students.
• The middle two digits are the "group number," which could be from 01 to 99. However, many two-digit combinations have not been issued. By reference to the Social Security Number Table, you can see that the SSN numbers 001-76-9876, 001-08-9876, and 001-11-9876 are fictitious because the group numbers 76, 08, and 11 in combination with area 001 have not been used (as of 1990). In SSNs issued before 1965, group numbers of 10 or higher should be even numbers; and in SSNs issued in or after 1965, the group number can be odd or even. This feature can be correlated with a person's reported birthdate.
• The last four digits can be 0001 to 9999. The only invalid one is 0000.

### SOCIAL SECURITY NUMBER TABLE

<table>
<thead>
<tr>
<th>Area Number</th>
<th>Odd less than 10</th>
<th>Even 10 and above</th>
<th>Even less than 10</th>
<th>Odd greater than 10</th>
<th>State or Territory</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Unassigned</td>
</tr>
<tr>
<td>001-003</td>
<td>09</td>
<td>94</td>
<td>None</td>
<td>None</td>
<td>New Hampshire</td>
</tr>
<tr>
<td>004-007</td>
<td>09</td>
<td>98</td>
<td>02</td>
<td>None</td>
<td>Maine</td>
</tr>
<tr>
<td>008-009</td>
<td>09</td>
<td>84</td>
<td>None</td>
<td>None</td>
<td>Vermont</td>
</tr>
<tr>
<td>010-029</td>
<td>09</td>
<td>84</td>
<td>None</td>
<td>None</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>030-034</td>
<td>09</td>
<td>82</td>
<td>None</td>
<td>None</td>
<td>Massachusetts</td>
</tr>
<tr>
<td>035-037</td>
<td>09</td>
<td>68</td>
<td>None</td>
<td>None</td>
<td>Rhode Island</td>
</tr>
<tr>
<td>038-039</td>
<td>09</td>
<td>66</td>
<td>None</td>
<td>None</td>
<td>Rhode Island</td>
</tr>
<tr>
<td>040-049</td>
<td>09</td>
<td>98</td>
<td>02</td>
<td>None</td>
<td>Connecticut</td>
</tr>
<tr>
<td>050-119</td>
<td>09</td>
<td>90</td>
<td>None</td>
<td>None</td>
<td>New York</td>
</tr>
<tr>
<td>120-134</td>
<td>09</td>
<td>88</td>
<td>None</td>
<td>None</td>
<td>New York</td>
</tr>
<tr>
<td>135-158</td>
<td>09</td>
<td>98</td>
<td>06</td>
<td>None</td>
<td>New Jersey</td>
</tr>
<tr>
<td>159-184</td>
<td>09</td>
<td>80</td>
<td>None</td>
<td>None</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td>185-211</td>
<td>09</td>
<td>78</td>
<td>None</td>
<td>None</td>
<td>Pennsylvania</td>
</tr>
<tr>
<td>212-216</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>59</td>
<td>Maryland</td>
</tr>
<tr>
<td>217-220</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>57</td>
<td>Maryland</td>
</tr>
<tr>
<td>221-222</td>
<td>09</td>
<td>92</td>
<td>None</td>
<td>None</td>
<td>Delaware</td>
</tr>
<tr>
<td>223-231</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>87</td>
<td>Virginia</td>
</tr>
<tr>
<td>232</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>47</td>
<td>North Carolina / West Virginia</td>
</tr>
<tr>
<td>233-236</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>47</td>
<td>West Virginia</td>
</tr>
<tr>
<td>237-246</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>95</td>
<td>North Carolina</td>
</tr>
<tr>
<td>247-251</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>South Carolina</td>
</tr>
<tr>
<td>252-260</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>Georgia</td>
</tr>
<tr>
<td>261-267</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>Florida</td>
</tr>
<tr>
<td>268-272</td>
<td>09</td>
<td>98</td>
<td>06</td>
<td>None</td>
<td>Ohio</td>
</tr>
<tr>
<td>273-302</td>
<td>09</td>
<td>98</td>
<td>04</td>
<td>None</td>
<td>Ohio</td>
</tr>
<tr>
<td>303-309</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>23</td>
<td>Indiana</td>
</tr>
<tr>
<td>310-317</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>17</td>
<td>Indiana</td>
</tr>
<tr>
<td>318-361</td>
<td>09</td>
<td>98</td>
<td>None</td>
<td>None</td>
<td>Illinois</td>
</tr>
<tr>
<td>362-386</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>25</td>
<td>Michigan</td>
</tr>
<tr>
<td>387-397</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>21</td>
<td>Wisconsin</td>
</tr>
<tr>
<td>398-399</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>19</td>
<td>Wisconsin</td>
</tr>
<tr>
<td>400-407</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>57</td>
<td>Kentucky</td>
</tr>
<tr>
<td>408-415</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>89</td>
<td>Tennessee</td>
</tr>
<tr>
<td>Area Number</td>
<td>Odd less than 10</td>
<td>Even 10 and above</td>
<td>Even less than 10</td>
<td>Odd greater than 10</td>
<td>State or Territory</td>
</tr>
<tr>
<td>-------------</td>
<td>-----------------</td>
<td>-------------------</td>
<td>------------------</td>
<td>--------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>416-424</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>51</td>
<td>Alabama</td>
</tr>
<tr>
<td>425-428</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>89</td>
<td>Mississippi</td>
</tr>
<tr>
<td>429-431</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>Arkansas</td>
</tr>
<tr>
<td>432</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>97</td>
<td>Arkansas</td>
</tr>
<tr>
<td>433-439</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>Louisiana</td>
</tr>
<tr>
<td>440-441</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>15</td>
<td>Oklahoma</td>
</tr>
<tr>
<td>442-448</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>13</td>
<td>Oklahoma</td>
</tr>
<tr>
<td>449-467</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>Texas</td>
</tr>
<tr>
<td>468-472</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>39</td>
<td>Minnesota</td>
</tr>
<tr>
<td>473-477</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>37</td>
<td>Minnesota</td>
</tr>
<tr>
<td>478-485</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>29</td>
<td>Iowa</td>
</tr>
<tr>
<td>486-500</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>17</td>
<td>Missouri</td>
</tr>
<tr>
<td>501</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>27</td>
<td>North Dakota</td>
</tr>
<tr>
<td>502</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>25</td>
<td>North Dakota</td>
</tr>
<tr>
<td>503-504</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>31</td>
<td>South Dakota</td>
</tr>
<tr>
<td>505-508</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>41</td>
<td>Nebraska</td>
</tr>
<tr>
<td>509-515</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>19</td>
<td>Kansas</td>
</tr>
<tr>
<td>516</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>35</td>
<td>Montana</td>
</tr>
<tr>
<td>517</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>33</td>
<td>Montana</td>
</tr>
<tr>
<td>518-519</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>59</td>
<td>Idaho</td>
</tr>
<tr>
<td>520</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>41</td>
<td>Wyoming</td>
</tr>
<tr>
<td>521-524</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>Colorado</td>
</tr>
<tr>
<td>525</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>New Mexico</td>
</tr>
<tr>
<td>526-527</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>Arizona</td>
</tr>
<tr>
<td>528-529</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>Utah</td>
</tr>
<tr>
<td>530</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>Nevada</td>
</tr>
<tr>
<td>531-539</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>45</td>
<td>Washington</td>
</tr>
<tr>
<td>540-544</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>59</td>
<td>Oregon</td>
</tr>
<tr>
<td>545-573</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>California</td>
</tr>
<tr>
<td>574</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>31</td>
<td>Alaska</td>
</tr>
<tr>
<td>575-576</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>89</td>
<td>Hawaii</td>
</tr>
<tr>
<td>577-579</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>31</td>
<td>District of Columbia</td>
</tr>
<tr>
<td>580</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>33</td>
<td>Puerto Rico / Virgin Islands</td>
</tr>
<tr>
<td>581-584</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>585</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>New Mexico</td>
</tr>
<tr>
<td>586</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>43</td>
<td>Guam / Amer. Samoa / N. Mariana Islands / Phillipines</td>
</tr>
<tr>
<td>587</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>87</td>
<td>Mississippi</td>
</tr>
<tr>
<td>588</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Mississippi</td>
</tr>
<tr>
<td>589-595</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>85</td>
<td>Florida</td>
</tr>
<tr>
<td>596-599</td>
<td>09</td>
<td>64</td>
<td>None</td>
<td>None</td>
<td>Puerto Rico</td>
</tr>
<tr>
<td>600-601</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>99</td>
<td>Arizona</td>
</tr>
<tr>
<td>602-620</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>21</td>
<td>California</td>
</tr>
<tr>
<td>621-626</td>
<td>09</td>
<td>98</td>
<td>08</td>
<td>19</td>
<td>California</td>
</tr>
<tr>
<td>627-645</td>
<td>09</td>
<td>72</td>
<td>None</td>
<td>None</td>
<td>Texas</td>
</tr>
<tr>
<td>646-647</td>
<td>09</td>
<td>54</td>
<td>None</td>
<td>None</td>
<td>Utah</td>
</tr>
<tr>
<td>648-649</td>
<td>09</td>
<td>22</td>
<td>None</td>
<td>None</td>
<td>New Mexico</td>
</tr>
</tbody>
</table>
### Highest Group Numbers

<table>
<thead>
<tr>
<th>Area Number</th>
<th>Odd less than 10</th>
<th>Even 10 and above</th>
<th>Even less than 10</th>
<th>Odd greater than 10</th>
<th>State or Territory</th>
</tr>
</thead>
<tbody>
<tr>
<td>650-653</td>
<td>09</td>
<td>16</td>
<td>None</td>
<td>None</td>
<td>Colorado</td>
</tr>
<tr>
<td>654-658</td>
<td>09</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>South Carolina</td>
</tr>
<tr>
<td>659-665</td>
<td>01</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Louisiana</td>
</tr>
<tr>
<td>666</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not mentioned</td>
</tr>
<tr>
<td>667-675</td>
<td>09</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Georgia</td>
</tr>
<tr>
<td>676-679</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Arkansas</td>
</tr>
<tr>
<td>680</td>
<td>09</td>
<td>24</td>
<td>None</td>
<td>None</td>
<td>Nevada</td>
</tr>
<tr>
<td>681-690</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>North Carolina</td>
</tr>
<tr>
<td>691-699</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Virginia</td>
</tr>
<tr>
<td>700-723</td>
<td>09</td>
<td>18</td>
<td>None</td>
<td>None</td>
<td>RR Retirement</td>
</tr>
<tr>
<td>724</td>
<td>09</td>
<td>28</td>
<td>None</td>
<td>None</td>
<td>RR Retirement</td>
</tr>
<tr>
<td>725-726</td>
<td>09</td>
<td>18</td>
<td>None</td>
<td>None</td>
<td>RR Retirement</td>
</tr>
<tr>
<td>727</td>
<td>09</td>
<td>10</td>
<td>None</td>
<td>None</td>
<td>RR Retirement</td>
</tr>
<tr>
<td>728</td>
<td>09</td>
<td>14</td>
<td>None</td>
<td>None</td>
<td>RR Retirement</td>
</tr>
<tr>
<td>729-749</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Unassigned</td>
</tr>
<tr>
<td>750-751</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Hawaii</td>
</tr>
<tr>
<td>752-755</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Mississippi</td>
</tr>
<tr>
<td>756-763</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Tennessee</td>
</tr>
<tr>
<td>764</td>
<td>03</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Arizona</td>
</tr>
<tr>
<td>765</td>
<td>01</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Arizona</td>
</tr>
<tr>
<td>766-999</td>
<td></td>
<td></td>
<td>None</td>
<td>Unassigned</td>
<td></td>
</tr>
</tbody>
</table>

### TECHNICAL NOTES

**AREA NUMBERS:** Since 1972 the Social Security Administration has assigned area numbers to the zip code for the applicant’s return address. Therefore, the area number might or might not signify the state or territory of birth or location at the time a social security number was issued. To find state and territory area number assignments, go to the web page at (www) ssa.gov/foia/stateweb.html

**GROUP NUMBERS:** The data in this table above is up to date as of October 2000. To find the current highest group numbers, go to (www) ssa.gov/foia/highgroup.htm

**RAILROAD (RR) RETIREMENT:** Numbers issued to railroad employees were discontinued 1 July 1963.

**OTHER:** Numbers in areas 574, 580, and 586 were also assigned to Southeast Asia refugees during the period April 1975 through November 1979. For general information about Social Security, go to (www) ssa.gov
SOURCES OF INFORMATION

A wide variety of records and information is available for various kinds of investigations ranging from personal background checks to business inquiries. Our concern here is with public records and ways to get them. Only a few of the hundreds of sources are described briefly below.

General Business Sources

City and county tax assessor-collectors keep files on real property by address and legal description, owner, taxable value, improvements, amount of taxes and delinquencies. State (and some city) regulatory agencies have directories of liquor licenses, and various professionals (e.g., CPAs, dentists, doctors, plumbers, electricians). The U.S. Department of Housing and Urban Development (HUD) has a central index file of appraisers, real estate brokers, and most components of the building industry. The U.S. Department of State has data on companies that apply for import and export licenses. The Federal Aviation Administration maintains files on the chain of ownership of all civil aircraft in the United States.

The U.S. Securities and Exchange Commission has extensive financial information on about 14,000 registered companies and their properties, principle officers, directors, and owners. Local Better Business Bureaus keep information about criminal rackets, cons, and their operators, and can provide information about the business reputation of local businesses. Standard & Poor's Register of Corporations, Directors, and Executives lists about 37,000 public and private companies and the names and titles of over 400,000 officials.

Business and Asset Identification Sources

Each country and state has a system for registering businesses—corporations, joint ventures, sole proprietorships, partnerships. They keep files on registered "assumed names" (DBA, or "Doing Business As" names). Some businesses may be registered with a state and not a county, or with a county and not a state. All real corporations are chartered by a state, and each state's secretary of state keeps corporate record information, such as the date of registration and the initial officers and owners. (Using these sources, you can find the assets or business "hidden" in the spouse's name.) Crooks often work through a labyrinth of business entities, and you can find all the registered ones in these sources. You can find phony vendor companies created by real employees to bilk employers with false billings. Banks, finance companies, and other creditors often file Uniform Commercial Code (UCC) records to record the interest of the creditor in assets used as collateral for a loan, so other parties cannot claim interest in the assets (e.g., boats, business equipment, appliances). UCCs are found in county clerks' offices and in a state's office of the secretary of state or commercial department of the state records office. (They are also online in some commercial databases.)
Federal and State Revenue Agencies

Ever wonder how revenue agents find tax evaders? One accountant described the following sources of tips for possible big audit findings. (1) Police and Drug Enforcement Agency arrest records point to people who may have illicit unreported income. (2) Real estate sales records may identify people who "forget" to put their sales in a tax return. (3) Auto registrations of expensive cars point to people who have a lot of money to spend, maybe some unreported income. (4) Comparison of state sales tax returns with income tax revenue amounts may reveal discrepancies (depending on which tax collector is feared the most). (5) Agents have used college-town newspaper rental ads to identify people who rent rooms, garage apartments, duplex halves, and the like, but forget to report the income.

EXTENDED PROCEDURES

The nature of extended procedures is limited only by an auditor's imagination and, sometimes, the willingness of management to cooperate in extraordinary audit activities. Next is a short series of extended procedures, with some brief explanations.

Count the Petty Cash Twice in a Day

The second count is unexpected, and you might catch an embezzling custodian short.

Investigate Suppliers (Vendors)

Check the Better Business Bureau for reputation, the telephone book for a listing and address, the state and county corporation records for owners and assumed names. You may find fictitious vendors being used to make false billings or companies related to purchasing department employees.

Investigate Customers

As with vendors, investigation may reveal companies set up by insiders, with billings at below-list prices so the insiders can "buy" goods and resell them at a profit.

Examine Endorsements on Canceled Checks

Look for second endorsements, especially the name of employees. Most business payments are deposited with one endorsement. Be sure to include checks payable to "cash" or to a bank for purchase of cashiers' checks. The second endorsee indicates that the payee may not have received the benefit of the payment.

Add Up the Accounts Receivable Subsidiary Ledger

Cash payments on customer accounts have been stolen, with receipts given, credit entry to the customer account, but no cash deposit and no entry to the control account.
Audit General Journal Entries

Experience has shown that the largest number of accounting errors requiring adjustment are found in nonroutine, nonsystematic journal entries. (Systematic accounting is the processing of large volumes of day-to-day ordinary transactions.)

Match Payroll to Life and Medical Insurance Deductions

Ghosts on the payroll seldom elect these insurance coverages. Doing so reduces the embezzler’s take and complicates the cover-up.

Match Payroll to Social Security Numbers

Fictitious SSNs may be chosen at random, making the mistake of using an unissued number or one that does not match with the birthdate. Sort the payroll SSNs in numerical order and look for false, duplicate, or unlikely (e.g., consecutive) numbers.

Match Payroll with Addresses

Look for multiple persons at the same address.

Retrieve Customers' Checks

If an employee has diverted customer payments, the canceled checks showing endorsements and deposits to a bank where the company has no account are not available because they are returned to the issuing organization (customer). Ask the customer to give originals, copies, or provide access for examination.

Use Marked Coins and Currency

Plant marked money in locations where cash collections should be gathered and turned over for deposit.

Measure Deposit Lag Time

Compare the dates of cash debit recording and deposit slip dates to dates credited by the bank. Someone who takes cash, then holds the deposit for the next cash receipts to make up the difference, causes a delay between the date of recording and the bank's date of deposit.

Document Examination

Look for erasures, alterations, copies where originals should be filed, telltale lines from a copier when a document has been pieced together, handwriting, and other oddities. Auditors should always insist on seeing original documents instead of photocopies. Professional document examination is a technical activity that requires special training (e.g., IRS, FBI), but crude alterations may be observed, at least enough to bring them to specialists’ attention.
WANT TO FUDGE YOUR TAX DEDUCTIONS?

Don't try to turn that $300 receipt into $800 with the stroke of a ballpoint pen. The IRS has ultraviolet scanners, ink chromatographers, densitometers, and argon-ion lasers that can identify the brand of pen, the age of the paper, and the source of the paper. Something printed on a laser printer is harder, but they're working on it.


Inquiry, Ask Questions

Be careful not to discuss fraud possibilities with the managers who might be involved. It gives them a chance to cover up or run. Fraud assessment questioning (FAQ) is described as a nonaccusatory method of asking key questions of personnel during a regular audit to give them an opportunity to furnish information about possible misdeeds. Fraud possibilities are addressed in a direct manner, so the FAQ approach must have the support of management. Example questions are: "Do you think fraud is a problem for business in general?" "Do you think this company has any particular problem with fraud?" "In your department, who is beyond suspicion?" "Is there any information you would like to furnish regarding possible fraud within this organization?"

Covert Surveillance

Observe activities while not being seen. External auditors might watch employees clocking onto a work shift, observing whether they use only one time card. Traveling hotel auditors may check in unannounced, use the restaurant and entertainment facilities, and watch the employees skimming receipts and tickets. (Trailing people on streets and maintaining a "stake-out" should be left to trained investigators.)

Horizontal and Vertical Analyses

This is analytical review ratio analysis and is very similar to preliminary analytical procedures. (A technical explanation is in Robertson, J.C., Auditing, eighth edition, Chapter 5, Richard D. Irwin, Inc., 1996.) Horizontal analysis refers to changes of financial statement numbers and ratios across several years. Vertical analysis refers to financial statement amounts expressed each year as proportions of a base, such as sales for the income statement accounts and total assets for the balance sheet accounts. Auditors look for relationships that do not make sense as indicators of potential large misstatement and fraud.

Net Worth Analysis

This is used when fraud has been discovered or strongly suspected, and the information to calculate a suspect's net worth can be obtained (e.g., asset and liability records, bank accounts). The method is to calculate the suspect's net worth (known assets minus known liabilities) at the beginning and end of a period (months or years), and then try to account for the difference as (1) known income less living expenses and (2) unidentified difference. The unidentified difference may be the best available approximation of the amount of a theft.
Expenditure Analysis

This is similar to net worth analysis, except the data is the suspect's spending for all purposes compared to known income. If spending exceeds legitimate and explainable income, the difference may be the amount of a theft.

AFTER DISCOVERING A FRAUD

Building a case against a fraudster is a task for trained fraud examiners. Most internal and external auditors take roles as assistants to fraud examiners who know how to conduct interviews, perform surveillance, use informants, and obtain usable confessions. In almost all cases, the postdiscovery activity proceeds with a special prosecutorial assignment under the cooperation or leadership of management. A district attorney and police officials may be involved. Prosecution of fraudsters is advisable because, if left unpunished, they often go on to steal again. This is no place for "normal" auditing.

While engaged in audit work, auditors should know how to preserve the chain of custody of evidence. The chain of custody is the crucial link of the evidence to the suspect, called the "relevance" of evidence by attorneys and judges. If documents are lost, mutilated, coffee-soaked, compromised (so a defense attorney can argue that they were altered to frame the suspect), they can lose their effectiveness for the prosecution. Auditors should learn to mark the evidence, writing an identification of the location, condition, date, time, and circumstances as soon as it appears to be a signal of fraud. This marking should be on a separate tag or page, the original document should be put in a protective envelope (plastic) for preservation, and audit work should proceed with copies of the documents instead of originals.

A record should be made of the safekeeping and of all persons who use the original. Any eyewitness observations should be timely recorded in a memorandum or on tape (audio or video), with corroboration of colleagues, if possible. There are other features to the chain of custody relating to interviews, confessions, documents obtained by subpoena, and other matters, but these activities usually are not conducted by auditors.

Independent CPAs often accept engagements for litigation support and expert witnessing. This work is often called forensic accounting, which means the application of accounting and auditing skills to legal problems, both civil and criminal. Litigation support can take several forms, but it usually amounts to consulting in the capacity of helping attorneys document case evidence and determine damages. Expert witness work involves testifying to findings determined during litigation support and testifying about accounting principles and auditing standards applications.
SUMMARY

Fraud awareness auditing starts with knowledge of the types of errors, irregularities, illegal acts, and frauds that can be perpetrated. External, internal, and governmental auditors all have standards for care, attention, planning, detection, and reporting of some kinds of errors, irregularities, and illegal acts. The Association of Certified Fraud Examiners publishes standards for Certified Fraud Examiners.

Fraud may be contemplated when people have motives, usually financial needs, for stealing money or property. Motive, combined with perceived opportunity and a lapse of integrity, generally makes the probability of fraud or theft very high. Opportunities arise when an organization's management has lax attitudes about setting examples for good behavior and about maintenance of a supportive control environment. The fear of getting caught by control procedures is a strong deterrent for many would-be fraudsters. Otherwise, attentive management of personnel can ease the pressures people feel and, thus, reduce the incidence of fraud.

Auditors need to know about the red flags – the telltale signs and indications that have accompanied many frauds. When studying a business operation, auditors' ability to "think like a crook" to devise ways to steal can help in the planning of procedures designed to determine whether it happened. Often, imaginative "extended procedures" can be employed to unearth evidence of fraudulent activity. However, technical and personal care must always be exercised because accusations of fraud are always taken very seriously. For this reason, after preliminary findings indicate fraud possibilities, auditors should enlist the cooperation of management and assist fraud examination professionals in bringing an investigation to a conclusion.
PRACTICAL CASE PROBLEMS
INSTRUCTIONS FOR CASES

These following cases are designed like the ones presented earlier in the chapter. They give the problem, the method, the paper trail, and the amount.

Please note: you are not required to complete this assignment as part of your CPE certification. However this exercise will reinforce your comprehension and ability to address the audit approach. If you choose to complete this exercise, in each of the following cases your assignment is to write the "audit approach" portion of the case, organized around these sections:

**Objective**: Express the objective in terms of the facts supposedly asserted in financial records, accounts, and statements.

**Control**: Write a brief explanation of desirable controls, missing controls, and especially the kinds of "deviations" that might arise from the situation described in the case.

**Test of controls**: Write some procedures for getting evidence about existing controls, especially procedures that could discover deviations from controls. If there are no controls to test, then there are no procedures to perform; go then to the next section. A "procedure" should instruct someone about the source(s) of evidence to tap and the work to do.

**Audit of balance**: Write some procedures for getting evidence about the existence, completeness, valuation, ownership, or disclosure assertions identified in your objective section above.

**Discovery summary**: Write a short statement about the discovery you expect to accomplish with your procedures.

Once you have completed writing the audit approach, sample responses are included for your review to compare your response to that suggested by the author.
Write the "audit approach" section like the cases in the chapter. For this case, give the recommended adjusting journal entry as well as the audit approach.

**Problem**: Overstated sales caused overstated net income, retained earnings, current assets, working capital, and total assets. Overstated cash collections did not change the total current assets or total assets, but it increased the amount of cash and decreased the amount of accounts receivable.

**Method**: Alpha Brewery Corporation has generally good control policies and procedures related to authorization of transactions for accounting entry, and the accounting manual has instructions for recording sales transactions in the proper accounting period. The company regularly closes the accounting process each Friday at 5 p.m. to prepare weekly management reports. The year-end date (cutoff date) is December 31 and, in 20X0, December 31, was a Monday. However, the accounting was performed through Friday as usual, and the accounts were closed for the year on January 4.

**Paper Trail**: All the entries were properly dated after December 31, including the sales invoices, cash receipts, and shipping documents. However, the trial balance from which the financial statements were prepared was dated December 31, 20X0. Nobody noticed the slip of a few days because the Friday closing was normal.

**Amount**: Alpha recorded sales of $672,000 and gross profit of $268,800 over the January 1-4 period. Cash collections on customers’ accounts came in the amount of $800,000.
AUDIT APPROACH: THANK GOODNESS IT'S FRIDAY

**Objective:** Obtain evidence to determine the existence, completeness, and valuation of sales for the year ended December 31, 20X0, and cash and accounts receivable as of December 31, 20X0.

**Control:** The company had in place the proper instructions to people to date transactions on the actual date on which they occurred and to enter sales and cost of goods sold on the day of shipment and to enter cash receipts on the day received in the company offices. An accounting supervisor should have checked the entries through Friday to make sure the dates corresponded with the actual events, and that the accounts for the year were closed with Monday's transactions.

**Test of Controls:** In this case, the auditors need to be aware of the company's weekly routine closing and the possibility that the intervention of the December 31 date might cause a problem. Asking the question: "Did you cut off the accounting on Monday night this week?" might elicit the "Oh, we forgot!" response. Otherwise, it is normal to sample transactions around the year-end date to determine whether they were recorded in the proper accounting period.

The procedure: Select transactions 7-10 days before and after the year-end date, and inspect the dates on supporting documentation for evidence of accounting in the proper period.

**Audit of Balance:** The audit for sales overstatement is partly accomplished by auditing the cash and accounts receivable at December 31 for overstatement (the dangling debit location). Confirm a sample of accounts receivable. If the accounts are too large, the auditors expect the debtors to say so, thus leading to detection of sales overstatements.

Cash overstatement is audited by auditing the bank reconciliation to see whether deposits in transit (the deposits sent late in December) actually cleared the bank early in January. Obviously, the January 4 cash collections could not reach the bank until at least Monday, January 7. That's too long for a December 31 deposit to be in transit to a local bank.

The completeness of sales recordings is audited by selecting a sample of sales transactions (and supporting shipping documents) in the early part of the next accounting period (January 20X1). One way that sales of 20X0 could be incomplete would be to postpone recording December shipments until January, and this procedure will detect them if the shipping documents are dated properly.

The completeness of cash collections (and accounts receivable credits) are audited by auditing the cash deposits early in January to see whether there is any sign of holding cash without entry until January.

In this case, the existence objective is more significant for discovery of the problem than the completeness objective. After all, the January 1-4 sales, shipments, and cash collections did not "exist" in December 20X0.
**Discovery Summary:** The test of controls sample from the days before and after December 31 quickly revealed the problem. Company accounting personnel were embarrassed, but there was no effort to misstate the financial statements. This was a simple error. The company readily made the following adjustment:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$672,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>403,200</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>800,000</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td></td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>403,200</td>
</tr>
<tr>
<td>Cash</td>
<td>800,000</td>
</tr>
</tbody>
</table>
CASE STUDY: THE PHANTOM OF THE INVENTORY.
Financial Reporting: Overstated Inventory and Profits.

Write the "audit approach" section like the cases in the chapter, and also recalculate the income (loss) before taxes using the correct inventory figures. (Assume the correct beginning inventory two years ago was $5.5 million.)

**Problem:** Overstated physical inventory caused understated cost of goods sold and overstated net income, current assets, total assets, and retained earnings.

**Method:** All Bright Company manufactured lamps. Paul M, manager of the State Street plant, was under pressure to produce profits so the company could maintain its loans at the bank. The loans were secured by the inventory of 1,500 types of finished goods, work in process, and parts used for making lamps (bases, shades, wire, nuts, bolts, and so on). Paul arranged the physical inventory counting procedures and accompanied the external audit team while the external auditors observed the count and made test counts after the company personnel had recorded their counts on tags attached to the inventory locations. At the auditors' request, Paul directed them to the "most valuable" inventory for their test counts, although he did not show them all of the most valuable types. When the auditors were looking the other way, Paul raised the physical count on inventory tags the auditors did not include in their test counts. When everyone had finished each floor of the multistory warehouse, all the tags were gathered and sent to data processing for computer compilation and pricing at FIFO cost.

**Paper Trail:** All Bright had no perpetual inventory records. All the record of the inventory quantity and pricing was in the count tags and the priced compilation, which was produced by the data processing department six weeks later. The auditors traced their test counts to the compilation and did not notice the raised physical quantities on the inventory types they did not test count. They also did not notice some extra (fictitious) tags Paul had handed over to data processing.

**Amount:** Paul falsified the inventory for three years before the company declared bankruptcy. Over that period, the inventory was overstated by $1 million (17 percent, two years ago), $2.5 million (31 percent, one year ago), and $3 million (29 percent, current year). The financial statements showed the following (dollars in 000):

<table>
<thead>
<tr>
<th></th>
<th>Two Years Ago</th>
<th>One Year Ago</th>
<th>Current Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$25,000</td>
<td>$29,000</td>
<td>$40,500</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>(20,000)</td>
<td>(22,000)</td>
<td>(29,000)</td>
</tr>
<tr>
<td>Expenses</td>
<td>(5,000)</td>
<td>(8,000)</td>
<td>(9,000)</td>
</tr>
<tr>
<td>Income (loss) before taxes</td>
<td>0</td>
<td>$(1,000)</td>
<td>$2,500</td>
</tr>
<tr>
<td>Ending inventory</td>
<td>$6,000</td>
<td>$8,000</td>
<td>$10,200</td>
</tr>
<tr>
<td>Other current assets</td>
<td>9,000</td>
<td>8,500</td>
<td>17,500</td>
</tr>
<tr>
<td>Total assets</td>
<td>21,000</td>
<td>21,600</td>
<td>34,300</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>5,000</td>
<td>5,500</td>
<td>13,000</td>
</tr>
<tr>
<td>Long-term debt *</td>
<td>5,500</td>
<td>6,600</td>
<td>9,300</td>
</tr>
<tr>
<td>Stockholder equity</td>
<td>10,500</td>
<td>9,500</td>
<td>12,000</td>
</tr>
</tbody>
</table>

* Secured by inventory pledged to the bank.
AUDIT APPROACH: THE PHANTOM OF THE INVENTORY

Objective: Obtain evidence of the existence and completeness of the inventory.

Control: Since All Bright keeps no perpetual inventory records, all the desirable controls relate to the physical counting. (Pricing and valuation are important, but are not included in this case).

Control starts with the instructions to company personnel about care and accuracy in counting, including follow-up teams to double-count or test count before the auditors make test counts. Instructions should include procedures for gathering the tags so that none are omitted (ensuring completeness of the inventory counting) and none are altered/raised (ensuring existence of the inventory).

Test of Controls: The auditors need to know enough about the business to know which inventory types are the more valuable ones and should not need to rely on company personnel to tell them. The auditors need to monitor the counting and the completion of the company procedures, making their own counts to test the accuracy of the counting, keeping them for later tracing to the EDP compilation to ensure that no fictitious quantities get added to the inventory.

As a matter of skepticism, auditors thus should not let company personnel know which types they test counted. These procedures provide evidence of the control over the completeness of the inventory, evidence that nothing was omitted from the count.

The company has no control over the existence of the inventory, because there were no perpetual inventory records or other schedule of inventory to test by selecting items, then going to the warehouse to see whether they were there.

Audit of Balance: The audit for completeness of the quantities in the inventory balance is accomplished by the evidence obtained from this procedure: Take secret test counts of inventory in place in the warehouse, and trace the counts to the EDP inventory compilation.

The audit for existence requires more effort, especially since the auditors lose control of the tags when they disappear into the data processing department for computer compilation. These procedures are appropriate: Make photocopies of the tags when they are gathered from the warehouse floor, then with a sample selected at random from the photocopies, return to the floor and make more test counts to get evidence of the existence of the inventory being sent to data processing for compilation. Obtain a useful control total (tag numbers, physical quantity) for later comparison to the computer compilation to determine whether any quantities were added after the physical count. Trace some quantities from the photocopies to the final computer compilation to ensure that no quantities have been altered (raised or lowered).

Discovery Summary: The auditors did not perform any of the existence-related procedures, and Paul was able to fool them.
**Recalculation of Actual Costs of Goods Sold:**

<table>
<thead>
<tr>
<th></th>
<th>Two Years Ago</th>
<th>One Year Ago</th>
<th>Current Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of goods sold</td>
<td>$20,000</td>
<td>$22,000</td>
<td>$29,000</td>
</tr>
<tr>
<td>Increase in inventory</td>
<td>500</td>
<td>2,000</td>
<td>2,200</td>
</tr>
<tr>
<td>(ending inventory minus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>beginning)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>$20,500</td>
<td>$24,000</td>
<td>$31,200</td>
</tr>
<tr>
<td>Actual decrease (increase) of inventory</td>
<td>500</td>
<td>(500)</td>
<td>(1,700)</td>
</tr>
<tr>
<td>Actual costs of goods sold</td>
<td>$21,000</td>
<td>$23,500</td>
<td>$29,500</td>
</tr>
</tbody>
</table>

**Income Recalculation:**

<table>
<thead>
<tr>
<th></th>
<th>Two Years Ago</th>
<th>One Year Ago</th>
<th>Current Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$25,000</td>
<td>$29,000</td>
<td>$40,500</td>
</tr>
<tr>
<td>Actual cost of goods sold</td>
<td>(21,000)</td>
<td>(23,500)</td>
<td>(29,500)</td>
</tr>
<tr>
<td>Expenses</td>
<td>(5,000)</td>
<td>(8,000)</td>
<td>(9,000)</td>
</tr>
<tr>
<td>Actual income (loss) before taxes</td>
<td>$(1,000)</td>
<td>$(2,500)</td>
<td>$2,000</td>
</tr>
</tbody>
</table>

**Ending inventory**

<table>
<thead>
<tr>
<th></th>
<th>Two Years Ago</th>
<th>One Year Ago</th>
<th>Current Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ending inventory</td>
<td>$5,500</td>
<td>$5,500</td>
<td>$7,200</td>
</tr>
<tr>
<td>Other current assets</td>
<td>$9,000</td>
<td>$8,500</td>
<td>$17,500</td>
</tr>
<tr>
<td>Total assets</td>
<td>$20,000</td>
<td>$19,100</td>
<td>$31,300</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>$5,000</td>
<td>$5,500</td>
<td>$13,000</td>
</tr>
<tr>
<td>Long-term debt *</td>
<td>$5,500</td>
<td>$6,600</td>
<td>$9,300</td>
</tr>
<tr>
<td>Stockholder equity</td>
<td>$9,500</td>
<td>$7,000</td>
<td>$9,000</td>
</tr>
</tbody>
</table>

*secured by inventory pledged to the bank
CASE STUDY: IS THIS THE PERFECT CRIME?

Embezzlers often try to cover up by removing canceled checks they made payable to themselves or endorsed with their own names. Missing canceled checks are a signal (red flag). However, people who reconcile bank accounts may not notice missing checks if the bank reconciliation is performed using only the numerical listing printed in the bank statement. Now consider the case of truncated bank statements, when the bank does not even return the canceled checks to the payor. All the checks are "missing," and the bank reconciler has no opportunity to notice anything about canceled checks.

Required:

Consider the following story of a real embezzlement. List and explain the ways and means you believe someone might detect the embezzlement. Think first about the ordinary everyday control activities. Then, think about extensive detection efforts assuming a tip or indication of a possible fraud has been received. Is this a "perfect crime?"

This was the ingenious embezzler's scheme:

(a) He hired a print shop to print a private stock of Ajax Company checks in the company's numerical sequence.

(b) In his job as an accounts payable clerk, he intercepted legitimate checks written by the accounts payable department and signed by the Ajax treasurer, then destroyed them.

(c) He substituted the same-numbered check from the private stock, payable to himself in the same amount as the legitimate check, and he "signed" it with a rubber stamp that looked enough like the Ajax Company treasurer's signature to fool the paying bank.

(d) He deposited the money in his own bank account. The bank statement reconciler (a different person) compared the check numbers and amounts listed in the cleared items in the bank statement to the recorded cash disbursement (check number and amount), thus did not notice the trick.

The embezzler was able to process the vendor's "past due" notice and next-month statement with complete documentation, enabling the Ajax treasurer to sign another check the next month paying both the past due balance and current charges. The embezzler was careful to scatter the double-expense payments among numerous accounts (telephone, office supplies, inventory, etc.), so the double-paid expenses did not distort any accounts. As time passed, the embezzler recommended budget figures that allowed a large enough budget so his double-paid expenses in various categories did not often pop up as large variances from the budget.
CASE SOLUTION: PERFECT CRIME?

The ingenious scheme was a perfect crime for a long time. Only the greed of the embezzler finally tipped off the managers, who commissioned a special investigation to learn why expenses were high, profits low, and cash flow small.

Ordinary everyday control activities for detection:

1. Someone else taking over the embezzler's duties at vacation time might have been less willing or able to dig out the documentation to support payment of "past due" amounts, thus leading to suspicion and maybe discovery. The embezzler avoided the problem by clearing all the vendor payments a month before his regular vacation.

2. The treasurer might have been more diligent about remembering earlier payments of amounts later submitted as "past due," but she had other more important assignments. (In fact the documents were just scanned and the checks were signed with a mechanical signature plate.)

3. Someone in charge of investigating budget variances (when they occurred) might have been more in tune with "thinking like a crook," but several people in several departments were not that careful. The variances were not very large after the first two years (although some larger ones began to show toward the end when the embezzler got greedy.)

Extensive detection efforts:

The embezzler was caught because he was too greedy – adverse cash flow alerted the business owner, and an investigation started.

1. The investigator spent a long time reviewing the expense accounts and studying documentation. He noticed fairly frequent payments of "past due" balances.

2. In the course of repeated interviews with the company president, he learned about the company's policy of paying bills on time to obtain trade discounts. The president was surprised to learn of the numerous incidents of past due bills.

3. More searching by the investigator led to notice of five "quarterly payments" in an expense account for the rental of a photocopy machine. This was the first obvious sign of a duplicate payment.

4. The investigator asked the bank to send copies of the checks for the five payments. One proved to be payable to the embezzler. This discovery led to requests for access to all the company's canceled checks, and the investigator then was able to find numerous checks payable to the embezzler. The differences in the company's own checks and the embezzler's private stock were small, but they were noticeable.

5. Charges were filed. The district attorney subpoenaed the embezzler's bank account records, and the bogus checks were matched with deposits.
CHAPTER 1: FRAUD AWARENESS AUDITING – SUMMARY / REVIEW

The following summarizes the important points related to the chapter just completed. Following the outline are review study questions with suggested solutions which provide evaluative and responsive feedback. You should answer the study questions and review the suggested solutions to confirm that you have a clear understanding of the material presented prior to proceeding to subsequent chapters.

OUTLINE

A. Definitions Related to Fraud

- Fraud
- Employee fraud
- Embezzlement
- Larceny
- Defalcation
- Management fraud
- Fraudulent financial reporting
- Fraud auditing

B. Characteristics of Fraudsters

- Likely to be married
- Member of a church
- Educated beyond high school
- No arrest record
- Range in age from teens to over 60
- Socially conforming
- Employment tenure from 1 to 20 or more years
- Usually act alone (70 percent of incidents)

The largest frauds are committed by people who hold high executive positions, have long tenure with an organization, and are respected and trusted employees.

C. Fraud Conditions

- Motive – some kind of pressure experienced by a person and believed unshareable with friends and confidants. Forms of motives include psychotic, egocentric, ideological, and economic
- Opportunity – an open door for solving the unshareable problem in secret by violating a trust
- Lack of Integrity – unimpeachable integrity is the ability to act in accordance with the highest moral and ethical values all of the time. The lapses and occasional lack of integrity permit motive and opportunity to take form as fraud
D. Fraud Prevention

The key is to deal with the conditions that lead to fraud:

- Motive
- Opportunity
- Lack of Integrity

1. Deal with unshareable needs (motive) with programs designed to cope with personal needs. The most effective long-run prevention lies in the practice of management by caring for people. Ways to encourage fraud include practice autocratic management, manage by power with little trust in people, manage by crisis, centralize authority in top management, measure performance on a short-term basis, make profits the only criterion for success, make rewards punitive, stingy and political. Also, give feedback that is always critical and negative, create a highly hostile, competitive workplace, and insist everything be documented with a rule for everything.

2. Install and operate effective internal controls to forestall opportunities. Look out for missing documents, second endorsements on checks, unusual endorsements, unexplained adjustments to inventory balances and accounts receivables, old items in bank reconciliation, old outstanding checks, customer complaints, and unusual patterns in deposits in transit.

3. Set examples of integrity to discourage rationalization. Examples include executives set the “tone at the top”, publish a code of conduct, establish accountability, obtain background checks on employees, use a “hotline”, and terminate and prosecute employees who steal.

E. Fraud Detection

Since an organization cannot prevent all fraud, its auditors, accountants, and security personnel must be acquainted with some detection techniques.

1. Red Flags – employee fraud and management fraud
2. Explore the possibilities (opportunities) offered by internal control weaknesses
CHAPTER 1 – REVIEW QUESTIONS

1. Fraud involves the unintentional misstatements or omissions of amounts or disclosures in financial statements.
   a) true
   b) false

2. Embezzlement and larceny are the same thing.
   a) true
   b) false

3. External and internal auditors get credit for finding about ______ percent of discovered frauds.
   a) 10
   b) 20
   c) 45
   d) 60

4. What type of “motives” are more common in business fraud than the others:
   a) psychotic
   b) economic
   c) egocentric
   d) ideological

5. Opportunity is one of the factors that increases the probability of fraud and can be defined as:
   a) some kind of pressure experienced by a person and believed unshareable with friends and confidants
   b) a lack of the ability to act in accordance with the highest moral and ethical values all the time
   c) an open door for solving an unshareable problem in secret by violating a trust
   d) none of the above

6. The most effective long-run prevention for fraud lies in the practice of management by caring for people.
   a) true
   b) false
7. In consideration of fraud detection, which of the following statements is not true:
   
a) certain personality traits are definitely indicative of a fraudster  
b) catching people in the fraud act itself is difficult and unusual; many frauds are  
   investigated by noticing signs and signals  
c) observations regarding a persons’ habits and lifestyle and changes in such may  
   reveal red flags related to employee fraud  
d) fraud detection often involves noticing telltale hints of the “cover up” that may  
   appear in the accounting records  

8. Through management fraud and “creative accounting,” companies have caused  
   financial statements to be materially misleading by:
   
a) overstating revenues and assets  
b) understating expenses and liabilities  
c) giving disclosures that are misleading or that omit important information  
d) all of the above  

9. An important feature of internal control is the separation of certain duties.  
   
a) true  
b) false  

10. “Extended procedures” in an audit can include a variety of procedures deemed as  
    whatever is necessary” in consideration of the circumstances. For example, in a  
    payroll fraud scheme, there could be bogus employees set up with bogus social  
    security numbers. An auditor might check payroll records and social security numbers  
    to look for red flags. Which of the following is false and may constitute a “red flag” in  
    consideration of social security number validation:
    
a) every SSN consists of three groups of digits: three digits, followed by two, followed  
    by four  
b) certain three-digit combinations for the first three digits have not been issued by the  
    social security administration  
c) the middle two digits are the “group number,” however, many two-digit  
    combinations have not been issued and by referencing the SSN Table, an auditor  
    could see that certain SSN’s are fictitious  
d) the only group of digits that can contain consecutive zeros is the second, or middle,  
    two-digit combination  

11. The nature of extended procedures is limited only by an auditor’s imagination. Some  
    examples of extended procedures could include:
    
a) matching payroll to life and medical insurance deductions  
b) using marked coins and currency  
c) adding up the accounts receivable subsidiary ledger  
d) all of the above
Please note: AICPA / NASBA CPE guidelines require that CPE sponsors provide 5 review questions along with evaluative and responsive feedback for each CPE credit granted. Although there are an adequate amount of multiple-choice and true/false review questions located throughout the course material to meet this specific requirement, we have included additional review questions to enhance the student’s learning process. The suggested solutions provided are based upon the author’s experience and opinion as reflected in the course material.

For questions 12-14 below, review the case study and write on a separate piece of paper the “audit approach” portion of the case, organized around these sections:

Objective: Express the objective in terms of the facts supposedly asserted in financial records, accounts, and statements.

Control: Write a brief explanation of desirable controls, missing controls, and especially the kinds of “deviations” that might arise from the situation described in the case.

Test of controls: Write some procedures for getting evidence about existing controls, especially procedures that could discover deviations from controls. If there are no controls to test, then there are no procedures to perform; go then to the next section. A “procedure” should instruct someone about the source(s) of evidence to tap and the work to do.

Audit of balance: Write some procedures for getting evidence about the existence, completeness, valuation, ownership, or disclosure assertions identified in your objective section above.

Discovery summary: Write a short statement about the discovery you expect to accomplish with your procedures.

After writing your audit approach, review the proposed audit approach attached for each to compare and contrast ideas and opinions.
12. **CASE STUDY: STEALING WAS EASY.**
   **Employee Embezzlement via Cash Disbursements and Inventory.**

Write the "audit approach" section like the cases presented earlier in the chapter.

**Problem:**

Cash embezzlement, inventory and expense overstatement.

**Method:**

Lew Marcus was the only bookkeeper at the Ace Plumbing Supply Company. He ordered the supplies and inventory, paid the bills, collected the cash receipts and checks sent by customers, and reconciled the bank statements. The company had about $11 million in sales, inventory of $3 million, and expenses that generally ran about $6-7 million each year. Nobody checked Lew's work, so sometimes when he received a bill for goods from a supplier (say, for $8,000) he would make an accounting entry for $12,000 debit to inventory, write an $8,000 check to pay the bill, then write a $4,000 check to himself. The check to Lew was not recorded, and he removed it from the bank statement when he prepared the bank reconciliation. The owner of the business considered the monthly bank reconciliation a proper control activity.

**Paper Trail:**

No perpetual inventory records were kept, and no periodic inventory count was taken. The general ledger contained an inventory control account balance that was reduced by 60 percent of the amount of each sale of plumbing fixtures (estimated cost of sales). The bank statements and reconciliations were in a file. The statements showed the check number and amount of Lew's checks to himself, but the checks themselves were missing. The checks to vendors were in the amounts of their bills, but the entries in the cash disbursements journal showed higher amounts.

**Amount:**

Over an eight-year period, Lew embezzled $420,000.
13. **CASE STUDY: THE EXTRA BANK ACCOUNT.**  
Employee Embezzlement via Cash Receipts and Payment of Personal Expenses.

In this case, you can assume you have received the informant's message. Write the "audit approach" section like the cases in the chapter.

**Problem:**

Cash receipts pocketed and personal expenses paid from business account.

**Method:**

The Ourtown Independent School District, like all others, had red tape about school board approval of cash disbursements. To get around the rules, and to make timely payment of some bills possible, the superintendent of schools had a school bank account that was used in the manner of a petty cash fund. The board knew about it and had given blanket approval in advance for its use to make timely payment of minor school expenses. The board, however, never reviewed the activity in this account. The business manager had sole responsibility for the account, subject to the annual audit. The account got money from transfers from other school accounts and from deposit of cafeteria cash receipts. The superintendent did not like to be bothered with details, and he often signed blank checks so the business manager would not need to run in for a signature all the time. The business manager sometimes paid her personal American Express credit card bills, charged personal items to the school's VISA account, and pocketed some cafeteria cash receipts before deposit.

**Paper Trail:**

An informant called the state education audit agency and told the story that this business manager had used school funds to buy hosiery. When told of this story, the superintendent told the auditor to place no credibility in the informant, who is "out to get us." The business manager had in fact used the account to write unauthorized checks to "cash," put her own American Express bills in the school files (the school district had a VISA card, not American Express), and signed on the school card for gasoline and auto repairs during periods of vacation and summer when school was not in session. (As for the hosiery, she purchased $700 worth with school funds one year.) The superintendent was genuinely unaware of the misuse of funds.

**Amount:**

The business manager had been employed for six years, was trusted, and stole an estimated $25,000.
14. **CASE STUDY: DOCTOR! DOCTOR?**  
Employee Embezzlement: Medical Claims Fraud.

Write the "audit approach" section like the cases in the chapter.

*Problem:*

Fictitious medical benefit claims were paid by the company, which self-insured up to $50,000 per employee. The expense account that included legitimate and false charges was "employee medical benefits."

*Method:*

As manager of the claims payment department, Martha Lee was considered one of Beta Magnetic's best employees. She never missed a day of work in 10 years, and her department had one of the company's best efficiency ratings. Controls were considered good, including the verification by a claims processor that: (1) the patient was a Beta employee, (2) medical treatments were covered in the plan, (3) the charges were within approved guidelines, (4) the cumulative claims for the employee did not exceed $50,000 (if over $50,000 a claim was submitted to an insurance company), and (5) the calculation for payment was correct. After verification processing, claims were sent to the claims payment department to pay the doctor directly. No payments ever went directly to employees. Martha Lee prepared false claims on real employees, forging the signature of various claims processors, adding her own review approval, naming bogus doctors who would be paid by the payment department. The payments were mailed to various post office box addresses and to her husband's business address.

Nobody ever verified claims information with the employees. The employees received no reports of medical benefits paid on their behalf. While the department had performance reports by claims processors, these reports did not show claim-by-claim details. No one verified the credentials of the doctors.

*Paper Trail:*

The falsified claims forms were in Beta's files, containing all the fictitious data on employee names, processor signatures, doctors' bills, and phony doctors and addresses. The canceled checks were returned by the bank and were kept in Beta's files, containing "endorsements" by the doctors. Martha Lee and her husband were somewhat clever: They deposited the checks in various banks in accounts opened in the names and identification of the "doctors."

Martha Lee did not stumble on the paper trail. She drew the attention of an auditor who saw her take her 24 claims processing employees out to an annual staff appreciation luncheon in a fleet of stretch limousines.

*Amount:*

Over the last seven years, Martha Lee and her husband stole $3.5 million, and, until the last, no one noticed anything unusual about the total amount of claims paid.
CHAPTER 1 – SOLUTIONS AND SUGGESTED RESPONSES

1. A: True is incorrect. Fraud consists of knowingly making material misrepresentations of fact, with the intent of inducing someone to believe the falsehood and act upon it, and thus, suffer a loss or damage. “Errors” are unintentional misstatements or omissions of amounts or disclosures in financial statements.

B: False is correct. The AICPA generally accepted auditing standards describes “errors” as unintentional misstatements or omissions of amounts or disclosures in financial statements. “Fraud” involves intentional misstatements or omissions.

(See page 1-3 of the course material.)

2. A: True is incorrect. Embezzlement is a type of fraud involving employees’ or nonemployees’ wrongfully taking money or property entrusted to their care, custody and control. Larceny is simple theft. They are not the same thing.

B: False is correct. Larceny and embezzlement are not the same thing. Larceny is simple theft. Embezzlement is a type of fraud involving employees’ or nonemployees’ wrongfully taking money or property entrusted to their care, custody, and control.

(See page 1-3 of the course material.)

3. A: Incorrect. The actual percentage is larger than 10%.

B: Correct. Larger percentages are discovered by voluntary confessions, anonymous tips, and other haphazard means.

C: Incorrect. The actual percentage identified by external and internal auditors is actually less.

D: Incorrect. The actual percentage identified by external and internal auditors is actually less.

(See page 1-5 of the course material.)
4. A: Incorrect. Psychotic motivation is characterized by the “habitual criminal” who steals simply for the sake of stealing. Psychotic motivation is relatively rare.

**B: Correct.** Economic motives are often simply a need for money. Even ordinarily honest people can fall into circumstances where there is a new or unexpected need for money, and the normal options for talking about it or going through legitimate channels seem to be closed. Economic motives are common in business fraud.

C: Incorrect. Egocentric motives drive people to steal to achieve more personal prestige. This is not the most common motive in business fraud.

D: Incorrect. Ideological motives are those that are held by individuals who think their “cause” is morally superior and they feel justified by making someone else a “victim” to further that cause. This is not the most common motive in business fraud.

(See page 1-6 of the course material.)

5. A: Incorrect. This is the definition of “motive.”

B: Incorrect. This is the definition of “integrity.”

**C: Correct.** Opportunity is one of the factors that can contribute to the probability of fraud and it is an open door for solving the unshareable problem (the motive) in secret by violating a trust. Of course, to do so, you also must have the other factor … a lack of integrity – which permits motive and opportunity to take form as fraud.

D: Incorrect. None of the above is incorrect because “opportunity” was adequately defined in one of the responses.

(See page 1-7 of the course material.)

6. **A: True is correct.** Often, fraud is rationalized by the suspect because they believe they were treated poorly by the company or management and that in effect they deserved it. Management has the capability to effectively discourage instead of encourage fraud by treating people fairly, and respectfully and basically by caring about the individuals that make up the company.

B: False is incorrect. Management and supervisors at all levels can exhibit a genuine concern for the personal and professional needs of their subordinates and fellow managers, and subordinates can show the same concern for each other and their managers. Such case will create an environment which will lend itself more to discouraging fraud instead of encouraging fraud.

(See page 1-8 of the course material).
7. **A: Correct.** This is the false statement. Although fraudsters may exhibit similar characteristics, you cannot rely simply on the characteristic itself as a fraud indicator. Personality red flags are difficult because (1) honest people sometimes show them and (2) they often are hidden from view. It is easier to notice changes in a person’s characteristics or behavior as a possible indication of fraud.

   **B: Incorrect.** This is a true statement. Frauds consist of the act itself, the conversion of the assets to the fraudster’s use, and the cover-up. Catching people in the act as well as seeing the act of conversion is difficult to observe. Many frauds are investigated by noticing signs and signals, then following the trail.

   **C: Incorrect.** This is a true statement. Noticing changes is easier than simply picking certain personality traits as indicators of fraud. Changes should be paid attention to especially when a person changes their lifestyle or spends more money than their salary justifies – for example on homes, furniture, jewelry, autos, etc.

   **D: Incorrect.** This is a true statement. These generally appear in the accounting records – exceptions and oddities such as transactions that are: at odd times of the day, month, season; too many or too few transactions; amounts too high or too low, too consistent and/or too different from the normal transactions.

   (See pages 1-11 to 1-12 of the course material)

8. **A: Incorrect.** Management fraud (through creative accounting) has caused financial statements to be materially misleading by overstating revenues and assets, but this is not the only correct answer for this question.

   **B: Incorrect.** Management fraud (through creative accounting) has caused financial statements to be materially misleading by understating expenses and liabilities, but this is not the only correct answer to this question.

   **C: Incorrect.** Management fraud (through creative accounting) has caused financial statements to be materially misleading by giving disclosures that are misleading or that omit important information, but this is not the only correct answer to this question.

   **D: Correct.** A, B and C are all true. Fraud that affects financial statements often arises from the perceived need to “get through a difficult period.” Generally, fraudulent financial statements show financial performance and ratios that are better than current industry experience or better than the company’s own history.

   (See pages 1-12 to 1-13 of the course material).
9. **A: True is correct.** An important feature of internal control is the separation of these duties and responsibilities: (1) transaction authorization, (2) record-keeping, (3) custody of, or access to, assets, and (4) reconciliation of actual assets to the accounting records.

B: False is incorrect. There are certain duties and responsibilities that should be kept separate for effective internal control. Generally, a person who, acting alone or in a conspiracy, can perform two or more of these functions also can commit a fraud by taking assets, converting them, and covering up.

(See page 1-14 of the course material)

10. **A: Incorrect.** This is a true statement regarding social security numbers, and therefore not the correct answer.

B: Incorrect. This is a true statement regarding social security numbers, and therefore not the correct answer.

C: Incorrect. This is a true statement regarding social security numbers, and therefore not the correct answer.

**D: Correct.** This is the false statement, and therefore the correct answer. No group of digits contains consecutive zeros. Therefore, if an auditor notices consecutive zeros in any of the three sets of digits, they should see it as red flag equating a fictitious social security number and possibly a fictitious employee and payroll fraud.

(See page 1-24 of the course material)

11. **A: Incorrect.** This is an example – ghosts on the payroll seldom elect these insurance coverages. Doing so reduces the embezzler’s take and complicates the cover-up. However, this is not the correct answer because the other options are also examples of extended procedures.

B: Incorrect. This is an example – plant marked money in locations where cash collections should be gathered and turned over for deposit. If the coins don’t show up, there’s a problem!! However, this is not the correct answer because the other options are also examples of extended procedures.

C: Incorrect. This is an example – this is where cash payments on customer accounts have been stolen, with receipts given, credit entry made to the customer account, but no cash deposit and no entry made into the control account. However, this is not the correct answer because the other options are also examples of extended procedures.

**D: Correct.** All of the answers listed are indeed examples of extended procedures. Such procedures are limited only by the auditor’s imagination (and sometimes the willingness of management to cooperate in extraordinary audit activities).

(See page 1-29 of the course material).
12. Audit Approach: Stealing Was Easy

Note: The approach could be written to cover cash receipts and accounting for customer accounts, but nothing would be found because Lew did not steal the customers’ money.

Objective: Obtain evidence of the existence and valuation of the inventory.

Control: The company had no controls over comparison of purchase orders with payments and no reconciliation of the inventory account with the physical inventory (control by counting the inventory, valuing it, and comparing the result to the inventory account).

The bank reconciliation is a desirable control feature when it is performed properly by a person not otherwise involved in the accounting. In a small business, however, separation of duties is not always possible, and a good reconciliation may be performed anyway.

The deviations that might arise are that Lew could write unauthorized checks, hide them in the accounting records, and rig the bank reconciliations to mask their existence.

Test of Controls: Audit the performance of the bank reconciliation control (comparison of actual cash according to the bank with the cash shown in the accounting records). For a selection of bank reconciliations, (1) see that the explanation of differences between book and bank balances is mathematically accurate, (2) count the number of checks and deposits attached to the statement and compare to the count number printed on the fact of the statement, (3) compare each cleared check and deposit slip to the entry in the bank’s statement, (4) compare each deposit in transit and outstanding check to the cleared item in the next month’s bank statement, and (5) trace each cleared item to the cash receipts and cash disbursements accounting entries for agreement of amount and date.

Since there were controls connected with the inventory account, no test procedures should be performed.

Audit of Balance: Audit the year-end bank reconciliation as described above for the purpose of auditing the cash amount shown in the financial statements.

Get management to perform a complete count and valuation of the inventory. Observe the count extensively to determine whether it is reasonably accurate. Compare the resulting compilation to the inventory control account.

Discovery Summary: The test of controls and year-end audit of the bank reconciliations might turn up an example of a missing canceled check. (If Lew stole an amount of $4,000 or so at a time, he had only about 100 checks to himself over an eight-year period, about 12 or 13 per year, so there is no guarantee that a selection of one or two bank reconciliations would contain one. One check is enough!) In light of the concentration of duties in Lew and the importance of the bank reconciliation procedure, perhaps the auditors should perform “extended procedures” in the form of testing/auditing a large number of the bank reconciliations.

The physical count and valuation of inventory is the most likely place to find the “dangling debit”. It should show a significant inventory shortage and prompt further investigation of the cause. At least the physical count will flush the overstated assets out of the balance sheet and make the financial statements reasonable, even if all the expense categories are not properly identified (e.g. “fraud loss” instead of cost of goods sold).

**Objective:** Obtain evidence to determine whether expenses paid from the extra bank account were for legitimate school business. Auditors cannot ignore informants' tales.

**Control:** Cash disbursements should be authorized by responsible officers of the organization to be for valid business purposes. It is not unusual for a business manager to have the authorization responsibility. Tight control would call for disbursement review (at time of check signature) by another responsible person (superintendent), and this control was not always observed. Cash receipts should be listed by the person initially in control (cafeteria manager), deposited by another person (business manager), and a responsible person (superintendent, internal auditor, external auditor) should compare the initial control record to the deposit to note any differences.

**Test of Controls:** Forewarned by the informant, the auditors could make inquiry: “Does the school district have a fund for which individual disbursements are not approved by the school board?” and “Does the business manager have responsibility for this fund?” Answers to both questions directed to the superintendent would be “yes”, and the auditors can then concentrate initial attention on the particular account records.

The next question is: “Does the cafeteria manager make a record of the daily receipts?” Answer by the superintendent: “I don’t know, ask her”. Luckily, it turned out that the cafeteria manager, without direct instructions, made notes on a calendar of the amount of money sent forward to the business manager for deposit. Procedure: Compare the amounts from the cafeteria manager’s calendar to the deposits in the account.

**Audit of Balance:** The “balances” being audited are the expense accounts that received the debits from the extra bank account. However, it is efficient to go to the bank account records as a starting point for the investigation. Obtain the bank statements and supporting documents for cash disbursements. Study them for evidence of (1) improperly authorized payments, (2) payments of personal expenses on the school district’s VISA account, and (3) payments to unauthorized persons or to “cash” for unauthorized purposes.

**Discovery Summary:** After finding payments to American Express and VISA, auditors asked the superintendent about the credit card used by the school and learned that the school used only VISA. Inquiry at American Express revealed the business manager as the owner of the account number found on receipts in the supporting documents. (Actually, by this time the business manager had confessed, but identification of the account might have been harder). Study of the items and dates on the VISA charge slips showed items (e.g. hosiery) not used at the school and dates that did not match business periods. Review of the checks identified the son as payee on some.

During this review, the auditors found checks dated out of numerical sequence and a missing block in the most current month. This was a sign of having blank checks signed, so the superintendent was asked, and admitted doing so. The missing block was in the business manager’s desk drawer, already signed.

Comparing the cafeteria manager’s notes of cash receipts showed shortages in numerous deposits. The business manager admitted taking the cash.
14. Audit Approach: Doctor! Doctor?

**Objective:** Obtain evidence to determine whether employee medical benefits “existed” in the sense of being valid claims paid to valid doctors.

**Control:** The controls are good so far as they go. The claims processors used internal data in their work – employee files for identification, treatment descriptions submitted by doctors with comparisons to plan provisions, and mathematical calculations. This work amounted to all the approval necessary for the claims payment department to prepare a check.

There were no controls that connected the claims data with outside sources, such as employee acknowledgment or doctor investigation.

**Test of Controls:** The processing and control work in the claims processing department can be audited for deviations from controls. Procedure: Select a sample of paid claims and reperform the claims processing procedures to verify the employee status, coverage of treatment, proper guideline charges, cumulative amount less than $50,000, and accurate calculation. However, this procedure would not help answer the question: “Does Martha Lee steal the money to pay for the limousines?”

“Thinking like a crook” points out the holes in the controls. Nobody seeks to verify data with external sources. However, an auditor must be careful in an investigation not to cast aspersions on a manager by letting rumors start by interviewing employees to find out whether they actually had the medical claim paid on their behalf. If money is being taken, the company check must be intercepted in some manner.

**Audit of Balance:** The balance under audit is the sum of the charges in the employee medical benefits account, and the objective relates to the valid existence of the payments. The first procedure can be: Obtain a list of doctors paid by the company and look them up in the state medical society directory. Look up their addresses and determine whether they are valid business addresses. You might try comparing claims processors’ signatures on various forms, but this is hard to do and requires training. An extended procedure would be: Compare the doctors’ addresses to addresses known to be associated with Martha Lee and other claims processing employees.

**Discovery Summary:** The comparison of doctors to the medical society directory showed eight “doctors” who were not licensed in the current period. Five of these eight had post office box addresses, and discrete inquiries and surveillance showed them rented to Martha Lee. The other three had the same mailing address as her husband’s business. Further investigation, involving the district attorney and police, was necessary to obtain personal financial records and reconstruct the thefts from prior years.
CHAPTER 2
OVERVIEW OF INTERNAL CONTROL

This chapter defines and explains internal controls as they affect financial recordkeeping and reporting. Controls help prevent and detect errors and frauds, although they cannot guarantee prevention and detection of all types of frauds. Management is responsible for designing, implementing, and monitoring internal controls. Internal and external auditors are concerned with internal controls in connection with planning audit procedures and making reports of control weaknesses. This chapter provides an overview of internal control theory mainly from the perspective of external auditors.

INTRODUCTION

Internal control evaluation and control risk assessment is a very important part of the work in every audit of financial statements. Generally accepted auditing standards (GAAS) emphasize internal control in the second field work standard:

A sufficient understanding of internal control is to be obtained to plan the audit and to determine the nature, timing, and extent of tests to be performed (SAS 1, AU 150; SAS 55, AU 319).

The key idea in the audit standard is "to plan the audit" (i.e., determine the nature, timing, and extent of subsequent audit procedures). The "understanding of a client's internal control" need be only sufficient to accomplish this purpose. The audit standard does not require auditors to evaluate controls exhaustively in every audit. However, as you study this chapter, you will encounter aspects of auditors’ involvement with controls that go beyond this limited purpose.

This chapter presents a general introduction to the theory and definitions you will find useful for internal control evaluation and control risk assessment. Chapters 3-7 explain internal control considerations in the context of specific accounts and classes of transaction.

INTRODUCTION – THE COSO REPORT

Through 1995, the auditing standard on internal control in a financial statement audit was SAS 55, AU 319. In 1996, the AICPA Auditing Standards Board issued SAS 78 to amend SAS 55 to make it consistent with a popular report on internal control known under the title of Internal Control – Integrated Framework produced in 1992 by the Committee of Sponsoring Organizations of the Treadway Commission (hereafter abbreviated as the "COSO Report"). This chapter incorporates SAS 78 and the COSO Report and uses them to explain independent auditors' responsibilities for internal control evaluation and control risk assessment.
DEFINITION

The COSO Report defined internal control as follows:

Internal control is a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following three categories:

- Reliability of financial reporting.
- Compliance with applicable laws and regulations.
- Effectiveness and efficiency of operations.

FUNDAMENTAL CONCEPTS

COSO stated that this definition reflects four fundamental concepts – process, people, reasonable assurance, and category objectives.

Internal control is a process, not an end in itself, but a means to ends (i.e., the category objectives). Internal control is a dynamic function (process) operating every day.

Internal control is operated by people. A company may have policy manuals, procedures, forms, computer-controlled information and accounting, and other features of control, but people make the system work at every level of company management. People establish the objectives, put control mechanisms in place, and operate them.

Internal control provides reasonable assurance, not absolute assurance, that category control objectives will be achieved. Since people operate the controls, breakdowns can occur. Human error, deliberate circumvention, management override, and improper collusion among people who are supposed to act independently can cause failure to achieve objectives. Internal control can help prevent and detect these people-caused failures, but it cannot guarantee that they will never happen. In auditing standards, the concept of reasonable assurance recognizes that the costs of controls should not exceed the benefits that are expected from the controls (SAS 78, AU 319). Hence, a company can decide that certain controls are too costly in light of the risk of loss that may occur.

Internal control is designed to achieve objectives in three categories. In the operations category, some examples of objectives are: good business reputation, return on investment, market share, new product introduction, and safeguarding assets in the context of their effective and efficient use. The operations control objectives cover business strategy and tactics. In the financial reporting category, the objectives are: reliable published financial reports (e.g., annual financial statements, interim financial reports), and safeguarding assets from unauthorized use (e.g., embezzlement, theft, damage, unauthorized purchase or disposition), including the accounting-reporting of lapses in asset safeguarding. The financial reporting objectives are of most direct concern to internal and external auditors. In the compliance category, the broad objective is compliance with laws and regulations that affect the company. Internal and external auditors are also concerned with evaluation of compliance objective controls.
INTERNAL CONTROL COMPONENTS

The COSO Report and SAS 78 state that internal control consists of five interrelated components (Exhibit 2-1) – management's control environment, management's risk assessment, management's control activities, management's monitoring, and the management information and communication systems that link all the components. COSO wrote the report to be a guide for managements of organizations (directors, officers, internal auditors, and employees). Hence, management is used to describe all the components. The COSO Report is not a guide for external auditors' procedural control evaluation and control risk assessment responsibilities. However, the components provide the focus for auditors' attention. Exhibit 2-1 shows the interrelated control components.

The control components are relevant for each of the control objectives categories. The COSO Report defined each of the three categories and stated that management should enact the five components in each of them. Exhibit 2-2 diagrams this scheme.

The foregoing description of the COSO Report briefly explains the entire integrated framework and places the reliable financial reporting category in perspective. The remainder of this chapter deals with the objectives of financial reporting controls and the auditors' work in evaluating them. The chapter concentrates on the components as they apply to financial reporting. The auditors' task is to evaluate internal control based on evidence that these five components are (1) properly designed and specified, (2) placed in operation, and (3) functioning effectively. Thus, the five components are prerequisite criteria for effective internal control.

EXHIBIT 2-1 Interrelated Internal Control Components

[Diagram showing the interrelated control components: Control environment, control monitoring, control activities, risk assessment, and information and communication component connections.]
EXHIBIT 2-2 Internal Control-Integrated Framework (COSO)

Definition

Internal control is a management process

Objectives categories

Categories

Efficiency and effectiveness of operations
Reliable financial reporting
Compliance with laws and regulations

Objectives

Various business, company specific
Reliable financial annual and interim reports (e.g., GAAP)
Compliance with ones that apply to the company

Components

Control environment
Risk assessment
Control activities
Monitoring
Information and Communication

Control environment
Risk assessment
Control activities
Monitoring
Information and Communication

Control environment
Risk assessment
Control activities
Monitoring
Information and Communication
MANAGEMENT VERSUS AUDITOR RESPONSIBILITY

A company's management is responsible for the components of its internal control. Management establishes a control environment, assesses risks it wishes to control, specifies information and communication channels and content (including the accounting system and its reports), designs and implements control activities, and monitors, supervises, and maintains the controls.

External auditors are not responsible for designing effective controls for audit clients. They are responsible for evaluating existing internal controls and assessing the control risk in them. "Designing control" refers to management's responsibility for the five components. However, accounting firms undertake control design as consulting engagements and consider such work to be separate and apart from the audit engagement responsibility.

External auditors often provide information useful to management and directors for carrying out the company's control mission. Auditors' communications of reportable conditions and material weaknesses are intended to help management carry out its responsibilities for internal control monitoring and change. However, external auditors' observations and recommendations are usually limited to external financial reporting matters.

External auditors' basis for knowing about reportable conditions and material weaknesses is found in their familiarity with the types of errors, frauds, and misstatements that can occur in any account balance or class of transactions. Clearly, hundreds of innocent errors and not-so-innocent fraud schemes are possible. (Many of these are discussed in Chapter 1, Fraud Awareness Auditing.) Instead of trying to learn hundreds of possible errors and frauds, it is better to start with seven general categories of them. Exhibit 2-3 shows a typology of seven categories, with some examples. The external auditors' task of control risk assessment starts with learning about a company's controls designed to prevent, detect, and correct these potential errors and frauds.

EXHIBIT 2-3 General Categories and Examples of Errors and Frauds

1. Invalid transactions are recorded: Fictitious sales are recorded and charged to nonexistent customers.
2. Valid transactions are omitted from the accounts: Shipments to customers never get recorded.
3. Unauthorized transactions are executed and recorded: A customer's order is not approved for credit, yet the goods are shipped, billed, and charged to the customer without requiring payment in advance.
4. Transaction amounts are inaccurate: A customer is billed and the sale is recorded in the wrong amount because the quantity shipped and the quantity billed are not the same and the unit price is for a different product.
5. Transactions are classified in the wrong accounts: Sales to a subsidiary company are recorded as sales to outsiders instead of intercompany sales, or the amount is charged to the wrong customer account receivable record.
6. Transaction accounting and posting is incorrect: Sales are posted in total to the accounts receivable control account, but some are not posted to individual customer account records.
7. Transactions are recorded in the wrong period: Shipments made in January (next year) are backdated and recorded as sales and charges to customers in December. Shipments in December are recorded as sales and charges to customers in January.
REASONS FOR INTERNAL CONTROL EVALUATION

A useful, though unofficial, definition of internal control related to a company's financial reporting objectives is: "All the policies and procedures a company uses to prevent, detect, and correct errors and frauds that might get into financial statements." You can properly infer that such control enables a company to safeguard its assets from unauthorized disposition and prepare financial statements in conformity with generally accepted accounting principles.

The auditors' task is to assess the control risk associated with the controls management designed and implemented for the period under audit. Control risk is the probability that a company's controls will fail to detect errors and frauds, provided any enter the accounting system in the first place. Control risk is a characteristic of the client's controls. The auditors' assessment task is to assign an evaluation to the control risk. Many auditors conclude the internal control risk assessment decision with a descriptive assessment (e.g., maximum, slightly below maximum, high, moderate, low), and some auditors put probability numbers on it (e.g., 1.0, 0.90, 0.70, 0.50, 0.30).

PLANNING THE SUBSTANTIVE AUDIT PROGRAM

The primary reason under GAAS for conducting an evaluation of a company's internal control and assessing control risk is to give the auditors a basis for planning the audit and determining the nature, timing, and extent of audit procedures for the account balance (substantive) audit program. The presumption is that the auditors have prepared a preliminary audit program and have ideas about the work they want to do. This preliminary program might be last year's audit program or an off-the-shelf "standard program."

An account balance (substantive) audit program is a specification (list) of procedures designed to produce evidence about the assertions in financial statements. Each procedure should have identifiable characteristics of nature, timing, and extent, as well as a direct association with one or more financial statement assertions. The nature of procedures refers to the seven general procedures: recalculation, physical observation, confirmation, verbal inquiry, document examination, scanning, and analytical procedures. The timing of procedures is a matter of when they are performed: at "interim" before the balance sheet date, or at "year-end" shortly before and after the balance sheet date. The extent of procedures refers to the amount of work done when the procedures are performed.

If auditors assess control risk as "maximum" (i.e., poor control), they will tend to perform a great deal of substantive balance-audit work with large sample sizes (extent), at or near the company's fiscal year-end (timing), using procedures designed to obtain high-quality external evidence (nature). On the other hand, if auditors assess control risk as "low" (i.e., effective control), they can perform a lesser quantity of substantive balance-audit work with small sample sizes (extent), at an interim date before the company's fiscal year-end (timing), using a mixture of procedures designed to obtain high-quality external evidence and lower quality internal evidence (nature). Of course, auditors may assess control risk between "low" and "maximum" (e.g., "moderate," "high," or "slightly below maximum") and adjust the substantive audit work accordingly.
COMMUNICATING INTERNAL CONTROL DEFICIENCIES

A secondary reason for evaluating internal control is to provide a basis for communicating to a client's management and directors any reportable conditions regarding internal control problems. Reportable conditions are defined as matters the auditors believe should be communicated to the client's audit committee because they represent significant deficiencies in the design or operation of the internal controls that could adversely affect the organization's ability to record, process, summarize, and report financial data in the financial statements (SAS 60, AU 325). Examples include:

- Absence of appropriate segregation of duties.
- Absence of appropriate reviews and approvals of transactions.
- Evidence of failure of control procedures.
- Evidence of intentional management override of control procedures by persons in authority to the detriment of control objectives.
- Evidence of willful wrongdoing by employees or management, including manipulation, falsification, or alteration of accounting records.

Although auditors are not obligated to search for or identify reportable conditions, they must communicate ones that come to their attention in the normal performance of the audit. Written communications are preferred, but auditing standards permit auditors to communicate reportable conditions orally, in which case a memorandum of the oral report should be placed in the working papers (SAS 60, AU 325). However, because the potential for misinterpretation is great, auditors should not issue reports stating that no reportable conditions were noted during an audit (AU 9325). A manager receiving such a report could conclude (incorrectly) that the auditors are stating positively that the company has no internal control problems.
The five components of internal control are considered to be criteria for evaluating a company’s financial reporting controls and the bases for auditors’ assessment of control risk as it relates to financial statements. Thus, auditors must consider the five components in terms of (1) understanding a client’s financial reporting controls, (2) documenting the understanding, (3) assessing the control risk, and (4) using the control risk assessment to plan the remainder of the audit work (Exhibit 2-4).

EXHIBIT 2-4 Auditors’ Work on Internal Control

- Obtain an understanding of the client’s internal control.
- Management’s Information and Communication Systems
  - Management’s Control Environment
    - Document the Environment and Risk Assessment
  - Management’s Risk Assessment
  - Management’s Accounting System
  - Management’s Monitoring Activities
- Management’s Control Activities
  - Document the Control Activities
- Assess the control risk (preliminary).
- Assess control risk below the maximum.
  - Document the control risk assessment and plan the balance – audit program
  - Perform audit test of control procedures
CONTROL ENVIRONMENT AND RISK ASSESSMENT

The control environment sets the tone of the organization. It is the foundation for all other components of internal control. It provides discipline and structure. Control environment factors include the integrity, ethical values, and competence of the company’s people. The following are general elements of an internal control environment:

- Management’s philosophy and operating style
- Management and employee integrity and ethical values
- Company organization structure
- Company commitment to competence—job skills and knowledge
- Functioning of the board of directors, particularly its audit committee
- Methods of assigning authority and responsibility
- Human resource policies and practices

Management should assess the risks present in the financial reporting category. The production of reliable financial reports is the general objective. All companies face the risk that their financial statements may be unreliable. They may report assets that do not exist or ones that are not owned by the company. Asset and liability amounts may be improperly valued. They may fail to report liabilities and expenses. They may present information that does not conform to GAAP. The risk of producing unreliable financial reports arises from control breakdowns. The types of errors and frauds shown in Exhibit 2-3 are manifestations of these breakdowns.

Since management fraud in financial statements became a topic for acceptable discussion in the late 1980s, the “tone at the top” has become a buzzword for the necessary condition for good internal control. The "tone" is virtually identical to the control environment component. Likewise, the financial reporting risk assessment component is an integral part of the effort to avoid fraudulent financial reports.

INFORMATION AND COMMUNICATION-- THE ACCOUNTING SYSTEM

The information and communication component of internal control is a necessary prerequisite for establishing, maintaining, and changing control features in a company. While a wide range of communication channels is important for control, this section concentrates on the accounting system. It is an integral part of the monitoring and control activities in companies.

An accounting system processes transactions, records them in journals and ledgers (either computerized or manual), and produces financial statements without necessarily guaranteeing their accuracy. Nevertheless, the accounting policies and procedures often contain important elements of control. The accounting instruction: "Prepare sales invoices only when shipment has been made," is a control so long as the people performing the work follow the instruction. The control part of this policy could be expressed: "Prepare sales invoices and record them only when a shipping document is matched."
All accounting systems, whether computerized or manual, consist of four essential functions--data identification, data entry, transaction processing, and report production and distribution.

_**Data identification**_ is the analysis of transactions and their "capture" for accounting purposes. The "capture" amounts to creation of source documents, such as sales invoices, credit memos, cash receipts listings, purchase orders, receiving reports, negotiable checks, and the like. These source documents provide the information for data entry. However, in some computerized accounting systems, the paper source documents are not produced first. Transactions may be entered directly on a keyboard, or electronic equipment may capture the transaction information. Your long-distance telephone charges are initially captured by the telephone company's computers using your telephone number, the location called, and the duration of the call.

_**Data description and entry**_ often consists of accounting personnel using a batch of source documents to enter transaction information on a keyboard into an accounting software program. This process may produce a "book of original entry," another name for a _journal_, such as the sales journal, purchases journal, cash receipts journal, cash disbursements journal, general journal, and others. In advanced paperless systems, electronic equipment may enter the accounting information automatically without producing an intermediate journal. Your long-distance telephone call is entered automatically into the telephone company's revenue and receivable accounts. Your monthly telephone bill is later produced from the accounting information.

_**Transaction measurement and processing**_ usually refers to posting the journals to the general ledger accounts. The posting operation updates the account balances. When all data are entered and processed, the account balances are ready for placement in reports.

_**Report production and distribution**_ is the object of the accounting system. The account balances are put into internal management reports and external financial statements. The internal reports are management's feedback for monitoring operations. The external reports are the financial information for outside investors, creditors, and others.

The accounting system produces a trail of accounting operations, from data identification to reports. Often, this is called the _audit trail_. You can visualize that it starts with the source documents and proceeds through to the financial reports. Auditors often follow this trail frontwards and backwards! They will follow it backwards from the financial reports to the source documents to determine whether everything in the financial reports is supported by appropriate source documents. They will follow it forward from source documents to reports to determine that everything that happened (transactions) was recorded in the accounts and reported in the financial statements.
MONITORING

Internal control systems need to be monitored. Management should assess the quality of its control performance on a timely basis. Monitoring includes regular management and supervisory activities and other actions personnel take in performing their duties. Errors, frauds, and internal control deficiencies should be reported to top management and to the audit committee of the board of directors.

Monitoring helps ensure that internal control continues to operate effectively. Everyday monitoring of the types shown below are part of the internal control process:

- Operating managers compare internal reports and published financial statements with their knowledge of the business.
- Customer complaints of amounts billed are analyzed.
- Vendor complaints of amounts paid are analyzed.
- Regulators report to the company on compliance with laws and regulations (e.g., bank examiners’ reports, IRS audits).
- Accounting managers supervise the accuracy and completeness of transaction processing.
- Recorded amounts are periodically compared to actual assets and liabilities (e.g., internal auditors' inventory counts, receivables and payables confirmations, bank reconciliations).
- External auditors report on control performance and give recommendations for improvement.
- Training sessions for management and employees heighten awareness of the importance of controls.

These elements of the monitoring component have a great deal in common with the controls included in the control activities component. Indeed, some of the control activities explained later in this chapter are monitoring activities as well (e.g., periodic comparison).

CONTROL ACTIVITIES

Control activities are the policies and procedures that help ensure that management directives are carried out. They include: (1) Performance reviews – for example, study of budget variances with follow-up action, (2) Information processing, including approvals, authorizations, verifications, and reconciliations, (3) Physical controls designed to ensure safeguarding and security of assets and records, and (4) Segregation of duties designed to reduce opportunities for a person to be in a position to perpetrate and conceal errors and frauds when performing normal duties.

Control activities are actions taken by a client's management and employees. You should be careful to distinguish the "client's control activities" from the "auditors' test of control procedures." Control activities are part of the internal control designed and operated by the company. The auditors' procedures are the auditors' own evidence-gathering work performed to obtain evidence about the client's control activities.
Control activities (both computerized and manual) are imposed on the accounting system for the purpose of preventing, detecting, and correcting errors and frauds that might enter and flow through to the financial statements. For example, a control activity related to the accounting policy cited earlier would be: "At the end of each day, the billing supervisor reviews all the sales invoices to see that the file copy has a bill of lading copy attached."

Minimum requirements for a good control-oriented accounting system include a chart of accounts and some written definitions and instructions about measuring and classifying transactions. In most organizations, such material is incorporated in computer systems documentation, computer program documentation, systems and procedures manuals, flowcharts of transaction processing, and various paper forms. A company's internal auditors and systems staff often review and evaluate this documentation. Independent auditors may review and study their work instead of doing the same tasks over again.

Accounting manuals should contain statements of objectives, policies, and procedures. Management should approve statements of specific accounting and control objectives and assure that appropriate steps are taken to accomplish them. In general, the overriding objective of an accounting system is to produce financial statement assertions that are correct. An accounting system cannot accomplish this objective without an integrated set of control activities.

TRANSACTION PROCESSING CONTROL OBJECTIVES AND ACTIVITIES

While the objective of the control system is to produce reliable financial statement assertions, principally in account balances, the overriding objective of control activities is to process transactions correctly. Correctly processed transactions produce correct account balances, which in turn help produce accurate and reliable assertions in the financial statements.

CONTROL ACTIVITIES

Companies use numerous detailed accounting and control activities designed to achieve the control objectives. These detail activities are directed, one way or another, toward preventing, detecting, or correcting the seven general kinds of errors, frauds, and misstatements that can occur.

Control activities can be complicated. Exhibit 2-5 presents an overview of the organization of the discussion that follows. The discussion is organized under the headings of general controls and application controls (error-checking activities).
EXHIBIT 2-5 Overview of Transaction Processing Control Activities

General Control Activities
- Capable personnel
- Segregation of responsibilities
  - Authorization
  - Recording (recordkeeping)
  - Custody
  - Periodic reconciliation
- Controlled access
- Periodic comparison
- Error-checking routines

Input Controls
- Input authorization
- Check digits
- Record counts
- Batch financial totals
- Batch cash totals
- Valid character tests
- Valid signs tests
- Missing data tests
- Sequence tests
- Limit / reasonableness tests
- Error resubmission

Processing Controls
- Run-to-run totals
- Control total reports
- File logs
- Limit / reasonableness tests

Output Controls
- Control totals
- Master file changes
- Output distribution
GENERAL CONTROL ACTIVITIES

While the "tone at the top" (control environment) is pervasive, the control activities of capable personnel, segregation of responsibilities, controlled access, and periodic comparison are always important in a company's control process.

Capable Personnel

The most important feature of control is the people who make the system work. A company's personnel problems sometimes create internal control problems. High turnover in accounting jobs means that inexperienced people are doing the accounting and control tasks, and they generally make more mistakes than experienced people. New accounting officers and managers (financial vice president, controller, chief accountant, plant accountant, data processing manager) may not be familiar enough with company accounting and may make technical and judgmental errors. Sometimes, accounting officers and employees are fired because they refuse to go along with improper accounting procedures desired by a higher level of management. In general, accounting personnel changes may be a warning signal.

Segregation of Responsibilities

A very important characteristic of effective internal control is an appropriate segregation of functional responsibilities. Sometimes this characteristic is called division of duties. Four kinds of functional responsibilities should be performed by different departments, or at least by different persons on the company's accounting staff:

1. Authorization to execute transactions. This duty belongs to people who have authority and responsibility for initiating the recordkeeping for transactions. Authorization may be general, referring to a class of transactions (e.g., all purchases), or it may be specific (e.g., sale of a major asset).
2. Recording of transactions. This duty refers to the accounting and recordkeeping function (bookkeeping) which, in most organizations, is delegated to a computer system. (People who control the computer processing are the recordkeepers.)
3. Custody of assets involved in the transactions. This duty refers to the actual physical possession or effective physical control of property.
4. Periodic reconciliation of existing assets to recorded amounts. This duty refers to making comparisons at regular intervals and taking appropriate action with respect to any differences.

Incompatible responsibilities are combinations of responsibilities that place a person alone in a position to create and conceal errors, frauds, and misstatements in his or her normal job. Duties should be so divided that no one person can control two or more of these responsibilities. If different departments or persons are forced to deal with these different facets of transactions, then two benefits are obtained: (1) Frauds are more difficult because they would require collusion of two or more persons, and most people hesitate to seek the help of others to conduct wrongful acts, and (2) by acting in a coordinated manner (handling different aspects of the same transaction), innocent errors are more likely to be found and flagged for correction. The old saying is: "Two heads are better than one."
Controlled Access

Physical access to assets and important records, documents, and blank forms should be limited to authorized personnel. Such assets as inventory and securities should not be available to persons who have no need to handle them. Likewise, access to cost records and accounts receivable records should be denied to people who do not have a recordkeeping responsibility for them.

Some blank forms are very important for accounting and control, and their availability should be restricted. Someone not involved in accounting for sales should not be able to pick up blank sales invoices and blank shipping orders. A person should not be able to obtain blank checks (including computer-paper blank checks) unless he or she is involved in cash disbursement activities. Sometimes, access to blank forms is the equivalent of access to, or custody of, an important asset. For example, someone who has access to blank checks has a measure of actual custody and access to cash.

Periodic Comparison

Management has responsibility for the recorded accountability for assets and liabilities. Managers should provide for periodic comparison of the recorded amounts with independent evidence of existence and valuation. Internal auditors and other people on an accounting staff can perform periodic comparison on a regular basis. However, the people who perform these periodic comparisons should not also have responsibility for authorization of related transactions, accounting or recordkeeping, or custodial responsibility for the assets.

Periodic comparisons may include counts of cash on hand, reconciliation of bank statements, counts of securities, inventory counting, confirmation of accounts receivable and accounts payable, and other such comparison operations undertaken to determine whether accounting records – the recorded accountability – represent real assets and liabilities. A management that performs frequent periodic comparisons has more opportunities to detect errors in the records than a management that does not. The frequency, of course, is governed by the costs and benefits. One should not try to count, compare, or confirm assets with great frequency (say, weekly) unless they are especially susceptible to loss or error or unless they are unusually valuable.

Subsequent action to correct differences is also important. Periodic comparison and action to correct errors lowers the risk that material misstatements remain in the accounts. Such comparisons are frequently assigned to internal auditors and other employees. Research has shown that companies with active internal auditors have fewer account errors.

APPLICATION CONTROLS (Error-Checking Routines)

Numerous techniques used to check for errors in accounting data can be categorized as:

(1) input controls
(2) processing controls, and
(3) output controls.
The weakest point in computer systems is input – the point at which transaction data are transformed from hard-copy source documents into machine-readable tape or disk, or when direct entry is made with a communication device such as a remote terminal. When undetected errors are entered originally, they may not be detected during processing, and, if detected, they are troublesome to correct. Processing control refers to error-condition check routines written into the computer program. Output control refers primarily to control over the distribution of reports, but feedback on errors and comparison of input totals to output totals also are part of this "last chance" control point.

**Input Control Activities**

Input controls are designed to provide reasonable assurance that data received for processing by the computer department have been authorized properly and converted into machine-sensible form, and that data have not been lost, suppressed, added, duplicated, or otherwise improperly changed. These controls also apply to correction and resubmission of data initially rejected as erroneous. The following control areas are particularly important:

*Input Authorized and Approved.* Only properly authorized and approved input should be accepted for processing by the computer center. Authorization usually is a clerical (noncomputer) procedure involving a person's signature or stamp on a transaction document. However, some authorizations can be general (e.g., a management policy of automatic approval for sales under $500), and some authorizations can be computer controlled (e.g., automatic production of a purchase order when an inventory item reaches a predetermined reorder point).

*Check Digits.* Numbers often are used in computer systems in lieu of customer names, vendor names, and so forth. One common type of number validation procedure is the calculation of a check digit. A check digit is an extra number, precisely calculated, that is tagged onto the end of a basic identification number such as an employee number. The basic code with its check digit sometimes is called a self-checking number. An electronic device can be installed on a data input device or the calculation can be programmed. The device or the program calculates the correct check digit and compares it to the one on the input data. When the digits do not match, an error message is indicated on the device or printed out on an input error report. Check digits are used only on identification numbers (not quantity or value fields) to detect coding errors or keying errors such as the transposition of digits (e.g., coding 387 as 837).

*Data Conversion.* Conversion of data into machine-sensible form is a source of many errors. Controls include the following:

- *Record counts.* Counts of records are tallies of the number of transaction documents submitted for data conversion. The known number submitted can be compared to the count of records produced by the data-conversion device (e.g., the number of sales transactions or count of magnetic records coded). A count mismatch indicates a lost item or one converted twice. Record counts are used as **batch control totals** and also are used during processing and at the output stage – whenever the comparison of a known count can be made with a computer-generated count.
• **Batch financial totals.** These totals are used in the same way as record counts, except the batch total is the sum of some important quantity or amount (e.g., the total sales dollars in a batch of invoices). Batch totals are also useful during processing and at the output stage.

• **Batch hash totals.** These totals are similar to batch number totals, except the hash total is not meaningful for accounting records (e.g., the sum of all the invoice numbers on invoices submitted to the data input operator).

*Edit or Validation Routines.* Various computer-programmed editing or validation routines can be used to detect data conversion errors. Some of these are listed below:

• **Valid character tests.** These tests are used to check input data fields to see if they contain numbers where they are supposed to have numbers and alphabetic letters where they are supposed to have letters.

• **Valid sign tests.** Sign tests check data fields for appropriate plus or minus signs.

• **Missing data tests.** These edit tests check data fields to see if any are blank when they must contain data for the record entry to be correct.

• **Sequence tests.** These test the input data for numerical sequence of documents when sequence is important for processing, as in batch processing. This validation routine also can check for missing documents in a prenumbered series.

• **Limit or reasonableness tests.** These tests are computerized checks to see whether data values exceed or fall below some predetermined limit. For example, a payroll application may have a limit test to flag or reject any weekly payroll time record of 50 or more hours. The limit tests are a computerized version of scanning—the general audit procedure of reviewing data for indication of anything unusual that might turn out to be an error.

*Error Correction and Resubmission.* Errors should be subject to special controls. Usually, the computer department itself is responsible only for correcting its own errors (data conversion errors, for example). Other kinds of errors, such as those due to improper coding, should be referred to and handled by the user departments. It is a good idea to have a control group log the contents of error reports in order to monitor the nature, disposition, and proper correction of rejected data. Unless properly supervised and monitored, the error-correction process itself can become a source of data input errors.

*Processing Control Activities.*

Processing controls are designed to provide reasonable assurance that data processing has been performed as intended without any omission or double-counting of transactions. Many of the processing controls are the same as the input controls, but they are used in the actual processing phases, rather than at the time input is checked. Other important controls are the following:

*Run-to-Run Totals.* Movement of data from one department to another or one processing program to another should be controlled. One useful control is run-to-run totals.
Run-to-run refers to sequential processing operations – runs – on the same data. These totals may be batch record counts, financial totals, and/or hash totals obtained at the end of one processing run. The totals are passed to the next run and compared to corresponding totals produced at the end of the second run.

Control Total Reports. Control totals – record counts, financial totals, hash totals, and run-to-run totals – should be produced during processing operations and printed out on a report. Someone (the control group, for example) should have the responsibility for comparing and/or reconciling them to input totals or totals from earlier processing runs. Loss or duplication of data thus may be detected. For example, the total of the balances in the accounts receivable master file from the last update run, plus the total of the credit sales from the current update transactions, should equal the total of the balances at the end of the current processing.

File and Operator Controls. External and internal labels are means of assuring that the proper files are used in applications. The systems software should produce a log to identify instructions entered by the operator and to make a record of time and use statistics for application runs. These logs should be reviewed by supervisory personnel.

Limit and Reasonableness Tests. These tests should be programmed to ensure that illogical conditions do not occur; for example, depreciating an asset below zero or calculating a negative inventory quantity. These conditions, and others considered important, should generate error reports for supervisory review. Other logic and validation checks, described earlier under the heading of input edit checks, also can be used during processing.

Output Control Activities.

Output controls are the final check on the accuracy of the results of computer processing. These controls also should be designed to ensure that only authorized persons receive reports or have access to files produced by the system. Typical output controls are the following:

Control Totals. Control totals produced as output should be compared and/or reconciled to input and run-to-run control totals produced during processing. An independent control group should be responsible for the review of output control totals and investigation of differences.

Master File Changes. These changes should be reported in detail back to the user department from which the request for change originated because an error can be pervasive. For example, changing selling prices incorrectly can cause all sales to be priced wrong. Someone should compare computer-generated change reports to original source documents for assurance that the data are correct.

Output Distribution. Systems output should be distributed only to persons authorized to receive it. A distribution list should be maintained and used to deliver report copies. The number of copies produced should be restricted to the number needed.
PERFORMING TEST OF CONTROLS

AUDIT PROCEDURES

To reduce a final control risk assessment to a low level, auditors must determine (1) the required degree of company compliance with the control policies and procedures and (2) the actual degree of company compliance. The required degree of compliance is the auditors’ decision criterion for good control performance. Knowing that compliance cannot realistically be expected to be perfect, auditors might decide, for example, that evidence of using bills of lading (shipping documents) to validate sales invoice recordings 96 percent of the time is sufficient to assess a low control risk for the audit of accounts receivable (looking for overstatement in receivables and sales).

Now the auditors can perform test of controls procedures to determine how well the company’s controls actually functioned during the period under audit. A test of controls audit procedure is a two-part statement. Part one is an identification of the data population from which a sample of items will be selected for audit. Part two is an expression of an action taken to produce relevant evidence. In general, the action is: (1) determine whether the selected items correspond to a standard (e.g., mathematical accuracy), and (2) determine whether the selected items agree with information in another data population. Here is an example of a test of control procedure:

Select a sample of recorded sales invoices; look for proper credit approval; find the related shipping document and compare it for the corresponding date and quantity.

TEST OF CONTROLS NECESSARY FOR ASSESSING LOW CONTROL RISK

Inquiry alone generally will not provide sufficient evidential matter to support a conclusion about the effectiveness of design or operation of a specific [client] control. When the auditor determines that a specific [client] control may have a significant effect in reducing control risk to a low level for a specific assertion, he ordinarily needs to perform additional tests [of controls] to obtain sufficient evidential matter to support the conclusion about the effectiveness of the design or operation of that [client] control.

Source: SAS 55, AU 319.51.

Some test of controls procedures involve reperformance – the auditors perform again the arithmetic calculations and the comparisons the company people were supposed to have performed. Some accountants, however, believe mere inspection is enough – the auditors just look to see whether the documents were marked with an initial, signature, or stamp to indicate they had been checked. They maintain that reperformance is not necessary.

Some test of controls procedures depend on documentary evidence, like a sales entry supported by a bill of lading. Documentary evidence in the form of signatures, initials, checklists, reconciliation working papers, and the like provides better evidence than procedures that leave no documentary tracks.
Some controls, such as segregation of employees' duties, may leave no documents behind. In this case, the best kind of procedures (i.e., reperformance of control activities) cannot be done, and the second procedure – observation – must be used. This procedure amounts to an auditor's unobtrusive eyewitness observation of employees at their jobs performing control activities.

Test of controls procedures, when performed, should be applied to samples of transactions and control activities executed throughout the period under audit. The reason for this requirement is that the conclusions about controls will be generalized to the whole period under audit.

CONTROL EVALUATION AND COST-BENEFIT

An assessment of control risk should be coordinated with the final audit plan. The final account balance audit plan includes the specification (list) of substantive audit procedures, which are defined as the detail audit and analytical procedures designed to detect material misstatements in account balances and footnote disclosures.

Control systems are subject to cost-benefit considerations. Controls possibly could be made perfect, or nearly so, at great expense. An inventory could be left unlocked and unguarded (no control against theft and no control expenses), or a fence could be used; locks could be installed; lighting could be used at night; television monitors could be put in place; armed guards could be hired. Each of these successive safeguards costs money, as does extensive supervision of clerical personnel in an office. At some point, the cost of protecting the inventory from theft (or of supervisors' catching every clerical error) exceeds the benefit of control. Hence, control systems generally do not provide absolute assurance that the objectives of internal control are satisfied. Reasonable assurance is thought to be enough, and has been defined: "The concept of reasonable assurance recognizes that the cost of an entity's internal control should not exceed the benefits that are expected to be derived" (SAS 55, AU 319).

Notwithstanding the common sense of the concept of reasonable assurance, auditors must be careful to determine whether a system contains any internal control weakness. Business managers can make estimates of benefits to be derived from controls and weigh them against the cost. Managers are perfectly free to make their own judgments about the necessary extent of controls. Managers can decide the degree of control risk they are willing to accept. However, auditors should be aware that the "cost-benefit" and "reasonable assurance" concepts can sometimes be used loosely by a management to tolerate control deficiencies.

Since preparation of the final account balance audit plan is the primary aim and purpose, the evaluation of internal control must be documented in audit working papers. Documentation of the understanding of the internal control structure and the control risk assessment is required. These audit working papers can include internal control questionnaires, narrative descriptions, flowcharts, specifications of controls and compliance criteria, and the evidence produced by test of controls audit procedures.
SUMMARY

This chapter explains the theory and practice of auditors' involvement with a client's control process. The purposes of auditor involvement are to assess the control risk in order to plan the substantive audit program and to report control deficiencies to management and the board of directors.

In theory, a financial reporting control system consists of five components – management's control environment, management's risk assessment, management's information and communication (accounting) system, management's control activities, and management's monitoring of the control system. Each of these is evaluated and documented in the audit working papers. The control environment and management's risk assessment is explained in terms of understanding the client's business. Elements of the accounting system are explained in conjunction with control activities designed to prevent, detect, and correct misstatements that occur in transactions. These misstatements are systematized in a set of seven categories of errors and frauds that can occur.

Control procedures are covered extensively. They are organized under the headings of general control activities (i.e., capable personnel, segregation of responsibilities, controlled access, periodic comparison, and error-checking routines), and error-checking routine detail (11 input controls, 4 processing controls, and 3 output controls). The chapter closes with sections on cost-benefit and reasonable assurance considerations.
CHAPTER 2: OVERVIEW OF INTERNAL CONTROL – SUMMARY / REVIEW

The following summarizes the important points related to the chapter just completed. Following the outline are review study questions with suggested solutions which provide evaluative and responsive feedback. You should answer the study questions and review the suggested solutions to confirm that you have a clear understanding of the material presented prior to proceeding to subsequent chapters.

OUTLINE

A. Introduction

The COSO Report defined internal control as follows:

Internal control is a process, effected by an entity’s board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following three categories:

- Reliability of financial reporting
- Compliance with applicable laws and regulations
- Effectiveness and efficiency of operations

B. There are general elements of an internal control environment

1. Management’s philosophy and operating style
2. Management and employee integrity and ethical values
3. Company organization structure
4. Company commitment to competence – job skills and knowledge
5. Functioning of the board of directors, particularly its audit committee
6. Methods of assigning authority and responsibility
7. Human resource policies and practices

C. The Accounting System and its four essential functions

1. Data Identification
2. Data Entry
3. Transaction Processing
4. Report Production and Distribution

D. Monitoring: helps ensure that internal control continues to operate effectively.
E. Control Activities: the policies and procedures that help ensure that management directives are carried out. They are part of the internal control designed and operated by the company and include:

1. Performance Reviews
2. Information Processing
3. Physical Controls
4. Segregation of Duties

F. General Control Activities:

1. Capable Personnel
2. Segregation of Responsibilities
3. Controlled Access
4. Periodic Comparison

G. Segregation of Technical Responsibilities: since most companies use computer based accounting and control systems, the essential separation of responsibilities involves the duties of analysts, programmers, and operators.

H. Performing Test of Controls Audit Procedures: to reduce a final control risk assessment to a low level, auditors must determine:

1. The required degree of company compliance with the control policies and procedures and
2. The actual degree of company compliance

I. Control Evaluation and Cost-Benefit

- Control systems are subject to cost-benefit considerations.
- Reasonable assurance: “the concept of reasonable assurance recognizes that the costs of an entity’s internal control should not exceed the benefits that are expected to be derived.”
- Cost-benefit and reasonable assurance concepts can also be use loosely by management to tolerate control deficiencies.
CHAPTER 2 – REVIEW QUESTIONS

1. The external auditor is responsible for designing, implementing, and monitoring internal controls.
   
a) true  
b) false

2. Which of the following statements is not true:
   
a) reliability of financial reporting is one of the objectives of internal control  
b) internal control can guarantee prevention of fraud  
c) internal control is operated by people  
d) internal control is a process, not an end in itself

3. Who is responsible for the company’s internal control components:
   
a) management  
b) external auditors  
c) the fraud examiner  
d) none of the above

4. Control risk is the actual dollar amount/financial loss that the auditor anticipates will occur as a result of the lack of proper internal controls.
   
a) true  
b) false

5. If auditors assess control risk as “maximum” (i.e., poor control), they will tend to:
   
a) perform a great deal of substantive balance-audit work with small sample sizes (extent), at or near the company’s fiscal year-end (timing), using procedures designed to obtain high-quality external evidence (nature)  
b) perform a great deal of substantive balance-audit work with large sample sizes (extent), at or near the company’s fiscal year-end (timing), using procedures designed to obtain high-quality external evidence (nature)  
c) perform a lesser quantity of substantive balance-audit work with large sample sizes (extent), at an interim date before the company’s fiscal year-end (timing), using a mixture of procedures designed to obtain high-quality external evidence and lower quality internal evidence (nature)  
d) perform a lesser quantity of substantive balance-audit work with small sample sizes (extent), at an interim date before the company’s fiscal year-end (timing), using a mixture of procedures designed to obtain high-quality external evidence and lower quality internal evidence (nature)
6. Which of the following is **not** true regarding reportable conditions:

   a) auditors are not obligated to search for or identify reportable conditions  
   b) if an auditor becomes aware of a reportable condition, they must communicate it  
      either in writing or orally  
   c) auditors should not issue reports stating that no reportable conditions were noted  
      during an audit  
   d) if a reportable condition is communicated orally, a written memorandum should not  
      be placed in the working papers

7. Control environment factors include the integrity, ethical values, and competence of the  
   company’s people.

   a) true  
   b) false

8. The overriding objective of control activities is to process transactions correctly.

   a) true  
   b) false

9. Which of the following statements is true in regard to general control activities:

   a) a very important characteristic of effective internal control is an appropriate  
      segregation of functional responsibilities  
   b) controlled access (physical access) to assets and important records is an important  
      characteristic of effective internal control  
   c) one of the most important features of control is capable personnel  
   d) all of the above

10. Which category of application control activities is designed to provide reasonable  
    assurance that data received for processing has been properly authorized and  
    converted and that no data has been lost or destroyed:

    a) processing controls  
    b) output controls  
    c) input controls  
    d) none of the above

11. Control systems generally have to provide absolute assurance that the objectives of  
    internal control are satisfied even if very costly.

    a) true  
    b) false
Please note: AICPA / NASBA CPE guidelines require that CPE sponsors provide 5 review questions along with evaluative and responsive feedback for each CPE credit granted. Although there are an adequate amount of multiple-choice and true/false review questions located throughout the course material to meet this specific requirement, we have included additional review questions to enhance the student’s learning process. The suggested solutions provided are based upon the author’s experience and opinion as reflected in the course material.

12. Discuss one of the general control activities that is important in a company’s control process.
CHAPTER 2 – SOLUTIONS AND SUGGESTED RESPONSES

1. A: True is incorrect. Internal and external auditors are concerned with internal controls in connection with planning audit procedures and making reports of control weaknesses. Management is responsible for designing, implementing, and monitoring internal controls.

   **B: False is correct.** Management is responsible for designing, implementing, and monitoring internal controls. Internal and external auditors are concerned with internal controls in connection with planning audit procedures and making reports of control weaknesses.

   (See page 2-1 of the course material.)

2. A: Incorrect. This is a true statement. Internal controls are designed to achieve objectives in three categories: operations, financial reporting, and compliance. In the financial reporting category the objectives are reliable published financial reports, and safeguarding assets from unauthorized use, including the accounting-reporting of lapses in asset safeguarding.

   **B: Correct.** This is the false statement. Controls help prevent and detect errors and frauds, however there is no absolute guarantee for the prevention and detection of all types of frauds.

   C: Incorrect. This is a true statement. Internal control is operated by people – regardless of how many policy manuals, written procedures and other features of control exist in the company, it is the people that either make the system work or not. People establish the objectives of control, develop and put the control systems in place, and operate them.

   D: Incorrect. This is a true statement. Internal control is a process; it is not an end in itself, but a means to the end. Internal control is a dynamic function (process) operating every single day.

   (See pages 2-1 to 2-2 of the course material)
3. **A: Correct.** Management is responsible for the components of its internal control – they establish the control environment, assess the risks that it wishes to control, designs and implements the control elements, and monitors and maintains them after they are put into place.

   B: Incorrect. External auditors are not responsible for designing effective controls for audit clients. They are responsible for evaluating internal controls and assessing the control risk in them.

   C: Incorrect. The fraud examiner is not involved in the development of controls (as is management) or the evaluation of such (as is the external auditor). They become involved after the fraud is discovered.

   D: Incorrect. This is incorrect as there is a correct response.

   (See page 2-5 of the course material.)

4. **A: True is incorrect.** Control risk is the probability that a company’s controls will fail to detect errors and frauds, provided any enter the accounting system in the first place. The auditor’s assessment task is to assign an evaluation to the control risk.

   **B: False is correct.** Control risk is not the actual financial loss anticipated by the auditor. It is the probability that the company’s controls will fail to detect errors and frauds, provided any enter the accounting system in the first place. The auditor’s task is to assess the control risk associated with the controls management designed and implemented for the period under audit.

   (See page 2-6 of the course material.)

5. **A: Incorrect.** When auditors assess control risk as maximum, they tend to use large sample sizes.

   **B: Correct.** All elements are correct in the auditor’s procedures when they assess control risk as maximum.

   **C: Incorrect.** When auditors assess control risk as maximum, they would not use a lesser quantity on any sample size. They would perform a great deal of substantive balance-audit work.

   **D: Incorrect.** The elements listed here would be used if an auditor assessed control risk as “low” (i.e., effective control).

   (See page 2-6 of the course material.)
6. **A:** Incorrect. Although auditors are not obligated to search for or identify reportable conditions, they may come to their attention in the normal performance of an audit.

   **B:** Incorrect. If an auditor does become aware of a reportable condition, it should be communicated, preferably in writing.

   **C:** Incorrect. A manager receiving such a report could conclude erroneously that the auditors are stating positively that the company has no internal control problems.

   **D:** Correct. A written memorandum should be placed in the working papers if the communication is provided orally.

   (See page 2-7 of the course material.)

7. **A:** True is correct. The control environment sets the tone of the organization. It is the foundation for all other components of internal control.

   **B:** False is incorrect. Control environment factors do include the integrity, ethical values, and competence of the company’s people. The control environment sets the tone of the organization and is the foundation for all other components of internal control.

   (See page 2-9 of the course material.)

8. **A:** True is correct. While the objective of the control system is to produce reliable financial statement assertions, principally in account balances, the overriding objective of control activities is to process transactions correctly.

   **B:** False is incorrect. Correctly processed transactions produce correct account balances, which in turn help produce accurate and reliable assertions in the financial statements. While the objective of the control system is to produce reliable financial statement assertions, principally in account balances, the overriding objective of control activities is to process transactions correctly.

   (See page 2-12 of the course material.)
9. A: Incorrect. A very important characteristic of effective internal control is an appropriate segregation of functional responsibilities – also known as a division of duties. There are four functional responsibilities that should be performed by different departments, or at least by different persons on the company’s accounting staff. Although this is a true statement, it is not the best answer.

B: Incorrect. Physical access to assets and important records, documents, etc. should be limited to authorized personnel. Although this is a true statement, it is not the best answer.

C: Incorrect. The most important feature of control is the people who make the system work. Personnel problems sometimes create internal control problems. Although this is a true statement, it is not the best answer.

D: Correct. All of the above are correct. While the “tone at the top” (control environment) is pervasive, the control activities of capable personnel, segregation of responsibilities, controlled access, and periodic comparison are always important in a company’s control process.

(See pages 2-14 to 2-15 of the course material.)

10. A: Incorrect. Processing controls are designed to provide reasonable assurance that data processing has been performed as intended without any omission or double-counting of transactions. Many of the processing controls are the same as the input controls, but they are used in the actual processing phases, rather than at the time input is checked.

B: Incorrect. Output controls are the final check on the accuracy of the results of computer processing. These controls should also be designed to ensure that only authorized persons receive reports or have access to files produced by the system.

C: Correct. Input controls are designed to provide reasonable assurance that data received for processing have been authorized properly, that data has not been lost, suppressed, added, duplicated, or otherwise improperly changed. These controls also apply to corrections and resubmission of data initially rejected as erroneous.

D: Incorrect. This is incorrect as there is a correct response.

(See page 2-15 to 2-17 of the course material.)

11. A: True is incorrect. At some point, the cost exceeds the benefit of control. Hence, control systems generally do not provide absolute assurance that the objectives of internal control are satisfied. That is where the concept of “reasonable assurance” comes into play.

B: False is correct. Control systems are subject to cost-benefit considerations. Although controls could possibly be made perfect at great expense, at some point the cost exceeds the benefit of control. Therefore, reasonable assurance should be considered enough.

(See page 2-20 of the course material.)
12. A segregation of the functional responsibilities or a division of duties is a very important characteristic of effective internal control. This relates to certain functions being performed by different departments, or at least by different persons in the same department. For example, you would have different people doing the following: authorizing transactions, recording transactions, having custody of the assets involved in the transactions, and reconciling the assets to recorded amounts.

(See page 2-14 of the course material.)
CHAPTER 3
CASH COLLECTIONS AND RECEIVABLES

The revenue and collection accounting cycle covers sales, sales returns, accounts receivable, account write-offs, and cash collections. This chapter contains sections on:

(1) typical control activities in the cycle
(2) the audit evidence available in management reports and data files, and
(3) case story-style explanations concerning discovery of errors and frauds.

Special notes in the chapter cover:

(1) the existence assertion,
(2) using confirmations,
(3) bank reconciliation with attention to lapping and kiting, and
(4) bank transfer and proof of cash analyses.

REVENUE AND COLLECTION CYCLE: TYPICAL ACTIVITIES

The basic activities in the revenue and collection cycle are:

(1) receiving and processing customer orders, including credit granting;
(2) delivering goods and services to customers;
(3) billing customers and accounting for accounts receivable;
(4) collecting and depositing cash received from customers; and
(5) reconciling bank statements.

Exhibit 3-1 shows the activities and transactions involved in a revenue and collection cycle. As you follow the exhibit, you can track some of the elements of a control system.
EXHIBIT 3-1 Revenue and Collection Cycle

- Customer Orders
- Sales Authorization
- Cash Receipts Recording
- Accounts Receivable Recording
- Customer’s Purchase Orders
- Credit Granting
- Credit Files, Reports
- Start Here
- Bill Customers
- Warehouse Shipping and Delivery
- Collections
- Payment
- To Customer

- Customer Payments (Cash Receipts)
- Deposit Cash in Bank
- Cash Custody
- Monthly Statements
- Sales Invoice
- Shipping Documents
- Cash Receipts Transaction File
- Accounts Receivable Master File
- Sales Revenue Account(s) File
- Shipping Document Transaction File
- Shipping Documents (Copy)
- Perpetual Inventory Records
- Cash Balances (Account) File
- Bank Statements
- Customer Order
- Sales Invoice (Copy)
- Accounts Receivable
- Allowance for Doubtful Accounts, Write-Offs
- Bad Debt Expense
- Sales Revenue
- Sales Returns, Allowances, Discounts
- Perpetual Inventory Records, Shipping Records
- Cash in Bank
- Cash Receipts
- Accounts Receivable
- Allowance for Doubtful Accounts, Write-Offs
- Bad Debt Expense
- Sales Revenue
- Sales Returns, Allowances, Discounts
- Perpetual Inventory Records, Shipping Records
SALES AND ACCOUNTS RECEIVABLE

Authorization

In a computerized system for processing customer orders, Company personnel receive the customer's purchase order and create a sales order, entering it in a computer terminal. The computer system then performs automatic authorization procedures—determining whether the customer is a "regular" or a new customer, approving credit, and checking the availability of inventory to fill the order. (If inventory is short, a back order is entered.) When these authorizations are imbedded in a computer system, access to the master files for additions, deletions, and other changes must be limited to responsible persons. If these controls fail, orders might be processed for fictitious customers, credit might be approved for bad credit risks, and packing slips might be created for goods that do not exist in the inventory.

When a customer order passes these authorizations, the system: (1) creates a record in the pending order master file, (2) produces a packing slip that is transmitted to the stockroom and shipping department, and (3) updates the inventory master file to show the commitment (removal) of the inventory. At this stage, the pending order and the packing slip should be numbered in a numerical sequence so the system can determine later whether any transactions have not been completed (completeness objective of control). The packing slip is the storekeeper's authorization to release goods to the shipping department and the shipping department's authorization to release goods to a trucker or to the customer.

Another authorization in the system is the price list master file. It contains the product unit prices for billing customers. Persons who have power to alter this file have the power to authorize price changes and customer billings.

PRICE MANIPULATION

The company's computer programmer was paid off by a customer to cause the company to bill the customer at prices lower than list prices. The programmer wrote a subroutine that was invoked when the billing system detected the customer's regular code number. This subroutine instructed the computer billing system to reduce all unit prices 9.5 percent. The company relied on the computer billing system, and nobody ever rechecked the actual prices billed.

Custody

Physical custody of goods starts with the storeroom or warehouse where inventory is kept. Custody is transferred to the shipping department upon the authorization of the packing slip that orders storekeepers to release goods to the shipping area. As long as the system works, custody is under accountability control. However, if the storekeepers or the shipping department personnel have the power to change the quantity shown on the packing slip, they can cause errors in the system by billing the customer for too small or too large a quantity. (This power combines custody with a recording function. A computer record or "log" of such changes will create an electronic paper trail.)
"Custody" of accounts receivable records themselves implies the power to alter them directly or enter transactions to alter them (e.g., transfers, returns and allowance credits, write-offs). Personnel with this power have a combination of authorization and recording responsibility. (A computer "log" of such entries will create an electronic paper trail.)

Recording

When delivery or shipment is complete, the shipping personnel enter the completion of the transaction in a terminal, and the system (1) produces a bill of lading shipping document, which is evidence of an actual delivery/shipment; (2) removes the order from the pending order master file; and (3) produces a sales invoice (prenumbered the same as the order and packing slip) that bills the customer for the quantity shipped, according to the bill of lading. Any personnel who have the power to enter or alter these transactions or to intercept the invoice that is supposed to be mailed to the customer have undesirable combinations of authorization, custody, and recording responsibilities; they can "authorize" transaction changes and record them by making entries in systems under their control.

SHIPPING EMPLOYEE CAUGHT BY COMPUTER!

A customer paid off a shipping department employee to enter smaller quantities than actually shipped on the packing slip and bill of lading. This caused the customer's invoices to be understated. Unknown to the employee, a computer log recorded all the entries that altered the original packing slip record. An alert internal auditor noticed the pattern of "corrections" made by the shipping employee. A trap was laid by initiating fictitious orders for this customer, and the employee was observed making the alterations.

Periodic Reconciliation

The most frequent reconciliation is the comparison of the sum of customers' unpaid balances with the accounts receivable control account total. Usually, this reconciliation is done with an aged trial balance. An aged trial balance is a list of the customers and their balances, with the balances classified in columns headed for different age categories (e.g., current, 10-30 days past due, 31-60 days past due, 61-90 days past due, over 90 days past due). Internal auditors can perform periodic comparison of the customers' obligations (according to the customers) with the recorded amount by sending confirmations to the customers. (Refer to the special note on confirmations later in this chapter.)

CASH RECEIPTS AND CASH BALANCES

Authorization

Cash can be received in several ways – over the counter, through the mail, by electronic funds transfer, and by receipt in a "lockbox." In a lockbox arrangement, a fiduciary (e.g., a bank) opens the box, lists the receipts, deposits the money, and sends the remittance advices (stubs showing the amount received from each customer) to the company. Most companies need little "authorization" to accept a payment from a customer! However, authorization is important for approving customers' discounts and allowances taken, claiming to pay the bill in full.
Custody

Someone always gets the cash and checks in hand and thus has custody of the physical cash for a time. Control over this custody can vary. Companies can rotate people through the custody responsibility so one person does not have this custody all the time; they can have rotating teams of two or more people so they would need to collude with one another to steal money; they can make arrangements outside the company for actual cash custody (e.g., the lockbox arrangement). Since this initial custody cannot be avoided, it is always good control to prepare a list of the cash receipts as early in the process as possible, then separate the actual cash from the bookkeeping documents. The cash goes to the cashier or treasurer's office, where a bank deposit is prepared and the money is sent to the bank. The list goes to the accountants, who record the cash receipts. (This list may be only a stack of the remittance advices received with the customers' payments. You yourself prepare a "remittance advice" each time you write the "amount enclosed" on the top part of your credit card billing, tear it off, and enclose it with your check.)

Recording

The accountants who record cash receipts and credits to customer accounts should not handle the cash. They should use the remittance list to make entries to the cash and accounts receivable control accounts and to the customers' accounts receivable subsidiary account records. In fact, a good error-checking activity is to have control account and subsidiary account entries made by different people, then later the accounts receivable entries and balances can be compared (reconciled) to determine whether the proper source documents (remittance lists) were used to make error-free accounting entries. Some computerized accounting programs post the customers' accounts automatically by keying on the customer identification number.

Periodic Reconciliation

Bank account reconciliations should be prepared carefully. Deposit slips should be compared to the details on cash remittance lists, and the total should be traced to the general ledger entries. Likewise, paid checks should be traced to the cash disbursements listing (journal). This care is required to establish that all the receipts recorded in the books were deposited and that credit was given to the right customer. (Refer to the special note on auditing bank reconciliations later in this chapter.)

CAREFUL RECONCILIATION

Suppose the cashier who prepares the remittance list had stolen and converted Customer A's checks to personal use. It might work for a short time until Customer A complained that the company had not given credit for payments. The cashier knows this. So, the cashier later puts Customer B's check in the bank deposit, but shows Customer A on the remittance list; thus, the accountants give Customer A credit. So far, so good for preventing Customer A's complaint. But now Customer B needs to be covered. This "lapping" of customer payments to hide an embezzlement can be detected by a bank reconciliation comparison of the checks deposited (Customer B) with the remittance credit recorded (Customer A).
AUDIT EVIDENCE IN MANAGEMENT
REPORTS AND DATA FILES

Computer processing of revenue and cash receipts transactions makes it possible for management to generate several reports that can provide important audit evidence. Auditors should obtain and use these reports.

PENDING ORDER MASTER FILE

This file contains sales transactions that were started in the system but are not yet completed, thus not recorded as sales and accounts receivable. Old orders may represent shipments that actually were made, but for some reason the shipping department did not enter the shipping information (or entered an incorrect code that did not match the pending order file). The pending orders can be reviewed for evidence of the completeness of recorded sales and accounts receivable.

CREDIT CHECK FILES

The computer system may make automatic credit checks, but up-to-date maintenance of the credit information is very important. Credit checks on old or incomplete information are not good credit checks. A sample of the files can be tested for current status. Alternatively, the company’s records on updating the files can be reviewed for evidence of updating operations.

PRICE LIST MASTER FILE

The computer system may produce customer invoices automatically; but, if the master price list is wrong, the billings will be wrong. The computer file can be compared to an official price source for accuracy. (The company should perform this comparison every time the prices are changed.)

SALES DETAIL (SALES JOURNAL) FILE

This file should contain the detail sales entries, including the shipping references and dates. The file can be scanned for entries without shipping references (fictitious sales?) and for match of recording dates with shipment dates (sales recorded before shipment?). This file contains the population of debit entries to the accounts receivable.

SALES ANALYSIS REPORTS

A variety of sales analyses may be produced. Sales classified by product lines is information for the business segment disclosures. Sales classified by sales employee or region can show unusually high or low volume that might bear further investigation if error or fraud is suspected.
ACCOUNTS RECEIVABLE AGED TRIAL BALANCE

This list of customers’ accounts receivable balances is the accounts receivable. If the control account total is larger than the sum in the trial balance, too bad. A receivable amount that cannot be identified with a customer cannot be collected! The trial balance is used as the population for selecting accounts for confirmation. (See the special note on the existence assertion and the special note on using confirmations later in this chapter.) The aging information is used in connection with assessing the allowance for doubtful accounts.

CASH RECEIPTS JOURNAL

The cash receipts journal contains all the detail entries for cash deposits and credits to various accounts. It contains the population of credit entries that should be reflected in the credits to accounts receivable for customer payments. It also contains the adjusting and correcting entries that can result from the bank account reconciliation. These entries are important because they may signal the types of accounting errors or manipulations that happen in the cash receipts accounting.

PEAKS AND VALLEYS

During the year-end audit, the independent auditors reviewed the weekly sales volume reports classified by region. They noticed that sales volume was very high in Region 2 the last two weeks of March, June, September, and December. The volume was unusually low in the first two weeks of April, July, October, and January. In fact, the peaks far exceeded the volume in all the other six regions. Further investigation revealed that the manager in Region 2 was holding open the sales recording at the end of each quarterly reporting period in an attempt to make the quarterly reports look good.

SPECIAL NOTE: THE EXISTENCE ASSERTION

When considering assertions and obtaining evidence about accounts receivable and other assets, auditors must put emphasis on the existence and rights (ownership) assertions. (For liability accounts, the emphasis is on the completeness and obligations assertions, as explained in Chapter 4.) This emphasis on existence is rightly placed because companies and auditors often have gotten into malpractice trouble by giving unqualified reports on financial statements that overstated assets and revenues and understated expenses. For example, credit sales recorded too early (fictitious sales?) result in overstated accounts receivable and overstated sales revenue; failure to amortize prepaid expense results in understated expenses and overstated prepaid expenses (current assets).

Discerning the population of assets to audit for existence and ownership is easy because the company has asserted their existence by putting them on the balance sheet. The audit procedures described in the following sections can be used to obtain evidence about the existence and ownership of accounts receivable and other assets.
RECALCULATION

Think about the assets that depend largely on calculations. They are amenable to auditors' recalculation procedures. Expired prepaid expenses are recalculated, using auditors' vouching of basic documents, such as loan agreements (prepaid interest), rent contracts (prepaid rent), and insurance policies (prepaid insurance). Goodwill and deferred expenses are recalculated by using original acquisition and payment document information and term (useful life) estimates. A bank reconciliation is a special kind of calculation, and the company's reconciliation can be audited. (See the special note on auditing a bank reconciliation later in this chapter.)

PHYSICAL OBSERVATION

Inventories and fixed assets can be inspected and counted (more on inventory observation is in Chapter 4). Titles to autos, land, and buildings can be vouched, sometimes using public records in the county clerk's office. Petty cash and undeposited receipts can be observed and counted, but the cash in the bank cannot. Securities held as investments can be inspected if held by the company.

CONFIRMATION

Letters of confirmation can be sent to banks and customers, asking for a report of the balances owed the company. Likewise, if securities held as investments are in the custody of banks or brokerage houses, the custodians can be asked to report the names, numbers, and quantity of the securities held for the company. In some cases, inventories held in public warehouses or out on consignment can be confirmed with the other party. (Refer to the special note on confirmations later in this chapter.)

VERBAL INQUIRY

Inquiries to management usually do not provide very convincing evidence about existence and ownership. However, inquiries always should be made about the company's agreements to maintain compensating cash balances (may not be classifiable as "cash" among the current assets), about pledge or sale of accounts receivable with recourse in connection with financings, and about pledge of other assets as collateral for loans.

EXAMINATION OF DOCUMENTS (VOUCHING)

Evidence of ownership can be obtained by studying the title documents for assets. Examination of loan documents may yield evidence of the need to disclose assets pledged as loan collateral.

SCANNING

Assets are supposed to have debit balances. A computer can be used to scan large files of accounts receivable, inventory, and fixed assets for uncharacteristic credit balances. Usually, such credit balances reflect errors in the recordkeeping – customer overpayments, failure to post purchases of inventory, depreciation of assets more than cost. The names of debtors can be scanned for officers, directors, and related parties, amounts which need to be reported separately or disclosed in the financial statements.
ANALYTICAL PROCEDURES

A variety of analytical comparisons might be employed, depending on the circumstances and the nature of the business. Comparisons of asset and revenue balances with recent history might help detect overstatements. Such relationships as receivables turnover, gross margin ratio, and sales/asset ratios can be compared to historical data and industry statistics for evidence of overall reasonableness. Account interrelationships also can be used in analytical review. For example, sales returns and allowances and sales commissions generally vary directly with dollar sales volume, bad debt expense usually varies directly with credit sales volume, and freight expense varies with the physical sales volume. Accounts receivable write-offs should be compared with earlier estimates of doubtful accounts.

<table>
<thead>
<tr>
<th>SIMPLE ANALYTICAL COMPARISON</th>
</tr>
</thead>
<tbody>
<tr>
<td>The auditors prepared a schedule of the monthly credit sales totals for the current and prior years. They noticed several variations, but one, in November of the current year, stood out in particular. The current-year credit sales were almost twice as large as any prior November. Further investigation showed that a computer error had caused the November credit sales to be recorded twice in the control accounts. The accounts receivable and sales revenue were materially overstated as a result.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPECIAL NOTE: USING CONFIRMATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>This special note gives some details about using confirmations in the audit of cash and accounts receivable. In general, the use of confirmations for cash balances and trade accounts receivable is considered a required generally accepted audit procedure (SAS 67, AU 330). However, auditors may decide not to use them if suitable alternative procedures are available and applicable in particular circumstances. Auditors should document justifications for the decision not to use confirmations for trade accounts receivable in a particular audit. Justifications include:</td>
</tr>
<tr>
<td>(1) receivables are not material;</td>
</tr>
<tr>
<td>(2) confirmations would be ineffective, based on prior years’ experience or knowledge that responses could be unreliable; and</td>
</tr>
<tr>
<td>(3) analytical procedures and other substantive test of details procedures provide sufficient, competent evidence.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A DECISION NOT TO USE ACCOUNTS RECEIVABLE CONFIRMATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sureparts Manufacturing Company sold all its production to three auto manufacturers and six aftermarket distributors. All nine of these customers typically paid their accounts in full by the 10th of each following month. The auditors were able to vouch the cash receipts for the full amount of the accounts receivable in the bank statements and cash receipts records in the month following the Surepart year-end. Confirmation evidence was not considered necessary in these circumstances.</td>
</tr>
</tbody>
</table>
CONFIRMATION OF CASH AND LOAN BALANCES

The standard bank confirmation form, approved by the AICPA, the American Bankers Association, and the Bank Administration Institute, is shown in Exhibit 3-2. Auditors use this form to obtain bank confirmation of deposit and loan balances. (Other confirmation letters are used to obtain confirmation of contingent liabilities, endorsements, compensating balance agreements, lines of credit, and other financial instruments and transactions. The standard form and illustrative letters are reproduced in the AICPA Audit and Accounting Manual.) A word of caution is in order: While financial institutions may note exceptions to the information typed in a confirmation and may confirm items omitted from it, the AICPA warns auditors that sole reliance on the form to satisfy the completeness assertion, insofar as cash and loan balances are concerned, is unwarranted. Officers and employees of financial institutions cannot be expected to search their information systems for balances and loans that may not be immediately evident as assets and liabilities of the client company. However, it is a good idea to send confirmations on accounts the company represents as closed during the year to get the bank to confirm zero balances. (If a nonzero balance is confirmed by a bank, the auditors have evidence that some asset accounting is omitted in the company records.)
EXHIBIT 3-2 Bank Confirmation

STANDARD FORM TO CONFIRM ACCOUNT
BALANCE INFORMATION WITH FINANCIAL INSTITUTIONS

<table>
<thead>
<tr>
<th>FINANCIAL INSTITUTIONS’ NAME AND ADDRESS</th>
<th>Kingston Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>First National Bank</td>
<td></td>
</tr>
<tr>
<td>Main Street</td>
<td></td>
</tr>
<tr>
<td>Chicago, Illinois</td>
<td></td>
</tr>
</tbody>
</table>

We have provided to our accountants the following information as of the close at business on December 31, 20x1 regarding our deposit and loan balances. Please confirm the accuracy of the information, noting any exceptions to the information provided. If the balances have been left blank, please complete this form by furnishing the balance in the appropriate space below. Although we do not request nor expect you to conduct a comprehensive detailed search of your records, if during the process of completing this confirmation additional information about other deposit and loan accounts we may have with you comes to your attention, please include such information below. Please use the enclosed envelope to return the form directly to our accountants.

1. At the close of business on the date listed above, our records indicated the following deposit balances (s):

<table>
<thead>
<tr>
<th>Account Name</th>
<th>Account No.</th>
<th>Interest Rate</th>
<th>Balance *</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kingston Company</td>
<td>146-2013</td>
<td>None</td>
<td>$506,100</td>
</tr>
</tbody>
</table>

2. We were directly liable to the financial institution for loans at the close of business on the date listed above as follows:

<table>
<thead>
<tr>
<th>Account No. / Description</th>
<th>Balance *</th>
<th>Date Due</th>
<th>Interest Rate</th>
<th>Date through which interest is paid</th>
<th>Description of Collateral</th>
</tr>
</thead>
<tbody>
<tr>
<td>042743</td>
<td>$750,000</td>
<td>6/30/20xx</td>
<td>11%</td>
<td>n/a</td>
<td>Unsecured</td>
</tr>
</tbody>
</table>

Larry Lancaster
Customer’s Authorized Signature

December 29, 20x1
Dated

The information presented above by the customer is in agreement with our records. Although we have not conducted a comprehensive, detailed search of our records, no other deposit or loan accounts have come to our attention except as noted below.

Bank Representative
Financial Institution Authorized Signature

January 15, 20x2
Dated

Assistance VP
Title

EXCEPTIONS AND/OR COMMENTS

Please return this form directly to our accountants: Anderson, Olds, Watershed
123 Rush Street
Chicago, Illinois 12345

* Ordinarily balances are intentionally left blank if they are not available at the time the form is prepared.

Approved 1990 by American Bankers Association, American Institute of Certified Public Accountants, and Bank Administration Institute.
CONFIRMATION OF ACCOUNTS AND NOTES RECEIVABLE

Confirmations provide evidence of existence and, to a limited extent, of valuation of accounts and notes receivable. The accounts and notes to be confirmed should be documented in the working papers with an aged trial balance. Accounts for confirmation can be selected at random or in accordance with another plan consistent with the audit objectives. Statistical methods may be useful for determining the sample size. Generalized audit software to access computerized receivables files may be utilized to select and even to print the confirmations.

Two widely used confirmation forms are positive confirmations and negative confirmations. An example of a positive confirmation is shown in Exhibit 3-3. A variation of the positive confirmation is the blank form. A blank confirmation does not contain the balance; customers are asked to fill it in themselves. The blank positive confirmation may produce better evidence because the recipients need to get the information directly from their own records instead of just signing the form and returning it with no exceptions noted. (However, the effort involved may cause a lower response rate.)

The negative confirmation form for the same request shown in Exhibit 3-3 is in Exhibit 3-4. The positive form asks for a response. The negative form asks for a response only if something is wrong with the balance; thus, lack of response to negative confirmations is considered evidence of propriety.

The positive form is used when individual balances are relatively large or when accounts are in dispute. Positive confirmations may ask for information about either the account balance or specific invoices, depending on knowledge about how customers maintain their accounting records. The negative form is used mostly when inherent risk and control risk are considered low, when a large number of small balances is involved, and when the client's customers can be expected to consider the confirmations properly. Frequently, both forms are used by sending positive confirmations on some customers' accounts and negative confirmations on others.

Getting confirmations delivered to the intended recipient is a problem that requires auditors' careful attention. Auditors need to control the confirmations, including the addresses to which they are sent. Experience is full of cases where confirmations were mailed to company accomplices, who provided false responses. The auditors should carefully consider features of the reply, such as postmarks, fax and telegraph responses, letterhead, electronic mail, telephone, or other characteristics that may give clues to indicate false responses. Auditors should follow up electronic and telephone responses to determine their origin (e.g., returning the telephone call to a known number, looking up telephone numbers to determine addresses, or using a criss-cross directory to determine the location of a respondent). Furthermore, the lack of response to a negative confirmation is no guarantee that the intended recipient received it unless the auditor carefully controlled the mailing.
EXHIBIT 3-3  Positive Confirmation Letter

Kingston Company
Chicago, Illinois

January 5, 20x2

Charley Company
Lake and Adams
Chicago, Illinois

Gentlemen:

Our auditors, Anderson, Olds, and Watershed, are making their regular audit of our financial statements. Part of this audit includes direct verification of customer balances.

Please examine the date below carefully and either confirm its accuracy or report any differences directly to our auditors using the enclosed reply envelope.

This is not a request for payment. Please do not send your remittance to our auditors.

Your prompt attention to this confirmation request will be appreciated.

Samuel Carboy, Controller

The balance due Kingston Company as of December 31, 20x1 is $1,906. This balance is correct except as noted below:

________________________________________

t’s correct.

________________________________________

We will send payment as soon as possible. Thank you.

Date: Jan. 07, 20x2 
By: P. "Charley" O’Quirk
Title: President
Charley Company
Lake and Adams
Chicago, Illinois

Gentlemen:

Our auditors, Anderson, Olds, and Watershed, are making their regular audit of our financial statements. Part of this audit includes direct verification of customer balances.

PLEASE EXAMINE THE DATE BELOW CAREFULLY AND COMPARE IT TO YOUR RECORDS OF YOUR ACCOUNT WITH US. IF OUR INFORMATION IS NOT IN AGREEMENT WITH YOUR RECORDS, PLEASE STATE ANY DIFFERENCES ON THE REVERSE SIDE OF THIS PAGE, AND RETURN THIS FORM DIRECTLY TO OUR AUDITORS IN THE RETURN ENVELOPE PROVIDED.

IF THE INFORMATION IS CORRECT, NO REPLY IS NECESSARY.

This is not a request for payment. Please do not send your remittance to our auditors.

Your prompt attention to this confirmation request will be appreciated.

Samuel Carboy, Controller

As of December 31, 20x1, balance due to Kingston Company: $1,906
Date of Origination: November and December, 20x1
Type: Open trade account
The response rate for positive confirmations is the proportion of the number of confirmations returned to the number sent, generally after the audit team prompts recipients with second and third requests. Research studies have shown response rates ranging from 66 to 96 percent. Recipients seem to be able to detect account misstatements to varying degrees. Studies have shown detection rates (the ratio of the number of exceptions reported to auditors to the number of account errors intentionally reported to customers) ranging from 20 to 100 percent. Negative confirmations seem to have lower detection rates than positive confirmations. Also, studies show somewhat lower detection rates for misstatements favorable to recipients (i.e., an accounts receivable understatement). Overall, positive confirmations appear to be more effective than negative confirmations; but results depend on the type of recipients, the size of the account, and the type of account being confirmed. Effective confirmation practices depend on attention to these factors and on prior years’ experience with confirmation results on a particular client's accounts.

Effective confirmation also depends on using a "bag of tricks" to boost the response rate. Often, auditors merely send out a cold, official-looking request in a metered mail envelope and expect customers to be happy to respond. However, the response rate can be increased by using: (1) a postcard sent in advance, notifying that a confirmation is coming; (2) special delivery mail; (3) first-class stamp postage (not metered); and (4) an envelope imprinted "Confirmation Enclosed: Please Examine Carefully." These devices increase the cost of the confirmation procedure, but the benefit is a better response rate.

The audit team should try to obtain replies to all positive confirmations by sending second and third requests to nonrespondents. If there is no response or if the response specifies an exception to the client's records, the auditors should carry out document vouching procedures to audit the account. These alternative procedures include the vouching direction of finding sales invoice copies, shipping documents, and customer orders that signal the existence of sales charges. They also are used to find evidence of customers' payments in subsequent cash receipts.

When sampling is used, all accounts in the sample should be audited. It is improper to substitute an easy-to-audit customer account not in the sample for one that does not respond to a confirmation request.

Confirmation of receivables may be performed at a date other than the year-end. When confirmation is done at an interim date, the audit firm is able to spread work throughout the year and avoid the pressures of overtime that typically occur around December 31. Also, the audit can be completed sooner after the year-end date if confirmation has been done earlier. The primary consideration when planning confirmation of accounts before the balance sheet date is the client's internal control over transactions affecting receivables. When confirmation is performed at an interim date, the following additional procedures should be considered:

1. Obtain a summary of receivables transactions from the interim date to the year-end date.
2. Obtain a year-end trial balance of receivables, compare it to the interim trial balance, and obtain evidence and explanations for large variations.
3. Consider the necessity for additional confirmations as of the balance sheet date if balances have increased materially.
One final note about confirmations: Confirmations of accounts, loans, and notes receivable may not produce sufficient evidence of ownership by the client. Debtors may not be aware that the auditor's client has sold their accounts, notes, or loans receivable to financial institutions or to the public (collateralized securities). Auditors need to perform additional inquiry and detail procedures to get evidence of the ownership of the receivables and the appropriateness of disclosures related to financing transactions secured by receivables.

SUMMARY: CONFIRMATIONS

Confirmations of cash balances, loans, accounts receivable, and notes receivable are required, unless auditors can justify substituting other procedures in the circumstances of a particular audit. The bank confirmation is a standard positive form. Confirmations for accounts and notes receivable can be in positive or negative form, and the positive form may be a blank confirmation.

Auditors must take care to control confirmations to ensure that responses are received from the real debtors and not from persons who can intercept the confirmations to give false responses. Responses by fax, telegraph, electronic mail, telephone, or other means not written and signed by a recipient should be followed up to determine their genuine origins. Second and third requests should be sent to prompt responses to positive confirmations, and auditors should audit nonresponding customers by alternative procedures. Accounts in a sample should not be left unaudited (e.g., "They didn't respond"), and easy-to-audit accounts should not be substituted for hard-to-audit ones in a sample. Various "tricks" can be used to raise the response rate.

Confirmations yield evidence about existence and gross valuation. However, the fact that a debtor admits to owing the debt does not mean the debtor can pay. Other procedures must be undertaken to audit the collectibility of the accounts. Nevertheless, confirmations can give some clues about collectibility when customers tell about balances in dispute. Confirmations of accounts, notes, and loans receivable should not be used as the only evidence of the ownership of these financial assets.

SPECIAL NOTE: AUDIT OF BANK RECONCILIATIONS WITH ATTENTION TO LAPPING AND KITING

The company's bank reconciliation is the primary means of valuing cash in the financial statements. The amount of cash in the bank is almost always different from the amount in the general ledger (financial statements), and the reconciliation purports to explain the difference. The normal procedure is to obtain the company-prepared bank reconciliation and audit it. Auditors should not perform the company's control function of preparing the reconciliation.
A client-prepared bank reconciliation is shown in Exhibit 3-5. The bank balance is confirmed and cross-referenced to the bank confirmation working paper (Exhibit 3-2). The reconciliation is recalculated, the outstanding checks and deposits in transit are footed, and the book balance is traced to the trial balance (which has been traced to the general ledger). The reconciling items should be vouched to determine whether outstanding checks really were not paid and that deposits in transit actually were mailed before the reconciliation date. The auditors' information source for vouching the bank reconciliation items is a cutoff bank statement, which is a complete bank statement including all paid checks and deposit slips. The client requests the bank to send this bank statement directly to the auditor. It is usually for a 10- to 20-day period following the reconciliation date. (It also can be the next regular monthly statement, received directly by the auditors.)

The vouching of outstanding checks and deposits in transit is a matter of comparing checks that cleared in the cutoff bank statement with the list of outstanding checks for evidence that all checks that were written prior to the reconciliation date were on the list of outstanding checks. The deposits shown in transit should be recorded by the bank in the first business days of the cutoff period. If recorded later, the inference is that the deposit may have been made up from receipts of the period after the reconciliation date. For large outstanding checks not clearing in the cutoff period, vouching may be extended to other documentation supporting the disbursement. These procedures are keyed and described by tickmarks in Exhibit 3-5.

**ACCOUNTS RECEIVABLE LAPPING**

When the business receives many payments from customers, a detailed audit should include comparison of the checks listed on a sample of deposit slips (from the reconciliation month and other months) to the detail of customer credits listed on the day's posting to customer accounts receivable (daily remittance list or other record of detail postings). This procedure is a test for accounts receivable lapping. It is an attempt to find credits given to customers for whom no payments were received on the day in question. An example of this type of comparison is in the discovery summary section of Case 3.1 (The Canny Cashier) later in this chapter.
Kingston Company  
Bank Reconciliation – First National Bank  
General Account  
12/31/20x1  
(Prepared by client)

Prepared: J.D. 1/10/20x2  
Reviewed: RA 1/10/20x2

Balance per bank statement  
506,100 a

Add:  
Deposit in transit as of 12/31/20x1  
51,240 n

---------
557,340

Deduct outstanding checks:

<table>
<thead>
<tr>
<th>Date</th>
<th>No.</th>
<th>Payee</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/10/20x0</td>
<td>842</td>
<td>Ace Supply Company</td>
<td>500</td>
</tr>
<tr>
<td>11/31/20x1</td>
<td>1280</td>
<td>Ace Supply Company</td>
<td>1,800</td>
</tr>
<tr>
<td>12/15/20x1</td>
<td>1372</td>
<td>Norwest Lumber Co</td>
<td>30,760</td>
</tr>
<tr>
<td>12/28/20x1</td>
<td>1412</td>
<td>Gibson &amp; Johnson</td>
<td>7,270</td>
</tr>
<tr>
<td>12/30/20x1</td>
<td>1417</td>
<td>First National Payroll</td>
<td>20,000</td>
</tr>
<tr>
<td>12/30/20x1</td>
<td>1418</td>
<td>Ace Supply Company</td>
<td>2,820</td>
</tr>
<tr>
<td>12/30/20x1</td>
<td>1419</td>
<td>Windy City Utilities</td>
<td>2,030</td>
</tr>
<tr>
<td>12/30/20x1</td>
<td>1420</td>
<td>Howard Hardware</td>
<td>8,160</td>
</tr>
</tbody>
</table>

---------
73,340

Balance per book  
484,000 f

Note: Obtained cutoff bank statement 1/9/20x2

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Confirmed by bank, standard bank confirmation</td>
</tr>
<tr>
<td>n</td>
<td>Vouched to cutoff bank statement, deposit recorded by bank on 1/3/20x2. Vouched to duplicate deposit slip validated 1/3/20x2.</td>
</tr>
<tr>
<td>√</td>
<td>Vouched to paid check cleared with cutoff bank statement</td>
</tr>
<tr>
<td>☑</td>
<td>Vouched to statement from attorneys</td>
</tr>
<tr>
<td>¥</td>
<td>Amount in dispute per controller</td>
</tr>
</tbody>
</table>
CHECK KITING

Auditors also should be alert to the possibility of a company's practice of illegal "kiting." **Check kiting** is the practice of building up balances in one or more bank accounts based on uncollected (float) checks drawn against similar accounts in other banks. Kiting involves depositing money from one bank account to another, using a hot check. The depository bank does not know the check is on insufficient funds, but the deficiency is covered by another hot check from another bank account before the first check clears. Kiting is the deliberate floating of funds between two or more bank accounts. By this method, a bank customer uses the time required for checks to clear to obtain an unauthorized loan without any interest charge.

Professional money managers working for cash-conscious businesses try to have minimal unused balances in their accounts, and their efforts sometimes can look like check kites. Tight cash flows initiate kites, and **intent to kite** is the key for criminal charges. Kites evolve to include numerous banks and numerous checks. The more banks and broader geographical distance, the harder a perpetrator finds it to control a kite scheme.

The transactions described below illustrate a simple kite scheme. The transactions are shown in Exhibit 3-6.

Start with no money in the First National Bank and none in the Last National Bank. Run the kite quickly from July 3 (Monday) through July 12 (next Wednesday) – taking advantage of the holiday and the weekend to float the hot checks.

A. Deposit a $15,000 check drawn on First National Bank to the Last National account. Simultaneously, deposit a $10,000 check drawn on Last National Bank to the First National account. Do not record the deposits and disbursements in the general ledger.

B. Deposit an $11,000 check drawn on First National Bank to the Last National account. Simultaneously, deposit a $13,000 check drawn on Last National Bank to the First National account. Do not record the deposits and disbursements in the general ledger.

C. Purchase an $8,000 certified check from First National Bank to make a down payment on a Mercedes automobile. Record the check in the general ledger.

D. The first transfer checks (part A) clear each bank.

E. Deposit a $16,000 check drawn on First National Bank to the Last National account. Simultaneously, deposit a $14,000 check drawn on Last National Bank to the First National account. Do not record the deposits and disbursements in the general ledger.

F. Write checks for $14,000 drawn on First National Bank and $32,000 drawn on Last National Bank payable to a travel agent, and take a long trip (preferably to a country with no extradition treaty!).

G. When the checks are presented to the banks for payment, the accounts are empty. A total of $79,000 was kited, of which $25,000 cleared during the kite period (the first transfers in A), so the "take" was $54,000. The criminals got the Mercedes ($8,000) and the vacation funds ($46,000).
EXHIBIT 3-6 Illustrative Check Kiting Transactions

<table>
<thead>
<tr>
<th>Index</th>
<th>Date</th>
<th>Transaction</th>
<th>First National Bank</th>
<th>Last National Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>July 3</td>
<td>1st transfer</td>
<td>$10,000 $10,000</td>
<td>$10,000 $10,000</td>
</tr>
<tr>
<td>B</td>
<td>July 5</td>
<td>2nd transfer</td>
<td>$13,000 $13,000</td>
<td>$13,000 $13,000</td>
</tr>
<tr>
<td>C</td>
<td>July 6</td>
<td>Mercedes</td>
<td>$15,000 $15,000</td>
<td>$15,000 $15,000</td>
</tr>
<tr>
<td>D</td>
<td>July 7</td>
<td>1st trnsfr clear</td>
<td>$15,000 ($15,000)</td>
<td>($10,000) $10,000</td>
</tr>
<tr>
<td>E</td>
<td>July 7</td>
<td>3rd transfer</td>
<td>$14,000 $14,000</td>
<td>$14,000 $14,000</td>
</tr>
<tr>
<td>F</td>
<td>July 8</td>
<td>Pay travel</td>
<td>$14,000 $14,000</td>
<td>$14,000 $14,000</td>
</tr>
<tr>
<td>G</td>
<td>July 10</td>
<td>2nd trnsfr clear</td>
<td>$11,000 ($11,000)</td>
<td>($13,000) $13,000</td>
</tr>
<tr>
<td>G</td>
<td>July 12</td>
<td>3rd trnsfr clear</td>
<td>($16,000) ($16,000)</td>
<td>($14,000) $14,000</td>
</tr>
<tr>
<td>G</td>
<td>July 12</td>
<td>Travel clear</td>
<td>($14,000) ($14,000)</td>
<td>($32,000) $32,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>($27,000) ($27,000)</td>
<td>($27,000) $27,000</td>
</tr>
</tbody>
</table>

(1) "At Bank" means the bank's records of deposits received and checks paid (cleared).
(2) "Actual" means the amounts the general ledger would have shown had the transfers been recorded.

These are some characteristic signs of check kiting schemes:

- Frequent deposits and checks in same amounts.
- Frequent deposits and checks in round amounts.
- Frequent deposits with checks written on the same (other) banks.
- Short time lag between deposits and withdrawals.
- Frequent ATM account balance inquiries.
- Many large deposits made on Thursday or Friday to take advantage of the weekend.
- Large periodic balances in individual accounts with no apparent business explanation.
- Low average balance compared to high level of deposits.
- Many checks made payable to other banks.
- Bank willingness to pay against uncollected funds.
- "Cash" withdrawals with deposit checks drawn on another bank.
- Checks drawn on foreign banks with lax banking laws and regulations.

Auditors can detect the above signs of check kiting by reviewing bank account activity. The only trouble is that criminal check kiters often destroy the banking documents. If a company cannot or will not produce its bank statements, with all deposit slips and canceled checks, the auditors should be wary.

If these cash transfers are recorded in the books, a company will show the negative balances that result from checks drawn on insufficient funds. However, perpetrators may try to hide the kiting by not recording the deposits and checks. Such maneuvers may be detectable in a bank reconciliation audit.
SUMMARY: BANK RECONCILIATIONS, LAPPING AND KITING

The combination of all the procedures performed on the bank reconciliation provides evidence of existence, valuation, and proper cutoff of the bank cash balances. Auditors use a cutoff bank statement to obtain independent evidence of the proper listing of outstanding checks and deposits in transit on a bank reconciliation.

Additional procedures can be performed to try to detect attempts at lapping accounts receivable collections and kiting checks. For lapping, these procedures include auditing the details of customer payments listed in bank deposits in comparison to details of customer payment postings (remittance lists). For kiting, these procedures include being alert to the signs of kites and preparing a schedule of interbank transfers and a proof of cash.

BANK TRANSFER SCHEDULE AND "PROOF OF CASH"

Auditors usually prepare a schedule of interbank transfers to determine whether transfers of cash from one bank to another were recorded properly (correct amount and correct date). Assume the facts given in the preceding kiting illustration, and the following: (1) the First National Bank account is the company's general bank account, and the Last National Bank account is the payroll account, (2) the company pays its payroll on the 15th and 30th days of each month, and (3) the company transfers the net amount of each payroll from the general account to the payroll account. A "schedule of interbank transfers" prepared from the recorded entries in the general ledger would look like the one in Panel A in Exhibit 3-7.

However, we know that the managers performed a check kite and did not record several transfers between these accounts. Auditors should review the bank statements, and find the other transfers, and put them on the schedule (shown in Panel B in Exhibit 3-7). Panel B shows how the auditors can document the unrecorded transfers.

EXHIBIT 3-7 Illustration of Interbank Transfer Schedule

<table>
<thead>
<tr>
<th>Check No.</th>
<th>Disbursing Account Bank</th>
<th>Amount</th>
<th>Date per Books</th>
<th>Date per Bank</th>
<th>Receiving Account Bank</th>
<th>Date per Books</th>
<th>Date per Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PANEL A</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7602</td>
<td>1st Nat'l</td>
<td>$24,331</td>
<td>July 14</td>
<td>July 18</td>
<td>Last Nat'l</td>
<td>July 14</td>
<td>July 14</td>
</tr>
<tr>
<td>8411</td>
<td>1st Nat'l</td>
<td>$36,462</td>
<td>July 28</td>
<td>Aug 1</td>
<td>Last Nat'l</td>
<td>July 28</td>
<td>July 28</td>
</tr>
<tr>
<td><strong>PANEL B</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6722</td>
<td>1st Nat'l</td>
<td>$15,000</td>
<td>None</td>
<td>July 7</td>
<td>Last Nat'l</td>
<td>None</td>
<td>July 3</td>
</tr>
<tr>
<td>11062</td>
<td>Last Nat'l</td>
<td>$10,000</td>
<td>None</td>
<td>July 7</td>
<td>1st Nat'l</td>
<td>None</td>
<td>July 3</td>
</tr>
<tr>
<td>6793</td>
<td>1st Nat'l</td>
<td>$11,000</td>
<td>None</td>
<td>July 10</td>
<td>Last Nat'l</td>
<td>None</td>
<td>July 5</td>
</tr>
<tr>
<td>11097</td>
<td>Last Nat'l</td>
<td>$13,000</td>
<td>None</td>
<td>July 10</td>
<td>1st Nat'l</td>
<td>None</td>
<td>July 5</td>
</tr>
<tr>
<td>6853</td>
<td>1st Nat'l</td>
<td>$16,000</td>
<td>None</td>
<td>July 12</td>
<td>Last Nat'l</td>
<td>None</td>
<td>July 7</td>
</tr>
<tr>
<td>11106</td>
<td>Last Nat'l</td>
<td>$14,000</td>
<td>None</td>
<td>July 12</td>
<td>1st Nat'l</td>
<td>None</td>
<td>July 7</td>
</tr>
</tbody>
</table>
Auditors can use another method to discover unrecorded cash transactions. It is called a "proof of cash." You may know this method under the name of "four-column bank reconciliation." The proof of cash is a reconciliation in which the bank balance, the bank report of cash deposited, and the bank report of cash paid are all reconciled to the company's general ledger. Exhibit 3-8 illustrates a proof of cash. The illustration assumes some bank reconciliation information, some transaction activity, and the unrecorded transfers for the First National Bank account used in the previous illustrations of kiting and interbank transfers. (Changing the kiting illustration: the bank accounts did not start with zero balances.)

The proof of cash attempt to reconcile the deposits and payments reported by the bank to the deposits and payments recorded in the general ledger will reveal the unrecorded transfers. The amounts will not reconcile until the auditors inspect the bank statement and find the bank amounts that are not in the general ledger. (Likewise, the attempt to reconcile the July 31 bank balance will show a $5,000 difference, which is explained by the $37,000 unrecorded deposits and the $42,000 unrecorded payments.)

EXHIBIT 3-8 Illustration of Proof of Cash--First National Bank

<table>
<thead>
<tr>
<th>Balance</th>
<th>Deposits</th>
<th>Payments</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 30</td>
<td>$264,322</td>
<td>$398,406</td>
<td>$390,442</td>
</tr>
<tr>
<td>July 31</td>
<td>76,501</td>
<td>(76,501)</td>
<td>79,721</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deposits in transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 30</td>
</tr>
<tr>
<td>July 31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Outstanding checks</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 30</td>
</tr>
<tr>
<td>July 31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unrecorded bank interest (recorded in next month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 30</td>
</tr>
<tr>
<td>July 31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unrecorded service charges (recorded in the next month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 30</td>
</tr>
<tr>
<td>July 31</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unrecorded transfers received from Last National Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>(37,000)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unrecorded transfers to Last National Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>General ledger amounts</td>
</tr>
</tbody>
</table>

General ledger amounts | $251,045 | $364,633 | $321,655 | $294,023 |
AUDIT CASES: SUBSTANTIVE AUDIT PROCEDURES

The audit procedures to gather evidence on account balances are called "substantive procedures." Some amount of substantive audit procedures must be performed in all audits. Auditors should not place total reliance on controls to the exclusion of other procedures. Substantive audit procedures differ from test of controls audit procedures in their basic purpose. Substantive procedures are designed to obtain direct evidence about the dollar amounts in account balances, while test of controls procedures are designed to obtain evidence about the company's performance of its own control activities. Sometimes an audit procedure can be used for both purposes simultaneously, and then it is called a dual-purpose procedure.

DUAL-PURPOSE NATURE OF ACCOUNTS RECEIVABLE CONFIRMATIONS

Accounts receivable confirmation is a substantive procedure designed to obtain evidence of the existence and gross amount (valuation) of customers' balances directly from the customer. If such confirmations show numerous exceptions, auditors would be concerned with the controls over the details of sales and cash receipts transactions even if previous control evaluations seemed to show little control risk.

The goal in performing substantive procedures is to detect evidence of errors and frauds, if any exist in the accounts as material overstatements or understatements of account balances. In the remainder of this part of the chapter, the approach is to use a set of cases which contain specific examples of test of controls and substantive audit procedures (recalculation, observation, confirmation, inquiry, vouching, tracing, scanning, and analysis). The case stories are used instead of listing schemes and detection procedures in the abstract.

The cases follow a standard format, which first tells about an error or fraud situation. This part is followed by an "audit approach" section that tells about the audit objective (assertion), controls, test of controls, and audit of balances (substantive procedures) that could be considered in an approach to the situation. The audit approach section presumes that the auditors do not know everything about the situation. (As a student of the case, you have "inside information.")

These are the parts of the case situation description for each one:

Method: A cause of the misstatement (accidental error or fraud attempt), which usually is made easier by some kind of failure of controls.

Paper trail: A set of telltale signs of erroneous accounting, missing or altered documents, or a "dangling debit" (the false or erroneous debit that results from an overstatement of assets).

Amount: The dollar amount of overstated assets and revenue, or understated liabilities and expenses.
The audit approach section contains these parts:

**Audit objective:** A recognition of a financial statement *assertion* for which evidence needs to be obtained. The assertions are about existence of assets, liabilities, revenues, and expenses; their valuation; their complete inclusion in the account balances; the rights and obligations inherent in them; and their proper presentation and disclosure in the financial statements.

**Control:** A recognition of the control activities that *should* be used in an organization to prevent and detect errors and frauds.

**Test of controls:** Ordinary and extended procedures *designed to produce evidence about the effectiveness of the controls* that should be in operation.

**Audit of balances:** Ordinary and extended *substantive procedures designed to find signs of errors and frauds in account balances and classes of transactions.*
CASE 3.1: THE CANNY CASHIER

Problem
Cash embezzlement caused overstated accounts receivable, overstated customer discounts expense, and understated cash sales. Company failed to earn interest income on funds "borrowed."

Method
D. Bakel was the assistant controller of Sports Equipment, Inc. (SEI), an equipment retailer. SEI maintained accounts receivable for school districts in the region, otherwise customers received credit by using their own credit cards.

Bakel's duties included being the company cashier, who received all the incoming mail payments on school accounts and the credit card account and all the cash and checks taken over the counter. Bakel prepared the bank deposit (and delivered the deposit to the bank), listing all the checks and currency, and also prepared a remittance worksheet (daily cash report) that showed amounts received, discounts allowed on school accounts, and amounts to credit to the accounts receivable. The remittance worksheet was used by another accountant to post credits to the accounts receivable. Bakel also reconciled the bank statement. No one else reviewed the deposits or the bank statements except the independent auditors.

Bakel opened a bank account in the name of Sport Equipment Company (SEC), after properly incorporating the company in the secretary of state's office. Over-the-counter cash and checks and school district payments were taken from the SEI receipts and deposited in the SEC account. (None of the customers noticed the difference between the rubber stamp endorsements for the two similarly named corporations, and neither did the bank.) SEC kept the money awhile, earning interest, then Bakel wrote SEC checks to SEI to replace the "borrowed" funds, in the meantime taking new SEI receipts for deposit to SEC. Bakel also stole payments made by the school districts, depositing them to SEC. Later, Bakel deposited SEC checks in SEI, giving the schools credit, but approved an additional 2 percent discount in the process. Thus, the schools received proper credit later, and SEC paid in less by the amount of the extra discounts.

Paper Trail
SEI's bank deposits systematically showed fairly small currency deposits. Bakel was nervous about taking too many checks, so cash was preferred. The deposit slips also listed the SEC checks because bank tellers always compare the deposit slip listing to the checks submitted. The remittance worksheet showed different details: Instead of showing SEC checks, it showed receipts from school districts and currency, but not many over-the-counter checks from customers.

The transactions became complicated enough that Bakel had to use the microcomputer in the office to keep track of the school districts that needed to get credit. There were no vacations for this hard-working cashier because the discrepancies might be noticed by a substitute, and Bakel needed to give the districts credit later.

Amount
Over a six-year period, Bakel built up a $150,000 average balance in the Sport Equipment Company (SEC) account, which earned a total of $67,500 interest that should have been earned by Sports Equipment, Inc. (SEI). By approving the "extra" discounts, Bakel skimmed 2 percent of $1 million in annual sales, for a total of $120,000. Since SEI would have had net income before taxes of about $1.6 million over this six years (about 9 percent on the sales dollar), Bakel's embezzlement took about 12.5 percent of the income.
AUDIT APPROACH

Objective
Obtain evidence to determine whether the accounts receivable recorded on the books represent claims against real customers in the gross amounts recorded.

Control
Authorization related to cash receipts, custody of cash, recording cash transactions, and bank statement reconciliation should be separate duties designed to prevent errors and frauds. Some supervision and detail review of one or more of these duties should be performed as a next-level control designed to detect errors and frauds, if they have occurred. For example, the remittance worksheet should be prepared by someone else, or at least the discounts should be approved by the controller; the bank reconciliation should be prepared by someone else other than Bakel.

Bakel had all the duties. (While recording was not actually performed, Bakel provided the source document – the remittance worksheet – the other accountant used to make the cash and accounts receivable entries.) According to the company president, the "control" was the diligence of "our" long-time, trusted, hard-working assistant controller. Note: An auditor who "thinks like a crook" to imagine ways Bakel could commit errors or fraud could think of this scheme for cash embezzlement and accounts receivable lapping.

Test of Controls
Since the "control" purports to be Bakel's honest and diligent performance of the accounting and control activities that might have been performed by two or more people, the test of controls is an audit of cash receipts transactions as they relate to accounts receivable credit. The dual-direction samples and procedures are these:

Validity direction: Select a sample of customer accounts receivable, and vouch payment credits to remittance worksheets and bank deposits, including recalculation of discounts allowed in comparison to sales terms (2 percent), classification (customer name) identification, and correspondence of receipt date to recording date.

Completeness direction: Select a sample of remittance worksheets (or bank deposits), vouch details to bank deposit slips (trace details to remittance worksheets if the sample is bank deposits), and trace forward to complete accounting posting in customer accounts receivable.

Audit of Balance
Since there is a control risk of incorrect accounting, perform the accounts receivable confirmation as of the year-end date. Confirm a sample of school district accounts, using positive confirmations. Blank confirmations may be used. Since there is a control risk, the "sample" may be all the accounts, if the number is not too large.

As prompted by notice of an oddity (noted in the discovery summary below), use the telephone book, chamber of commerce directory, local criss-cross directory, and a visit to the secretary of state's office to determine the location and identity of Sport Equipment Company.
Discovery Summary

The test of controls samples showed four cases of discrepancy, one of which is shown below.

The auditors sent positive confirmations on all 72 school district accounts. Three of the responses stated the districts had paid the balances before the confirmation date. Follow-up procedures on their accounts receivable credit in the next period showed they had received credit in remittance reports, and the bank deposits had shown no checks from the districts but had contained a check from Sports Equipment Company. Investigation of SEC revealed the connection of Bakel, who was confronted and then confessed.

Bank Deposit Slip
Jones 25
Smith 35
Hill District 980
Sport Equipment 1,563
Currency 540
Deposit 3,143

Cash Remittance Report

<table>
<thead>
<tr>
<th>Name</th>
<th>Amount</th>
<th>Discount</th>
<th>AR</th>
<th>Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jones</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>Smith</td>
<td>35</td>
<td>0</td>
<td>0</td>
<td>35</td>
</tr>
<tr>
<td>Hill Dist.</td>
<td>980</td>
<td>20</td>
<td>1,000</td>
<td>0</td>
</tr>
<tr>
<td>Marlin Dist.</td>
<td>480</td>
<td>20</td>
<td>500</td>
<td>0</td>
</tr>
<tr>
<td>Waco Dist.</td>
<td>768</td>
<td>32</td>
<td>800</td>
<td>0</td>
</tr>
<tr>
<td>Currency</td>
<td>855</td>
<td>0</td>
<td>0</td>
<td>855</td>
</tr>
<tr>
<td>Totals</td>
<td>3,143</td>
<td>72</td>
<td>2,300</td>
<td>915</td>
</tr>
</tbody>
</table>
CASE 3.2: THE TAXMAN ALWAYS RINGS TWICE

Problem
Overstated receivables for property taxes in a school district because the tax assessor stole some taxpayers' payments.

Method
J. Shelstad was the tax assessor-collector in the Ridge School District, serving a large metropolitan area. The staff processed tax notices on a computer system and generated 450,000 tax notices each October. An office copy was printed and used to check off "paid" when payments were received. Payments were processed by computer, and a master file of "accounts receivable" records (tax assessments, payments) was kept on the computer hard disk.

Shelstad was a good personnel manager, who often took over the front desk at lunchtime so the teller staff could enjoy lunch together. During these times, Shelstad took payments over the counter, gave the taxpayers a counter receipt, and pocketed some of the money, which was never entered in the computer system.

Shelstad resigned when he was elected to the Ridge school board. The district's assessor-collector office was eliminated upon the creation of a new countywide tax agency.

Paper Trail
The computer records showed balances due from many taxpayers who had actually paid their taxes. The book of printed notices was not marked "paid" for many taxpayers who had received counter receipts. These records and the daily cash receipts reports (cash receipts journal) were available at the time the independent auditors performed the most recent annual audit in April. When Shelstad resigned in August, a power surge permanently destroyed the hard disk receivables file, and the cash receipts journals could not be found.

The new county agency managers noticed that the total of delinquent taxes disclosed in the audited financial statements was much larger than the total turned over to the country attorney for collection and foreclosure.

Amount
Shelstad had been the assessor-collector for 15 years. The "good personnel manager" pocketed 100-150 counter payments each year, in amounts of $500-$2,500, stealing about $200,000 a year for a total of approximately $2.5 million. The district had assessed about $800-$900 million per year, so the annual theft was less than 1 percent. Nevertheless, the taxpayers got mad.
AUDIT APPROACH

Objective

Obtain evidence to determine whether the receivables for taxes (delinquent taxes) represent genuine claims collectible from the taxpayers.

Control

The school district had a respectable system for establishing the initial amounts of taxes receivable. The professional staff of appraisers and the independent appraisal review board established the tax base for each property. The school board set the price (tax rate). The computer system authorization for billing was validated on these two inputs.

The cash receipts system was well designed, calling for preparation of a daily cash receipts report (cash receipts journal that served as a source input for computer entry). This report was always reviewed by the “boss,” Shelstad.

Unfortunately, Shelstad had the opportunity and power to override the controls and become both cash handler and supervisor. Shelstad made the decisions about sending delinquent taxes to the county attorney for collection, and the ones known to have been paid but stolen were withheld.

Test of Controls

The auditors performed dual-direction sampling to test the processing of cash receipts.

Validity direction: Select a sample of receivables from the computer hard disk, and vouch (1) charges to the appraisal record, recalculating the amount using the authorized tax rate and (2) payments, if any, to the cash receipts journal and bank deposits. (The auditors found no exceptions.) Completeness direction: Select a sample of properties from the appraisal rolls, and determine that tax notices had been sent and tax receivables (charges) recorded in the computer file. Select a sample of cash receipts reports, vouch them to bank deposits of the same amount and date, and trace the payments forward to credits to taxpayers' accounts.

Select a sample of bank deposits, and trace them to cash receipts reports of the same amount and date. In one of these latter two samples, compare the details on bank deposits to the details on the cash receipts reports to determine whether the same taxpayers appear on both documents. (The auditors found no exceptions.)

Audit of Balance

Confirm a sample of unpaid tax balances with taxpayers. Response rates may not be high, and follow-up procedures determining the ownership (county title files) may need to be performed, and new confirmations may need to be sent.

Determine that proper disclosure is made of the total of delinquent taxes and the total of delinquencies turned over to the county attorney for collection proceedings.
Discovery Summary

Shelstad persuaded the auditors that the true "receivables" were the delinquencies turned over to the county attorney. The confirmation sample and other work was based on this population. Thus, confirmations were not sent to fictitious balances that Shelstad knew had been paid, and the auditors never had the opportunity to receive "I paid" complaints from taxpayers.

The new managers of the countywide tax district were not influenced by Shelstad. They questioned the discrepancy between the delinquent taxes in the audit report and the lower amount turned over for collection. Since the computer file was not usable, the managers had to use the printed book of tax notices, where paid accounts had been marked "paid." (Shelstad had not marked the stolen ones "paid" so the printed book would agree with the computer file.) Tax due notices were sent to the taxpayers with unpaid balances, and they began to show up bringing their counter receipts and loud complaints.

In a fit of audit overkill, the independent auditors had earlier photocopied the entire set of cash receipts reports (cash journal), and they were then able to determine that the counter receipts (all signed by Shelstad) had not been deposited or entered. Shelstad was prosecuted and sentenced to a jail term.
CASE 3.3: BILL OFTEN, BILL EARLY

Problem

Overstated sales and receivables, understated discounts expense, and overstated net income resulted from recording sales too early and failure to account for customer discounts taken.

Method

McGossage Company experienced profit pressures for two years in a row. Actual profits were squeezed in a recessionary economy, but the company reported net income decreases that were not as severe as other companies in the industry.

Sales were recorded in the grocery products division for orders that had been prepared for shipment but not actually shipped until later. Employees backdated the shipping documents. Gross profit on these "sales" was about 30 percent. Customers took discounts on payments, but the company did not record them, leaving the debit balances in the customers' accounts receivable instead of charging them to discounts and allowances expense. Company accountants were instructed to wait 60 days before recording discounts taken.

The division vice president and general manager knew about these accounting practices, as did a significant number of the 2,500 employees in the division. The division managers were under orders from headquarters to achieve profit objectives they considered unrealistic.

Paper Trail

The customers' accounts receivable balances contained amounts due for discounts the customers already had taken. The cash receipts records showed payments received without credit for discounts. Discounts were entered monthly by a special journal entry.

The unshipped goods were on the shipping dock at year-end with papers showing earlier shipping dates.

Amount

As misstatements go, some of these were on the materiality borderline. Sales were overstated 0.3 percent and 0.5 percent in the prior and current year, respectively. Accounts receivable were overstated 4 percent and 8 percent. But the combined effect was to overstate the division's net income by 6 percent and 17 percent. Selected data were:

<table>
<thead>
<tr>
<th></th>
<th>One Year Ago *</th>
<th>Current Year *</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reported Actual</td>
<td>Reported Actual</td>
</tr>
<tr>
<td>Sales</td>
<td>$330.0 $329.0</td>
<td>$350.0 $348.0</td>
</tr>
<tr>
<td>Discounts expense</td>
<td>1.7 1.8</td>
<td>1.8 2.0</td>
</tr>
<tr>
<td>Net Income</td>
<td>6.7 6.3</td>
<td>5.4 4.6</td>
</tr>
</tbody>
</table>

*Dollars in millions.
AUDIT APPROACH

Objective

Obtain evidence to determine whether sales were recorded in the proper period and whether gross accounts receivable represented the amounts due from customers at year-end.

Obtain evidence to determine whether discounts expense was recognized in the proper amount in the proper period.

Control

The accounting manual should provide instructions to record sales on the date of shipment (or when title passes, if later). Management subverted this control procedure by having shipping employees date the shipping papers incorrectly.

Cash receipts procedures should provide for authorizing and recording discounts when they are taken by customers. Management overrode this control instruction by giving instructions to delay the recording.

Test of Controls

Questionnaires and inquiries should be used to determine the company's accounting policies. It is possible that employees and managers would lie to the auditors to conceal the policies. It is also possible that pointed questions about revenue recognition and discount recording policies would elicit answers to reveal the practices.

For detail procedures: Select a sample of cash receipts, examine them for authorization, recalculate the customer discounts, trace them to accounts receivable input for recording of the proper amount on the proper date. Select a sample of shipping documents and vouch them to customer orders, then trace them to invoices and to recording in the accounts receivable input with proper amounts on the proper date. These tests follow the tracing direction – starting with data that represent the beginning of transactions (cash receipts, shipping) and tracing them through the company's accounting process.

Audit of Balance

Confirm a sample of customer accounts. Use analytical relationships of past years' discount expense to a relevant base (sales, sales volume) to calculate an overall test of the discounts expense.
Discovery Summary

The managers lied to the auditors about their revenue and expense timing policies. The sample of shipping documents showed no dating discrepancies because the employees had inserted incorrect dates. The analytical procedures on discounts did not show the misstatement because the historical relationships were too erratic to show a deficient number (outlier). However, the sample of cash receipts transactions showed that discounts were not calculated and recorded at time of receipt. Additional inquiry led to discovery of the special journal entries and knowledge of the recording delay. Two customers in the sample of 65 confirmations responded with exceptions that turned out to be unrecorded discounts.

Two other customers in the confirmation sample complained that they did not owe for late invoices on December 31. Follow-up showed the shipments were goods noticed on the shipping dock. Auditors taking the physical inventory noticed the goods on the shipping dock during the December 31 inventory-taking. Inspection revealed the shipping documents dated December 26. When the auditors traced these shipments to the sales recording, they found them recorded "bill and hold" on December 29. (These procedures were performed and the results obtained by a successor audit firm in the third year!)
CASE 3.4: THANK GOODNESS IT’S FRIDAY

Problem

Overstated sales caused overstated net income, retained earnings, current assets, working capital, and total assets. Overstated cash collections did not change the total current assets or total assets, but it increased the amount of cash and decreased the amount of accounts receivable.

Method

Alpha Brewery Corporation generally has good control policies and procedures related to authorization of transactions for accounting entry, and the accounting manual has instructions for recording sales transactions in the proper accounting period. The company regularly closes the accounting process each Friday at 5 P.M. to prepare weekly management reports. The year-end date (cutoff date is December 31, and, in 20X0, December 31 was a Monday. However, the accounting was performed through Friday as usual, and the accounts were closed for the year on January 4.

Paper Trail

All the entries were properly dated after December 31, including the sales invoices, cash receipts, and shipping documents.

However, the trial balance from which the financial statements were prepared was dated December 31, 20X0. Nobody noticed the slip of a few days because the Friday closing was normal.

Amount

Alpha recorded sales of $672,000 and gross profit of $268,800 over the January 1-4 period. Cash collections on customers’ accounts were recorded in the amount of $800,000.
AUDIT APPROACH

Objective

Obtain evidence to determine the existence, completeness, and valuation of sales for the year ended December 31, 20X0, and cash and accounts receivable as of December 31, 20X0.

Control

The company had in place the proper instructions to people to date transactions on the actual date on which they occurred and to enter sales and cost of goods sold on the day of shipment and to enter cash receipts on the day received in the company offices. An accounting supervisor should have checked the entries through Friday to make sure the dates corresponded with the actual events, and that the accounts for the year were closed with Monday's transactions.

Test of Controls

In this case, the auditors need to be aware of the company's weekly routine closing and the possibility that the intervention of the December 31 date might cause a problem. Asking the question: "Did you cut off the accounting on Monday night this week?" might elicit the "Oh, we forgot!" response. Otherwise, it is normal to sample transactions around the year-end date to determine whether they were recorded in the proper accounting period.

The procedure: Select transactions 7-10 days before and after the year-end date, and inspect the dates on supporting documentation for evidence of accounting in the proper period.

Audit of Balance

The audit for sales overstatement is partly accomplished by auditing the cash and accounts receivable at December 31 for overstatement (the dangling debit location). Confirm a sample of accounts receivable. If the accounts are too large, the auditors expect the debtors to say so, thus leading to detection of sales overstatements.

Cash overstatement is audited by auditing the bank reconciliation to see whether deposits in transit (the deposits sent late in December) actually cleared the bank early in January. Obviously, the January 4 cash collections could not reach the bank until at least Monday, January 7. That's too long for a December 31 deposit to be in transit to a local bank.

The completeness of sales recordings is audited by selecting a sample of sales transactions (and supporting shipping documents) in the early part of the next accounting period (January 20X1). One way that sales of 20X0 could be incomplete would be to postpone recording December shipments until January, and this procedure will detect them if the shipping documents are dated properly.
Audit of Balance continued

The completeness of cash collections (and accounts receivable credits) are audited by auditing the cash deposits early in January to see whether there is any sign of holding cash without entry until January.

In this case, the existence objective is more significant for discovery of the problem than the completeness objective. After all, the January 1-4 sales, shipments, and cash collections did not "exist" in December 20X0.

Discovery Summary

The test of controls sample from the days before and after December 31 quickly revealed the problem. Company accounting personnel were embarrassed, but there was no effort to misstate the financial statements. This was a simple error. The company readily made the following adjustment:

<table>
<thead>
<tr>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$672,000</td>
</tr>
<tr>
<td>Inventory</td>
<td>$403,200</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>$800,000</td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>$672,000</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>$403,200</td>
</tr>
<tr>
<td>Cash</td>
<td>$800,000</td>
</tr>
</tbody>
</table>
SUMMARY

The revenue and collection cycle consists of customer order processing, credit checking, shipping goods, billing customers and accounting for accounts receivable, and collecting and accounting for cash receipts. Companies reduce control risk by having a suitable separation of authorization, custody, recording, and periodic reconciliation duties. Error-checking activities of comparing customer orders and shipping documents are important for billing customers the right prices for the delivered quantities. Otherwise, many things could go wrong – ranging from making sales to fictitious customers or customers with bad credit to erroneous billings for the wrong quantities at the wrong prices at the wrong time.

Cash collection is a critical point for asset control. Many cases of embezzlement occur in this process. Illustrative cases in the chapter tell the stories of some of these cash embezzlement schemes, including the practice of "lapping" accounts receivable.

Three topics have special technical notes in the chapter. The existence assertion is very important in the audit of cash and receivables assets because misleading financial statements often have contained overstated assets and revenue. The use of confirmations gets a special section because confirmation is frequently used to obtain evidence of asset existence from outside parties, such as customers who owe on accounts receivable. The audit of bank reconciliations is covered in the context of an audit opportunity to recalculate the amount of cash for the financial statements and to look for signs of accounts receivable lapping and check kiting. The schedule of interbank transfers and the proof of cash methods are tools auditors can use to find unrecorded cash transactions.
CHAPTER 3: CASH COLLECTIONS AND RECEIVABLES

The following summarizes the important points related to the chapter just completed. Following the outline are review study questions with suggested solutions which provide evaluative and responsive feedback. You should answer the study questions and review the suggested solutions to confirm that you have a clear understanding of the material presented prior to proceeding to subsequent chapters.

OUTLINE

A. Revenue and Collection Cycle: Typical Activities
   1. Receiving and processing customer orders, including credit granting
   2. Delivering goods and services to customers
   3. Billing customers and accounting for accounts receivable
   4. Collecting and depositing cash received from customers
   5. Reconciling bank statements

B. Sales and Accounts Receivable
   1. Authorization: processing customer orders
   2. Custody: physical custody of goods, and of accounts receivable records
   3. Recording: the shipment, producing bills and invoices
   4. Periodic reconciliation: comparing the sum of customer’s unpaid balances with the accounts receivable control account total

C. Cash Receipts and Cash Balances
   1. Authorization: not directly regarding accepting cash payments from customers but rather to approving discounts and/or allowances
   2. Custody: control over having the cash and checks “in hand”
   3. Recording: using remittance list to make entries to the cash and accounts receivable control accounts and to the customers’ accounts
   4. Periodic reconciliation: bank account reconciliations comparing deposit slips and paid checks with the statement and the correct journal

D. Audit Evidence in Management Reports and Data Files: when utilizing computer processing of revenue and cash receipts transactions, reports can be generated to provide audit evidence
   1. Pending Order Master Files
   2. Credit Check Files
   3. Price List Master File
   4. Sales Detail (Sales Journal) File
   5. Sales Analysis Reports
   6. Accounts Receivable Aged Trial Balance
   7. Cash Receipts Journal
E. The Existence Assertion: procedures to obtain evidence about the existence and ownership of accounts receivable and other assets

1. Recalculation
2. Physical Observation
3. Confirmation
4. Verbal Inquiry
5. Examination of Documents (vouching)
6. Scanning
7. Analytical Procedures

F. Using Confirmations:

1. Confirmation of the Cash and Loan Balances: the standard bank confirmation form
2. Confirmation of Accounts and Notes Receivable: the working papers with an aged trial balance
3. Confirmation forms:
   a. Positive confirmations
   i. blank form
   b. Negative confirmations

G. Audit of Bank Reconciliations with Attention to Lapping and Kiting

H. Bank Transfer Schedule and “Proof of Cash”
CHAPTER 3 – REVIEW QUESTIONS

1. Cash disbursements is one of the most important things covered by the revenue and collection accounting cycle.
   
   a) true
   b) false

2. Which of the following reports should be reviewed for evidence of the completeness of recorded sales and accounts receivable:
   
   a) pending order master file
   b) credit check files
   c) price list master file
   d) sales detail (sales journal) file

3. When considering assertions and obtaining evidence about accounts receivable and other assets, auditors must put emphasis on the existence and ownership assertions.
   
   a) true
   b) false

4. Which of the following would not be an acceptable justification for not using confirmations for cash balances and trade accounts receivable:
   
   a) receivables are not material
   b) confirmations would be ineffective, based on prior years’ experience or knowledge that responses could be unreliable
   c) analytical procedures and other substantive tests of details procedures provide sufficient, competent evidence
   d) the preparation of the confirmations is costly

5. The AICPA states that the auditor’s sole reliance on the returned bank confirmation form is warranted.
   
   a) true
   b) false

6. Which of the following is true regarding accounts receivable confirmations:
   
   a) response rates for positive confirmations usually run close to 100%
   b) negative confirmations tend to have lower detection rates than positive confirmations
   c) overall, negative confirmations appear to be more effective than positive confirmations
   d) there is nothing that can be done to increase confirmation response rates
7. The auditor’s information source for vouching the bank reconciliation items is cutoff bank statement.
   a) true
   b) false

8. Which of the following is a characteristic sign of check kiting:
   a) frequent ATM account balance inquiries
   b) few checks made to other banks
   c) large deposits made on Mondays
   d) long periods between deposits and withdrawals

9. Substantive audit procedures differ from test of controls audit procedures in their basic purpose.
   a) true
   b) false

**Please note:** AICPA / NASBA CPE guidelines require that CPE sponsors provide 5 review questions along with evaluative and responsive feedback for each CPE credit granted. Although there are an adequate amount of multiple-choice and true/false review questions located throughout the course material to meet this specific requirement, we have included additional review questions to enhance the student’s learning process. The suggested solutions provided are based upon the author’s experience and opinion as reflected in the course material.

For questions 10-12 below, review each case study and write on a separate piece of paper the “audit approach” portion of the case, organized around these sections:

**Objective:** Express the objective in terms of the facts supposedly asserted in financial records, accounts, and statements.

**Control:** Write a brief explanation of desirable controls, missing controls, and especially the kinds of “deviations” that might arise from the situation described in the case.

**Test of controls:** Write some procedures for getting evidence about existing controls, especially procedures that could discover deviations from controls. If there are no controls to test, then there are no procedures to perform; go then to the next section. A “procedure” should instruct someone about the source(s) of evidence to tap and the work to do.

**Audit of balance:** Write some procedures for getting evidence about the existence, completeness, valuation, ownership, or disclosure assertions identified in your objective section above.

**Discovery summary:** Write a short statement about the discovery you expect to accomplish with your procedures.

After writing your audit approach, review the proposed audit approach attached for each to compare and contrast ideas and opinions.
INTERBANK TRANSFERS AND CHECK KITING

EverReady Corporation is in the home building and repair business. Construction business has been in a slump, and the company has experienced financial difficulty over the past two years. Part of the problem lies in the company’s desire to avoid laying off its skilled crews of bricklayers and cabinetmakers. Meeting the payroll has been a problem.

The auditors are engaged to audit the 20x5 financial statements. Knowing of EverReady’s financial difficulty and its business policy, the auditors decided to prepare a schedule of interbank transfers covering the 10 days before and after December 31, which is the company’s balance sheet date.

First, the auditors used the cash receipts and disbursements journals to prepare part of the schedule shown in Exhibit 3.1-1. They obtained the information for everything except the dates of deposit and payment in the bank statements (disbursing date per bank, and receiving date per bank). They learned that EverReady always transferred money to the payroll account at 1st National Bank from the general account at 1st National Bank. This transfer enabled the bank to clear the payroll checks without delay. The only bank accounts in the EverReady financial statements are the two at 1st National Bank.

Next, the auditors obtained the December 20x5 and January 20x6 bank statements for the general and payroll accounts at 1st National Bank. They recorded the bank disbursement and receipt dates in the schedule of interbank transfers. For each transfer, these dates are identical because the accounts are in the same bank. An alert auditor noticed that the 1st National Bank general account bank statement also contains deposits received from Citizen National Bank and canceled check number 1799 dated January 5 payable to Citizen National Bank. This check cleared the 1st National Bank account on January 8 and was marked "transfer of funds." This led to new information.
EXHIBIT 3.1-1 Schedule of Interbank Transfers

EVERREADY CORPORATION
SCHEDULE OF INTERBANK TRANSFERS
DATE: DECEMBER 31, 20X5

Prepared: GIngram
Reviewed: KBrown

<table>
<thead>
<tr>
<th>Check</th>
<th>Disbursing Account</th>
<th>Receiving Account</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Date Per</td>
<td>Date Per</td>
</tr>
<tr>
<td>1417</td>
<td>1st Nat'l</td>
<td>24-Dec</td>
</tr>
<tr>
<td>1601</td>
<td>1st Nat'l</td>
<td>31-Dec</td>
</tr>
<tr>
<td>1982</td>
<td>1st Nat'l</td>
<td>08-Jan</td>
</tr>
</tbody>
</table>

T Traced from cash disbursements journal
✓ Check properly listed as outstanding on bank reconciliation
× Vouched to check cleared in bank statement
? Traced from cash receipts journal
V Vouched deposit cleared in bank statement

Note: We scanned the cash disbursements and cash receipts journals for checks to and deposits from other accounts.

NEW INFORMATION

Asked about the Citizen National Bank transactions, EverReady's chief financial officer readily admitted the existence of an off-books bank account. He explained that it was used for financing transactions in keeping with normal practice in the construction industry. He gave the auditors the December and January bank statements for the account at Citizen National Bank. In it, the auditors found the following:
Bank Statements

*Citizen National Bank*

<table>
<thead>
<tr>
<th>Check #</th>
<th>Payable to</th>
<th>Amount</th>
<th>Dated</th>
<th>Cleared</th>
<th>Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>4050</td>
<td>1st National</td>
<td>10,000</td>
<td>23-Dec</td>
<td>29-Dec</td>
<td>1st National</td>
</tr>
<tr>
<td>4051</td>
<td>Chase Bank</td>
<td>12,000</td>
<td>28-Dec</td>
<td>31-Dec</td>
<td>Chase Bank</td>
</tr>
<tr>
<td>4052</td>
<td>1st National</td>
<td>12,000</td>
<td>30-Dec</td>
<td>05-Jan</td>
<td>1st National</td>
</tr>
<tr>
<td>4053</td>
<td>Chase Bank</td>
<td>14,000</td>
<td>04-Jan</td>
<td>07-Jan</td>
<td>Chase Bank</td>
</tr>
<tr>
<td>4054</td>
<td>1st National</td>
<td>20,000</td>
<td>07-Jan</td>
<td>13-Jan</td>
<td>1st National</td>
</tr>
</tbody>
</table>

*Deposits*

<table>
<thead>
<tr>
<th>Received from</th>
<th>Amount</th>
<th>Dated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chase Bank</td>
<td>11,000</td>
<td>22-Dec</td>
</tr>
<tr>
<td>Chase Bank</td>
<td>15,000</td>
<td>30-Dec</td>
</tr>
<tr>
<td>1st National</td>
<td>10,000</td>
<td>05-Jan</td>
</tr>
<tr>
<td>Chase Bank</td>
<td>12,000</td>
<td>07-Jan</td>
</tr>
</tbody>
</table>

*Chase Bank*

<table>
<thead>
<tr>
<th>Check #</th>
<th>Payable to</th>
<th>Amount</th>
<th>Dated</th>
<th>Cleared</th>
<th>Bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2220</td>
<td>Citizen Bank</td>
<td>11,000</td>
<td>22-Dec</td>
<td>28-Dec</td>
<td>Citizen Bank</td>
</tr>
<tr>
<td>2221</td>
<td>Citizen Bank</td>
<td>15,000</td>
<td>30-Dec</td>
<td>05-Jan</td>
<td>Citizen Bank</td>
</tr>
<tr>
<td>2222</td>
<td>Citizen Bank</td>
<td>12,000</td>
<td>07-Jan</td>
<td>12-Jan</td>
<td>Citizen Bank</td>
</tr>
</tbody>
</table>

*Deposits*

<table>
<thead>
<tr>
<th>Received from</th>
<th>Amount</th>
<th>Dated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citizen Bank</td>
<td>12,000</td>
<td>28-Dec</td>
</tr>
<tr>
<td>Citizen Bank</td>
<td>14,000</td>
<td>04-Jan</td>
</tr>
</tbody>
</table>

When asked about the Chase Bank transactions, EverReady's chief financial officer admitted the existence of another off-books bank account, which he said was the personal account of the principal stockholder. He explained that the stockholder often used it to finance EverReady's operations. He gave the auditors the December and January bank statements for this account at Chase Bank; in it, the auditors found the information above:
An abbreviated calendar for the period is in Exhibit 3.1-2:

EXHIBIT 3.1-2: Calendar

<table>
<thead>
<tr>
<th></th>
<th>S</th>
<th>M</th>
<th>T</th>
<th>W</th>
<th>T</th>
<th>F</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 20x5</td>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>January 20x6</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
</tr>
</tbody>
</table>

**Required:**

a. Complete the Schedule of Interbank Transfers (working paper C-5, page 3-43) by entering the new information.

b. What is the actual cash balance for the four bank accounts combined, considering only the amounts given in this case information, as of December 31, 20x5 (before any of the December 31 payroll checks are cashed by employees)? As of January 8, 20x6 (before any of the January 8 payroll checks are cashed by employees)? *(Hint: Prepare a schedule of bank and actual balances like the one illustrated earlier in Chapter 3 to explain check kiting.)*
11. Case Study: The Extra Bank Account

**Employee Embezzlement via Cash Receipts and Payment of Personal Expenses**

In this case, you can assume you have received the informant's message. Write the "audit approach" section like the cases in the chapter.

**Problem:**

Cash receipts pocketed and personal expenses paid from business account.

**Method:**

The Ourtown Independent School District, like all others, had red tape about school board approval of cash disbursements. To get around the rules, and to make timely payment of some bills possible, the superintendent of schools had a school bank account that was used in the manner of a petty cash fund. The board knew about it and had given blanket approval in advance for its use to make timely payment of minor school expenses. The board, however, never reviewed the activity in this account. The business manager had sole responsibility for the account, subject to the annual audit. The account got money from transfers from other school accounts and from deposit of cafeteria cash receipts. The superintendent did not like to be bothered with details, and he often signed blank checks so the business manager would not need to run in for a signature all the time. The business manager sometimes paid her personal American Express credit card bills, charged personal items to the school's VISA account, and pocketed some cafeteria cash receipts before deposit.

**Paper Trail:**

An informant called the state education audit agency and told the story that this business manager had used school funds to buy hosiery. When told of this story, the superintendent told the auditor to place no credibility in the informant, who is "out to get us." The business manager had in fact used the account to write unauthorized checks to "cash," put her own American Express bills in the school files (the school district had a VISA card, not American Express), and signed on the school card for gasoline and auto repairs during periods of vacation and summer when school was not in session. (As for the hosiery, she purchased $700 worth with school funds one year.) The superintendent was genuinely unaware of the misuse of funds.

**Amount:**

The business manager had been employed for six years, was trusted, and stole an estimated $25,000.
12. Case Study Ring Around the Revenue

RING AROUND THE REVENUE—
Overstated Sales and Accounts Receivable.

Write the audit approach section like the cases in the chapter.

Problem: Sales were recorded early, sometimes at fictitiously high prices, overstating sales revenue, accounts receivable, and income.

Method: Mattox Toy Manufacturing Company had experienced several years of good business. Income had increased steadily, and the common stock was a favorite among investors. Management had confidently predicted continued growth and prosperity. But business turned worse instead of better. Competition became fierce.

In earlier years, Mattox had accommodated a few large retail customers with the practice of field warehousing coupled with a "bill and hold" accounting procedure. These large retail customers executed noncancellable written agreements, asserting their purchase of toys and their obligation to pay. The toys were not actually shipped because the customers did not have available warehouse space. They were set aside in segregated areas on the Mattox premises and identified as the customers' property. Mattox would later drop-ship the toys to various retail locations upon instructions from the customers. The "field warehousing" was explained as Mattox serving as a temporary warehouse and storage location for the customers' toys. In the related bill and hold accounting procedure, Mattox prepared invoices billing the customers, mailed the invoices to the customers, and recorded the sales and accounts receivable.

When business took the recent downturn, Mattox expanded its field warehousing and its bill and hold accounting practices. Invoices were recorded for customers who did not execute the written agreements used in previous arrangements. Some customers signed the noncancellable written agreements with clauses permitting subsequent inspection, acceptance, and determination of discounted prices. The toys were not always set aside in separate areas, and this failure later gave shipping employees problems with identifying shipments of toys that had been "sold" earlier and those that had not.

Mattox also engaged in overbilling. Customers who ordered close-out toys at discounted prices were billed at regular prices, even though the customers' orders showed the discounted prices agreed by Mattox sales representatives.

In a few cases, the bill and hold invoices and the close-out sales were billed and recorded in duplicate. In most cases, the customers' invoices were addressed and mailed to specific individuals in the customers' management instead of the routine mailing to the customers' accounts payable departments.
Paper trail: The field warehousing arrangements were well known and acknowledged in the Mattox accounting manual. Related invoices were stamped "bill and hold." Customer orders and agreements were attached in a document file. Sales of close-out toys also were stamped "close-out," indicating the regular prices (basis for salespersons' commissions) and the invoice prices. Otherwise, the accounting for sales and accounts receivable was unexceptionable. Efforts to record these sales in January (last month of the fiscal year) caused the month's sales revenue to be 35 percent higher than the January of the previous year.

In the early years of the practice, inventory sold under the field warehousing arrangements (both regular and close-out toys) was segregated and identified. The shipping orders for these toys left the "carrier name" and "shipping date" blank, even though they were signed and dated by a company employee in the spaces for the company representative and the carrier representative signature.

The lack of inventory segregation caused problems for the company. After the fiscal year-end, Mattox solved the problem by reversing $6.9 million of the $14 million bill and hold sales. This caused another problem because the reversal was larger than the month's sales, causing the sales revenue for first month of the next year to be a negative number!

Amount: Company officials' reasons for the validity of recognizing sales revenue and receivables on the bill and hold procedure and field warehousing were persuasive. After due consideration of the facts and circumstances, the company's own accountants agreed that the accounting practices appropriately accounted for revenue and receivables.

It was Mattox's abuse of the practices that caused financial statements to be materially misstated. In January of the year in question, the company overstated sales by about $14 million, or 5 percent of the sales that should have been recorded. The gross profit of $7 million on these sales caused the income to be overstated by about 40 percent.
CHAPTER 3 – SOLUTIONS AND SUGGESTED RESPONSES

1. A: True is incorrect. The revenue and collection accounting cycle does not cover cash disbursements. It covers sales, sales returns, accounts receivable, account write-offs, and cash collections.

   B: False is correct. Cash disbursements is not covered by the revenue and collection accounting cycle, therefore cannot be one of the most important things covered by it.

   (See page 3-1 of the course material.)

2. A: Correct. This file contains sales transactions that were started in the system but are not yet completed, thus not recorded as sales and accounts receivable. Old orders may represent shipments that actually were made, but for some reason the shipping department did not enter the shipping information (or entered an incorrect code that did not match the pending order file).

   B: Incorrect. Credit check files are used to make automatic credit checks. A sample of the files should be tested for current status, or the company’s records on updating the files can be reviewed for evidence of updating operations.

   C: Incorrect. The price list master file is used to produce customer invoices automatically and should be compared to an official price source for accuracy.

   D: Incorrect. This file should contain the detail sales entries, including the shipping reference and dates, and contains the population of debit entries to the accounts receivable.

   (See page 3-6 of the course material.)

3. A: True is correct. This emphasis is rightly placed because companies and auditors often have gotten into malpractice trouble by giving unqualified reports on financial statements that overstated assets and revenues and understated expenses.

   B: False is incorrect. Auditors must put emphasis on the existence and rights (ownership) assertions. This emphasis is rightly placed because companies and auditors often have gotten into malpractice trouble by giving unqualified reports on financial statements that overstated assets and revenue and understated expenses.

   (See page 3-7 of the course material.)
4. A: Incorrect. This is a reasonable justification, but should be documented for a particular audit.

B: Incorrect. This is a reasonable justification, but should be documented for a particular audit.

C: Incorrect. This is a reasonable justification, but should be documented for a particular audit.

D: Correct. Cost alone is not a reasonable justification

(See page 3-9 of the course material.)

5. A: True is incorrect. Auditors use this form to obtain bank confirmation of deposit and loan balances. The AICPA warns auditors that sole reliance on the form to satisfy the completeness assertion, insofar as cash and loan balances are concerned, is unwarranted.

B: False is correct. While financial institutions may note exceptions to the information typed in a confirmation and may confirm items omitted from it, the AICPA warns auditors that sole reliance on the form to satisfy the completeness assertion, insofar as cash and loan balances are concerned, is unwarranted.

(See page 3-10 of the course material.)

6. A: Incorrect. Research studies have shown the response rates ranging from 66 to 96 percent.

B: Correct. Studies have also shown somewhat lower detection rates for misstatements favorable to recipients (i.e., an accounts receivable understatement.)

C: Incorrect. Overall, positive confirmations appear to be more effective than negative confirmations, but results vary depending on the type of recipients, the size of the accounts, and the type of account being confirmed.

D: Incorrect. The response rate can be increased by using (a) a postcard sent in advance, notifying that a confirmation is coming, (b) special delivery mail, (c) first-class stamp postage (not metered), and (d) an envelope imprinted “Confirmation Enclosed: Please Examine Carefully.”

(See page 3-15 of the course material.)
7. **A: True is correct.** The cutoff statement is a complete bank statement including all paid checks and deposit slips.

B: False is incorrect. The cutoff statement should be sent directly to the auditors. It is usually a complete bank statement for the 10- to 20-day period following the reconciliation date. It can be the next regular monthly statement.

(See page 3-17 of the course material.)

8. **A: Correct.** Frequent ATM inquiries is one of many characteristic signs of check kiting schemes.

B: Incorrect. It is more characteristic that many checks would be made payable to other banks.

C: Incorrect. It would be more characteristic that large deposits would be made on Thursday or Friday to take advantage of the weekend.

D: Incorrect. It would be more characteristic that there would be a short time lag between deposits and withdrawals rather than being held over a long period.

(See page 3-20 of the course material.)

9. **A: True is correct.** Substantive procedures are designed to obtain direct evidence about the dollar amounts in account balances, while test of controls procedures are designed to obtain evidence about the company’s performance of its own control activities.

B: False is incorrect. Audit procedures that can be used for both purposes (test for dollar amounts and evidence of control activities) are called dual-purpose procedures.

(See page 3-23 of the course material.)

10. Case Study: Interbank Transfers and Check Kiting

    Note: Check #1799 ($10,000 payable to Citizen National Bank) drawn on the 1st National Bank account was not recorded in EverReady’s cash disbursements journal. This is the reason it is not in the schedule of interbank transfers in the Exhibit. The auditors obtained the initial information from the cash receipts and cash disbursements journals, and #1799 was not in them.

    a. Complete the Schedule of Interbank Transfers (working paper C-5) by entering the new information.
Exhibit: Schedule of Interbank Transfers (working paper C-5)

EVERREADY CORPORATION
SCHEDULE OF INTERBANK TRANSFERS
December 31, 20x5

Prepared___
Date_____
Reviewed_____
Date_____

-------------------------------------------------------------------------------------------------------------------------------------
| Disbursing Account | Receiving Account |
-------------------------------------------------------------------------------------------------------------------------------------
| Check Number | Bank | Amount | Date per Books | Date per Bank | Bank | Date per Books | Date per Bank |
-------------------------------------------------------------------------------------------------------------------------------------
| 2220 | Chase | 11,000 | 28 Dec | Citizen | 22 Dec |
| 4050 | Citizen | 10,000 | 29 Dec | 1st Nat'l | 23 Dec |
| 1417 | 1st Nat'l | 10,463 | 24 Dec | 24 Dec | 1st Nat'l payroll | 24 Dec | 24 Dec |
| 4051 | Citizen | 12,000 | 31 Dec | Chase | 28 Dec |
| 2221 | Chase | 15,000 | 05 Jan | Citizen | 30 Dec |
| 4052 | Citizen | 12,000 | 05 Jan | 1st Nat'l | 30 Dec |
| 1601 | 1st Nat'l | 11,593 | 31 Dec | 31 Dec | 1st Nat'l payroll | 31 Dec | 31 Dec |
| 4053 | Citizen | 14,000 | 07 Jan | Chase | 04 Jan |
| 1799 | 1st Nat'l | 10,000 | 08 Jan | Citizen | 05 Jan |
| 2222 | Chase | 12,000 | 12 Jan | Citizen | 07 Jan |
| 4054 | Citizen | 20,000 | 13 Jan | 1st Nat'l | 08 Jan |
| 1982 | 1st Nat'l | 9,971 | 08 Jan | 08 Jan | 1st Nat'l payroll | 08 Jan | 08 Jan |

Traced from cash disbursements journal.
Check properly listed as outstanding on bank reconciliation.
Vouched to check cleared in bank statement.
Traced from cash receipts journal.
Vouched deposit cleared in bank statement.

Note: We scanned the cash disbursements and cash receipts journals for checks to and deposits from other bank accounts. Found none other than those noted in this workpaper.

b. What is the actual cash balance for the four bank accounts combined, considering only the amounts given in this case information, as of December 31, 20x5 (before any of the December 31 payroll checks are cashed by employees)? As of January 8, 20x6 (before any of the January 8 payroll checks are cashed by employees)? (Hint: Prepare a schedule of bank and actual balances like the one illustrated earlier in Chapter 3 to explain check kiting.)
### Interbank Transfers:

Subtractions in the “bank” column indicate checks cleared and paid by the banks.

<table>
<thead>
<tr>
<th>Date</th>
<th>Ck #</th>
<th>Bank (1) Actual (2)</th>
<th>Bank (1) Actual (2)</th>
<th>Bank (1) Actual (2)</th>
<th>Bank (1) Actual (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 22</td>
<td>2220</td>
<td>(11,000) 11,000</td>
<td>11,000</td>
<td>11,000</td>
<td></td>
</tr>
<tr>
<td>Dec 23</td>
<td>4050</td>
<td>(10,000) 10,000</td>
<td>10,000</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Dec 24</td>
<td>1417</td>
<td>(9,463) (9,463)</td>
<td>9,463</td>
<td>9,463</td>
<td></td>
</tr>
</tbody>
</table>

**Payroll Checks Cashed**

<table>
<thead>
<tr>
<th>Date</th>
<th>Ck #</th>
<th>Bank (1) Actual (2)</th>
<th>Bank (1) Actual (2)</th>
<th>Bank (1) Actual (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 28</td>
<td>4051</td>
<td>12,000</td>
<td>12,000</td>
<td>(12,000)</td>
</tr>
<tr>
<td>Dec 28</td>
<td>2220</td>
<td>(11,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 29</td>
<td>4050</td>
<td>(10,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dec 30</td>
<td>2221</td>
<td>(15,000)</td>
<td>15,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Dec 30</td>
<td>4052</td>
<td>(12,000)</td>
<td>12,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Dec 31</td>
<td>1601</td>
<td>(11,593)</td>
<td>(11,593)</td>
<td>11,593</td>
</tr>
<tr>
<td>Dec 31</td>
<td>4051</td>
<td>(12,000)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) balances

<table>
<thead>
<tr>
<th></th>
<th>Bank (1) Actual (2)</th>
<th>Bank (1) Actual (2)</th>
<th>Bank (1) Actual (2)</th>
<th>Bank (1) Actual (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec 28</td>
<td>1,000</td>
<td>(14,000)</td>
<td>4,000</td>
<td>(8,000)</td>
</tr>
<tr>
<td>Dec 29</td>
<td></td>
<td></td>
<td>944</td>
<td>944</td>
</tr>
<tr>
<td>Dec 30</td>
<td></td>
<td></td>
<td>11,593</td>
<td>11,593</td>
</tr>
<tr>
<td>Dec 31</td>
<td></td>
<td></td>
<td>17,537</td>
<td>(9,463)</td>
</tr>
</tbody>
</table>

**Payroll Checks Cashed**

<table>
<thead>
<tr>
<th>Date</th>
<th>Ck #</th>
<th>Bank (1) Actual (2)</th>
<th>Bank (1) Actual (2)</th>
<th>Bank (1) Actual (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 4</td>
<td>4053</td>
<td>14,000</td>
<td>(14,000)</td>
<td></td>
</tr>
<tr>
<td>Jan 5</td>
<td>1799</td>
<td>10,000</td>
<td>10,000</td>
<td>(10,000)</td>
</tr>
<tr>
<td>Jan 5</td>
<td>4052</td>
<td>(12,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 5</td>
<td>2221</td>
<td>(15,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 7</td>
<td>2222</td>
<td>(12,000)</td>
<td>12,000</td>
<td>12,000</td>
</tr>
<tr>
<td>Jan 7</td>
<td>4053</td>
<td>(14,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 8</td>
<td>4054</td>
<td>(20,000)</td>
<td>20,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Jan 8</td>
<td>1799</td>
<td>(10,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 8</td>
<td>1982</td>
<td>(9,971)</td>
<td>(9,971)</td>
<td>9,971</td>
</tr>
</tbody>
</table>

(b) balances

<table>
<thead>
<tr>
<th></th>
<th>Bank (1) Actual (2)</th>
<th>Bank (1) Actual (2)</th>
<th>Bank (1) Actual (2)</th>
<th>Bank (1) Actual (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 12</td>
<td>2222</td>
<td>(12,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 13</td>
<td>4054</td>
<td>(20,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balances</td>
<td>(12,000)</td>
<td>(12,000)</td>
<td>(20,000)</td>
<td>(20,000)</td>
</tr>
</tbody>
</table>

---

(1) "bank" means the bank’s records of deposits received and checks paid (cleared).

(2) "actual" means the amounts the general ledger would have shown had the transfers been recorded.
11. Case Study: The Extra Bank Account

**Objective:** Obtain evidence to determine whether expenses paid from the extra bank account were for legitimate school business. Auditors cannot ignore informants’ tales.

**Control:** Cash disbursements should be authorized by responsible officers of the organization to be for valid business purposes. It is not unusual for a business manager to have the authorization responsibility. Tight control would call for disbursement review (at time of check signature) by another responsible person (superintendent), and this control was not always observed. Cash receipts should be listed by the person initially in control (cafeteria manager), deposited by another person (business manager), and a responsible person (superintendent, internal auditor, external auditor) should compare the initial control record to the deposit to note any differences.

**Test of Controls:** Forewarned by the informant, the auditors could make inquiry: “Does the school district have a fund for which individual disbursements are not approved by the school board?” and “Does the business manager have responsibility for this fund?” Answers to both questions directed to the superintendent would be “yes”, and the auditors can then concentrate initial attention on the particular account records.

The next question is: “Does the cafeteria manager make a record of the daily receipts?” Answer by the superintendent: “I don’t know, ask her”. Luckily, it turned out that the cafeteria manager, without direct instructions, made notes on a calendar of the amount of money sent forward to the business manager for deposit. Procedure: Compare the amounts from the cafeteria manager’s calendar to the deposits in the account.

**Audit of Balance:** The “balances” being audited are the expense accounts that received the debits from the extra bank account. However, it is efficient to go to the bank account records as a starting point for the investigation. Obtain the bank statements and supporting documents for cash disbursements. Study them for evidence of (1) improperly authorized payments, (2) payments of personal expenses on the school district’s VISA account, and (3) payments to unauthorized persons or to “cash” for unauthorized purposes.

**Discovery Summary:** After finding payments to American Express and VISA, auditors asked the superintendent about the credit card used by the school and learned that the school used only VISA. Inquiry at American Express revealed the business manager as the owner of the account number found on receipts in the supporting documents. (Actually, by this time the business manager had confessed, but identification of the account might have been harder). Study of the items and dates on the VISA charge slips showed items (e.g. hosiery) not used at the school and dates that did not match business periods. Review of the checks identified the son as payee on some.

During this review, the auditors found checks dated out of numerical sequence and a missing block in the most current month. This was a sign of having blank checks signed, so the superintendent was asked, and admitted doing so. The missing block was in the business manager’s desk drawer, already signed.

Comparing the cafeteria manager’s notes of cash receipts showed shortages in numerous deposits. The business manager admitted taking the cash.
12. Case Study: Ring Around the Revenue

This case is a take-off on the Mattel, Inc. financial statements misstatement case.

Objective: Obtain evidence to determine whether sales were recorded in the proper period and whether gross accounts receivable represented the amounts due from customers at year end.

Control: Sales terms should be properly documented. Accounting treatment, including billing at agreed-upon prices, should follow the terms of the sale. If the risks and rewards of ownership have not been transferred to the customer, or the price has not been reliably determined, or the collectibility of the amount is seriously in doubt or not estimable, an accrual sale should not be recognized. Recorded sales should be supported by customer orders and agreements. Shipping documents should be sufficient to show actual shipment or a legitimate field warehousing arrangement.

Test of Controls: Questionnaires and inquiries should be used to determine the company’s accounting policies. If the auditors do not know about “bill and hold” practices, they should learn the details. For detail procedures: Select a sample of recorded sales, and examine them for any signs of unusual sales terms. Vouch them to customer orders and other sales agreements, if any. Vouch them to shipping documents, and examine the documents for external validity — recognizing blank spaces (carrier name, date) and company representative’s signature (two places, both company and carrier). Compare prices asked in customers’ orders to prices charged on invoices. These tests follow the vouching direction — starting with data that represent the final recorded transactions (sales) and going back to find originating supporting source documents. These procedures might reveal some transactions of the problem types—bill and hold, and overbilling. The last month of the fiscal year (although a typical seasonal low month) could be targeted for greater attention because the sales are much higher than the previous January and because the auditors want to pay attention to sales cut-off in the last month.

Select a sample of shipping documents, trace them to customer orders, and trace them to invoices and to recording in the accounts receivable with proper amounts on the proper date. These tests follow the tracing direction — starting with data that represent the beginning of transactions (orders, shipping) and tracing them through the company’s accounting process. If extra attention is given in January for cut-off reasons, this sample might reveal some of the problem transactions.

Audit of Balance: Confirm a sample of customer accounts. Follow up exceptions noted by customers relating to bill and hold terms, excessive prices, and double billing. Even a few exceptions raise red flags for the population of receivables.

Use analytical comparison on comparative month’s sales. Investigate any unusual fluctuations (e.g. January this year much larger than January last year, the reversal month next year with negative sales). The January comparative increase in sales should cause auditors to extend detail procedures on some of the month’s transactions.
Discovery Summary: The auditors performed a detail sales cut-off test on January sales, selecting a sample of recorded sales. However, they did not notice the significance of “bill and hold” marked on the invoices, and they did not figure out the meaning of the blank spaces and duplicate company employee signatures on the shipping documents.

In the following year’s audit, they tested sales transactions in a month when a prior year’s bill and hold sales were reversed. They noticed the discrepancy but were told that it involved various billing errors. They did not connect it with reversal of the prior year’s sales.

The auditors confirmed a judgment sample of large accounts receivable balances. Twelve replies were received on 103 confirmations. Six of the replies were from “bill and hold” customers who listed discrepancies. The auditors followed up the six by examining sales invoices and shipping documents. They did not grasp the significance of the “bill and hold” stamps or the features of the shipping documents described earlier. Three confirmation responses indicated the customers did not owe the amounts. The auditors relied on Mattox internal documents to decide that the customers were wrong. They did not examine the sales orders that indicated that these customers had a right of cancellation.

The auditors did not perform month-by-month analytical sales comparisons with the prior year. Thus they did not recognize the significant fluctuations in the comparative January sales. In the next year’s audit, they did not recognize the significant comparative decrease in month’s sales for the months when the prior year bill and hold sales were reversed.
CHAPTER 4
CASH DISBURSEMENTS AND PAYABLES

The acquisition and expenditure accounting cycle covers purchasing, receiving, accounts payable, and cash disbursements. This chapter contains sections on (1) typical control activities in the cycle, (2) the audit evidence available in management reports and data files, and (3) case story-style explanations concerning discovery of errors, and frauds. Special notes in the chapter cover (1) the completeness assertion, and (2) physical inventory observation.

ACQUISITION AND EXPENDITURE CYCLE:
TYPICAL ACTIVITIES

The basic acquisition and expenditure activities are (1) purchasing goods and services and (2) paying the bills. Exhibit 4-1 shows the activities and transactions involved in an acquisition and expenditure cycle. The exhibit also lists the accounts and records typically found in this cycle. As you follow the exhibit, you can track the elements of a control system described next.

AUTHORIZATION

Purchases are requested (requisitioned) by people who know the needs of the organization. A purchasing department seeks the best prices and quality and issues a purchase order to a selected vendor. Obtaining competitive bids is a good practice because it tends to produce the best prices and involves several legitimate suppliers in the process.

Cash disbursements are authorized by an accounts payable department's assembly of purchase orders, vendor invoices, and internal receiving reports to show a valid obligation to pay. This assembly of supporting documents is called a voucher (illustrated in Exhibit 4-1). Accounts payable obligations usually are recorded when the purchaser receives the goods or services ordered.

Checks are signed by a person authorized by the management or the board of directors. A company may have a policy to require two signatures on checks over a certain amount (e.g., $1,000). Vouchers should be marked "paid" or otherwise stamped to show that they have been processed completely so they cannot be paid a second time.

TOO MUCH TROUBLE

A trucking company self-insured claims of damage to goods in transit, processed claims vouchers, and paid customers from its own bank accounts. Several persons were authorized to sign checks. One person thought it "too much trouble" to stamp the vouchers PAID and said: "That's textbook stuff anyway." Numerous claims were recycled to other check signers, and $80,000 in claims were paid in duplicate before the problem was discovered.
EXHIBIT 4-1  Acquisition and Expenditure Cycle

Start Here

Purchase requisition

Request for purchases

Purchase order

To vendor

Receive goods and services

Receiving report

Vendor invoice

Receive vendor invoice

Authorization

Custody Inventory

To vendor

Put goods in inventory
Put fixed assets in productive service
Put services to use

Accounts/Records
Raw materials
Work in process
Finished goods
Property, plant, equipment
Insurance
Supplies
Various expenses
Cash disbursements
Accounts payable

To vendor

Cash disbursement

Checks

Custody (Cash)

Invoices

Purchase order

Receiving report

Invoice

Voucher envelope

Requisition

Purchase order

Receiving report

Invoice

Voucher envelope

Cash Disbursements
Transaction File

Accounts Payable
Master File

Asset and expense accounts

Perpetual inventory record
CUSTODY

A receiving department inspects the goods received for quantity and quality (producing a receiving report), then puts them in the hands of other responsible persons (e.g., inventory warehousing, fixed asset installation). Services are not "received" in this manner, but they are accepted by responsible persons. Cash "custody" rests largely in the hands of the person or persons authorized to sign checks.

Another aspect of "custody" involves access to blank documents, such as purchase orders, receiving reports, and blank checks. If unauthorized persons can obtain blank copies of these internal business documents, they can forge a false purchase order to a fictitious vendor, forge a false receiving report, send a false invoice from a fictitious supplier, and prepare a company check to the fictitious supplier, thereby accomplishing an embezzlement.

RECORDING

When the purchase order, vendor's invoice, and receiving report are in hand, accountants enter the accounts payable, with debits to proper inventory, fixed asset, and expense accounts and with a credit to accounts payable. When checks are prepared, entries are made to debit the accounts payable and credit cash.

PERIODIC RECONCILIATION

A periodic comparison or reconciliation of existing assets to recorded amounts is not shown in Exhibit 4-1, but it occurs in several ways, including: physical inventory-taking to compare inventory on hand to perpetual inventory records, bank account reconciliation to compare book cash balances to bank cash balances, inspection of fixed assets to compare to detail fixed asset records, preparation of an accounts payable trial balance to compare the detail of accounts payable to the control account, and internal audit confirmation of accounts payable to compare vendors' reports and monthly statements to recorded liabilities.

CLASSIFY THE DEBITS CORRECTLY

Invoices for expensive repairs were not clearly identified, so the accounts payable accountants entered the debits that should have been repairs and maintenance expense as capitalized fixed assets. This initially understated expenses and overstated income by $125,000 one year, although the incorrectly capitalized expenses were written off as depreciation in later years.
AUDIT EVIDENCE IN MANAGEMENT REPORTS

Computer processing of acquisition and payment transactions enables management to generate several reports that can provide important audit evidence. Auditors should obtain and use these reports.

OPEN PURCHASE ORDERS

Purchase orders are "open" from the time they are issued until the goods and services are received. They are held in an "open purchase order" file. Generally, no liability exists to be recorded until the transactions are complete. However, auditors may find evidence of losses on purchase commitments in this file, if market prices have fallen below the purchase price shown in purchase orders.

THINKING AHEAD

Lone Moon Brewing purchased bulk aluminum sheets and manufactured its own cans. To assure a source of raw materials supply, the company entered into a long-term purchase agreement for 6 million pounds of aluminum sheeting at 40 cents per pound. At the end of this year, 1.5 million pounds had been purchased and used, but the market price had fallen to 32 cents per pound. Lone Moon was on the hook for a $360,000 (4.5 million pounds x 8 cents) purchase commitment in excess of current market prices.

UNMATCHED RECEIVING REPORTS

Liabilities should be recorded on the date the goods and services are received and accepted by the receiving department or by another responsible person. Sometimes, however, vendor invoices arrive later. In the meantime, the accounts payable department holds the receiving reports "unmatched" with invoices, awaiting enough information to record an accounting entry. Auditors can inspect the "unmatched receiving report" file report to determine whether the company has material unrecorded liabilities on the financial statement date.

UNMATCHED VENDOR INVOICES

Sometimes, vendor invoices arrive in the accounts payable department before the receiving activity is complete. Such invoices are held "unmatched" with receiving reports, awaiting information that the goods and services were actually received and accepted. Auditors can inspect the "unmatched invoice file" and compare it to the "unmatched receiving report" file to determine whether liabilities are unrecorded. Systems failures and human coding errors can cause "unmatched" invoices and related "unmatched" receiving reports to sit around unnoticed when all the information for recording a liability is actually in hand.
ACCOUNTS PAYABLE TRIAL BALANCE

This trial balance is a list of payable amounts by vendor, and the sum should agree with the accounts payable control account. (Some organizations keep records by individual invoices instead of vendor names, so the trial balance is a list of unpaid invoices. The sum still should agree with the control account balance.) The best kind of trial balance for audit purposes is one that contains the names of all the vendors with whom the organization has done business, even if their balances are zero. The audit "search for unrecorded liabilities" should emphasize the small and zero balances, especially for regular vendors, because these may be the places where liabilities are unrecorded.

All paid and unpaid accounts payable should be supported by a "voucher" or similar document. A "voucher" is a cover sheet, folder, or envelope that contains all the supporting documents--purchase requisition (if any), purchase order (if any), vendor invoice, receiving report (if any), and check copy (or notation of check number, date, and amount), as shown in Exhibit 4-1.

PURCHASES JOURNAL

A listing of all purchases may or may not be printed out. It may exist only in a computer transaction file. In either event, it provides raw material for (1) computer-audit analysis of purchasing patterns, which may exhibit characteristics of errors and frauds, and (2) sample selection of transactions for detail test of controls audit of supporting documents for validity, authorization, accuracy, classification, accounting/posting, and proper period recording. (A company may have already performed analyses of purchases, and auditors can use these for analytical evidence, provided the analyses are produced under reliable control conditions.)

INVENTORY REPORTS (TRIAL BALANCE)

Companies can produce a wide variety of inventory reports useful for analytical evidence. One is an item-by-item trial balance that should agree with a control account (if balances are kept in dollars). Auditors can use such a trial balance (1) to scan for unusual conditions (e.g., negative item balances, overstocking, and valuation problems) and (2) as a population for sample selection for a physical inventory observation (audit procedures to obtain evidence about the existence of inventory shown in the account). The scanning and sample selection may be computer-audit applications on a computer-based inventory report file.

THE SIGN OF THE CREDIT BALANCE

Auto Parts & Repair, Inc., kept perpetual inventory records and fixed assets records on a computer system. Because of the size of the files (8,000 parts in various locations and 1,500 asset records), the company never printed reports for visual inspection. Auditors ran a computer-audit "sign test" on inventory balances and fixed asset net book balances. The test called for a printed report for all balances less than zero. The auditors discovered 320 negative inventory balances caused by failure to record purchases and 125 negative net asset balances caused by depreciating assets more than their cost.
FIXED ASSET REPORTS

These reports are similar to inventory reports because they show the details of fixed assets in control accounts. They can be used for scanning and sample selection, much like the inventory reports. The information for depreciation calculation (cost, useful life, method, salvage) can be used for the audit of depreciation on a sample basis or by computer applications to recalculate all the depreciation.

CASH DISBURSEMENTS REPORTS

The cash disbursements process will produce a cash disbursements journal, sometimes printed out, sometimes maintained only on a computer file. This journal should contain the date, check number, payee, amount, account debited for each cash disbursement, and a cross-reference to the voucher number (usually the same as the check number). This journal is a population of cash disbursement transactions available for sample selection for detail test of controls audit of supporting documents in the voucher for validity, authorization, accuracy, classification, accounting/posting, and proper period recording.

SPECIAL NOTE: THE COMPLETENESS ASSERTION – SEARCH FOR UNRECORDED LIABILITIES

When considering assertions and obtaining evidence about accounts payable and other liabilities, auditors must put emphasis on the completeness assertion. (For asset accounts, the emphasis is on the existence assertion.) This emphasis on completeness is rightly placed because companies typically are less concerned about timely recording of expenses and liabilities than they are about timely recording of revenues and assets. Of course, generally accepted accounting principles require timely recording of liabilities and their associated expenses.

Evidence is much more difficult to obtain to verify the completeness assertion than the existence assertion. Auditors cannot rely entirely on a management assertion of completeness, even in combination with a favorable assessment of control risk (AU 9326). Substantive procedures – tests of details or analytical procedures – ought to be performed. The search for unrecorded liabilities is the set of procedures designed to yield audit evidence of liabilities that were not recorded in the reporting period. Such a search ought normally to be performed up to the report date in the period following the audit client's balance sheet date.

The following is a list of procedures useful in the search for unrecorded liabilities. The audit objective is to search all the places where evidence of them might exist. If these procedures reveal none, the auditors can conclude that all material liabilities are recorded.

1. Scan the open purchase order file at year-end for indications of material purchase commitments at fixed prices. Obtain current prices and determine whether any adjustments for loss and liability for purchase commitments are needed.
2. List the unmatched vendor invoices and determine when the goods were received, looking to the unmatched receiving report file and receiving reports prepared after the year-end. Determine which invoices, if any, should be recorded.
3. Trace the unmatched receiving reports to accounts payable entries, and determine whether ones recorded in the next accounting period need to be adjusted to report them in the current accounting period under audit.

4. Select a sample of cash disbursements from the accounting period following the balance sheet date. Vouch them to supporting documents (invoice, receiving report) to determine whether the related liabilities were recorded in the proper accounting period.

5. Trace the liabilities reported by financial institutions to the accounts. (See the Bank Confirmation in Exhibit 3-2, Chapter 3. However, a bank really is not expected to search all its files to report all client liabilities to auditors, so the bank confirmation is not the best source of evidence of unrecorded debts.)

6. Study IRS examination reports for evidence of income or other taxes in dispute, and decide whether actual or estimated liabilities need to be recorded.

7. Confirm accounts payable with vendors, especially regular suppliers showing small or zero balances in the year-end accounts payable. These are the ones most likely to be understated. (Vendors’ monthly statements controlled by the auditors also may be used for this procedure.) Be sure to verify the vendors’ addresses so confirmations will not be misdirected, perhaps to conspirators in a scheme to underestimate liabilities.

8. Study the accounts payable trial balance for indications of dates showing fewer payables than usual recorded near the year-end. (A financial officer may be stashing vendor invoices in a desk drawer instead of recording them.)

9. Review the lawyers’ responses to requests for information about pending or threatened litigation, and for unasserted claims and assessments. The lawyers’ information may signal the need for contingent liability accruals or disclosures.

10. Use a checklist of accrued expenses to determine whether the company has been conscientious about expense and liability accruals; including accruals for wages, interest, utilities, sales and excise taxes, payroll taxes, income taxes, real property taxes, rent, sales commissions, royalties, and warranty and guarantee expense.

11. When auditing the details of sales revenue, pay attention to the terms of sales to determine whether any amounts should be deferred as unearned revenue. Inquiries directed to management about terms of sales can be used to obtain initial information, such as inquiries about customers’ rights of cancellation or return. (See the box below.)

<table>
<thead>
<tr>
<th>ADVERTISED SALES RETURN PRIVILEGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>This advertisement appeared in popular magazines.</strong></td>
</tr>
<tr>
<td><strong>THE 1956 THUNDERBIRD</strong> – authentic die-cast replica of the classic T-Bird described as America’s finest production sports car ever! Send no money now. You will be billed for a deposit of $24 and four equal monthly installments of $24 each.</td>
</tr>
<tr>
<td><strong>RETURN ASSURANCE POLICY:</strong> If you wish to return any Franklin Mint Precision Models purchase, you may do so within 30 days of your receipt of that purchase for replacement, credit, or refund.</td>
</tr>
</tbody>
</table>
12. Prepare or obtain a schedule of casualty insurance on fixed assets, and determine the adequacy of insurance in relation to asset market values. Inadequate insurance and self-insurance should be disclosed in the notes to the financial statements.
13. Confirm life insurance policies with insurance companies to ask whether the company has any loans against the cash value of the insurance. In this confirmation, request the names of the beneficiaries of the policies. If the insurance is for the benefit of a party other than the company, the beneficiaries may be creditors on unrecorded loans. Make inquiries about the business purpose of making insurance proceeds payable to other parties.
14. Review the terms of debt due within one year but classified long-term because the company plans to refinance it on a long-term basis. Holders of the debt or financial institutions must have shown (preferably in writing) a willingness to refinance the debt before it can be classified long-term. Classification cannot be based solely on management's expressed intent to seek long-term financing.
15. Apply analytical procedures appropriate in the circumstances. In general, accounts payable volume and period-end balances should increase when the company experiences increases in physical production volume or engages in inventory stockpiling. Some liabilities may be functionally related to other activities; for example, sales taxes are functionally related to sales dollar totals, payroll taxes to payroll totals, excise taxes to sales dollars or volume, income taxes to income.

**SPECIAL NOTE: PHYSICAL INVENTORY OBSERVATION**

The audit procedures for inventory and related cost of sales accounts frequently are extensive in an audit engagement. A 96-page AICPA auditing procedure study entitled *Audit of Inventories* (AICPA, 1986) describes many facets of inherent risk, control risk, and the process of obtaining evidence about inventory financial statement assertions. Inventories often are the largest current asset.

A material error or fraud in inventory has a pervasive effect on financial statements. Errors in inventory cause misstatements in current assets, working capital, total assets, cost of sales, gross margin, and net income. While analytical procedures can help indicate inventory presentation problems, the auditors' best opportunity to detect inventory errors and frauds is during the physical observation of the client's inventory count taken by company personnel. (Auditors observe the inventory-taking and make test counts, but they seldom actually take (count) the entire inventory.) Auditing standards express the requirement for inventory observation in SAS 1, AU 331:

Observation of inventories is a generally accepted auditing procedure, . . . When inventory quantities are determined solely by means of a physical count . . . it is ordinarily necessary for the independent auditor to be present at the time of count and, by suitable observations, tests, and inquiries, satisfy himself respecting the methods of inventory-taking and the reliance which may be placed upon the client's representation about the quantities and physical condition of the inventories.
The remainder of this special note gives details about auditors' observation of physical inventory-taking. The first task is to review the client's inventory-taking instructions. The instructions should include the following:

1. Names of client personnel responsible for the count.
2. Dates and times of inventory-taking.
3. Names of client personnel who will participate in the inventory-taking.
4. Instructions for recording accurate descriptions of inventory items, for count and double-count, and for measuring or translating physical quantities (such as counting by measures of gallons, barrels, feet, dozens).
5. Instructions for making notes of obsolete or worn items.
6. Instructions for the use of tags, punched cards, count sheets, computers, or other media devices and for their collection and control.
7. Plans for shutting down plant operations or for taking inventory after store closing hours, and plans for having goods in proper places (such as on store shelves instead of on the floor, or of raw materials in a warehouse rather than in transit to a job).
8. Plans for counting or controlling movement of goods in receiving and shipping areas if those operations are not shut down during the count.
9. Instructions for computer compilation of the count media (such as tags, count sheets) into final inventory listings or summaries.
10. Instructions for pricing the inventory items.
11. Instructions for review and approval of the inventory count; notations of obsolescence or other matters by supervisory personnel.

These instructions characterize a well-planned counting operation. As the plan is carried out, the independent auditors should be present to hear the count instructions being given to the client's count teams and to observe the instructions being followed.

Many physical inventories are counted at the year-end when the auditor is present to observe. The auditors can perform dual-direction testing by (1) selecting inventory items from a perpetual inventory master file, going to the location, and obtaining a test count, which produces evidence for the existence assertion; and (2) selecting inventory from locations on the warehouse floor, obtaining a test count, and tracing the count to the final inventory compilation, which produces evidence for the completeness assertion. If the company does not have perpetual records and a file to test for existence, the auditors must be careful to obtain a record of all the counts and use it for the existence-direction tests.

<table>
<thead>
<tr>
<th>Examples</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lumber</td>
<td>Problem identifying quality or grade.</td>
</tr>
<tr>
<td>Piles of sugar, coal, scrap steel</td>
<td>Geometric computations, aerial photos.</td>
</tr>
<tr>
<td>Items weighed on scales</td>
<td>Check scales for accuracy.</td>
</tr>
<tr>
<td>Bulk material (oil, grain, liquid in storage tanks)</td>
<td>Sample for assay or chemical analysis.</td>
</tr>
<tr>
<td>Diamonds, jewelry</td>
<td>Identification and quality problems. Ask a specialist.</td>
</tr>
<tr>
<td>Pulp wood</td>
<td>Quantity measurement estimation. Aerial photos.</td>
</tr>
<tr>
<td>Livestock</td>
<td>Movement not controllable. Count critter’s legs then divide by four (two, for chickens).</td>
</tr>
</tbody>
</table>

Source (adapted: AICPA, Audit of Inventories, Auditing Procedures Study (1986), p.28)
INVENTORY EXISTENCE AND COMPLETENESS

The physical observation procedures are designed to audit for existence and completeness (physical quantities), valuation (recalculation of appropriate FIFO, LIFO, or other pricing at cost, and lower-of-cost-or-market write-down of obsolete or worn inventory). After the observation is complete, auditors should have sufficient competent evidence of the following physical quantities and valuations:

- Goods in the perpetual records but not owned were excluded from the inventory compilation.
- Goods on hand were counted and included in the inventory compilation.
- Goods consigned-out or stored in outside warehouses (goods owned but not on hand) were included in the inventory compilation.
- Goods in transit (goods actually purchased and recorded but not yet received) were added to the inventory count and included in the inventory compilation.
- Goods on hand already sold (but not yet delivered) were not counted and were excluded from the inventory compilation.
- Goods consigned-in (goods on hand but not owned) were excluded from the inventory compilation.

INVENTORY – A RIPE FIELD FOR FRAUD

These problems have arisen in companies' inventory frauds:

- Auditors were fooled as a result of taking a small sample for test-counting, thus missing important information.
- Companies included inventory they pretended to have ordered.
- Auditors permitted company officials to follow them and notice their test counts. Then the managers falsified counts for inventory the auditors did not count.
- Shipments between plants (transfers) were reported as inventory at both plant locations.
- Auditors spotted a barrel whose contents management had valued at thousands of dollars, but it was filled with sawdust. The auditors required management to exclude the value from the inventory, but it never occurred to them that they had found one instance in an intentional and pervasive overstatement fraud.
- Auditors observed inventory at five store locations and told the management in advance of the specific stores. Management took care not to make fraudulent entries in these five stores, instead making fraudulent adjustments in many of the other 236 stores.
- After counting an inventory of computer chips, the auditors received a call from the client's controller: "Just hours after you left the plant, 2,500 chips arrived in a shipment in transit." The auditors included them in inventory but never checked to see whether the chips were real.
An accounting firm advised its audit personnel:

- Focus test counts on high-value items, and sample lower-value items. Test-count a sufficient dollar amount of the inventory.
- If all locations will not be observed, do not follow an easily predictable pattern. Advise client personnel as late as possible of the locations we will visit.
- Be skeptical of large and unusual test count differences or of client personnel making notes or displaying particular interest in our procedures and test counts.
- Be alert for inventory not used for some time, stored in unusual locations, showing signs of damage, obsolescence, or excess quantities.
- Ensure that interplant movements (transfers) are kept to an absolute minimum. Obtain evidence that any items added to inventory after the count is completed are proper and reasonable (i.e., exist in stated quality and quantity).


**AUDIT CASES: SUBSTANTIVE AUDIT PROCEDURES**

The audit of account balances consists of procedural efforts to detect errors, and frauds that might exist in the balances, thus making them misleading in financial statements. If such misstatements exist, they are characterized by the following features:

**Method:** A cause of the misstatement (accidental error, intentional irregularity, or fraud attempt), which usually is made easier by some kind of failure of controls.

**Paper trail:** A set of telltale signs of erroneous accounting, missing or altered documents, or a "dangling debit" (the false or erroneous debit that results from an overstatement of assets).

**Amount:** The dollar amount of overstated assets and revenue, or understated liabilities and expenses.

The cases in this section tell about an error, irregularity, or fraud situation in terms of the method, the paper trail, and the amount. The first part of each case gives you the "inside story" that auditors seldom know before they perform the audit work. The next part is an "audit approach" section, which tells about the audit objective (assertion), controls, test of controls, and test of balances (substantive procedures) that could be considered in an approach to the situation. The "audit approach" section presumes that the auditors do not know everything about the situation.
The audit approach part of each case contains the following parts:

**Audit objective**: A recognition of a financial statement assertion for which evidence needs to be obtained. The assertions are about existence of assets, liabilities, revenues, and expenses; their valuation; their complete inclusion in the account balances; the rights and obligations inherent in them; and their proper presentation and disclosure in the financial statements.

**Control**: A recognition of the control activities that should be used in an organization to prevent and detect errors and frauds.

**Test of controls**: Ordinary and extended procedures designed to produce evidence about the effectiveness of the controls that should be in operation.

**Audit of balance**: Ordinary and extended substantive procedures designed to find signs of errors and frauds in account balances and classes of transactions.

At the end of the chapter, some similar discussion cases are presented, and you can write the audit approach to test your ability to design audit procedures for the detection of errors and frauds.
CASE 4.1: PRINTING (COPYING) MONEY

Problem

Improper expenditures for copy services charged to motion picture production costs.

Method

Argus Productions, Inc., a motion picture and commercial production company, assigned M. Welby the authority and responsibility for obtaining copies of scripts used in production. Established procedures permitted Welby to arrange for outside script copying services, receive the copies, and approve the bills for payment. In effect, Welby was the "purchasing department" and the "receiving department" for this particular service. To a certain extent, Welby was also the "accounting department" by virtue of approving bills for payment and coding them for assignment to projects. Welby did not make the actual accounting entries or sign the checks.

M. Welby set up a fictitious company under the registered name of Quickprint Company with himself as the incorporator and stockholder, complete with a post office box number, letterhead stationery, and nicely printed invoices, but no printing equipment. Legitimate copy services were "subcontracted" by Quickprint with real printing businesses, which billed Quickprint. Welby then prepared Quickprint invoices billing Argus, usually at the legitimate shop’s rate, but for a few extra copies each time. Welby also submitted Quickprint bills to Argus for fictitious copying jobs on scripts for movies and commercials that never went into production. As the owner of Quickprint, Welby endorsed Argus’s checks with a rubber stamp and deposited the money in the business bank account, paid the legitimate printing bills, and took the rest for personal use.

Paper Trail

Argus’s production cost files contained all the Quickprint bills, sorted under the names of the movie and commercial production projects. Welby even created files for proposed films that never went into full production, and thus should not have had script copying costs. There were no copying service bills from any shop other than Quickprint Company.

Amount

M. Welby conducted this fraud for five years, stealing $475,000 in false and inflated billings. (Argus’s net income was overstated a modest amount because copying costs were capitalized as part of production cost, then amortized over a 2-3 year period.)
AUDIT APPROACH

Objective

Obtain evidence of the valid existence (occurrence) and valuation of copying charges capitalized as film production cost.

Control

Management should assign the authority to request copies and the purchasing authority to different responsible employees. The accounting, including coding cost assignments to projects, also should be performed by other persons. Managerial review of production results could result in notice of excess costs.

The request for the quantity (number) of copies of a script should come from a person involved in production who knows the number needed. This person also should sign off for the receipt (or approve the bill) for this requested number of copies, thus acting as the "receiving department." This procedure could prevent waste (excess cost), especially if the requesting person were also held responsible for the profitability of the project.

Actual purchasing always is performed by a company agent, and in this case, the agent was M. Welby. Purchasing agents generally have latitude to seek the best service at the best price, with or without bids from competitors. A requirement to obtain bids is usually a good idea, but much legitimate purchasing is done with sole-source suppliers without bid.

Someone in the accounting department should be responsible for coding invoices for charges to authorized projects, thus making it possible to detect costs charged to projects not actually in production.

Someone with managerial responsibility should review project costs and the purchasing practices. However, this is an expensive use of executive time. It was not spent in the Argus case. Too bad.

Test of Controls

In gaining an understanding of the control structure, auditors could learn of the trust and responsibility vested in M. Welby. Since the embezzlement was about $95,000 per year, the total copying cost under Welby's control must have been around $1 million or more. (It might attract unwanted attention to inflate a cost more than 10 percent.)

Controls were very weak, especially in the combination of duties performed by Welby and in the lack of managerial review. For all practical purposes, there were no controls to test, other than to see whether Welby had approved the copying cost bills and coded them to active projects. This provides an opportunity, since proper classification is a control objective.

Procedures: Select a sample of project files, and vouch costs charged to them to support in source documents (validity direction of the test). Select a sample of expenditures, and trace them to the project cost records shown coded on the expenditures (completeness direction of the test).
Audit of Balance

Substantive procedures are directed to obtaining evidence about the existence of film projects, completeness of the costs charged to them, valuation of the capitalized project costs, rights in copyright and ownership, and proper disclosure of amortization methods. The most important procedures are the same as the test of controls procedures; thus, when performed at the year-end date on the capitalized cost balances, they are dual-purpose audit procedures.

Either of the procedures described above as test of controls procedures should show evidence of projects that had never gone into production. (Auditors should be careful to obtain a list of actual projects before they begin the procedures.) Chances are good that the discovery of bad project codes with copying cost will reveal a pattern of Quickprint bills.

Knowing that controls over copying cost are weak, auditors could be tipped off to the possibility of a Welby-Quickprint connection. Efforts to locate Quickprint should be taken (telephone book, chamber of commerce, other directories). Inquiry with the state secretary of state for names of the Quickprint incorporators should reveal Welby's connection. The audit findings can then be turned over to a trained investigator to arrange an interview and confrontation with M. Welby.

Discovery Summary

In this case, internal auditors performed a review of project costs at the request of the manager of production, who was worried about profitability. They performed the procedures described above, noticed the dummy projects and the Quickprint bills, investigated the ownership of Quickprint, and discovered Welby's association. They had first tried to locate Quickprint's shop but could not find it in telephone, chamber of commerce, or other city directories. They were careful not to direct any mail to the post office box for fear of alerting the then-unknown parties involved. A sly internal auditor already had used a ruse at the post office and learned that Welby rented the box, but they did not know whether anyone else was involved.Alerted, the internal auditors gathered all the Quickprint bills and determined the total charged for nonexistent projects. Carefully, under the covert observation of a representative of the local district attorney's office, Welby was interviewed and readily confessed.
## CASE 4.2: REAL CASH PAID TO PHONY DOCTORS

### Problem
Cash disbursement fraud. Fictitious medical benefit claims were paid by the company, which self-insured up to $50,000 per employee. The expense account that included legitimate and false charges was "employee medical benefits."

### Method
As manager of the claims payment department, Martha Lee was considered one of Beta Magnetic's best employees. She never missed a day of work in 10 years, and her department had one of the company's best efficiency ratings. Controls were considered good, including the verification by a claims processor that (1) the patient was a Beta employee, (2) medical treatments were covered in the plan, (3) the charges were within approved guidelines, (4) the cumulative claims for the employee did not exceed $50,000 (if over $50,000 a claim was submitted to an insurance company), and (5) the calculation for payment was correct. After verification processing, claims were sent to the claims payment department to pay the doctor directly. No payments ever went directly to employees. Martha Lee prepared false claims on real employees, forging the signature of various claims processors, adding her own review approval, naming bogus doctors who would be paid by the payment department. The payments were mailed to various post office box addresses and to her husband's business address.

Nobody ever verified claims information with the employee. The employees received no reports of medical benefits paid on their behalf. While the department had performance reports by claims processors, these reports did not show claim-by-claim details. No one verified the credentials of the doctors.

### Paper Trail
The falsified claims forms were in Beta's files, containing all the fictitious data on employee names, processor signatures, doctors' bills, and phony doctors and addresses. The canceled checks were returned by the bank and were kept in Beta's files, containing "endorsements" by the doctors. Martha Lee and her husband were somewhat clever: They deposited the checks in various banks in accounts opened in the names and identification of the "doctors."

Martha Lee did not stumble on the paper trail. She drew the attention of an auditor who saw her take her 24 claims processing employees out to an annual staff appreciation luncheon in a fleet of stretch limousines.

### Amount
Over the last seven years, Martha Lee and her husband stole $3.5 million, and, until the last, no one noticed anything unusual about the total amount of claims paid.
AUDIT APPROACH

Objective
Obtain evidence to determine whether employee medical benefits "existed" in the sense of being valid claims paid to valid doctors.

Control
The controls are good as far as they go. The claims processors used internal data in their work—employee files for identification, treatment descriptions submitted by doctors with comparisons to plan provisions, and mathematical calculations.

This work amounted to all the approval necessary for the claims payment department to prepare a check.

There were no controls that connected the claims data with outside sources, such as employee acknowledgment or doctor investigation.

Test of Controls
The processing and control work in the claims processing department can be audited for deviations from controls.

Procedure: Select a sample of paid claims and reperform the claims processing procedures to verify the employee status, coverage of treatment, proper guideline charges, cumulative amount less than $50,000, and accurate calculation. However, this procedure would not help answer the question: "Does Martha Lee steal the money to pay for the limousines?"

"Thinking like a crook" points out the holes in the controls. Nobody seeks to verify data with external sources. However, an auditor must be careful in an investigation not to cast aspersions on a manager by letting rumors start by interviewing employees to find out whether they actually had the medical claim paid on their behalf. If money is being taken, the company check must be intercepted in some manner.

Audit of Balance
The balance under audit is the sum of the charges in the employee medical benefits expense account, and the objective relates to the valid existence of the payments.

Procedure: The first procedure can be as follows: Obtain a list of doctors paid by the company and look them up in the state medical society directory. Look up their addresses and determine whether they are valid business addresses. You might try comparing claims processors' signatures on various forms, but this is hard to do and requires training. An extended procedure would be as follows: Compare the doctors' addresses to addresses known to be associated with Martha Lee and other claims processing employees.
Discovery Summary

The comparison of doctors to the medical society directory showed eight "doctors" who were not licensed in the current period. Five of these eight had post office box addresses, and discrete inquiries and surveillance showed them rented to Martha Lee. The other three had the same mailing address as her husband's business. Further investigation, involving the district attorney and police, was necessary to obtain personal financial records and reconstruct the thefts from prior years.
CASE 4.3: RECEIVING THE MISSING OIL

Problem
Fuel oil supplies inventory and fuel expense inflated because of short shipments.

Method
Johnson Chemical started a new contract with Madden Oil Distributors to supply fuel oil for the plant generators on a cost-plus contract. Madden delivered the oil weekly in a 5,000-gallon tank truck and pumped it into Johnson's storage tanks. Johnson's receiving employees were supposed to observe the pumping and record the quantity on a receiving report, which was then forwarded to the accounts payable department, where it was held pending arrival of Madden's invoice. The quantities received then were compared to the quantities billed by Madden before a voucher was approved for payment and a check prepared for signature by the controller. Since it was a cost-plus contract, Madden's billing price was not checked against any standard price.

The receiving employees were rather easily fooled by Madden's driver. He mixed sludge with the oil; the receiving employees did not take samples to check for quality. He called out the storage tank content falsely (e.g., 1,000 gallons on hand when 2,000 were actually in the tank); the receiving employees did not check the gauge themselves; and the tank truck was not weighed at entry and exit to determine the amount delivered. During the winter months, when fuel oil use was high, Madden ran in extra trucks more than once a week, but pumped nothing when the receiving employees were not looking. Quantities "received" and paid during the first year of the contract were (in gallons):

<table>
<thead>
<tr>
<th>Month</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>31,000</td>
</tr>
<tr>
<td>February</td>
<td>28,000</td>
</tr>
<tr>
<td>March</td>
<td>23,000</td>
</tr>
<tr>
<td>April</td>
<td>19,000</td>
</tr>
<tr>
<td>May</td>
<td>18,000</td>
</tr>
<tr>
<td>June</td>
<td>14,000</td>
</tr>
<tr>
<td>July</td>
<td>15,000</td>
</tr>
<tr>
<td>August</td>
<td>14,000</td>
</tr>
<tr>
<td>September</td>
<td>21,000</td>
</tr>
<tr>
<td>October</td>
<td>23,000</td>
</tr>
<tr>
<td>November</td>
<td>33,000</td>
</tr>
<tr>
<td>December</td>
<td>36,000</td>
</tr>
</tbody>
</table>

Paper Trail
The Johnson receiving reports all agreed with the quantities billed by Madden. Each invoice had a receiving report attached in the Johnson voucher files. Even though Madden had many trucks, the same driver always came to the Johnson plant, as evidenced by his signature on the receiving report (along with the Johnson company receiving employees' initials). Madden charged $1.80 per gallon, making the charges for the 275,000 gallons a total of $495,000 for the year. Last year, Johnson paid a total of $360,000 for 225,000 gallons, but nobody made a complete comparison with last year's quantity and cost.
CASE 4.3: RECEIVING THE MISSING OIL - continued

**Amount**

During the first year, Madden shorted Johnson on quantity by 40,000 gallons (loss = 40,000 x $1.80 = $72,000) and charged 20 cents per gallon more than competitors (loss = 235,000 gallons x $0.20 = $47,000) for a total overcharge of $119,000, not to mention the inferior sludge mix occasionally delivered.

**AUDIT APPROACH**

**Objective**

Obtain evidence to determine whether all fuel oil billed and paid was actually received in the quality expected at a fair price.

**Control**

Receiving employees should be provided the tools and techniques they need to do a good job. Scales at the plant entrance could be used to weigh the trucks in and out and determine the amount of fuel oil delivered. (The weight per gallon is a well-known measure.) They could observe the quality of the oil by taking samples for simple chemical analysis.

Instructions should be given to teach the receiving employees the importance of their job so they can be conscientious. They should have been instructed and supervised to read the storage tank gauges themselves instead of relying on Madden's driver.

Lacking these tools and instructions, they were easy marks for the wily driver.

**Test of Controls**

The control activity supposedly in place was the receiving report on the oil delivered. A procedure to (1) take a sample of Madden's bills, and (2a) compare quantities billed to quantities received, and (2b) compare the price billed to the contract would probably not have shown anything unusual (unless the auditor became suspicious of the same driver always delivering to Johnson).

The information from the "understanding the control system" phase would need to be much more detailed to alert the auditors to the poor receiving practices.

*Procedure:* Make inquiries with the receiving employees to learn about their practices and work habits.
Audit of Balance

The balances in question are the fuel oil supply inventory and the fuel expense.

The inventory is easily audited by reading the tank storage gauge for the quantity. The price is found in Madden's invoices. However, a lower-of-cost-or-market test requires knowledge of market prices of the oil. Since Johnson Chemical apparently has no documentation of competing prices, the auditor will need to make a few telephone calls to other oil distributors to get the prices. Presumably, the auditors would learn that the price is approximately $1.60 per gallon.

The expense balance can be audited like a cost of goods sold number. With knowledge of the beginning fuel inventory, the quantity "purchased," and the quantity in the ending inventory, the fuel oil expense quantity can be calculated. This expense quantity can be priced at Madden's price per gallon.

Analytical procedures applied to the expense should reveal the larger quantities used and the unusual pattern of deliveries, leading to suspicions of Madden and the driver.

Discovery Summary

Knowing the higher expense of the current year and the evidence of a lower market price, the auditors obtained the fuel oil delivery records from the prior year. They are shown below, and the numbers in parentheses are the additional gallons delivered in the current year.

Having found a consistent pattern of greater "use" in the current year, with no operational explanation, the auditors took to the field. With the cooperation of the receiving employees, the auditors read the storage tank measure before the Madden driver arrived. They hid in an adjoining building and watched (and filmed) the driver call out an incorrect reading, pump the oil, sign the receiving report, and depart. Then they took samples.

These observations were repeated for three weeks. They saw short deliveries, tested inferior products, and built a case against Madden and the driver.

<table>
<thead>
<tr>
<th>Month</th>
<th>Beginning Inventory</th>
<th>Ending Inventory</th>
<th>Quantity</th>
<th>Price per Gallon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>28,000 (3,000)</td>
<td></td>
<td>10,000 (5,000)</td>
<td></td>
</tr>
<tr>
<td>Feb</td>
<td>24,000 (4,000)</td>
<td></td>
<td>9,000 (5,000)</td>
<td></td>
</tr>
<tr>
<td>March</td>
<td>20,000 (3,000)</td>
<td></td>
<td>15,000 (6,000)</td>
<td></td>
</tr>
<tr>
<td>April</td>
<td>17,000 (2,000)</td>
<td></td>
<td>20,000 (3,000)</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>13,000 (5,000)</td>
<td></td>
<td>28,000 (5,000)</td>
<td></td>
</tr>
<tr>
<td>June</td>
<td>11,000 (3,000)</td>
<td></td>
<td>30,000 (6,000)</td>
<td></td>
</tr>
</tbody>
</table>
CASE 4.4 : GO FOR THE GOLD

**Problem**

Fixed assets in the form of mining properties were overstated through a series of “flip” transactions involving related parties.

**Method**

In 20X5 Alta Gold Company was a public "shell" corporation that was purchased for $1,000 by the Blues brothers. Operating under the corporate names of Silver King and Pacific Gold, the brothers purchased numerous mining claims in auctions conducted by the U.S. Department of the Interior. They invested a total of $40,000 in 300 claims. Silver King sold limited partnership interests in its 175 Nevada silver claims to local investors, raising $20 million to begin mining production. Pacific Gold then traded its 125 Montana gold mining claims for all the Silver King assets and partnership interests, valuing the silver claims at $20 million. (Silver King valued the gold claims received at $20 million as the fair value in the exchange.) The brothers then put $3 million obtained from dividends into Alta Gold, and, with the aid of a bank loan, purchased half of the remainder of Silver King’s assets and all of Pacific Gold’s mining claims by purchase. They paid off the limited partners. At the end of 20X5, Alta Gold had cash of $16 million and mining assets valued at $58 million, with liabilities on bank loans of $53 million.

**Paper Trail**

Alta Gold had in its files the partnership offering documents, receipts, and other papers showing partners' investment of $20 million in the Silver King limited partnerships. The company also had Pacific Gold and Silver King contracts for the exchange of mining claims. The $20 million value of the exchange was justified in light of the limited partners' investments.

Appraisals in the files showed one appraiser's report that there was no basis for valuing the exchange of Silver King claims, other than the price limited partner investors had been willing to pay. The second appraiser reported a probable value of $20 million for the exchange based on proved production elsewhere, but no geological data on the actual claims had been obtained. The $18 million paid by Alta to Silver King also had similar appraisal reports.

**Amount**

The transactions occurred over a period of 10 months. The Blues brothers had $37 million cash in Silver King and Pacific Gold, as well as the $16 million in Alta (all of which was the gullible bank's money, but the bank had loaned to Alta with the mining claims and production as security). The mining claims that had cost $40,000 were now in Alta's balance sheet at $58 million, the $37 million was about to flee, and the bank was about to be left holding the bag containing 300 mining claim papers.
AUDIT APPROACH

Objective

Obtain evidence of the existence, valuation, and rights (ownership) in the mining claim assets.

Control

Alta Gold, Pacific Gold, and Silver King had no control system. All transactions were engineered by the Blues brothers, including the hiring of friendly appraisers. The only control that might have been effective was at the bank in the loan-granting process, but the bank failed.

Test of Controls

The only vestige of control could have been the engagement of competent, independent appraisers. Since the auditors will need to use (or try to use) the appraisers' reports, the procedures involve investigating the reputation, engagement terms, experience, and independence of the appraisers. The auditors can use local business references, local financial institutions who keep lists of approved appraisers, membership directories of the professional appraisal associations, and interviews with the appraisers themselves.

Audit of Balances

The procedures for auditing the asset values include analyses of each of the transactions through all their complications, including obtaining knowledge of the owners and managers of the several companies and the identities of the limited partner investors. If the Blues brothers have not disclosed their connection with the other companies (and perhaps with the limited partners), the auditors will need to inquire at the secretary of state's offices where Pacific Gold and Silver King are incorporated and try to discover the identities of the players in this flip game. Numerous complicated premerger transactions in small corporations and shells often manipulate valuations.

Loan applications and supporting papers should be examined to determine the representations made by Alta in connection with obtaining the bank loans. These papers may reveal some contradictory or exaggerated information.

Ownership of the mining claims might be confirmed with the Department of Interior auctioneers or be found in the local county deed records (spread all over Nevada and Montana).
Discovery Summary

The inexperienced audit staff was unable to unravel the Byzantine exchanges, and they never questioned the relation of Alta to Silver King and Pacific Gold. They never discovered the Blues brothers' involvement in the other side of the exchange, purchase, and merger transactions. They accepted the appraisers' reports because they had never worked with appraisers before and thought all appraisers were competent and independent. The bank lost $37 million. The Blues brothers changed their names.
CASE 4.5: RETREAD TIRES

Problem

Inventory and income overstated by substitution of retread tires valued for inventory at new tire prices.

Method

Ritter Tire Wholesale Company had a high-volume truck and passenger car tire business in Austin, Texas (area population 750,000). J. Lock, the chief accountant, was a longtime trusted employee who had supervisory responsibility over the purchasing agents as well as general accounting duties. Lock had worked several years as a purchasing agent before moving into the accounting job. In the course of normal operations, Lock often prepared purchase orders; but the manufacturers were directed to deliver the tires to a warehouse in Marlin (a town of 15,000 population 100 miles northeast of Austin). Ritter Tire received the manufacturers’ invoices, which Lock approved for payment. Lock and an accomplice (brother-in-law) sold the tires from the Marlin warehouse and pocketed the money. At night, Lock moved cheaper retreaded tires into the Ritter warehouse so spaces would not seem to be empty. As chief accountant, Lock could override controls (e.g., approving invoices for payment without a receiving report), and T. Ritter (president) never knew the difference because the checks presented for signature were not accompanied by the supporting documents.

Paper Trail

Ritter Tire's files were well-organized. Each check copy had supporting documents attached (voucher, invoice, receiving report, purchase order), except the misdirected tire purchases had no receiving reports. These purchase orders were all signed by Lock, and the shipping destination on them directed delivery to the Marlin address. There were no purchase requisition documents because "requisitions" were in the form of verbal requests from salespersons.

There was no paper evidence of the retreaded tires because Lock simply bought them elsewhere and moved them in at night when nobody else was around.

Amount

Lock carried out the scheme for three years, diverting tires that cost Ritter $2.5 million, which Lock sold for $2.9 million. (Lock's cost of retread tires was approximately $500,000.)
AUDIT APPROACH

Objective
Obtain evidence of the existence and valuation of the inventory. (President Ritter engaged external auditors for the first time in the third year of Lock's scheme after experiencing a severe cash squeeze.)

Control
Competent personnel should perform the purchasing function. Lock and the other purchasing agents were competent and experienced. They prepared purchase orders authorizing the purchase of tires. (The manufacturers required them for shipments.)

A receiving department prepared a receiving report after counting and inspecting each shipment by filling in the "quantity column" on a copy of the purchase order. (A common form of receiving report is a "blind" purchase order that has all the purchase information except the quantity, which is left blank for the receiving department to fill in after an independent inspection and count.) Receiving personnel made notes if the tires showed blemishes or damage.

As chief accountant, Lock received the invoices from the manufacturers and approved them for payment after comparing the quantities with the receiving report and the prices with the purchase order. The checks for payment were produced automatically on the microcomputer accounting system when Lock entered the invoice payable in the system. The computer software did not void transactions for lack of a receiving report reference because many other expenses legitimately had no receiving reports.

The key weakness in the control system was the fact that no one else on the accounting staff had the opportunity to notice missing receiving reports in vouchers that should have had them, and Ritter never had the vouchers when checks were signed. Lock was a trusted employee.

Test of Controls
Because the control procedures for cross-checking the supporting documents were said to have been placed in operation, the external auditors can test the controls.

Procedure: Select a sample of purchases (manufacturers' invoices payable entered in the microcomputer), and (1) study the related purchase order for (i) valid manufacturer name and address; (ii) date; (iii) delivery address; (iv) unit price, with reference to catalogs or price lists; (v) correct arithmetic; and (vi) approval signature. Then (2) compare purchase order information to the manufacturers' invoice; and (3) compare the purchase order and invoice to the receiving report for (i) date, (ii) quantity and condition, (iii) approval signature, and (iv) location.
Audit of Balance

Ritter Tire did not maintain perpetual inventory records, so the inventory was a "periodic system" whereby the financial statement inventory figure was derived from the annual physical inventory count and costing compilation. The basic audit procedure was to observe the count by taking a sample of locations on the warehouse floor, recounting the employees' count, controlling the count sheets, and inspecting the tires for quality and condition (related to proper valuation). The auditors kept their own copy of all the count sheets with their test count notes and notes identifying tires as "new" or "retread." (They took many test counts in the physical inventory sample as a result of the test of controls work, described below.)

Discovery Summary

Forty manufacturers' invoices were selected at random for the test of controls procedure. The auditors were good. They had reviewed the business operations, and Ritter had said nothing about having operations or a warehouse in Marlin, although a manufacturer might have been instructed to "drop ship" tires to a customer there. The auditors noticed three missing receiving reports, all of them with purchase orders signed by Lock and requesting delivery to the same Marlin address. They asked Lock about the missing receiving reports, and got this response: "It happens sometimes. I'll find them for you tomorrow." When Lock produced the receiving reports, the auditors noticed they were in a current numerical sequence (dated much earlier), filled out with the same pen, and signed with an illegible scrawl not matching any of the other receiving reports they had seen.

The auditors knew the difference between new and retread tires when they saw them, and confirmed their observations with employees taking the physical inventory count. When Lock priced the inventory, new tire prices were used, and the auditors knew the difference.

Ritter took the circumstantial evidence to a trained investigator who interviewed the manufacturers and obtained information about the Marlin location. The case against Lock led to criminal theft charges and conviction.
CASE 4.6: AMORTIZE BANG THE DRUM SLOWLY

Problem
Net asset values (unamortized costs of films) were overstated by taking too little amortization expense.

Method
Candid Production Company was a major producer of theatrical movies. The company usually had 15-20 films in release at theaters across the nation and in foreign countries. Movies also produced revenue from video licenses and product sales (T-shirts, toys, and the like).

Movie production costs are capitalized as assets, then amortized to expense as revenue is received from theater and video sales and from other sources of revenue. The amortization depends on the total revenue forecast and the current-year revenue amount. As the success or failure of a movie unfolds at the box office, revenue estimates are revised. (The accounting amortization is very similar to depletion of a mineral resource, which depends upon estimates of recoverable minerals and current production.)

Candid Production was not too candid. For example, its recent film of Bang the Drum Slowly was forecast to produce $50 million total revenue over six years, although the early box office returns showed only $10 million in the first eight months in the theaters. (Revenue will decline rapidly after initial openings, and video and other revenue depend on the box office success of a film.)

Accounting "control" with respect to film cost amortization resides in the preparation and revision of revenue forecasts. In this case, they were overly optimistic, slowing the expense recognition and overstating assets and income.

Paper Trail
Revenue forecasts are based on many factors, including facts and assumptions about number of theaters, ticket prices, receipt sharing agreements, domestic and foreign reviews, and moviegoer tastes. Several publications track the box office records of movies. You can see them in newspaper entertainment sections and in industry trade publications. Of course, the production companies themselves are the major source of the information. However, company records also show the revenue realized from each movie.

Revenue forecasts can be checked against actual experience, and the company's history of forecasting accuracy can be determined by comparing actual to forecast over many films and many years.

Amount
Over a four-year period, Candid Productions postponed recognition of a $20 million amortization expense, thus inflating assets and income.
**AUDIT APPROACH**

**Objective**

Obtain evidence to determine whether revenue forecasts provide a sufficient basis for calculating film cost amortization and net asset value of films.

**Control**

Revenue forecasts need to be prepared in a controlled process that documents the facts and underlying assumptions built into the forecast. Forecasts should break down the revenue estimate by years, and the accounting system should produce comparable actual revenue data so forecast accuracy can be assessed after the fact. Forecast revisions should be prepared in as much detail and documentation as original forecasts.

**Test of Controls**

The general procedures and methods used by personnel responsible for revenue forecasts should be studied (inquiries and review of documentation), including their sources of information both internal and external. Procedures for review of mechanical aspects (arithmetic) should be tested: Select a sample of finished forecasts and recalculate the final estimate.

Specific procedures for forecast revision also should be studied in the same manner. A review of the accuracy of forecasts on other movies with hindsight on actual revenues helps in a circumstantial way, but past accuracy on different film experiences may not directly influence the forecasts on a new, unique product.

**Audit of Balance**

The audit of amortization expense concentrates on the content of the forecast itself. The preparation of forecasts used in the amortization calculation should be studied to distinguish underlying reasonable expectations from "hypothetical assumptions." A hypothetical assumption is a statement of a condition that is not necessarily expected to occur, but nonetheless is used to prepare an estimate. For example, a hypothetical assumption is like an "if-then" statement: "If Bang the Drum Slowly sells 15 million tickets in the first 12 months of release, then domestic revenue and product sales will be $40 million, and foreign revenue can eventually reach $10 million." Auditors need to assess the reasonableness of the basic 15 million ticket assumption. It helps to have some early actual data from the film's release in hand before the financial statements need to be finished and distributed. For actual data, industry publications ought to be reviewed, with special attention to competing films and critics' reviews (yes, movie reviews!).
Discovery Summary

The auditors were not skeptical enough about optimistic revenue forecasts, and they did not weigh unfavorable actual/forecast history comparisons heavily enough. Apparently, they let themselves be convinced by exuberant company executives that the movies were comparable with *Gone with the Wind*! The audit of forecasts and estimates used in accounting determinations is very difficult, especially when company personnel have incentives to hype the numbers, seemingly with conviction about the artistic and commercial merit of their productions. The postponed amortization expense finally came to roost in big write-offs when the company management changed.
SUMMARY

The acquisition and expenditure cycle consists of purchase requisitioning, purchase ordering, receiving goods and services, recording vendors' invoices and accounting for accounts payable, and making disbursements of cash. Companies reduce control risk by having a suitable separation of authorization, custody, recording, and periodic reconciliation duties. Error-checking procedures of comparing purchase orders and receiving reports to vendor invoices are important for recording proper amounts of accounts payable liabilities. Supervisory control is provided by having a separation of duties between preparing cash disbursement checks and actually signing them. Otherwise, many things could go wrong, ranging from processing false or fictitious purchase orders to failing to record liabilities for goods and services received.

Two topics have special technical notes in the chapter. The completeness assertion is very important in the audit of liabilities because misleading financial statements often have contained unrecorded liabilities and expenses. The "search for unrecorded liabilities" is an important set of audit procedures. The physical inventory observation audit work gets a special section because actual contact with inventories (and fixed assets, for that matter) provides auditors with direct eyewitness evidence of important tangible assets.

Cash disbursement is a critical point for asset control. Many cases of embezzlement occur in this process. Illustrative cases in the chapter tell the stories of some of these schemes, mostly involving payment of fictitious charges to dummy companies set up by employees.
PRACTICAL CASE PROBLEMS
INSTRUCTIONS FOR CASES

These cases are designed like the ones in the chapter. They give the problem, the method, the paper trail, and the amount.

Please note: you are not required to complete this assignment as part of your CPE certification. However this exercise will reinforce your comprehension and ability to address the audit approach. If you choose to complete this exercise, in each of the following cases your assignment is to write the "audit approach" portion of the case, organized around these sections:

**Objective**: Express the objective in terms of the facts supposedly asserted in financial records, accounts, and statements.

**Control**: Write a brief explanation of desirable controls, missing controls, and especially the kinds of "deviations" that might arise from the situation described in the case.

**Test of controls**: Write some procedures for getting evidence about existing controls, especially procedures that could discover deviations from controls. If there are no controls to test, then there are no procedures to perform; go then to the next section. A "procedure" should instruct someone about the source(s) of evidence to tap and the work to do.

**Audit of balance**: Write some procedures for getting evidence about the existence, completeness, valuation, ownership, or disclosure assertions identified in your objective section above.

**Discovery summary**: Write a short statement about the discovery you expect to accomplish with your procedures.

Once you have completed writing the audit approach, sample responses are included for your review to compare your response to that suggested by the author.
Write the "audit approach" section like the cases in the chapter.

**Problem:** Fictitious purchases overstated inventory and inflated costs and expenses, causing misstated financial statements and operating losses.

**Method:** Simon Construction Company had two divisions. Simon, the president, managed the roofing division. Simon delegated authority and responsibility for management of the modular manufacturing division to John G. A widower, Simon had virtually adopted John when he ran away from an orphanage 20 years earlier, treating him like the son he never had, even building him a fine house on the outskirts of the city.

John and his secretary handled all the bids for manufacturing jobs, purchased all the material, controlled the physical inventory of materials, contracted for shipping by truck, supervised the construction activity, billed the customers when jobs were in progress and finished, approved all bid changes, and collected payments from the customers. With Simons' approval, John asked the company internal auditor not to interfere with his busy schedule. The secretary entered all the division's transactions into the computerized accounting system from a dedicated terminal in the manufacturing division office.

John did everything crooked, and the secretary was an accomplice. He rigged low bids and gave kickbacks to customers' purchasing agents, paid high prices to suppliers and took kickbacks, set up dummy companies to sell materials to Simon Construction at inflated prices, removed excess materials inventory and sold it and took the money, manipulated the inventory accounts to overstate the inventory and hide the thefts, and caused Simon Construction to pay trucking bills for a side business he owned. Simon exercised no control over John's operations.

**Paper trail:** Paper evidence was plentiful, if somebody looked for it. Bid records showed original low bids, later raised for basic construction (e.g., adding second floor, when the original request for bid included a second floor). Checks payable to "cash" were endorsed by people known to be customers' purchasing agents. Prices paid for materials and supplies were higher than the list prices shown in the competing suppliers' price books kept in the manufacturing division library. John's kickbacks were deposited in his own bank account. Dummy companies were incorporated in the same state, with John and the secretary listed as original incorporators. The physical inventory shown in the accounts simply did not exist. Trucking bills showed deliveries to locations where the manufacturing division had no jobs in progress.

**Amount:** John drained $1.2 million from Simon Construction over a nine-year period before he was caught. Auditors were engaged to analyze the situation when Simon finally noticed the reported losses in the manufacturing division and had a violent argument with John.
AUDIT APPROACH: LIKE A SON

Objective: Obtain evidence of the valid existence (occurrence) and valuation of materials and supplies used in construction and the physical quantities of materials inventory.

Control: Suitable control would provide for separation of duties among authority to initiate transactions, custody of assets, record-keeping, and reconciliation of assets with accounting records. If the business is too small to have numerous people employed, Simon should insist that the internal auditor be able to exercise review over purchasing, pricing, payments, and collections.

John had authority and influence over too many interrelated activities. Nothing he did was subject to review or supervision. In several different activities (purchase, transport, selling), he authorized transactions, had custody over assets, controlled the recording (through the accomplice secretary), and kept the internal auditor from performing any reconciling activity in the division.

The only thing John did not control was the independent auditor's work on the inventory observation and consequent discovery of overstated inventory. He also could not hide all the losses in the division, and apparently these were reported to some extent, because Simon finally noticed them.

Test of Controls: There are no controls to test. Auditors should go directly to audit of balances where a "dangling debit" might be hidden, and the most likely places are the materials inventory and the construction in progress. The procedures should be extensive.

However, test-of-controls type procedures can be used to find false and inflated transactions for the purpose of establishing the nature and extent of John's misdeeds. In this context, the procedures are applied with a substantive purpose:

- Select a sample of completed job files, and (1) prepare a schedule of bids and bid changes, and (2) trace final job billings to cash collections. (Try to find examples of actual cash embezzlement.)
- Select a sample of purchases (materials, trucking, etc.), and (1) compare delivery destinations to job sites, and (2) compare prices to price lists.
- Select a sample of vendors (suppliers, truckers, etc.), and investigate their addresses, business locations, and ownership for evidence of false fronts created by John.
- Select a sample of checks, including checks payable to "cash," and identify the endorsers (looking for kickback payments or connections to John).

Audit of Balance: The auditors should observe and simultaneously count all the inventory-taking, control a copy of the count sheets, and test all the pricing by reference to both invoice prices and suppliers' price lists. This extensive work should reveal any inventory shortage and inflated costs on jobs in progress.
Discovery Summary: Independent auditors had audited Simon Construction for five years. They never found the overstated inventory because they test-counted small samples and did not know enough about the materials to identify them correctly. They relied on invoice prices and never referred to list prices for a lower-of-cost-or-market test. They were influenced by the apparent close relation of President Simon and John, and were lulled into believing that a trusted employee could not do wrong. After all, losses were being reported in the manufacturing division, and the books balanced.

After being alerted by Simon's anger and suspicion, the auditors observed the inventory and construction in progress more extensively. They found the overstatements. They then performed tests listed above in the test of controls section and found evidence of all the conditions of John's perfidy. Simon confronted John. He confessed. The district attorney later obtained John's bank records and found confirming evidence of many unexplained deposits that came from his thefts.
CASE STUDY: THE BULGING DESK DRAWERS
Liability Understatement.

In this case, along with your "audit approach" solution, specify the discrepancies you notice by studying the excerpt from the accounts payable trial balance in the Case Exhibit on page 4-38. Also, recalculate the income before taxes and write the adjusting journal entry you would propose. (Hint: The voucher numbers in the trial balance are assigned when the vendor invoices are recorded.)

Problem: Failure to record purchases of raw materials and expense items caused understated accounts payable, understated cost of goods sold, understated expenses, and overstated income.

Method: All Bright Company manufactured lamps. L. Mendoza, the company financial vice president, knew the company was under pressure to produce profits in order to maintain its loans at the bank. One of the surest ways accountants know to produce profits with a pencil is to fail to record purchases. This keeps expenses off the books and understates cost of goods sold figured on a periodic inventory basis. (Cost of goods sold = Beginning inventory + Purchases - Ending inventory.)

Mendoza opened the mail each day and removed the invoices from suppliers, putting them in the office desk drawer. Later, when the company could "afford it," some invoices were sent to the accounts payable department for recording. Mendoza did not always get them in sequence of arrival, but that didn't matter much to her. Anyway, the desk drawers were getting full.

The clerks in the accounts payable department knew about this manipulation. They would go through periods with very little to record, then a large stack of invoices would be delivered for recording. (Must have made a big sale, they gossiped.)

The clerks followed control procedures about matching invoices with receiving reports, and they always had a full file of "unmatched receiving reports" awaiting the arrival of invoices. Mendoza had the power to override controls that called for the timely recording of purchases, and the clerks could not record invoices they had not yet received.

Paper trail: The accounts payable clerks gave each invoice-receiving report-purchase order set a voucher number in numerical sequence. They dated the accounts payable and related debit recordings on the day they processed the vouchers. Their vouchers were always complete because they were under strict orders not to record any payables that were not supported by source documents.

The problem with the paper trail is that the recording did not get started until Mendoza delivered the invoices. However, there was a file of the unmatched receiving reports in the accounts payable department, forwarded from the receiving employees, and there was a trial balance of accounts payable produced for the auditors.

An excerpt from this trial balance is in the Case Exhibit on page 4-38. The total accounts payable on the trial balance, not shown in the Case Exhibit on page 4-38, was $1.8 million for the year ended December 31, 20X5. (The signs of delayed recording of accounts payable are in the exhibit. Can you find them?)
Amount: Mendoza held back the recording of accounts payable for two years (the current year 20X5, and one year ago 20X4). One year ago, the accounts payable were understated by $500,000, of which $200,000 was unrecorded purchases for inventory and $300,000 was unrecorded operating expenses. In the current year (20X5), the accounts payable were understated at December 31 by $750,000, of which $450,000 was for inventory purchases, and $300,000 was unrecorded operating expenses.

The financial statements showed the following (dollars in 000s):

<table>
<thead>
<tr>
<th></th>
<th>Two Years Ago</th>
<th>One Year Ago</th>
<th>Current Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$25,000</td>
<td>$29,000</td>
<td>$40,500</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>(20,000)</td>
<td>(22,000)</td>
<td>(29,000)</td>
</tr>
<tr>
<td>Expenses</td>
<td>(5,000)</td>
<td>(8,000)</td>
<td>(9,000)</td>
</tr>
<tr>
<td>Income (loss) before taxes</td>
<td>0</td>
<td>$(1,000)</td>
<td>$2,500</td>
</tr>
<tr>
<td>Ending inventory</td>
<td>$6,000</td>
<td>$8,000</td>
<td>$10,200</td>
</tr>
<tr>
<td>Current assets</td>
<td>9,000</td>
<td>8,500</td>
<td>17,500</td>
</tr>
<tr>
<td>Total assets</td>
<td>21,000</td>
<td>21,600</td>
<td>34,300</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>5,000</td>
<td>5,500</td>
<td>13,000</td>
</tr>
<tr>
<td>Long-term debt *</td>
<td>5,500</td>
<td>6,600</td>
<td>9,300</td>
</tr>
<tr>
<td>Stockholder equity</td>
<td>10,500</td>
<td>9,500</td>
<td>12,000</td>
</tr>
</tbody>
</table>

* Secured by inventory pledged to the bank.
CASE EXHIBIT

Excerpt from Accounts Payable Trial Balance:
December 31, 20X5

<table>
<thead>
<tr>
<th>Voucher #</th>
<th>Vendor Name</th>
<th>Invoice #</th>
<th>Date Invoice</th>
<th>Date Due</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>26695</td>
<td>Industrial Uniforms</td>
<td>66681</td>
<td>01-Oct-X5</td>
<td>01-Nov-X5</td>
<td>112.11</td>
</tr>
<tr>
<td>26694</td>
<td>Industrial Uniforms</td>
<td>67127</td>
<td>08-Oct-X5</td>
<td>08-Nov-X5</td>
<td>112.11</td>
</tr>
<tr>
<td>27209</td>
<td>Industrial Uniforms</td>
<td>67582</td>
<td>15-Oct-X5</td>
<td>15-Nov-X5</td>
<td>112.11</td>
</tr>
<tr>
<td>27208</td>
<td>Industrial Uniforms</td>
<td>67981</td>
<td>22-Oct-X5</td>
<td>22-Nov-X5</td>
<td>112.11</td>
</tr>
<tr>
<td>27210</td>
<td>Industrial Uniforms</td>
<td>68462</td>
<td>29-Oct-X5</td>
<td>29-Nov-X5</td>
<td>112.11</td>
</tr>
<tr>
<td>27552</td>
<td>Industrial Uniforms</td>
<td>38972</td>
<td>05-Nov-X5</td>
<td>05-Dec-X5</td>
<td>112.11</td>
</tr>
<tr>
<td>27553</td>
<td>Industrial Uniforms</td>
<td>69463</td>
<td>12-Nov-X5</td>
<td>12-Dec-X5</td>
<td>112.11</td>
</tr>
<tr>
<td>27854</td>
<td>Industrial Uniforms</td>
<td>69851</td>
<td>19-Nov-X5</td>
<td>19-Dec-X5</td>
<td>112.11</td>
</tr>
<tr>
<td>29123</td>
<td>Industrial Uniforms</td>
<td>70851</td>
<td>03-Dec-X5</td>
<td>03-Jan-X6</td>
<td>112.11</td>
</tr>
<tr>
<td>28095</td>
<td>Industrial Uniforms</td>
<td>71353</td>
<td>10-Dec-X5</td>
<td>10-Jan-X6</td>
<td>112.11</td>
</tr>
<tr>
<td>29437</td>
<td>Industrial Uniforms</td>
<td>71831</td>
<td>17-Dec-X5</td>
<td>17-Jan-X6</td>
<td>112.11</td>
</tr>
</tbody>
</table>

Vendor Total 1,233.21

<table>
<thead>
<tr>
<th>Vendor Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>27484</td>
<td>B&amp;B Experimental Co</td>
</tr>
<tr>
<td>27550</td>
<td>B&amp;B Experimental Co</td>
</tr>
<tr>
<td>27559</td>
<td>B&amp;B Experimental Co</td>
</tr>
<tr>
<td>27560</td>
<td>B&amp;B Experimental Co</td>
</tr>
<tr>
<td>27741</td>
<td>B&amp;B Experimental Co</td>
</tr>
<tr>
<td>27475</td>
<td>B&amp;B Experimental Co</td>
</tr>
<tr>
<td>29494</td>
<td>B&amp;B Experimental Co</td>
</tr>
<tr>
<td>27556</td>
<td>B&amp;B Experimental Co</td>
</tr>
<tr>
<td>27662</td>
<td>B&amp;B Experimental Co</td>
</tr>
<tr>
<td>28084</td>
<td>B&amp;B Experimental Co</td>
</tr>
<tr>
<td>28085</td>
<td>B&amp;B Experimental Co</td>
</tr>
<tr>
<td>28086</td>
<td>B&amp;B Experimental Co</td>
</tr>
</tbody>
</table>

Vendor Total 9,484.79

<table>
<thead>
<tr>
<th>Vendor Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>29377</td>
<td>Cameo Corp</td>
</tr>
<tr>
<td>29379</td>
<td>Cameo Corp</td>
</tr>
<tr>
<td>29378</td>
<td>Cameo Corp</td>
</tr>
<tr>
<td>29374</td>
<td>Cameo Corp</td>
</tr>
<tr>
<td>29380</td>
<td>Cameo Corp</td>
</tr>
<tr>
<td>29382</td>
<td>Cameo Corp</td>
</tr>
<tr>
<td>29372</td>
<td>Cameo Corp</td>
</tr>
<tr>
<td>29371</td>
<td>Cameo Corp</td>
</tr>
<tr>
<td>29383</td>
<td>Cameo Corp</td>
</tr>
<tr>
<td>29381</td>
<td>Cameo Corp</td>
</tr>
<tr>
<td>29385</td>
<td>Cameo Corp</td>
</tr>
<tr>
<td>29373</td>
<td>Cameo Corp</td>
</tr>
<tr>
<td>29370</td>
<td>Cameo Corp</td>
</tr>
</tbody>
</table>

Vendor Total 25,556.05

<table>
<thead>
<tr>
<th>Vendor Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>27120</td>
<td>Central States Pension</td>
</tr>
<tr>
<td>27121</td>
<td>Central States Pension</td>
</tr>
<tr>
<td>27122</td>
<td>Central States Pension</td>
</tr>
<tr>
<td>27123</td>
<td>Central States Pension</td>
</tr>
<tr>
<td>27124</td>
<td>Central States Pension</td>
</tr>
<tr>
<td>27125</td>
<td>Central States Pension</td>
</tr>
</tbody>
</table>

Vendor Total 73,907.61

---

CHAPTER 4: Cash Disbursements and Payables 4-38
AUDIT APPROACH:
THE BULGING DESK DRAWERS

In this case, along with your procedural solution, specify the discrepancies you notice by studying the excerpt from the accounts payable trial balance in the Exhibit. Also, recalculate the income before taxes and write the adjusting journal entry you would propose.

**Objective:** Obtain evidence about the completeness of accounts payable recording.

**Control:** The internal control structure should provide for timely delivery of vendors' invoices to the accounts payable department. Personnel should compare the invoices to receiving reports and purchase orders to determine whether the vendor billed for the quantity received at the price agreed in the purchase order. Voucher numbers should be assigned in numerical sequence, and each voucher should be recorded as of the date of receipt of the goods or services.

Control deviations occur when accounts payable get recorded for unauthorized purchases, for goods not received, in the wrong amount, or in the wrong accounting period.

**Test of Controls:** The process of obtaining an understanding of the control structure should include inquiries directed to Mendoza (internal control questionnaire) and to the accounting clerks who actually perform the accounts payable recording. Careful questioning should reveal information about their habits of recording dates on the day they make the entries instead of the dates of receipt of goods or services. Careful questioning about their mail delivery ought to elicit the information that it comes through Mendoza, and someone might even volunteer the well-known information that she holds invoices in the desk and delivers them to accounts payable on her own schedule.

In terms of procedures: Select a sample of recorded vouchers, paid and unpaid, and examine the supporting documents for evidence of matching quantities, prices, and dates of receipt and recording. Select a sample of "unmatched receiving reports," record the information, and wait until later to trace them to accounts payable entries later in the audit.

**Audit of Balance:** Send accounts payable confirmations to the vendors represented in the unmatched receiving reports file. (They are ones most likely to represent unrecorded liabilities.) Study the accounts payable trial balance for names of vendors with small or zero balances. Send confirmations to them. Study the trial balance for oddities, and notice these:
Vendor: Industrial Uniforms

Invoices of different dates were entered out of date sequence and apparently arrived in accounts payable at the same time:

- Oct 8 Industrial Uniforms invoice entered on voucher 26694 at same time the Oct 1 Industrial Uniforms invoice was entered on voucher 26695
- The "batching" happened again with the Oct 22 and Oct 15 invoices
- The Nov 5 and Nov 12 invoices were entered on consecutive vouchers numbered 27552 and 27553

There is a weekly billing pattern and the Nov 26 invoice is either not recorded or has been paid (unlikely, with all the unpaid invoices in weekly date sequence)

The Dec 10 invoice was recorded (voucher 28095) before the Dec 3 invoice was recorded (voucher 29123)

For a weekly billing pattern, the Dec 24 and Dec 31 invoices appear not to be recorded

Vendor: B&B Experimental

There seems to be only a few vouchers recorded in the Nov 26 - Dec 10 time period. B&B Experimental's Nov 26 invoice is recorded on voucher 28084, and Industrial Uniform's Dec 10 invoice was recorded on voucher 28095. The recording represents only 12 vouchers recorded in a 14-day period around the end/beginning of a month, when accountants might be expected to be recording payables to prepare monthly financial statements.

Two B&B invoices have the same Nov 2 date but appear to have been recorded at different times (one on voucher 27484, the other on voucher 27550. Although there's a voucher numbering gap (27550 - 27484 = 66), the recording might have been on the same day, one invoice might have been paid later, or one might have been held without recording. Notice that the two Nov 8 invoices were recorded at the same time (consecutive vouchers 27559 and 27560).

The Nov 12 invoice was recorded (voucher 27475) before the Nov 4 invoice (voucher 27484) and several invoices following. The Nov 4 - Nov 9 invoices seem to have been held without recording until after the Nov 12 invoice was recorded. (Same out-of-sequence may be noted for the Nov 18 and Nov 22 invoices. Their recording comes before the recording of invoices with earlier dates.)

Judging from the recording of the Industrial Uniforms Dec 17 invoice on voucher 29437, the B&B Nov 16 invoice seems to have been recorded in Dec on voucher 29494, quite late. The dating seems to be confirmed when compared to Cameo's Dec 6 invoice recorded on voucher 29377.

B&B Experimental invoices seem to be dated about every 2-4 days, yet none are recorded after the invoice dated Dec 6. Either purchasing patterns changed or some Dec B&B invoices were not recorded.

A large number of vouchers seem to have been recorded around the same time. See B&B’s Dec 6 invoice on voucher 28086 and Cameo's Dec 6 invoice on voucher 29377.
Vendor: Cameo Corp

The invoices seem to arrive at the rate of one or more per day, yet none are recorded after Dec 10. Probably invoices are being held back without recording.

Vendor: Central States Pension Fund

Apparently the company recorded all the monthly pension fund payments at one time (see the consecutive voucher numbers), and the time of recording must have been in Oct (judging from the Oct invoices from Industrial Uniforms recorded on vouchers in the low 27000's series).

It looks like the company paid the Jan - Mar liabilities, since they are not on the accounts payable trial balance. However, it looks like the Nov and Dec monthly payments due have not been recorded.

Discovery Summary: Inquiries elicited the gossip from the accounts payable clerks that Mendoza held invoices in the desk drawer. The study of the accounts payable trial balance provided documentary evidence after the sudden fire in Mendoza's office.

With the problem information, here are the restated financial statements:

<table>
<thead>
<tr>
<th></th>
<th>Two Years Ago</th>
<th>One Year Ago</th>
<th>Current Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$25,000</td>
<td>$29,000</td>
<td>$40,500</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
<td>(20,000)</td>
<td>(22,200)</td>
<td>(29,250)</td>
</tr>
<tr>
<td>Expenses</td>
<td>(5,000)</td>
<td>(8,300)</td>
<td>(9,000)</td>
</tr>
<tr>
<td>Income (loss) before taxes</td>
<td>0</td>
<td>$(1,500)</td>
<td>$2,250</td>
</tr>
<tr>
<td>Ending inventory</td>
<td>$6,000</td>
<td>$7,500</td>
<td>$9,700</td>
</tr>
<tr>
<td>Current assets</td>
<td>10,000</td>
<td>12,000</td>
<td>23,000</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>5,000</td>
<td>6,000</td>
<td>13,750</td>
</tr>
<tr>
<td>Long-term debt *</td>
<td>5,500</td>
<td>6,600</td>
<td>9,300</td>
</tr>
<tr>
<td>Total Assets</td>
<td>11,500</td>
<td>12,900</td>
<td>$24,500</td>
</tr>
</tbody>
</table>

* Secured by inventory pledged to the bank.

Adjusting Journal Entry (20XX):

Cost of Goods Sold............................ $ 450,000
Operating Expenses............................ $ 300,000
Retained Earnings (prior period adjustment).. $ 500,000
Cost of Goods Sold............................ $ 200,000
Operating Expenses............................ $ 300,000
Accounts Payable.............................. $ 750,000
CHAPTER 4: CASH DISBURSEMENTS AND PAYABLES

The following summarizes the important points related to the chapter just completed. Following the outline are review study questions with suggested solutions which provide evaluative and responsive feedback. You should answer the study questions and review the suggested solutions to confirm that you have a clear understanding of the material presented prior to proceeding to subsequent chapters.

OUTLINE

A. Acquisition and Expenditure Cycle: Typical Activities
   1. Purchasing goods and services
   2. Paying the bills

B. Control System Factors:
   1. Authorization: requisitioned by people who know the needs of the organization, authorized by an accounts payable department’s assembly of purchase orders, vendor invoices and internal receiving reports
   2. Custody: products received by receiving department checked for quantity and quality and then passed to responsible persons; services are also accepted by responsible persons. Custody also refers to access to blank documents related to purchasing
   3. Recording: crediting and debiting appropriate accounts
   4. Periodic Reconciliation: existing assets to recorded amounts

C. Audit Evidence Found in Management Reports: computer processing allows different reports to be generated for audit evidence
   1. Open purchase orders
   2. Unmatched receiving reports
   3. Unmatched vendor invoices
   4. Accounts payable trial balance
   5. Purchases journal
   6. Inventory reports (trial balance)
   7. Fixed Assets Reports
   8. Cash Disbursements Reports

D. Control Risk Assessment: accounts in the acquisition and expenditure cycle
   1. Inventory
   2. Fixed assets
   3. Depreciation expense
   4. Accumulated depreciation
   5. Accounts and notes payable
   6. Cash disbursements part of cash balance auditing
   7. Various expenses
      a. Administrative: supplies, legal fees, audit fees, taxes
      b. Selling: commissions, travel, delivery, repairs, advertising
      c. Manufacturing: maintenance, freight in, utilities
E. The Completeness Assertion: rightly placed because companies typically are less concerned about timely recording of expenses and liabilities than they are about timely recording of revenues and assets.

1. Search for unrecorded liabilities

F. Physical Inventory Observation: since inventories are often the largest current asset, a material error or irregularity in inventory has a pervasive effect on financial statements.

1. Physical inventory not on year-end date
2. Cycle inventory counting
3. Auditors not present at client’s inventory counting
4. Inventories located off the client’s premises
5. Inventory existence and completeness
CHAPTER 4 – REVIEW QUESTIONS

1. Part of the acquisition and expenditure accounting cycle includes accounts receivable.
   a) true
   b) false

2. Cash custody rests largely with:
   a) the receiving department
   b) the person(s) authorized to sign checks
   c) the bank
   d) the purchasing department

3. The open purchase order file should be reviewed for evidence of:
   a) unpaid invoices
   b) fraud
   c) losses on purchase commitments
   d) material unrecorded liabilities

4. The cash disbursements journal should be used for sample selection for detail tests of controls audit of supporting documents.
   a) true
   b) false

5. Through a physical inventory count, auditors can test for:
   a) the existence assertion
   b) the completeness assertion
   c) both a and b above
   d) none of the above

6. Rarely does fraud occur in the area of inventory.
   a) true
   b) false

7. The audit of account balances consists of procedural efforts to detect errors, and fraud that might exist in the balances.
   a) true
   b) false

8. Separation of duties is one of the best ways to reduce control risk in the acquisition and expenditure cycle.
   a) true
   b) false
Please note: AICPA / NASBA CPE guidelines require that CPE sponsors provide 5 review questions along with evaluative and responsive feedback for each CPE credit granted. Although there are an adequate amount of multiple-choice and true/false review questions located throughout the course material to meet this specific requirement, we have included additional review questions to enhance the student’s learning process. The suggested solutions provided are based upon the author’s experience and opinion as reflected in the course material.

For questions 9 and 10 below, review each case study and write the “audit approach” portion of the case, organized around these sections:

Objective: Express the objective in terms of the facts supposedly asserted in financial records, accounts, and statements.

Control: Write a brief explanation of desirable controls, missing controls, and especially the kinds of “deviations” that might arise from the situation described in the case.

Test of controls: Write some procedures for getting evidence about existing controls, especially procedures that could discover deviations from controls. If there are no controls to test, then there are no procedures to perform; go then to the next section. A “procedure” should instruct someone about the source(s) of evidence to tap and the work to do.

Audit of balance: Write some procedures for getting evidence about the existence, completeness, valuation, ownership, or disclosure assertions identified in your objective section above.

Discovery summary: Write a short statement about the discovery you expect to accomplish with your procedures.

After writing your audit approach, review the proposed audit approach attached for each to compare and contrast ideas and opinions.
9. Case Study: THE PHANTOM OF THE INVENTORY.  
Financial Reporting: Overstated Inventory and Profits.

Write the "audit approach" section like the cases in the chapter, and also recalculate the income (loss) before taxes using the correct inventory figures. (Assume the correct beginning inventory two years ago was $5.5 million.)

**Problem:** Overstated physical inventory caused understated cost of goods sold and overstated net income, current assets, total assets, and retained earnings.

**Method:** All Bright Company manufactured lamps. Paul M, manager of the State Street plant, was under pressure to produce profits so the company could maintain its loans at the bank. The loans were secured by the inventory of 1,500 types of finished goods, work in process, and parts used for making lamps (bases, shades, wire, nuts, bolts, and so on). Paul arranged the physical inventory counting procedures and accompanied the external audit team while the external auditors observed the count and made test counts after the company personnel had recorded their counts on tags attached to the inventory locations. At the auditors' request, Paul directed them to the "most valuable" inventory for their test counts, although he did not show them all of the most valuable types. When the auditors were looking the other way, Paul raised the physical count on inventory tags the auditors did not include in their test counts. When everyone had finished each floor of the multistory warehouse, all the tags were gathered and sent to data processing for computer compilation and pricing at FIFO cost.

**Paper Trail:** All Bright had no perpetual inventory records. All the record of the inventory quantity and pricing was in the count tags and the priced compilation, which was produced by the data processing department six weeks later. The auditors traced their test counts to the compilation and did not notice the raised physical quantities on the inventory types they did not test count. They also did not notice some extra (fictitious) tags Paul had handed over to data processing.

**Amount:** Paul falsified the inventory for three years before the company declared bankruptcy. Over that period, the inventory was overstated by $1 million (17 percent, two years ago), $2.5 million (31 percent, one year ago), and $3 million (29 percent, current year). The financial statements showed the following (dollars in 000):

<table>
<thead>
<tr>
<th></th>
<th>Two Years Ago</th>
<th>One Year Ago</th>
<th>Current Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$25,000</td>
<td>$29,000</td>
<td>$40,500</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td>(20,000)</td>
<td>(22,000)</td>
<td>(29,000)</td>
</tr>
<tr>
<td>Expenses</td>
<td>( 5,000)</td>
<td>( 8,000)</td>
<td>( 9,000)</td>
</tr>
</tbody>
</table>

Income (loss) before taxes

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Income (loss) before taxes</td>
<td>0</td>
<td>$(1,000)</td>
<td>$2,500</td>
</tr>
</tbody>
</table>

Ending inventory

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>End year inventory</td>
<td>$6,000</td>
<td>$8,000</td>
<td>$10,200</td>
</tr>
<tr>
<td>Other current assets</td>
<td>9,000</td>
<td>8,500</td>
<td>17,500</td>
</tr>
<tr>
<td>Total assets</td>
<td>21,000</td>
<td>21,600</td>
<td>34,300</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>5,000</td>
<td>5,500</td>
<td>13,000</td>
</tr>
<tr>
<td>Long-term debt *</td>
<td>5,500</td>
<td>6,600</td>
<td>9,300</td>
</tr>
<tr>
<td>Stockholder equity</td>
<td>10,500</td>
<td>9,500</td>
<td>12,000</td>
</tr>
</tbody>
</table>

* Secured by inventory pledged to the bank.

In this case, let your initial objective be to select one vendor for investigation. Instead of a "test of controls" section, name the one vendor you would select from those in the Case Exhibit on page 4-48 and tell your reasons. In the "test of balances" section, tell how you would investigate the situation. In the "discovery summary" section, speculate about how your investigation might reveal the culprit.

**Problem:** Kickbacks taken on books or supplies inventory purchases caused inflated inventory, cost of goods sold, and expenses.

**Method:** Bailey Books, Inc., is a retail distributor of upscale books, periodicals, and magazines. Bailey has 431 retail stores throughout the southeastern states. Three full-time purchasing agents work at corporate headquarters. They are responsible for purchasing all the inventory at the best prices available from wholesalers jobbers. They can purchase with or without obtaining competitive bids. The three purchasing agents are: R. McGuire in charge of purchasing books, M. Garza in charge of purchasing magazines and periodicals, and L. Collins (manager of purchasing) in charge of ordering miscellaneous items, such as paper products and store supplies.

One of the purchasing agents is suspected of taking kickbacks from vendors. In return, Bailey is thought to be paying inflated prices, which first go to inventory and then to cost of goods sold and other expense accounts as the assets are sold or used.

L. Collins is the manager in charge. Her duties do not include audit or inspection of the performance of the other two purchasing agents. No one audits or reviews Collins's performance.

**Paper trail:** The purchasing system is computerized, and detail records are retained. An extract from these records is in the Case Exhibit on page 4-48.

**Amount:** This kickback scheme has been going on for two or three years. Several hundred thousand dollars may have been overpaid by Bailey Books.
### CASE EXHIBIT: Summary of Purchasing Activity

**BAILEY BOOKS, INCORPORATED**

**Selected Purchases 20X3-20X5**

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Items Purchased</th>
<th>20X3</th>
<th>20X4</th>
<th>20X5</th>
<th>Date of Last Bid</th>
<th>Percent of Purchases Bid (3-yr period)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armour</td>
<td>Books</td>
<td>683,409</td>
<td>702,929</td>
<td>810,100</td>
<td>12/01/X5</td>
<td>87</td>
</tr>
<tr>
<td>Burdick</td>
<td>Sundries</td>
<td>62,433</td>
<td>70,949</td>
<td>76,722</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Canon</td>
<td>Magazines</td>
<td>1,404,360</td>
<td>1,947,601</td>
<td>2,361,149</td>
<td>11/03/X5</td>
<td>94</td>
</tr>
<tr>
<td>Debois, Inc</td>
<td>Paper</td>
<td>321,644</td>
<td>218,404</td>
<td>121,986</td>
<td>06/08/X5</td>
<td>57</td>
</tr>
<tr>
<td>Elton Books</td>
<td>Books</td>
<td>874,893</td>
<td>781,602</td>
<td>649,188</td>
<td>07/21/X5</td>
<td>91</td>
</tr>
<tr>
<td>Fergeson</td>
<td>Books</td>
<td>921,666</td>
<td>1,021,440</td>
<td>1,567,811</td>
<td>09/08/X5</td>
<td>88</td>
</tr>
<tr>
<td>Guyford</td>
<td>Magazines</td>
<td>2,377,821</td>
<td>2,868,988</td>
<td>3,262,490</td>
<td>10/08/X5</td>
<td>81</td>
</tr>
<tr>
<td>Hyman, Inc</td>
<td>Supplies</td>
<td>31,640</td>
<td>40,022</td>
<td>46,911</td>
<td>10/22/X5</td>
<td>----</td>
</tr>
<tr>
<td>Intersect</td>
<td>Books</td>
<td>821,904</td>
<td>898,683</td>
<td>949,604</td>
<td>11/18/X5</td>
<td>86</td>
</tr>
<tr>
<td>Jerrico</td>
<td>Paper</td>
<td>186,401</td>
<td>111,923</td>
<td>93,499</td>
<td>10/04/X5</td>
<td>72</td>
</tr>
<tr>
<td>Julian-Borg</td>
<td>Magazines</td>
<td>431,470</td>
<td>589,182</td>
<td>371,920</td>
<td>02/07/X5</td>
<td>44</td>
</tr>
<tr>
<td>King Features</td>
<td>Magazines</td>
<td>436,820</td>
<td>492,687</td>
<td>504,360</td>
<td>11/18/X5</td>
<td>89</td>
</tr>
<tr>
<td>Lycorp</td>
<td>Sundries</td>
<td>16,280</td>
<td>17,404</td>
<td>21,410</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Medallian</td>
<td>Books</td>
<td>----</td>
<td>61,227</td>
<td>410,163</td>
<td>12/15/X5</td>
<td>99</td>
</tr>
<tr>
<td>Northwood</td>
<td>Books</td>
<td>861,382</td>
<td>992,121</td>
<td>----</td>
<td>12/07/X4</td>
<td>----</td>
</tr>
<tr>
<td>Orion Corp</td>
<td>Paper</td>
<td>86,904</td>
<td>416,777</td>
<td>803,493</td>
<td>11/02/X4</td>
<td>15</td>
</tr>
<tr>
<td>Peterson</td>
<td>Supplies</td>
<td>114,623</td>
<td>----</td>
<td>----</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Quick</td>
<td>Supplies</td>
<td>----</td>
<td>96,732</td>
<td>110,441</td>
<td>11/03/X5</td>
<td>86</td>
</tr>
<tr>
<td>Robertson</td>
<td>Books</td>
<td>2,361,912</td>
<td>3,040,319</td>
<td>3,516,811</td>
<td>12/01/X5</td>
<td>96</td>
</tr>
<tr>
<td>Steele</td>
<td>Magazines</td>
<td>621,490</td>
<td>823,707</td>
<td>482,082</td>
<td>11/03/X5</td>
<td>90</td>
</tr>
<tr>
<td>Telecom</td>
<td>Sundries</td>
<td>81,406</td>
<td>101,193</td>
<td>146,316</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Union Bay</td>
<td>Books</td>
<td>4,322,639</td>
<td>4,971,682</td>
<td>5,368,144</td>
<td>12/03/X5</td>
<td>97</td>
</tr>
<tr>
<td>Victory</td>
<td>Magazines</td>
<td>123,844</td>
<td>141,909</td>
<td>143,286</td>
<td>06/09/X5</td>
<td>89</td>
</tr>
<tr>
<td>Williams</td>
<td>Sundries</td>
<td>31,629</td>
<td>35,111</td>
<td>42,686</td>
<td>----</td>
<td>----</td>
</tr>
</tbody>
</table>
1. A: True is incorrect. Accounts receivable is not covered by the acquisition and expenditure accounting cycle. The cycle covers purchasing, receiving, accounts payable, and cash disbursements.

   **B: False is correct.** Accounts receivable is covered in the cash collections and receivables accounting cycle.

   (See page 4-1 of the course material.)

2. A: Incorrect. The receiving department has custody of the goods received, but not the cash.

   **B: Correct.** Cash custody rests largely in the hands of the person or persons authorized to sign checks.

   C: Incorrect. The bank would not have responsibility for the receiving or disbursement of funds, and therefore would not have custody of the cash.

   D: Incorrect. The purchasing department generally does not handle the cash.

   (See page 4-3 of the course material.)

3. A: Incorrect. The accounts payable trial balance is a list of payable amounts by vendor, and can be reviewed to identify large unpaid invoices.

   B: Incorrect. The purchases journal may be reviewed for characteristics of errors and frauds.

   **C: Correct.** This would occur if prices have fallen below the purchase price shown in purchase orders.

   D: Incorrect. Material unrecorded liabilities can be found by inspecting the “unmatched receiving report” file report or the “unmatched invoice file.”

   (See pages 4-4 to 4-5 of the course material.)

4. **A: True is correct.** The cash disbursements journal should contain the date, check number, payee, amount, account debited for each cash disbursement, and a cross-reference to the voucher number (usually the same as the check number).

   B: False is incorrect. The cash disbursements journal can be used for the voucher of validity, authorization, accuracy, classification, accounting/posting, and proper period recording.

   (See page 4-6 of the course material.)
5. A: Incorrect. The existence assertion can be tested by selecting inventory items from a perpetual inventory master file, going to the location, and obtaining a test count, but this is not the best answer.

B: Incorrect. The completeness assertion can be tested by selecting inventory from locations on the warehouse floor, obtaining a test count, and tracing the count to the final inventory compilation, but this is not the best answer.

C: Correct. Auditors can perform dual-direction testing at a physical inventory count, testing for both the existence and completeness assertions.

D: Incorrect. Since there is a correct response given, none of the above cannot be correct.

(See page 4-9 of the course material.)

6. A: True is incorrect. Several problems have arisen in auditing inventory as a result of fraud.

B: False is correct. Inventory is a ripe field for fraud. Fraud can result from a number of audit procedures not performed correctly, including test counts, notification of test locations in advance, and falsified product.

(See page 4-10 of the course material.)

7. A: True is correct. The errors and frauds that might exist would make the balances misleading in financial statements.

B: False is incorrect. The audit of account balances does consist of procedural efforts to detect errors, and fraud that might exist in the balance, thus making them misleading in financial statements.

(See page 4-11 of the course material.)

8. A: True is correct. Companies can reduce control risk by having a suitable separation of authorization, custody, recording, and periodic reconciliation duties.

B: False is incorrect. Supervisory control is provided by having a separation of duties between preparing cash disbursement checks and actually signing them.

(See page 4-31 of the course material.)
9. Case Study: Phantom of the Inventory – Audit Approach

**Objective:** Obtain evidence of the existence and completeness of the inventory.

**Control:** Since All Bright keeps no perpetual inventory records, all the desirable controls relate to the physical counting. (Pricing and valuation are important, but are not included in this case).

Control starts with the instructions to company personnel about care and accuracy in counting, including follow-up teams to double-count or test count before the auditors make test counts. Instructions should include procedures for gathering the tags so that none are omitted (ensuring completeness of the inventory counting) and none are altered/raised (ensuring existence of the inventory).

**Test of Controls:** The auditors need to know enough about the business to know which inventory types are the more valuable ones and should not need to rely on company personnel to tell them. The auditors need to monitor the counting and the completion of the company procedures, making their own counts to test the accuracy of the counting, keeping them for later tracing to the EDP compilation to ensure that no fictitious quantities get added to the inventory.

As a matter of skepticism, auditors thus should not let company personnel know which types they test counted. These procedures provide evidence of the control over the completeness of the inventory, evidence that nothing was omitted from the count.

The company has no control over the existence of the inventory, because there were no perpetual inventory records or other schedule of inventory to test by selecting items, then going to the warehouse to see whether they were there.

**Audit of Balance:** The audit for completeness of the quantities in the inventory balance is accomplished by the evidence obtained from this procedure: Take secret test counts of inventory in place in the warehouse, and trace the counts to the EDP inventory compilation.

The audit for existence requires more effort, especially since the auditors lose control of the tags when they disappear into the data processing department for computer compilation. These procedures are appropriate: Make photocopies of the tags when they are gathered from the warehouse floor, then with a sample selected at random from the photocopies, return to the floor and make more test counts to get evidence of the existence of the inventory being sent to data processing for compilation. Obtain a useful control total (tag numbers, physical quantity) for later comparison to the computer compilation to determine whether any quantities were added after the physical count. Trace some quantities from the photocopies to the final computer compilation to ensure that no quantities have been altered (raised or lowered).

**Discovery Summary:** The auditors did not perform any of the existence-related procedures, and Paul was able to fool them.
### Recalculation of Actual Cost of Goods Sold

<table>
<thead>
<tr>
<th></th>
<th>Two Years Ago</th>
<th>One Year Ago</th>
<th>Current Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Goods Sold Reported</td>
<td>$ 20,000</td>
<td>$ 22,000</td>
<td>$ 29,000</td>
</tr>
<tr>
<td>Increase in inventory reported</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ending inventory minus</td>
<td>$ 500</td>
<td>$ 2,000</td>
<td>$ 2,200</td>
</tr>
<tr>
<td>beginning inventory)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases</td>
<td>$ 20,500</td>
<td>$ 24,000</td>
<td>$ 31,200</td>
</tr>
<tr>
<td>Actual decrease (increase) of</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>inventory</td>
<td>$ 500</td>
<td>( $ 500 )</td>
<td>( $ 1,700 )</td>
</tr>
<tr>
<td>Actual cost of goods sold</td>
<td>$ 21,000</td>
<td>$ 23,500</td>
<td>$ 29,500</td>
</tr>
</tbody>
</table>

### Income Recalculation

<table>
<thead>
<tr>
<th></th>
<th>Two Years Ago</th>
<th>One Year Ago</th>
<th>Current Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$ 25,000</td>
<td>$ 29,000</td>
<td>$ 40,500</td>
</tr>
<tr>
<td>Actual cost of goods sold</td>
<td>( $ 21,000 )</td>
<td>( $ 23,500 )</td>
<td>( $ 29,500 )</td>
</tr>
<tr>
<td>Expenses</td>
<td>( $ 5,000 )</td>
<td>( $ 8,000 )</td>
<td>( $ 9,000 )</td>
</tr>
<tr>
<td>Actual income (loss) before</td>
<td>$ (1,000)</td>
<td>$ (2,500)</td>
<td>$ 2,000</td>
</tr>
<tr>
<td>taxes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ending inventory</td>
<td>$ 5,000</td>
<td>$ 5,500</td>
<td>$ 7,200</td>
</tr>
<tr>
<td>Other current assets</td>
<td>$ 9,000</td>
<td>$ 8,500</td>
<td>$ 17,500</td>
</tr>
<tr>
<td>Total assets</td>
<td>$ 20,000</td>
<td>$ 19,100</td>
<td>$ 31,300</td>
</tr>
<tr>
<td>Current liabilities</td>
<td>$ 5,000</td>
<td>$ 5,500</td>
<td>$ 13,000</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>$ 5,500</td>
<td>$ 6,600</td>
<td>$ 9,300</td>
</tr>
<tr>
<td>Stockholder equity</td>
<td>$ 9,500</td>
<td>$ 7,000</td>
<td>$ 9,000</td>
</tr>
</tbody>
</table>

*secured by inventory pledged to the bank
10. Case Study: Purchasing Star – Audit Approach

In this case, let your initial objective be to select one vendor for investigation. Instead of a “test of controls” section, name the one vendor you would select from those in the Exhibit and tell your reasons. In the “test of balances” section, tell how you would investigate the situation. In the “discovery summary” section, speculate about how your investigation might reveal the culprit.

**Objective:** Select one vendor for investigation, and try to obtain evidence of purchasing at inflated prices.

**Control:** Purchasing operations should be performed under rules and procedures designed to motivate purchasing agents to buy at the best prices available from competing vendors. Competitive bidding should be required unless conditions make the best prices available without bid.

However, purchasing agents should have flexibility within operating procedures to move quickly to obtain the best balance of quantities, delivery terms, and prices as events dictate. Thus they may not always obtain competitive bids.

A higher manager level should supervise and review the results of purchasing activity on a regular basis, perhaps reperforming some price-obtaining actions occasionally to determine whether the agents are achieving efficiency. Such review might also involve selecting odd situations for extensive review.

**Test of Controls:** The one vendor selected is Orion Corp. Key reasons for this selection are:

- Volume is high and has increased almost 1000%, more than any other vendor.
- Last bid was in 20X4, older than other vendors’ bids.
- The percentage purchased on bid is lowest among those bid.
- Collins, the manager, is in charge.
- Collins purchases from several vendors without bids.

**Audit of Balance:** Investigation of purchases from Orion:

a) Review purchase invoices to determine unit prices for paper
b) Compare unit prices with other suppliers
c) Interview other suppliers and their salespersons to try to determine whether Collins solicited kickbacks
d) Review bid records to determine the dates of submitted bids and bid prices
e) Examine Collins’ personnel files. Investigate references if they were not consulted earlier. Might investigate again with more determination to notice telltale signs
f) Conduct interviews with Collins and other purchasing agents under a front of learning about purchasing procedures. Carefully seek information or impressions about Collins relations with Orion
g) Inquire at secretary of state office for names of Orion incorporators to see if Collins is connected. Look up officers in national executives directory to see if she is listed as an officer of Orion.

h) Covertly observe Collins' lifestyle and spending habits. A ruse might be used to get information about Collins' bank balance and activity. (Overt action such as subpoena should not be used until clear evidence of guilt is available.)

Discovery Summary: If Collins is taking kickbacks in return for causing Bailey to pay higher prices, the price comparison information should show evidence. If this is the case, the other procedures should also bear fruit—past employment history problems, police record, derogatory gossip from coworkers, more wealth than justified by salary, maybe even a direct connection with Orion.

Collins has plenty of “room” to cause Bailey a significant financial drain. Purchases from Orion were $1,220,000 over the last two years, and about $500,000 of supplies and sundries without bid from other suppliers. If the overpricing to Bailey were 10% on all these purchases, it could amount to $172,000 for two years’ “work.”

P.S. The title of the case “Purchasing Stars” is a clue to the solution (Orion).
CHAPTER 5
PAYROLL ACCOUNTING

The payroll accounting cycle covers numerous activities from hiring and firing to pay distribution. This chapter contains sections on (1) typical control activities in the cycle, (2) the audit evidence available in management reports and files, and (3) case story-style explanations concerning discovery of errors and frauds.

PAYROLL CYCLE TYPICAL ACTIVITIES

Most every company has a payroll. It may include manufacturing labor, research scientists, administrative personnel, or all of these. Subsidiary operations, partnerships, and joint ventures may call it "management fees" charged by a parent company or general partner. Payroll can take different forms. Personnel management and the payroll accounting cycle not only include transactions that affect the wage and salary accounts but also the transactions that affect pension benefits, deferred compensation contracts, compensatory stock option plans, employee benefits (such as health insurance), payroll taxes, and related liabilities for these costs.

Exhibit 5-1 shows a payroll cycle. It starts with hiring (and firing) people and determining their wage rates and deductions, then proceeds to attendance and work (timekeeping), and ends with payment followed by preparation of governmental (tax) and internal reports. One of these internal reports is a report of labor cost to the cost accounting department, thus linking the payroll cycle with cost accounting in the production cycle. Five functional responsibilities should be performed by separate people or departments. They are:

- Personnel and Labor Relations – hiring and firing.
- Supervision – approval of work time.
- Payroll Accounting – check preparation and related payroll reports.
- Payroll Distribution – actual custody of checks and distribution to employees.
The following elements are part of the payroll control system.

**AUTHORIZATION**

A personnel or labor relations department that is independent of the other functions should have transaction initiation authority to add new employees to the payroll, to delete terminated employees, to obtain authorizations for deductions (such as insurance, saving bonds, withholding tax exemptions on federal form W-4), and to transmit authority for pay rate changes to the payroll department.

Authorization also takes place in the supervision function. All pay base data (hours, job number, absences, time off allowed for emergencies, and the like) should be approved by an employee's immediate supervisor.

Authorization is also a feature of the timekeeping and cost accounting function. Data on which pay is based (such as hours, piece-rate volume, incentives) should be accumulated independent of other functions.

**APPROVAL OF FICTITIOUS OVERTIME**

A supervisor at Austin Stoneworks discovered that she could approve overtime hours even though an employee had not worked 40 regular time hours. She made a deal with several employees to alter their work timecards and split the extra payments. Over a six-year period, the supervisor and her accomplices embezzled $107,000 in excess payments.

The employees' time cards were not reviewed after being approved by the supervisor. The company's payroll computer program did not have a valid data combination test that paid overtime only after 40 regular time hours were paid.

**CUSTODY**

The main feature of custody in the payroll cycle is the possession of the paychecks, cash, or electronic transfer codes used to pay people. (Electronic transfer codes refer to the practice by some organizations of transferring pay directly into employees' bank accounts.) A payroll distribution function should control the delivery of pay to employees so that unclaimed checks, cash, or incomplete electronic transfers are not returned to persons involved in any of the other functions.

Elements of custody of important documents are in the supervision function and in the timekeeping function. Supervisors usually have access to time cards or time sheets that provide the basis for payment to hourly workers. Likewise, the timekeeping devices (e.g., time clocks, supervisory approval of time cards or time sheets, electronic punch-in systems) have a type of custody of employees' time-base for payroll calculations.
RECORDKEEPING

The payroll accounting function should prepare individual paychecks, pay envelopes, or electronic transfers using rate and deduction information supplied by the personnel function and base data supplied by the timekeeping-supervision functions. Persons in charge of the authorization and custody functions should not also prepare the payroll. They might be tempted to pay fictitious employees.

Payroll accounting maintains individual year-to-date earnings records and prepares the state and federal tax reports (income tax and Social Security withholding, unemployment tax reports, and annual W-2 forms). The payroll tax returns (e.g., federal Form 941 that reports taxes withheld, state and federal unemployment tax returns) and the annual W-2 report to employees are useful records for audit recalculation and overall testing (analytical) procedures. They should correspond to company records. Most company employees responsible for these reports are reluctant to manipulate them.

PERIODIC RECONCILIATION

The payroll bank account can be reconciled like any other bank account. Otherwise, there is not much to count or observe in payroll to accomplish a traditional reconciliation – comparing "real payroll" to recorded wage cost and expense. However, one kind of reconciliation in the form of feedback to the supervision function can be placed in operation. Some companies send to each supervisor a copy of the payroll register, showing the employees paid under the supervisor's authority and responsibility. The supervisor gets a chance to reapprove the payroll after it is completed. This gives the opportunity to notice whether any persons not approved have been paid and charged to the supervisor's accountability.

The payroll report sent to cost accounting can be reconciled to the labor records used to charge labor cost to production. The cost accounting function should determine whether the labor paid is the same as the labor cost used in the cost accounting calculations.

NOT ENOUGH CONTROL, NO FEEDBACK, BYE-BYE MONEY

Homer had been in payroll accounting for a long time. He knew it was not uncommon to pay a terminated employee severance benefits and partial pay after termination. Homer received the termination notices and the data for the final paychecks. But Homer also knew how to keep the terminated employee on the payroll for another week, pay a full week's compensation, change the electronic transfer code, and take the money for himself. The only things he could not change were the personnel department's copy of the termination notices, the payroll register, and the individual employee pay records used for withholding tax and W-2 forms.

Fortunately, nobody reconciled the cost accounting labor charges to the payroll. The supervisors did not get a copy of the payroll register for post-payment approval, so they did not have any opportunity to notice the extra week. Nobody ever reviewed the payroll with reference to the termination notices. Former employees never complained about more pay and withholding reported on their W-2s than they actually received.

Homer and his wife Marge retired comfortably to a villa in Spain on a nest egg that had grown to $450,000. After his retirement, the company experienced an unexpected decrease in labor costs and higher profits.
EMPLOYEES ON FIXED SALARY

The functional duties and responsibilities described above relate primarily to nonsalaried (hourly) employees. For salaried employees, the system is simplified by not having to collect timekeeping data. In nonmanufacturing businesses, the cost accounting operations may be very simple or even nonexistent. The relative importance of each of these five areas should be determined for each engagement in light of the nature and organization of the company’s operations.

AUDIT EVIDENCE IN MANAGEMENT REPORTS AND FILES

Payroll systems produce numerous reports. Some are internal reports and bookkeeping records. Others are government tax reports. Auditors should obtain and use these reports.

PERSONNEL FILES

The contents of individual employee files usually include an employment application, a background investigation report, a notice of hiring, a job classification with pay rate authorization, and authorizations for deductions (e.g., health insurance, life insurance, retirement contribution, union dues, W-4 form for income tax exemptions). When employees retire, quit, or are otherwise terminated, appropriate notices of termination are filed. These files contain the raw data for important pension and post-retirement benefit accounting involving an employee's age, tenure with the company, wage record, and other information used in actuarial calculations.

A personnel file should establish the reality of a person's existence and employment. The background investigation report (prior employment, references, Social Security number validity check, credentials investigation, perhaps a private investigator's report) is important for employees in such sensitive areas as accounting, finance, and asset custody positions. One of the primary system controls is capable personnel. Experience is rich with errors and frauds perpetrated by people who falsify their credentials (identification, college degrees, prior experience, criminal records, and the like).

WHERE DID HE COME FROM?

The controller defrauded the company for several million dollars. As it turned out, he was no controller at all. He didn't know a debit from a credit. The fraudster had been fired from five previous jobs where money had turned up missing. He was discovered one evening when the president showed up unexpectedly at the company and found a stranger in the office with the controller. The stranger was doing all of the accounting for the bogus controller.

Source: Association of Certified Fraud Examiners, "Auditing for Fraud."
TIMEKEEPING RECORDS

Employees paid by the hour or on various incentive systems require records of time, production, piecework, or other measures of the basis for their pay. (Salaried employees do not require such detail records.) Timekeeping or similar records are collected in a variety of ways. The old-fashioned time clock is still used. It accepts an employee's time card and imprints the time when work started and ended. More sophisticated computer systems perform the same function without the paper time card. Production employees may clock in for various jobs or production processes in the system for assigning labor cost to various stages of production. These records are part of the cost accounting for production labor.

Timekeeping records should be approved by supervisors. This approval is a sign that employees actually worked the hours (or produced the output) reported to the payroll department. The payroll department should find a supervisor's signature or initials on the documents used as the basis for periodic pay. In computer systems, this approval may be automatic by virtue of the supervisory passwords used to input data into a computerized payroll system.

PAYROLL REGISTER

The payroll "register" is a special journal. It typically contains a row for each employee with columns for the gross regular pay, gross overtime pay, income tax withheld, Social Security tax withheld, other deductions, and net pay. The net pay amount usually is transferred from the general bank account to a special imprest payroll bank account. The journal entry for the transfer of net payroll, for example, is:

\[
\begin{align*}
\text{Payroll Bank Account} & \quad 25,774 \\
\text{General Bank Account} & \quad 25,774
\end{align*}
\]

The payroll check amounts are accumulated to create the payroll posting to the general ledger, like this example:

\[
\begin{align*}
\text{Wages Clearing Account} & \quad 40,265 \\
\text{Employee Income Taxes Payable} & \quad 7,982 \\
\text{Employee Social Security Payable} & \quad 3,080 \\
\text{Health Insurance Premium Payable} & \quad 2,100 \\
\text{Life Insurance Premium Payable} & \quad 1,329 \\
\text{Payroll Bank Account} & \quad 25,774
\end{align*}
\]

The payroll register is the primary original record for payroll accounting. It contains the implicit assertions that the employees are real company personnel (existence assertion), they worked the time or production for which they were paid (rights/ownership assertion), the amount of the pay is calculated properly (valuation assertion), and all the employees were paid (completeness assertion). The presentation and disclosure assertion depends on the labor cost analysis explained below.
Payroll department records also contain the canceled checks (or a similar electronic deposit record). The checks will contain the employees’ endorsements on the back.

**LOOK AT THE ENDORSEMENTS**

An assistant accountant was instructed to "look at" the endorsements on the back of a sample of canceled payroll checks.

She noticed three occurrences of the payee's signature followed by a second signature. Although scrawled almost illegibly, the second signatures were identical and were later identified as the payroll accountant's handwriting. The payroll accountant had taken unclaimed checks and converted (stolen) them. When cashing these "third-party checks," banks and stores had required the payroll accountant to produce identification and endorse the checks that already had been "endorsed" by the employee payee.

*The Lesson:* Second endorsements are a red flag.

**LABOR COST ANALYSIS**

The cost accounting department can receive its information in more than one way. Some companies have systems that independently report time and production work data from the production floor directly to the cost accounting department. Other companies let their cost accounting department receive labor cost data from the payroll department. When the data is received independently, it can be reconciled in quantity (time) or amount (dollars) with a report from the payroll department. This is a type of reconciliation to make sure the cost accounting department is using actual payroll data and that the payroll department is paying only for work performed.

The cost accounting department (or a similar accounting function) is responsible for the "cost distribution." This is the most important part of the presentation and disclosure assertion with respect to payroll. The cost distribution is an assignment of payroll to the accounts where it belongs for internal and external reporting. Using its input data, the cost accounting department may make a distribution entry like this:

<table>
<thead>
<tr>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Job A</td>
<td>14,364</td>
</tr>
<tr>
<td>Production Job B</td>
<td>3,999</td>
</tr>
<tr>
<td>Production Process A</td>
<td>10,338</td>
</tr>
<tr>
<td>Selling Expense</td>
<td>8,961</td>
</tr>
<tr>
<td>General and Administrative Expense</td>
<td>2,603</td>
</tr>
<tr>
<td>Wages Clearing Account</td>
<td>40,265</td>
</tr>
</tbody>
</table>

Payroll data flows from the hiring process, through the timekeeping function, into the payroll department, then to the cost accounting department, and finally to the accounting entries that record the payroll for inventory cost determination and financial statement presentation. The same data is used for various governmental and tax reports.
BEWARE THE "CLEARING ACCOUNT"

"Clearing accounts" are temporary storage places for transactions awaiting final accounting. Like the Wages Clearing Account illustrated in the entries above, all clearing accounts should have zero balances after the accounting is completed.

A balance in a clearing account means that some amounts have not been classified properly in the accounting records. If the Wages Clearing Account has a debit balance, some labor cost has not been properly classified in the expense accounts or cost accounting classifications. If the Wages Clearing Account has a credit balance, the cost accountant has assigned more labor cost to expense accounts and cost accounting classifications than the amount actually paid.

GOVERNMENTAL AND TAX REPORTS

Payroll systems have complications introduced by the federal income and Social Security tax laws. Several reports are produced. These can be used by auditors in tests of controls and substantive test of the balances produced by accumulating numerous payroll transactions.

Year-To-Date Earnings Records

The year-to-date (YTD) earnings records are the cumulative subsidiary records of each employee's gross pay, deductions, and net pay. Each time a periodic payroll is produced, the YTD earnings records are updated for the new information. The YTD earnings records are a subsidiary ledger of the wages and salaries cost and expense in the financial statements. Theoretically, like any subsidiary and control account relationship, their sum (e.g., the gross pay amounts) should be equal to the costs and expenses in the financial statements. The trouble with this reconciliation idea is that there are usually many payroll cost/expense accounts in a company's chart of accounts. The production wages may be scattered about in several different accounts, such as inventory (work in process and finished goods), selling, general, and administrative expenses.

However, these YTD records provide the data for periodic governmental tax forms. They can be reconciled to the tax reports.

Government Payroll Tax Report

Federal Form 941 is the payroll tax report that summarizes a total amount paid to employees during each three-month period. It also summarizes the income tax withheld and provides a place to calculate the Social Security and Medicare taxes due (employee and employer shares). This is a quarterly report, although employer's deposits of withheld taxes into government accounts may be required more often according to IRS regulations. The YTD records provide the data for Form 941, but the form itself does not list individual employees and their amounts of earnings and taxes. If this report is filed electronically, the basic report data are available in magnetic form.
Federal Form 940 is the employer's annual federal unemployment (FUTA) tax return. It requires a report of the total amount (but not the detail by employee) of wages subject to the unemployment tax, calculation of the tax, and payment. State unemployment tax returns may differ from state to state. Some states require a schedule showing each employee's name, Social Security identification number, and amount of earnings. These details can be compared to the company's YTD earnings records.

Companies in financial difficulty have been known to try to postpone payment of employee taxes withheld. However, the consequences can be serious. IRS can and will padlock the business and seize the assets for nonpayment. After all, the withheld taxes belong to the employee's accounts with the government, and the employers are obligated to pay over the amounts withheld from employees along with a matching share for the Social Security and Medicare taxes.

**Employee W-2 Reports**

The W-2 is the annual report of gross salaries and wages and the income, Social Security, and Medicare taxes withheld. Copies are filed with the Social Security Administration and IRS, and copies are sent to employees for use in preparing their income tax returns. The W-2s contain the annual YTD accumulations for each employee. They also contain the employees' address and Social Security identifying number. Auditors can use the name, address, Social Security number, and dollar amounts in certain procedures (described later) to obtain evidence about the existence of the employees. The W-2s can be reconciled to the payroll tax reports.

**AUDIT CASES: SUBSTANTIVE AUDIT PROCEDURES**

The audit of account balances consists of procedural efforts to detect errors and frauds that might exist in the balances, thus making them misleading in financial statements. If such misstatements exist, they are characterized by the following features:

**Method:** A cause of the misstatement (accidental error, intentional irregularity or fraud attempt), which usually is made easier by some kind of failure of controls.

**Paper trail:** A set of telltale signs of erroneous accounting, missing or altered documents, or a "dangling debit" (the false or erroneous debit that results from an overstatement of assets).

**Amount:** The dollar amount of overstated assets and revenue, or understated liabilities and expenses.

Each audit program for the audit of an account balance or class of transactions like payroll contains an audit approach that may enable auditors to detect errors and frauds. Each application of procedures contains these elements:
Audit objective: A recognition of a financial statement assertion for which evidence needs to be obtained. The assertions are about existence of assets, liabilities, revenues, and expenses; their valuation; their complete inclusion in the account balances; the rights and obligations inherent in them, and; their proper presentation and disclosure in the financial statements.

Control: A recognition of the control activities that should be used in an organization to prevent and detect errors and frauds.

Test of controls: Ordinary and extended procedures designed to produce evidence about the effectiveness of the controls that should be in operation.

Audit of balance: Ordinary and extended substantive procedures designed to find signs of errors and frauds in account balances and classes of transactions.

The next portion of this chapter consists of two cases that first set the stage with a story about an error, irregularity, or fraud – its method, paper trail (if any), and amount. This part of each case gives you the "inside story," which auditors seldom know before they perform the audit work. The second part of each case, under the heading of the "audit approach," tells a structured story about the audit objective, desirable controls, test of control procedures, audit of balance procedures, and discovery summary. The audit approach segment illustrates the manner in which audit procedures can be applied and the discoveries they may enable auditors to make.
Case 5.1: Time Card Forgeries

Problem
False claims for work time caused the overpayment of wages.

Method
A personnel leasing agency assigned Nurse Jane to work at County Hospital. She claimed payroll hours on agency time cards, which showed approval signatures of a hospital nursing shift supervisor. The shift supervisor had been terminated by the county several months prior to the periods covered by the time cards in question. Nurse Jane worked one or two days per week but submitted time cards for a full 40-hour workweek.

The leasing agency paid Nurse Jane, then billed County Hospital for the wages and benefits. Supporting documents were submitted with the leasing agency’s bills.

Paper Trail
Each hospital work station keeps ward shift logs, which are sign-in sheets showing nurses on duty at all times. Nurses sign in and sign out when going on and going off duty.

County Hospital maintains personnel records showing, among other things, the period of employment of its own nurses, supervisors, and other employees.

Amount
Nurse Jane’s wages and benefits were billed to the hospital at $22 per hour. False time cards overcharging about 24 extra hours per week cost the hospital $528 per week. Nurse Jane was assigned to County Hospital for 15 weeks during the year, so she caused overcharges of about $7,900. However, she told three of her crooked friends about the procedure, and they overcharged the hospital another $24,000.
AUDIT APPROACH

Audit Objective

Obtain evidence to determine whether wages were paid to valid employees for actual time worked at the authorized pay rate.

Control

Control activities should include a hiring authorization putting employees on the payroll. When leased employees are used, this authorization includes contracts for nursing time, conditions of employment, and terms including the contract reimbursement rate. Control records of attendance and work should be kept (ward shift log). Supervisors should approve time cards or other records used by the payroll department to prepare paychecks.

In this case, the contract with the leasing agency provided that approved time cards had to be submitted as supporting documentation for the agency billings.

Test of Controls

Although the procedures and documents for control were in place, the controls did not operate because nobody at the hospital ever compared the ward shift logs to time cards, and nobody examined the supervisory approval signatures for their validity. The scam was easy in the leasing agency situation because the nurses submitted their own time cards to the agency for payment. The same scam might be operated by the hospital's own employees if they, too, could write their time cards and submit them to the payroll department.

Auditors should make inquiries (e.g., internal control questionnaire) about the error-checking activities performed by hospital accounting personnel. Test of control audit procedures are designed to determine whether control procedures are followed properly by the organization. Since the comparison and checking activities were not performed, there is nothing to test.

However, the substantive tests described below are identical to the procedures that could be called "tests of controls," but in this case they are performed to determine whether nurses were paid improperly (a substantive purpose).
Audit of Balances

Select a sample of leasing agency billings and their supporting documentation (time cards). Vouch rates billed by the agency to the contract for agreement to proper rate. Vouch time claimed to hospital work attendance records (ward shift logs). Obtain handwriting examples of supervisors' signatures and compare them to the approval signatures on time cards. Use personnel records to determine whether supervisors were actually employed by the hospital at the time they approved the time cards. Use available work attendance records to determine whether supervisors were actually on duty at the time they approved the time cards.

Discovery Summary

The auditors quickly found that Nurse Jane (and others) had not signed-in on ward shift logs for days they claimed to have worked. Further investigation showed that the supervisors who supposedly signed the time cards were not even employed by the hospital at the time their signatures were used for approvals. Handwriting comparison showed that the signatures were not written by the supervisors.

The leasing agency was informed and refunded the $31,900 overpayment proved by the auditors. The auditors continued to comb the records for more!

(Adapted from vignette published in Internal Auditor, April 1990.)
CASE 5.2: CLEVERLY HIDDEN PAYCHECKS

Problem
Embezzlement with fictitious people on the payroll.

Method
Betty Ruth processed personnel files for RD-Mart, a large retail chain of clothing stores with about 6,400 employees in 233 store locations. She created fictitious files for fictitious employees and notified the outside payroll processing service of their names, addresses, social security numbers, salaries, and deductions. The payroll service prepared the paychecks and delivered them to Martha Lee in the accounting department. Martha Lee placed the paychecks in overnight express envelopes for delivery to the managers at RD-Mart's 46 stores in the Southeast Region. However, Martha Lee first removed the fictitious paychecks. (Betty Ruth and Martha Lee were long-time high school friends and conspirators in the fraud.)

Martha Lee hired a print shop to print a private stock of checks on the RD-Mart payroll bank account. These checks looked exactly like the real payroll checks and were in the payroll service's numerical sequence. After removing the paychecks payable to the fictitious employees, Martha Lee and Betty Ruth selected the checks with the same numbers from their private stock. They then made the checks payable to themselves in the proper net amount and deposited them in their own bank accounts. For a signature, they bought a rubber stamp that looked enough like the RD-Mart machine signature to fool the bank.

Paper Trail
Payroll creates a large paper trail with individual earnings records, W-2 tax forms, payroll deductions for taxes and insurance, and Form 941 payroll tax reports. Betty Ruth's fictitious employees were included in all these reports. Their W-2 forms were mailed to a variety of addresses--some to post office box numbers (rented by Martha Lee), and some to the conspirators' own addresses. (The conspirators even prepared federal income tax returns for the ghosts.)

RD-Mart's payroll bank account was truncated; that is, the bank submitted a statement showing the check number and amount of each paycheck but did not return the canceled checks. The bank reconciler (a person in the treasurer's office) was able to correspond the cleared check numbers and amounts to the payroll service report of check numbers and amounts. Nobody in the RD-Mart offices saw the canceled checks made payable to Betty Ruth and Martha Lee.

Amount
The conspirators embezzled about $200,000 each year (one $340 weekly gross paycheck alternating among 11-12 of the Southeast Region stores all year). This was about two-tenths of 1 percent of the total RD-Mart payroll cost.
AUDIT APPROACH

Objective
Obtain evidence of the existence and validity of payroll transactions.

Control
Different people should be responsible for hiring (preparing personnel files), approving wages, preparing paychecks, and distributing the checks. This segregation of duties was evident in the RD-Mart offices. The company had prescribed activities for authorizing personnel hires, personnel file preparation, paycheck production, and check delivery. However, the store managers did not receive any detail reports of employees paid, so they had no post-payment opportunity to review their own payrolls.

Test of Controls
Audit for transaction authorization and validity. A sample taken from the payroll service payroll registers can be vouched to personnel files. Since Betty Ruth had prepared authentic personnel files, this procedure will not show any exceptions. Likewise, a selection of personnel files traced to the payroll reports would show that all the people were paid.

Audit of Balance
The "balance" to audit is the accumulated total of payroll transactions. Analytical procedures will not show the total out of line with history because the fraud is small in relation to total payroll. The audit procedure to determine existence of the people is a surprise payroll distribution. A small selection of stores might not include one with a fictitious employee at the time of the observation. (Betty Ruth might be smart enough to "fire" the fictitious employees when the auditors are expected.)

If the intent is to search for fictitious employees, several computer-based screening methods can be employed: (1) run all the employee Social Security numbers through a program designed to find unissued numbers, (2) run a test to report all employees using the same address or telephone number, (3) run a report of employees who elect minimum insurance or pension deductions, (4) run a report of all employees using P.O. box addresses, (5) examine these reports to determine whether employees appear on one or more of them. If "suspects" appear, request the bank to send copies of the front and back of the canceled payroll checks.

Discovery Summary
The computer-generated search procedures turned up 300 suspect employees, of which 22 turned out to be the conspirators' ghosts. (They were ones with false Social Security numbers whose addresses were the same as Betty Ruth's and Martha Lee's homes.) The auditors requested these checks from the bank and quickly found the names on the checks not the same as the names in the payroll register. They identified the conspirators. Further investigation and covert observation of Martha Lee removing the paychecks established guilt. Further investigation by the district attorney obtained their bank accounts and revealed the deposits of the ill-gotten embezzlement gains.
SUMMARY

Payroll is a part of every business and an important part of every production cycle. Management and control of labor costs are important. The payroll cycle consists of hiring, rate authorization, attendance and work supervision, payroll processing, and paycheck distribution.

Payroll information systems produce many internal documents, reports, and files. A dozen or more of these sources of audit information are described in the chapter. This cycle is characterized by having mostly internal documentation as evidence and having relatively little external documentary evidence. The accounts in the payroll cycle are intangible. They cannot be observed, inspected, touched, or counted in any meaningful way. Most audit procedures for this cycle are analytical procedures and dual-purposes procedures that test both the company's control activities and the existence, valuation, and completeness assertions made by accumulating the results of numerous labor transactions.

Payroll accounting is a critical operation for expenditure control. Many cases of embezzlement occur in this process. Illustrative cases in the chapter tell the stories of some fictitious employee and false time embezzlements and thefts.
CHAPTER 5: PAYROLL ACCOUNTING

The following summarizes the important points related to the chapter just completed. Following the outline are review study questions with suggested solutions which provide evaluative and responsive feedback. You should answer the study questions and review the suggested solutions to confirm that you have a clear understanding of the material presented prior to proceeding to subsequent chapters.

OUTLINE

The payroll accounting cycle covers numerous activities from hiring and firing to pay distribution.

A. Payroll Cycle Typical Activities
   1. Personnel and Labor Relations – hiring and firing
   2. Supervision – approval of work time
   3. Timekeeping and Cost Accounting – payroll preparation and cost accounting
   4. Payroll Accounting – check preparation and related payroll reports
   5. Payroll Distribution – actual custody of checks and distribution to employees

B. Payroll Control System
   1. Authorization:
      a. Personnel or labor relations department: authorization to add new employees, delete terminated employees, obtain authorizations for deductions and to transmit authority for pay rate changes to the payroll department
      b. Supervision function: all pay base data should be approved by an employee’s supervisor
      c. Timekeeping and Cost Accounting function: data on which pay is based (e.g. hours, piece-rate volume, incentives) should be accumulated independent of other functions
   2. Custody:
      a. The main feature is the possession of the paychecks, cash or electronic transfer codes used to pay people
      b. Payroll distribution function: controls the delivery of pay to employees
      c. Supervision function: has access to time cards or time sheets that provide the basis for payment for hourly workers
      d. Timekeeping function: the devices have a type of custody of employee’s time-base for payroll calculations
3. Recordkeeping:

   a. Payroll accounting function: preparation of paychecks, envelopes or electronic transfers using rate and deduction information supplied by the personnel function and base data supplied by the timekeeping-supervision functions

4. Periodic Reconciliation

   a. The payroll bank account can be reconciled like any other bank account
   b. Supervision function: can have the supervisor review all paychecks to reapprove those that are under the supervisor’s authority and responsibility
   c. Payroll to cost accounting: reconciled to the labor records used to charge labor to production

C. Audit Evidence in Management Reports and Files

Payroll produces numerous reports; auditors should obtain and use these reports

1. Personnel Files
2. Timekeeping Records
3. Payroll Register
4. Labor Cost Analysis
5. Governmental and Tax Reports

   a. Year-To-Date Earnings Report
   b. Government Payroll Tax Report
   c. Employee W-2 Reports
CHAPTER 5 – REVIEW QUESTIONS

1. Payroll accounting and payroll distribution should be performed by separate people or departments.
   a) true
   b) false

2. The main feature of custody in the payroll cycle is:
   a) the approval of payroll increases
   b) the hiring of employees
   c) preparation of paychecks
   d) possession of the paychecks, cash, or electronic codes used to pay people

3. A personnel file should establish the reality of a person’s existence and employment.
   a) true
   b) false

4. Which of the following is responsible for the “cost distribution”:
   a) the personnel department
   b) the payroll department
   c) the cost accounting department
   d) the manufacturing department

5. A balance in a clearing account means that some amounts have not been classified properly in the accounting records.
   a) true
   b) false
**Please note:** AICPA / NASBA CPE guidelines require that CPE sponsors provide 5 review questions along with evaluative and responsive feedback for each CPE credit granted. Although there are an adequate amount of multiple-choice and true/false review questions located throughout the course material to meet this specific requirement, we have included additional review questions to enhance the student’s learning process. The suggested solutions provided are based upon the author’s experience and opinion as reflected in the course material.

For question 6 below, review the case study and write on a separate piece of paper the “audit approach” portion of the case, organized around these sections:

**Objective:** Express the objective in terms of the facts supposedly asserted in financial records, accounts, and statements.

**Control:** Write a brief explanation of desirable controls, missing controls, and especially the kinds of “deviations” that might arise from the situation described in the case.

**Test of controls:** Write some procedures for getting evidence about existing controls, especially procedures that could discover deviations from controls. If there are no controls to test, then there are no procedures to perform; go then to the next section. A “procedure” should instruct someone about the source(s) of evidence to tap and the work to do.

**Audit of balance:** Write some procedures for getting evidence about the existence, completeness, valuation, ownership, or disclosure assertions identified in your objective section above.

**Discovery summary:** Write a short statement about the discovery you expect to accomplish with your procedures.

After writing your audit approach, review the proposed audit approach attached to compare and contrast ideas and opinions.

Write the "audit approach" section like the cases in the chapter.

**Problem:** SueCan Corporation deferred costs under the heading of defense contract claims for reimbursement and deferred tooling labor costs, thus overstating assets, understating cost of goods sold, and overstating income.

**Method:** SueCan manufactured electronic and other equipment for private customers and government defense contracts. Near the end of the year, the company used a journal entry to remove $110,000 from cost of goods sold and defer it as deferred tooling cost. This $110,000 purported to be labor cost associated with preparing tools and dies for long production runs.

The company opened a receivables account for "cost overrun reimbursement receivable" as a claim for reimbursement on defense contracts ($378,000).

**Paper trail:** The company altered the labor time records for the tooling costs in an effort to provide substantiating documentation. Company employees prepared new work orders numbered in the series used late in the fiscal year and attached labor time records dated much earlier in the year. The production orders originally charged with the labor cost were left completed but with no labor charges!

The claim for reimbursement on defense contracts did not have documentation specifically identifying the labor costs as being related to the contract. There were no work orders. (Auditors know that defense department auditors insist on documentation and justification before approving such a claim.)

**Amount:** SueCan reported net income of about $442,000 for the year, an overstatement of approximately 60 percent.
CHAPTER 5 – SOLUTIONS AND SUGGESTED RESPONSES

1. **A: True is correct.** There are five functional responsibilities that should be performed by separate people or departments including personnel and labor relations, supervision, timekeeping and cost accounting, payroll accounting, and payroll distribution.

   B: False is incorrect. The payroll accounting person or department should be responsible for check preparation and related payroll reports. The payroll distribution person or department should be responsible for the actual custody of checks and distribution to employees.

   (See page 5-1 of the course material.)

2. **A: Incorrect.** The approval of payroll increases is an authorization element rather than a custody element, and is the responsibility of the supervision function.

   B: Incorrect. This is an authorization function that should be handled by the personnel or labor relations department.

   C: Incorrect. The actual preparation of paychecks is a recordkeeping function rather than a custody function.

   **D: Correct.** The main feature of custody in the payroll cycle is the possession of the paychecks, cash, or electronic codes used to pay people. A payroll distribution function should control the delivery of pay to employees so that unclaimed checks, cash, or incomplete electronic transfers are not returned to persons involved in any of the other functions.

   (See page 5-3 of the course material.)

3. **A: True is correct.** Personnel files usually include an employment application, a background investigation report, a notice of hiring, a job classification with pay rate authorization, and other information which aids in validation of a person’s existence and employment.

   B: False is incorrect. The contents of individual employee files usually include an employment application, a background investigation report, a notice of hiring, a job classification with pay rate authorization, and authorizations for deductions. Such items help to establish the reality of a person’s existence and employment.

   (See page 5-5 of the course material.)
4. A: Incorrect. The personnel department is responsible for hiring and firing of employees.

B: Incorrect. The payroll department is responsible for check preparation and related payroll reports, as well as actual custody of the checks and distribution to employees.

C: Correct. The cost accounting department (or similar accounting function) is responsible for cost distribution. The cost distribution is an assignment of payroll to the accounts where it belongs for internal and external reporting.

D: Incorrect. The manufacturing department does not have cost accounting responsibility. Their input may be required as to the standard cost of manufacturing items.

(See page 5-7 of the course material.)

5. A: True is correct. All clearing accounts should have zero balances after the accounting is completed. A balance does indicate that some amounts have not been classified properly.

B: False is incorrect. “Clearing accounts” are temporary storage places for transactions awaiting final accounting. All clearing accounts should have zero balances after the accounting is completed. A balance in a clearing account means that some amounts have not been classified properly in the accounting records.

(See page 5-8 of the course material.)


Objective: Obtain evidence of the validity of labor costs deferred as tooling and the amount claimed as cost overrun reimbursement on defense contracts. Obtain evidence of the “existence” of the labor cost reimbursement claim in terms of its being supported by sufficient documentation to justify carrying as an asset.

Control: The major control lies in the procedures for documenting the validity of labor cost assignments identifying the time and cost specifically to the categories claimed. For the reimbursement claim, the circumstances also need to meet the terms of the contract respecting cost overrun reimbursement.

Test of Controls: The test of control procedure is to select a sample of journal entries that created the assets—deferred tooling cost and cost reimbursement claim. Vouch them to supporting documentation. The transactions can be audited for control over validity and accuracy. However, these procedures will also satisfy the dual purpose of auditing the asset balances that arise directly from the transactions.
Test of Balances: The account balances created by the deferral journal entries are audited (“dual purpose procedure”) by auditing the supporting documentation. These balances were created entirely by the journal entries and their “existence” as legitimate assets—cost deferral and reimbursement claim depends on the believability of the supporting explanations. In connection with the defense contract claim, auditors can review it with knowledge of the contract and the extent of documentation required by government contract auditors.

Discovery Summary: By performing the procedures outlined above, the manager, senior, and staff accountants on the engagement discovered all the questionable and improper accounting. They noticed that the tooling cost deferral labor cost was “supported” by work orders of recent date and numerical sequence, but the labor charge tickets were created several months prior. This finding tipped them off that the later journal entry establishing the deferred charge was invented for income manipulation purposes later in the fiscal year.

The government contract cost overrun claim had similar deficient documentation. The labor cost had no associated work orders connected with the government contracts in progress. Collectibility was very doubtful. The account was adjusted to “write off” the claim.
CHAPTER 6
COST ACCOUNTING

The production accounting cycle covers the activities related to internal cost accounting for manufacture of products. This chapter contains sections on (1) typical control activities in the cycle, (2) the audit evidence available in management reports and files, and (3) case story-style explanations concerning discovery of errors and frauds.

PRODUCTION CYCLE TYPICAL ACTIVITIES

The basic production activities start with production planning, including inventory planning and management. Production planning can range from use of a sophisticated computerized long-range plan with just-in-time (JIT) inventory management to a simple ad hoc method ("Hey, Joe, we got an order today. Go make 10 units!") Exhibit 6-1 shows the activities and accounting involved in a production cycle. As you follow the exhibit, you can track the elements of a control system described in the sections below.

Most businesses try to estimate or forecast sales levels and seasonal timing, and they try to plan facilities and production schedules to meet customer demand. As shown in Exhibit 6-1, the production cycle interacts with the acquisition cycle (Chapter 4) and the payroll cycle (Chapter 5) for the acquisition of fixed assets, materials, supplies, overhead, and labor.

The physical output of a production cycle is inventory (starting with raw materials, proceeding to work in process, then to finished goods). Most matters of auditing inventory and physical inventory-taking are explained in Chapter 4. Exhibit 6-1 shows the connection of inventory to the revenue and collection cycle (Chapter 3) in terms of orders and deliveries.
Most of the "transactions" in a production cycle are cost accounting allocations, unit cost determinations, and standard cost calculations. These are internal transactions produced entirely within the company's accounting system. Exhibit 6-1 shows the elements of depreciation cost calculation, cost of goods sold determination, and job cost analysis as examples of these transactions.

AUTHORIZATION

The overall production authorization starts with production planning, which usually is based on a sales forecast. Production planning interacts with inventory planning to produce production orders. These production orders specify the materials and labor required and the timing for the start and end of production. Managers in the sales/marketing department and production department usually sign off their approval on plans and production orders.

Authorization also can include plans and approvals for subcontracting work to other companies. The process of taking bids and executing contracts can be a part of the planning-authorization system.

The production order usually includes a bill of materials (a specification of the materials authorized for the production). This bill of materials is the source of authorization for the preparation of materials requisitions, and these requisitions are the authorization for the inventory custodian to release raw materials and supplies to the production personnel. These documents are the inventory recordkeepers' authorizations to update the raw materials inventory files to record the reductions of the raw materials inventory.

Later, when production is complete, the production reports, along with the physical units and the quality control test reports, are the authorizations for the finished goods inventory custodian to place the units in the finished goods inventory. These same documents are the inventory recordkeepers' authorization to update the inventory record files to record the additions to the finished goods inventory.

CUSTODY

Supervisors and workers, skilled and unskilled, have physical custody of materials, equipment, and labor while the production work is performed. They can requisition materials from the raw materials inventory, assign people to jobs, and control the pace of work. In a sense, they have custody of a "moving inventory." The work in process (an inventory category) is literally "moving" and changing form in the process of being transformed from raw materials into finished goods.

Control over this custody is more difficult than control over a closed warehouse full of raw materials or finished goods. Control can be exercised by holding supervisors and workers accountable for the use of materials specified in the production orders, for the timely completion of production, and for the quality of the finished goods. This accountability can be achieved with good cost accounting, cost analysis, and quality control testing.
RECORDKEEPING (COST ACCOUNTING)

When production is completed, production orders and the related records of material and labor used are sent forward to the cost accounting department. Since these accounting documents may come from the production workers, the effective separation of the recordkeeping function depends upon its receiving independent notices from other places, especially notifications of materials issued from the inventory custodian and the labor costs assigned by the payroll department.

The cost accounting department produces analyses of cost-per-unit, standard cost, and variances. Cost accounting also may determine the allocation of overhead to production in general, to production orders, and to finished units. Depending on the design of the company's cost accounting system, these costs are used in inventory valuation and ultimately in determining the cost of goods sold. In many cases, the cost accounting department also is responsible for calculating the depreciation of fixed assets and the amortization of intangibles.

OVERHEAD ALLOCATION

The cost accounting department at Pointed Publications, Inc., routinely allocated overhead to book printing runs at the rate of 40 percent of materials and labor cost. The debit was initially to the finished books inventory, while the credit went to an "overhead allocated" account that was offset against other entries in the cost of goods sold calculation, which included all the actual overhead incurred. During the year, 10 million books were produced and $40 million of overhead was allocated to them. The auditors noticed that actual overhead expenditures were $32 million, and 3 million books remained in the ending inventory.

This finding resulted in the conclusion that the inventory was overstated by $2.4 million, the cost of goods sold was understated by $2.4 million, and the income before taxes was overstated by 8.2 percent.

<table>
<thead>
<tr>
<th></th>
<th>Company Accounting</th>
<th>Proper Accounting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Books produced</td>
<td>10 million</td>
<td>10 million</td>
</tr>
<tr>
<td>Labor and materials cost</td>
<td>$100 million</td>
<td>$100 million</td>
</tr>
<tr>
<td>Overhead allocated</td>
<td>$ 40 million</td>
<td>$ 32 million</td>
</tr>
<tr>
<td>Cost per book</td>
<td>$14.00</td>
<td>$13.20</td>
</tr>
<tr>
<td></td>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Cost of goods sold</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Labor and materials cost</td>
<td>$100 million</td>
<td>$100 million</td>
</tr>
<tr>
<td>Overhead allocated</td>
<td>40 million</td>
<td></td>
</tr>
<tr>
<td>Overhead incurred</td>
<td>32 million</td>
<td>32 million</td>
</tr>
<tr>
<td>Overhead credited to cost</td>
<td>(40 million)</td>
<td>(39.6 million)</td>
</tr>
<tr>
<td>Ending inventory</td>
<td>(42 million)</td>
<td>(39.6 million)</td>
</tr>
<tr>
<td></td>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Total cost of goods sold</td>
<td>$90 million</td>
<td>$92.4 million</td>
</tr>
</tbody>
</table>
PERIODIC RECONCILIATION

The function of periodic reconciliation generally refers to comparison of actual assets and liabilities to the amounts recorded in the company accounts (e.g., comparing the physical count of inventory to the perpetual inventory records, comparing vendors' monthly statements to the recorded accounts payable). Exhibit 6-1 shows the periodic reconciliation of physical inventory to recorded amounts. The features and audit considerations of this reconciliation are covered in Chapter 4. The work-in-process inventory also can be observed, although the "count" of partially completed units is very judgmental. It can be costed at the labor, materials, and overhead assigned to its stage of completion.

Most other periodic reconciliations in the production cycle take the form of analyses of internal information. These analyses include costing the production orders, comparing the cost to prior experience or to standard costs, and determining lower-of-cost-or-market (LCM) valuations. In a sense, the LCM calculations are a "reconciliation" of product cost to the external market price of product units.

AUDIT EVIDENCE IN MANAGEMENT REPORTS AND FILES

Most production accounting systems produce timely reports managers need to supervise and control production. These reports can be used by auditors as supporting evidence for assertions about work-in-process and finished goods inventories and about cost of goods sold. Auditors should obtain and use these reports.

SALES FORECAST

Management's sales forecast provides the basis for several aspects of business planning, notably the planning of production and inventory levels. If the auditors want to use the forecast for substantive audit decisions, some work to obtain assurance about its reasonableness needs to be performed. This work is not an examination or compilation of a forecast as contemplated by the attestation services standards. All the auditors need to accomplish is to learn about the assumptions built into the forecast for the purpose of ascertaining their reasonableness. In addition, some work on the mechanical accuracy of the forecast should be performed to avoid an embarrassing reliance on faulty calculations.

Forecasts can be used in connection with knowing management's plans for the year under audit, most of which will have already passed when the audit work begins. It will help the auditors understand the nature and volume of production orders and the level of materials inventory. Forecasts of the following year can be used in connection with valuing the inventory at lower-of-cost-or-market (e.g., slow-moving and potentially obsolete inventory), which influences the amount of cost of goods sold that is shown in the financial statements. Special care must be taken with using the forecast for the next year in connection with inventory valuation because an overly optimistic forecast can lead to a failure to write down inventory, accelerate the depreciation of fixed assets, and account for more cost of goods sold.
THE SALY FORECAST

The auditors were reviewing the inventory items that had not been issued for 30 days or more, considering the need to write some items down to market lower than cost. The production manager showed them the SALY forecast that indicated continuing need for the materials in products that are expected to have reasonable demand. The auditors agreed that the forecasts supported the prediction of future sales of products at prices that would cover the cost of the slow-moving material items.

Unfortunately, they neglected to ask the meaning of SALY in the designation of the forecast. They did not learn that it means "Same As Last Year." It is not a forecast at all. The products did not sell at the prices expected, and the company experienced losses the following year that should have been charged to cost of goods sold earlier.

PRODUCTION PLANS AND REPORTS

Based on the sales forecast, management should develop a plan for the amount and timing of production. The production plan provides general information to the auditors, but the production orders and inventory plan associated with the production plan are even more important. The production orders carry the information about requirements for raw materials, labor, and overhead, including the requisitions for purchase and use of materials and labor. These documents are the initial authorizations for control of the inventory and production.

Production reports record the completion of production quantities. When coupled with the related cost accounting reports, they are the company's record of the cost of goods placed into the finished goods inventory. In most cases, auditors will audit the cost reports in connection with determining the cost valuation of inventory and cost of goods sold.

DEPRECIATION SCHEDULE

The cost accounting department may be charged with the responsibility to prepare a schedule of the depreciation of fixed assets. In many companies, such a schedule is long and complicated, involving large dollar amounts of asset cost and calculated depreciation expense. It is not unusual to find the amount of depreciation expense exceeding a company's net income. (In the statement of cash flows, the depreciation added back to calculate the cash flow from operations can be larger than the net income carried forward from the income statement.) An abbreviated illustration of a fixed asset and depreciation schedule is in the table below.
### FIXED ASSETS AND DEPRECIATION

<table>
<thead>
<tr>
<th>Description</th>
<th>Asset Cost (000s)</th>
<th>Accumulated Depreciation (000s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beginning Balance</td>
<td>Added</td>
</tr>
<tr>
<td>Land</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td>Bldg 1</td>
<td>30,000</td>
<td></td>
</tr>
<tr>
<td>Bldg 2</td>
<td>42,000</td>
<td></td>
</tr>
<tr>
<td>Computer A</td>
<td>5,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Computer B</td>
<td>3,500</td>
<td></td>
</tr>
<tr>
<td>Press</td>
<td>1,500</td>
<td></td>
</tr>
<tr>
<td>Auto 1</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Auto 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>46,515</td>
<td>45,522</td>
</tr>
</tbody>
</table>

The depreciation schedule is audited by recalculating the depreciation expense, using the company’s methods, estimates of useful life, and estimates of residual value. The asset acquisition and disposition information in the schedule gives the auditors some points of departure for auditing the asset additions and disposals. When the schedule covers hundreds of assets and numerous additions and disposals, auditors can a) use computer auditing methods to recalculate the depreciation expense and b) use sampling to choose additions and disposals for test of controls and substantive audit procedures. The beginning balances of assets and accumulated depreciation should be traced to the prior year’s audit working papers. This schedule can be made into an audit working paper and placed in the auditor’s files for future reference.

### GAAP AND REGULATORY DEPRECIATION

U.S. West took a $5.4 billion pretax charge against earnings, wiping out over one-third of the shareholders’ equity. In stock trading, U.S. West’s share price increased 4 percent. Wall Street sent two messages: (1) the company should be rewarded for honest bookkeeping, and (2) its bookkeeping has not been very honest in recent years.

U.S. West changed its depreciation accounting for telecommunications equipment from the long lives required by rate regulation agencies to the shorter useful lives appropriate under GAAP. U.S. West reportedly got tired of reporting phony net earnings required by regulators and decided to report GAAP depreciation in its public financial statements. (The company must still use the regulatory depreciation when reporting to the rate regulation agencies.)

Other telecommunications companies are waiting for the regulators to approve the more appropriate depreciation deductions. However, the capital markets clearly approve of U.S. West’s new depreciation bookkeeping.

**THE LESSON:** Auditors should consider carefully the rational basis for useful lives clients incorporate in depreciation calculations.

The audit of account balances consists of procedural efforts to detect errors and frauds that might exist in the balances, thus making them misleading in financial statements. If such misstatements exist, they are characterized by the following features:

**Method:** A cause of the misstatement (accidental error, intentional irregularity, or fraud attempt), which is usually made easier by some kind of failure of controls.

**Paper trail:** A set of telltale signs of erroneous accounting, missing, or altered documents, or a "dangling debit" (the false or erroneous debit that results from an overstatement of assets).

**Amount:** The dollar amount of overstated assets and revenue, or understated liabilities and expenses.

Each audit program for the audit of an account balance contains an audit approach that may enable auditors to detect misstatements in account balances. Each application of procedures contains these elements:

**Audit objective:** A recognition of a financial statement assertion for which evidence needs to be obtained. The assertions are about existence of assets, liabilities, revenues, and expenses; their valuation; their complete inclusion in the account balances; the rights and obligations inherent in them; and their proper presentation and disclosure in the financial statements.

**Control:** A recognition of the control activities that should be used in an organization to prevent and detect errors and frauds.

**Test of controls:** Ordinary and extended procedures designed to produce evidence about the effectiveness of the controls that should be in operation.

**Audit of balance:** Ordinary and extended substantive procedures designed to find signs of errors and frauds in account balances and classes of transactions.

The next portion of this chapter consists of two cases that first set the stage with a story about an error, irregularity, or fraud – its method, paper trail (if any), and amount. This part of each case gives you the "inside story," which auditors seldom know before they perform the audit work. The second part of each case, under the heading of the "audit approach," tells a structured story about the audit objective, desirable controls, test of control procedures, audit of balance procedures, and discovery summary. The audit approach segment illustrates the manner in which audit procedures can be applied and the discoveries they may enable auditors to make.
CASE 6.1: UNBUNDLED BEFORE ITS TIME

Problem

Production "sold" as finished goods before actual unit completion caused understated inventory, overstated cost of goods sold, overstated revenue, and overstated income.

Method

Western Corporation assembled and sold computer systems. A system production order consisted of hardware and peripheral equipment specifications and software specifications with associated performance criteria. Customer contracts always required assembly to specifications, installation, hardware testing, software installation, and software testing, after which the customer could accept the finished installation and pay the agreed price for the entire package. Completion of an order usually took three to eight months.

For internal accounting purposes, Western "unbundled" the hardware and software components of the customer orders. Production orders were split between the two components. Standard production processing and cost accounting were performed as if the two components were independent orders. When the hardware was installed and tested (with or without customer acceptance), Western recorded part of the contract price as sales revenue and the related cost of goods sold. The amount "due from customers" was carried in an asset account entitled Unbilled Contract Revenue. No billing statement was sent to the customer at this time.

When the software component was completed, installed, tested, and accepted, the remainder of the contract price was recorded as revenue, and the cost of the software was recorded as cost of goods sold. A billing statement was sent to the customer. The Unbilled Contract Revenue, which now matched the customer's obligation, was moved to Accounts Receivable.

During the time either or both of the order components were in process (prior to installation at the customer's location), accumulated costs were carried in a work-in-process inventory account.
Paper Trail

Customer orders and contracts contained all the terms relating to technical specifications, acceptance testing, and the timing of the customer's obligation to pay. Copies of the technical specification sections of the contracts were attached to the separate hardware and software production orders prepared and authorized in the production planning department. During production, installation, and testing, each of these production orders served as the basis for the production cost accumulation and the subsidiary record of the work-in-process inventory. At the end, the production report along with the accumulated costs became the production cost report and the supporting documentation for the cost of goods sold entry.

Amount

Western Corporation routinely recorded the hardware component of contracts too early, recognizing revenue and cost of goods sold that should have been postponed until later when the customer accepted the entire system. In the last three years, the resulting income overstatement amounted to 12 percent, 15 percent, and 19 percent of the reported operating income before taxes.
AUDIT APPROACH

Objective

Obtain evidence of the actual occurrence of cost of goods sold transactions, thereby yielding evidence of the completeness of recorded inventory.

Control

The major control lies in the production planning department approval of orders that identify a total unit of production (in this case, the hardware and software components combined). Nothing is wrong with approving separate orders for efficiency of production, but they should be cross-referenced so both production personnel and the cost accounting department can see them as separate components of the same order unit.

Test of Controls

While the company conducted a large business, it had relatively few production orders (200-250 charged to cost of goods sold during each year). A sample of completed production orders should be taken and vouched to the underlying customer orders and contracts. The purpose of this procedure includes determining the validity of the production orders in relation to customer orders and determining whether the cost of goods sold was recorded in the proper period. (Procedures to audit the accuracy and completeness of the cost accumulation also are carried out on this sample.)

Even though the auditors can read the customer contracts, inquiries should be made about the company's standard procedures for the timing of revenue and cost of goods sold recognition.

Audit of Balances

The sample of completed production orders taken for the test of controls also can be used in a "dual purpose test" to audit the details of the cost of goods sold balance. In connection with the balance audit, the primary points of interest are the existence/occurrence and completeness of the dollar amounts accumulated as cost of the contracts and the proper cutoff for recording the cost.

The existence of the Unbilled Contract Revenue asset account in the general ledger should raise a red flag. Such an account always means that management has made an estimate of a revenue amount that has not been determined according to contract and has not yet been billed to the customer in accordance with contract terms. Even though the revenue is "unbilled," the related cost of goods sold still should be in the Cost of Goods Sold account. While accounting theory and practice permit recognizing unbilled revenue in certain cases (e.g., percentage of completion for construction contracts), the accounting has been known to harbor abuses in some cases.
Discovery Summary

When the company decided to issue stock to the public, a new audit firm was engaged. These auditors performed the dual purpose procedures outlined above, made the suggested inquiries, and investigated the Unbilled Contract Revenue account. They learned about management's unbundling policy and insisted that the policy be changed to recognize revenue only when all the terms of the contract were met. (The investigation yielded the information about prior years' overstatements of revenue, cost of goods sold, and income.) Part of the reason for insisting on the change of policy was the finding that Western did not have a very good record of quality control and customer acceptance of software installation. Customer acceptance was frequently delayed several months while systems engineers debugged software. On several occasions, Western solved the problems by purchasing complete software packages from other developers.
CASE 6.2: WHEN IN DOUBT, DEFER!

Problem
SaCom Corporation deferred costs under the heading of work in process, defense contract claims, and R&D test equipment, thus overstating assets, understating cost of goods sold, and overstating income. Disclosure of the auditor's fees was manipulated and understated.

Method
SaCom manufactured electronic and other equipment for private customers and government defense contracts. Near the end of the year, the company used a journal entry to remove $170,000 from cost of goods sold and to defer it as tooling, leasehold improvements, and contract award and acquisition costs.

The company capitalized certain expenditures as R&D test equipment ($140,000) and as claims for reimbursement on defense contracts ($378,000).

In connection with a public offering of securities, the auditors billed SaCom $125,000 for professional fees. The underwriters objected. The auditors agreed to forgive $70,000 of the fees, and SaCom agreed to pay higher fees for work the following year (150 percent of standard billing rates). SaCom disclosed audit fees in the registration statement in the amount of $55,000. This amount was paid from the proceeds of the offering.

Paper Trail
The $170,000 deferred costs consisted primarily of labor costs. The company altered the labor time records in an effort to provide substantiating documentation. The auditors knew about the alterations. The cost was removed from jobs that were left with too little labor cost in light of the work performed on them. The R&D test equipment cost already had been charged to cost of goods sold with no notice of deferral when originally recorded. Deferral was accomplished with an adjusting journal entry. The company did not have documentation for the adjusting entry, except for an estimate of labor cost (44 percent of all labor cost in a subsidiary was capitalized during the period).

The claim for reimbursement on defense contracts did not have documentation specifically identifying the costs as being related to the contract. (Auditors know that defense department auditors insist on documentation and justification before approving such a claim.)

The audit fee arrangement was known to the audit firm, and it was recorded in an internal memorandum.

Amount
SaCom reported net income of about $542,000 for the year, an overstatement of approximately 50 percent.
AUDIT APPROACH

Objective
Obtain evidence of the validity of production costs deferred as tooling, leasehold improvements, contract award and acquisition costs, R&D test equipment, and claims for reimbursement on defense contracts.

Control
The major control lies in the requirement to document the validity of cost deferral journal entries.

Test of Controls
The test of controls procedure is to select a sample of journal entries, suspect ones in this case, and vouch them to supporting documentation. Experience has shown that nonstandard adjusting journal entries are the source of accounting errors and frauds more often than standard repetitive accounting for systematic transactions. This phenomenon makes the population of adjusting journal entries a ripe field for control and substantive testing.

Audit of Balances
The account balances created by the deferral journal entries can be audited in a "dual purpose procedure" by auditing the supporting documentation. These balances were created entirely by the journal entries, and their "existence" as legitimate assets, deferrals, and reimbursement claims depends on the believability of the supporting explanations. In connection with the defense contract claim, auditors can review it with knowledge of the contract and the extent of documentation required by government contract auditors.

(As a separate matter, the auditors could "search for unrecorded liabilities," but they already know about the deferred accounting fees, anyway.)

Discovery Summary
By performing the procedures outlined above, the manager and senior and staff accountants on the engagement discovered all the questionable and improper accounting. However, the partners in the firm insisted on rendering unqualified opinions on the SaCom financial statements without adjustment. One partner owned 300 shares of the company's stock in the name of a relative (without the consent or knowledge of the relative). Another audit partner later arranged a bank loan to the company to get $125,000 to pay past-due audit fees. This partner and another, and both their wives, guaranteed the loan. (When the bank later disclosed the guarantee in a bank confirmation obtained in the course of a subsequent SaCom audit, the confirmation was removed from the audit working paper file and destroyed.)

The SEC investigated, and, among other things, barred the audit firm for a period (about six months) from accepting new audit clients who would file financial statements with the SEC. The SEC also barred the partners involved in supervising various portions of the audit work from involvement with new audit clients for various periods of time. (Adapted: ASR 196.)
SUMMARY

Production involves production planning, inventory planning, acquisition of labor, materials, and overhead (acquisition and payment cycle), custody of assets while work is in process and when finished products are stored in inventory, and cost accounting. Payroll is a part of every business and an important part of every production cycle (see Chapter 5). Management and control of production labor costs are important.

Production information systems produce many internal documents, reports, and files. Several of these sources of audit information are described in the chapter. This cycle is characterized by having mostly internal documentation as evidence and having relatively little external documentary evidence. Aside from the physical inventory in the production process, the accounts in the production cycle are intangible. They cannot be observed, inspected, touched, or counted in any meaningful way. Most audit procedures for this cycle are analytical procedures and dual-purposes procedures that test both the company’s control procedures and the existence, valuation, and completeness assertions made by accumulating the results of numerous material, labor, and overhead transactions.

Companies reduce control risk by having a suitable separation of authorization, custody, recording, and periodic reconciliation duties. Error-checking procedures of analyzing production orders and finished production cost reports are important for proper determination of inventory values and proper valuation of cost of goods sold. Otherwise, many things could go wrong, ranging from overvaluing the inventory to understating costs of production by deferring costs that should be expensed.

Cost accounting is a central feature of the production cycle. Illustrative cases in the chapter tell the stories of financial reporting manipulations and the audit procedures that will detect them.
CHAPTER 6: COST ACCOUNTING

The following summarizes the important points related to the chapter just completed. Following the outline are review study questions with suggested solutions which provide evaluative and responsive feedback. You should answer the study questions and review the suggested solutions to confirm that you have a clear understanding of the material presented prior to proceeding to subsequent chapters.

OUTLINE

The production accounting cycle covers the activities related to internal cost accounting for manufacture of products.

A. Production Cycle Typical Activities
   1. Production Planning: including
      a. inventory planning
      b. management

B. Control Systems
   1. Authorization: sales forecast, production orders, bill of materials, material requisitions, etc
   2. Custody: physical custody of materials, equipment and labor
   3. Record Keeping (Cost Accounting): analyses of cost-per-unit, standard cost, and variances, allocation of overhead, calculation of fixed assets and amortization of intangibles
   4. Periodic Reconciliation: comparison of actual assets and liabilities to the amounts recorded in the company accounts

C. Audit Evidence in Management Reports and Files

Most production accounting systems produce timely reports managers need to supervise and control production. These reports can be used by auditors as supporting evidence for assertions. They should obtain and use these reports.

   1. Sales Forecast
   2. Production Plans and Reports
   3. Depreciation Schedule
CHAPTER 6 – REVIEW QUESTIONS

1. The production accounting cycle covers the activities related to internal cost accounting for:

   a) manufacture of products
   b) sales forecasting
   c) purchasing
   d) hiring and firing

2. Production planning is usually based on:

   a) the availability of materials
   b) the sales forecast
   c) economic order quantities
   d) maximum productivity capability

3. The function of periodic reconciliation generally refers to comparison of actual assets and liabilities to the amounts recorded in the company accounts.

   a) true
   b) false

4. An auditor can place absolute assurance in the sales forecast they receive for substantive audit decisions.

   a) true
   b) false

5. Which of the following documents is the initial authorization for control of the inventory and production:

   a) the sales forecast
   b) the production orders
   c) the depreciation schedule
   d) the perpetual inventory records

6. The depreciation expense cannot exceed the company’s net income.

   a) true
   b) false
Please note: AICPA / NASBA CPE guidelines require that CPE sponsors provide 5 review questions along with evaluative and responsive feedback for each CPE credit granted. Although there are an adequate amount of multiple-choice and true/false review questions located throughout the course material to meet this specific requirement, we have included additional review questions to enhance the student’s learning process. The suggested solutions provided are based upon the author’s experience and opinion as reflected in the course material.

For question 7 below, review the case study and write on a separate piece of paper the “audit approach” portion of the case, organized around these sections:

Objective: Express the objective in terms of the facts supposedly asserted in financial records, accounts, and statements.

Control: Write a brief explanation of desirable controls, missing controls, and especially the kinds of “deviations” that might arise from the situation described in the case.

Test of controls: Write some procedures for getting evidence about existing controls, especially procedures that could discover deviations from controls. If there are no controls to test, then there are no procedures to perform; go then to the next section. A “procedure” should instruct someone about the source(s) of evidence to tap and the work to do.

Audit of balance: Write some procedures for getting evidence about the existence, completeness, valuation, ownership, or disclosure assertions identified in your objective section above.

Discovery summary: Write a short statement about the discovery you expect to accomplish with your procedures.

After writing your audit approach, review the proposed audit approach attached to compare and contrast ideas and opinions.
7. Case Study: Toying Around with the Numbers – Inventory and Deferred Cost Overstatement

Write the "audit approach" section like the cases in the chapter.

*Problem*: Mattel, Inc., a manufacturer of toys, failed to write off obsolete inventory, thereby overstating inventory, and improperly deferred tooling costs, both of which understated cost of goods sold and overstated income.

*Method*: "Excess" inventory was identified by comparing types of toys (wheels, general toys, dolls, games), parts, and raw materials with the forecasted sales or usage. Lower-of-cost-or-market (LCM) determinations were made to calculate the obsolescence write-off. Obsolescence was expected, and the target for the year was $700,000. The first comparison computer run showed $21 million "excess" inventory! The company "adjusted" the forecast by increasing the quantities of expected sales for many toy lines. (Forty percent of items had forecasted sales greater than the recent actual sales experience.) Another "adjustment" was to forecast toy close-out sales not at reduced prices but at regular price. Also, certain parts were labeled "interchangeable" without the normal reference to a new toy product. These "adjustments" to the forecast reduced the "excess" inventory exposed to LCM valuation and write-off.

The cost of setting up machines, preparing dies, and other preparations for manufacture are "tooling costs." They benefit the lifetime run of the toy manufactured. The company capitalized them as prepaid expenses and amortized them in the ratio of current-year sales to expected product lifetime sales (much like a natural resource depletion calculation). To get the amortization cost lower, the company transferred unamortized tooling costs from toys with low forecasted sales to ones with high forecasted sales. This caused the year's amortization ratio to be smaller, the calculated cost write-off lower, and the cost of goods sold lower than it should have been.

*Paper trail*: The computer forecast runs of expected usage of interchangeable parts provided a space for a reference to the code number of the new toy where the part would be used. Some of these references contained the code number of the part itself, not a new toy. In other cases, the forecast of toy sales and parts usage contained the quantity on hand, not a forecast number.

In the tooling cost detail records, unamortized cost was classified by lines of toys (similar to classifying asset cost by asset name or description). Unamortized balances were carried forward to the next year. The company changed the classifications shown at the prior year-end to other toy lines that had no balances or different balances. In other words, the balances of unamortized cost at the end of the prior year did not match the beginning balances of the current year, except that the total prepaid expense amount was the same.
Amount: For lack of obsolescence write-offs, inventory was overstated $4 million. The company recorded a $700,000 obsolescence write-off. It should have been about $4.7 million, as later determined.

The tooling cost manipulations overstated the prepaid expense by $3.6 million.

The company reported net income (after taxes) of $12.1 million in the year before the manipulations took place. If pretax income were in the $20-$28 million range in the year of the misstatements, the obsolescence and tooling misstatements alone amounted to about 32 percent income overstatement.
CHAPTER 6 – SOLUTIONS AND SUGGESTED RESPONSES

1. **A: Correct.** The basic production activities start with production planning, including inventory planning and management. The physical output of a production cycle is inventory (raw materials, work-in-process, and finished goods).

   B: Incorrect. Although a sales forecast often drives the production activity, it is not the main focus of the production accounting cycle.

   C: Incorrect. Purchasing is a part of the acquisition and expenditure cycle.

   D: Incorrect. Hiring and firing is a part of the payroll cycle.

   (See page 6-1 of the course material.)

2. **A: Incorrect.** The availability of materials is not generally the basis for the production plan.

   **B: Correct.** The production plan is usually based on the sales forecasts, and interacts with inventory planning to produce production orders.

   C: Incorrect. Economic order quantities are sometimes used to purchase materials, but not to plan production.

   D: Incorrect. The production plan is usually based on need, rather than on capability.

   (See page 6-3 of the course material.)

3. **A: True is correct.** For example, comparing the physical count of inventory to the perpetual inventory records, and comparing vendors’ monthly statements to the recorded accounts payable.

   **B: False is incorrect.** The function of periodic reconciliation generally refers to comparison of actual assets and liabilities to the amount recorded in the company accounts. Most other period reconciliations in the production cycle take the form of analyses of internal information.

   (See page 6-5 of the course material.)

4. **A: True is incorrect.** If the auditors want to use the forecast for substantive audit decisions, some work to obtain assurance about its reasonableness needs to be performed. The auditor needs to learn about the assumptions built into the forecast for the purpose of ascertaining their reasonableness.

   **B: False is correct.** Some work should be done to learn about the assumptions built into the forecast for the purpose of ascertaining their reasonableness and on the mechanical accuracy of the forecast to avoid an embarrassing reliance on faulty calculations.

   (See page 6-5 of the course material.)
5. A: Incorrect. The sales forecast is not the initial authorization, but is the basis for documents that are.

**B: Correct.** The production orders and inventory plan are the initial authorizations for control of the inventory and production.

C: Incorrect. The depreciation schedule is unrelated to the authorization for control of inventory and production.

D: Incorrect. The perpetual inventory records are unrelated to the authorization for control of inventory and production.

(See page 6-6 of the course material.)

6. A: True is incorrect. The cost accounting department may be charged with the responsibility to prepare a schedule of the depreciation of fixed assets. It is not unusual to find the amount of depreciation expense exceeding a company's net income.

**B: False is correct.** In fact, it is not unusual to find the amount of depreciation expense exceeding a company's net income

(See page 6-6 of the course material.)

7. Case Study: Audit Approach: Toying Around With The Numbers

**Audit Objective:** Obtain evidence to determine the valuation of manufactured inventory at lower-of-cost-or-market.

**Control:** The sales forecast should be based on realistic assumptions and expectations. The company should have documentation or plausible explanations for the assumptions underlying the forecast.

Detail records of tooling cost balances by toy line should carry forward from the end of the prior year to the beginning of the current year in the same amount and for the same toy lines, just like the cost of fixed assets.

**Test of Controls:** There is nothing routine about reviewing a sales forecast for reasonableness. The company's documentation, if any, should be studied. Persons responsible for its preparation should be interviewed. One typical procedure is to track the record of management's past sales forecasts with subsequent actual sales experience. Responses to inquiries should be analyzed for reasonableness on whatever bases are available (excluding wild optimism).
Test of Balances: Much of the balance-audit work on inventory obsolescence flows directly from the control testing. In this case, the validity of the forecast was the crucial step because inventory was not even flagged for LCM calculation unless it exceeded the forecast. (Not much could be determined from the physical observation because toys don’t show signs of mold or rust. When oversupplied, they are sold at close-out prices. However, a few kinds of parts and raw materials might be “observed” as questionably obsolete.)

Review the forecast for curious discrepancies. In this case zero differences between inventory quantity on hand and forecast sales of toys and usage of parts should bring suspicion that the forecast was “plugged.” Further inquiry into the forecast process is warranted.

Beginning balances of unamortized tooling costs should be traced to prior year working papers or the client’s prior year records. This should have showed the movement or prior year amounts to different toy lines.

Amortization rates should be tested against the forecasts, and the forecast experience should be reviewed.

Discovery Summary (Adapted; ASR 292): The auditors did not notice anything curious about inventory quantities and forecast quantities being equal in 19 of 128 lines sampled for detailed audit. They did not notice the interchangeable part numbers’ reference to the part itself instead of to a new toy. In one of the years, they did not compare prior forecast to subsequent actual sales experience; in the other year, the auditor made the comparison, but accepted management’s explanation of how sales would increase.

The auditors apparently did not trace the beginning tooling balances to prior year-end balances and failed to notice the movement of the amounts to other toy lines. However, they did notice the poor forecast experience for tooling amortization and recommended an additional $2 million amortization of the prepaid expense. After discussion with management, an adjustment to amortize another $1.4 million tooling cost was recorded. That still left the balance overstated because the auditors recommended an adjustment only for the sample of items they tested and did not project the misstatement to the entire deferred cost population.
CHAPTER 7
INVESTMENTS, LIABILITIES, AND EQUITIES

The finance and investment accounting cycle covers several types of transactions that are typically large and infrequent. This chapter contains sections on (1) typical control activities related to the transactions, and (2) case story-style explanations concerning discovery of errors and frauds for subtopics in (a) debt and stockholders equity capital, (b) long-term liabilities and related accounts, and (c) investments and intangibles. A closing section deals with additional aspects of clever accounting and fraud.

FINANCE AND INVESTMENT CYCLE: TYPICAL ACTIVITIES

The finance and investment cycle contains a large number of accounts and records, ranging across tangible and intangible assets, liabilities, deferred credits, stockholders' equity, gains and losses, expenses, and income taxes. The major accounts and records are listed in Exhibit 7-1. These include some of the more complicated topics in accounting – equity method accounting for investments, consolidation accounting, goodwill, income taxes, and financial instruments, to name a few. It is not the purpose of this chapter to explain the accounting for these balances and transactions. The chapter concentrates on a few important aspects of auditing them.

Exhibit 7-1 shows a skeleton outline of the finance and investment cycle. Its major functions are financial planning and raising capital; interacting with the acquisition and expenditure, production and payroll, and revenue and collection cycles; and entering into mergers, acquisitions, and other investments.
EXHIBIT 7-1  Finance and Investment Cycle

Start Here

Invest excess funds

Mergers and Acquisitions

Revenue and Collection Cycle
Deliver goods and services, bill customers, collect.

Production and Payroll Cycle
Convert resources into products and services

Financial Planning

Sell Stock or Borrow Money

Capital Budget

Cash flow forecast

Relations with financial institutions and public securities markets

Acquisition Cycle
Purchase resources: inventory, expenses, Fixed assets

Accounts / Records
Marketable securities
Long-term investments
Joint ventures
Advances to subsidiaries
Equity method investments
Gains and losses
Deferred gains and losses

Accounts / Records
Consolidations (purchase and pooling)
Goodwill
Intangibles
Deferred charges

Accounts / Records
Capital stock
Paid-in capital
Dividends
Bonds, notes payable
Interest expenses
Income tax expense, deferred taxes
Financial instruments
Securities registration (SEC)
DEBT AND STOCKHOLDER EQUITY CAPITAL

Transactions in debt and stockholder equity capital are normally few in number but large in monetary amount. They are handled by the highest levels of management. The control-related duties and responsibilities reflect this high-level attention.

Authorization

Financial planning starts with the chief financial officer's (CFO's) cash flow forecast. This forecast informs the board of directors and management of the business plans, the prospects for cash inflows, and the needs for cash outflows. The cash flow forecast usually is integrated with the capital budget, which contains the plans for asset purchases and business acquisitions. A capital budget approved by the board of directors constitutes the authorization for major capital asset acquisitions (acquisition cycle) and investments.

Sales of capital stock and debt financing transactions usually are authorized by the board of directors. All the directors must sign registration documents for public securities offerings. However, authority normally is delegated to the CFO to complete such transactions as periodic renewals of notes payable and other ordinary types of financing transactions without specific board approval of each transaction. Auditors should expect to find the authorizing signatures of the chief executive officer (CEO), CFO, chair of the board of directors, and perhaps other high-ranking officers on financing documents.

Many financing transactions are "off the balance sheet." Companies can enter into obligations and commitments that are not required to be recorded in the accounts. Examples of such authorizations include: leases, endorsements on discounted notes or on other companies' obligations, letters of credit, guarantees, repurchase or remarketing agreements, commitments to purchase at fixed prices, commitments to sell at fixed prices, and certain kinds of stock options. These are among the business and financing options available to companies. They cause problems in financial reporting and disclosure.

THE FRAUD LOSSES HAPPENED LAST YEAR!

Retained earnings is usually not a very interesting capital account. It cannot be bought, sold, or stolen, but it can be the final resting place for some important accounting decisions.

AM International was the victim of a massive management fraud engineered by high-level executives and put over for awhile on the independent auditors and on everybody else. Reportedly, over $75 million in assets did not exist, even though they were reported in the audited financial statements.

After the corrupt management was terminated, the new management concluded that the losses resulting from the fraud should be a prior period adjustment to retained earnings and prior income statements in the amount of $250 million, counting the fictitious assets and the adverse impact of the events on the company's business. They wanted to start with a new, clean slate.

The argument was that the accounting errors occurred in earlier years, and all the related losses should be placed in the accounting for those years. Do you agree with this prior period adjustment accounting for this situation?
Custody

In large companies, custody of stock certificate books is not a significant management problem. Large companies employ banks and trust companies to serve as registrars and transfer agents. A registrar keeps the stockholder list and, from time to time, determines the shareholders eligible to receive dividends (stockholders of record on a dividend record date) and those entitled to vote at the annual meeting. A transfer agent handles the exchange of shares, canceling the shares surrendered by sellers and issuing new certificates to buyers. The same bank or trust company usually provides both services.

Small companies often keep their own stockholder records. A stock certificate book looks like a checkbook. It has perforated stubs for recording the number of shares, the owner's name and other identification, and the date of issue. Actual unissued share certificates are attached to the stubs, like unused checks in a checkbook. The missing certificates are the ones outstanding in the possession of owners. Custody of the stock certificate book is important because the unissued certificates are like money or collateral. If improperly removed, they can be sold to buyers who think they are genuinely issued or can be used as collateral with unsuspecting lenders.

Lenders have custody of debt instruments (e.g., leases, bonds, and notes payable). A CFO may have copies, but they are merely convenience records. However, when a company repurchases its debt instruments, these come into the custody of trustees or company officials, usually the CFO. Until they are cancelled and destroyed, it is possible to misuse them by improperly reselling them to unsuspecting investors. (Refer to the box on "A New Meaning for 'Recycling'.")

A NEW MEANING FOR "RECYCLING"

Something strange must have happened on the way to the dump. Hundreds of issues of long-term bonds were redeemed early and presented to Citicorp's Citibank in New York, acting as agent for the issues, according to the FBI. Many of the bonds still had not reached the maturity date marked on them. Citibank sent about $1 billion of cancelled U.S. corporate bonds to a landfill dump in New Jersey. But in the past year, some of those bonds have been turning up at banks in Europe and the United States. The banks have had a disturbing surprise: The bonds are worthless, though they still might look genuine to a layman or even to some bankers.

An FBI spokesman says a defunct company in New Jersey is being investigated. The company had a contract to destroy the bonds.

Note: Companies obtain a "destruction certificate" when bonds and stock certificates are canceled. The certificate obtained by Citibank apparently was fraudulent.

**Recordkeeping**

Records of notes and bonds payable are maintained by the accounting department and the CFO or controller. The recordkeeping procedures should be similar to those used to account for vendor accounts payable: payment notices from lenders are compared to the accounting records, due dates are monitored, interest payments are set up in vouchers for payment, and accruals for unpaid interest are made on financial reporting dates. If the company has only a few bonds and notes outstanding, no subsidiary records of notes are kept. All the information is in the general ledger accounts. (Companies with a large number of bonds and notes may keep control and subsidiary accounts, as is done for accounts receivable.) When all or part of the notes become due within the next year, the CFO and controller have the necessary information for properly classifying current and long-term amounts.

Another class of credit balances is treated here under the heading of "recordkeeping," for which the functions of authorization, custody, and reconciliation are not easy to describe. They are the "calculated liabilities and credits" – lease obligations, deferred income taxes, pension and post-retirement benefit liabilities, and foreign currency translation gains and losses, to name a few. These are accounting creations, calculated according to accounting rules and using basic data from company plans and operations. Management usually enjoys considerable discretion in structuring leases, tax strategies, pension plan and employee benefit terms, foreign holdings, and the like. These accounting calculations often involve significant accounting estimates made by management. Company accountants try to capture the economic reality of these calculated liabilities by following generally accepted accounting principles.

**Periodic Reconciliation**

A responsible person should periodically inspect the stock certificate book to determine whether the only missing certificates are the ones known to be outstanding in the possession of bona fide owners. If necessary, company officials can confirm the ownership of shares with the holders of record. Reports with similar information content can be obtained from registrars and transfer agents to verify that the company's record of the number of shares outstanding agrees with the registrars' number. (Without this reconciliation, counterfeit shares handled by the transfer agent and recorded by the registrar might go unnoticed.)

Ownership of bonds can be handled by a trustee having duties and responsibilities similar to those of registrars and transfer agents. Confirmations and reports from bond trustees can be used to reconcile the trustee's records to the company's records.
INVESTMENTS AND INTANGIBLES

A company can have many investments or only a few, and can have a large variety or a limited set of types of investments. Intangible assets may be in the form of purchased assets (e.g., patents, trademarks) or in the form of accounting allocations (e.g., goodwill, deferred charges). The sections below are phrased in the context of a manufacturing or service company for which investments and intangibles are fairly incidental in the business. Financial institutions (banks, thrifts), investment companies (mutual funds, small business investment companies – SBICs), insurance companies, and the like have more elaborate systems for managing their investments and intangibles.

THE LITTLE LEASE THAT COULD

The Park ‘N Fly commuter airline was struggling. According to its existing debt covenants, it could not incur any more long-term liabilities. The company needed a new airplane to expand its services, so it "rented" one. The CFO pointed out that the deal for the $12 million airplane was a noncancellable operating lease because: (1) Park ‘N Fly does not automatically own the plane at the end of the lease; (2) the purchase option of $1,500,000 is no bargain; (3) the lease term of 133 months is 74 percent, not 75 percent, of the estimated 15-year economic life; and (4) the present value of the lease payments of $154,330 per month, discounted at the company’s latest borrowing rate of 14 percent, is $10.4 million, which is less than the 90 percent of fair value (0.90 X $12 million = $10.8 million) criterion in the FASB pronouncements.

The CFO did not record a long-term lease obligation (liability). Do you agree with this accounting conclusion?

Authorization

All investment policies should be approved by the board of directors or its investment committee. It is not unusual to find board or executive committee approval required for major individual investment transactions. However, auditors should expect to find a great deal of variation across companies about the nature and amount of transactions that must have specific high-level approval. The board of directors always is closely involved in major acquisitions, mergers, and stock buy-back plans.

AUTHORIZED: HERE TODAY, GONE TOMORROW

The treasurer of Travum County had many responsibilities as a chief financial officer. She invested several million dollars of county funds with a California-based investment money manager. Soon thereafter, news stories of the money manager’s expensive personal lifestyle and questionable handling of client’s funds began to circulate, indicating that clients could lose much of their investments. At the same time, news stories about the treasurer’s own credit-card spending habits were published locally, indicating that she had obtained a personal credit card by using the county’s name.

Although no county funds were lost and no improper credit-card bills were paid, the county commissioners temporarily suspended the treasurer’s authority to choose investment vehicles for county funds.
Custody

Custody of investments and intangibles depends on the nature of the assets. Some investments, such as stocks and bonds, are represented by negotiable certificates. The actual certificates may be kept in a brokerage account in a "house name" (the brokerage company), and, in this case, "custody" rests with the company official who is authorized to order the buy, sell, and delivery transactions. They also may be in the actual possession of the owner (client company). If they are kept by the company, they should be in a safe or a bank safe-deposit box. Only high-ranking officers (e.g., CFO, CEO, president, chair of board) should have combinations and keys.

Other kinds of investments do not have formal negotiable certificates, and "custody" may take the form of "management responsibility" instead of actual physical handling. Examples are joint ventures and partnerships in which the client company is a partner. Venture and partnership agreements are evidence of these investments, but they usually are merely filed with other important documents. Misuse of them is seldom a problem because they are not readily negotiable. Real custody rests with management's supervision and monitoring the venture or partnership operations.

Having "custody" of most intangibles is like trying to keep Jell-O in your pocket – good in theory but messy in practice. However, patents, trademarks, copyrights, and similar legal intangible rights may be evidenced in legal documents and contracts. These seldom are negotiable, and they usually are kept in ordinary company files. Accounting intangibles like goodwill and deferred charges (deferred tax credits and pension obligations on the liability side) are in the custody of the accountants who calculate them. Company managers may be assigned responsibility to protect exclusive rights granted by various intangibles.

DON'T USE OUR LOGO

The University of Texas at Austin has trademark rights over the "longhorn" symbol and a particular school color (burnt orange). The university actively prohibits businesses from using these symbols without permission. For example, a local cleaning business and a trash hauling business were informed that they must cease and desist using the longhorn-head logo on their buildings, signs, and trucks. The businesses complied by repainting and finding other ways to promote their business.

Recordkeeping

The procedures for purchase of stock and bond investments involve the voucher system described in the acquisition and expenditure cycle (Chapter 4). Authorization by the board of directors or other responsible officials is the approval for the accounting department to prepare the voucher and the check. The treasurer or CFO signs the check for the investment. If the company has few investments, no subsidiary records are maintained and all information is kept in the general ledger accounts. If the company has many investments, a control account and subsidiary ledger may be maintained.
The recordkeeping for many kinds of investments and intangibles can be complicated. The complications arise not so much from the original recording of transactions but from the maintenance of the accounts over time. This is the place where complex accounting standards for equity method accounting, consolidations, goodwill, intangibles amortization and valuation, deferred charges, deferred taxes, pension and post-retirement benefit liabilities, and various financial instruments enter the picture. High-level accountants who prepare financial statements get involved with the accounting rules and the management estimates required to account for such investments and intangibles. Management plans and estimates of future events and interpretations of the accounting standards often become elements of the accounting maintenance of these balances. These decisions are ripe areas for overstatement of assets, understatement of liabilities, and understatement of expenses.

**Periodic Reconciliation**

The most significant reconciliation opportunity in the investments and intangibles accounts is the inspection and count of negotiable securities certificates. This reconciliation is similar to a physical inventory in that it consists of an inspection of certificates on hand, along with comparison to the information recorded in the accounts. (When securities are held by a brokerage firm, the "inspection" is accomplished with a written confirmation.)

A securities count is not a mere handling of bits of paper. A securities count "inventory" should include a record of the name of the company represented by the certificate, the interest rate for bonds, the dividend rate for preferred stocks, the due date for bonds, the serial numbers on the certificates, the face value of bonds, the number or face amount of bonds and stock shares, and notes on the name of the owner shown on the face of the certificate or on the endorsements on the back (should be the client company). Companies should perform this reconciliation reasonably often and not wait for an annual visit by the independent auditors. A securities count in a financial institution that holds thousands of shares in multimillion-dollar asset accounts is a major undertaking.

When auditors perform the securities inspection and count, the same kind of information should be recorded in the audit working papers. Several elements of evidence are in this information: existence is established by inspecting the securities, ownership is established by viewing the client name as owner, valuation evidence is added by finding the cost and market value. If a security certificate is not available for inspection, it may be pledged as collateral for a loan and in the hands of a creditor. It can be confirmed or inspected, if the extended procedure of visiting the creditor is necessary. The pledge as collateral may be important for a disclosure note. A securities count and reconciliation is important for management and auditors because companies have been known to try to substitute others' securities for missing ones. If securities have been sold, then replaced without any accounting entries, the serial numbers will show that the certificates recorded in the accounts are not the same as the ones on hand.
CONTROL OVER ACCOUNTING ESTIMATES

An accounting estimate is an approximation of a financial statement element, item, or account. Estimates often are included in basic financial statements because (1) the measurement of some amount of valuation is uncertain, perhaps depending upon the outcome of future events, or (2) relevant data cannot be accumulated on a timely, cost-effective basis (SAS 57, AU 342). Some examples of accounting estimates in the finance and investment cycle are shown in the box below.

A client's management is responsible for making estimates and should have a process and controls designed to reduce the likelihood of material misstatements in them. According to auditing standards (SAS 57, AU 342), specific relevant aspects of such controls include:

- Management communication of the need for proper accounting estimates.
- Accumulation of relevant, sufficient, and reliable data for estimates.
- Preparation of estimates by qualified personnel.
- Adequate review and approval by appropriate levels of authority.
- Comparison of prior estimates with subsequent results to assess the reliability of the estimation outcomes.
- Consideration by management of whether particular accounting estimates are consistent with the company's operational plans.

FINANCE AND INVESTMENT CYCLE ESTIMATES

Financial instruments: Valuation of securities, classification into trading versus investment portfolios, probability of a correlated hedge, sales of securities with puts and calls.

Accruals: Compensation in stock option plans, actuarial assumptions in pension costs.

Leases: Initial direct costs, executory costs, residual values, capitalization interest rate.

Rates: Imputed interest rates on receivables and payables.

Other: Losses and net realizable value on segment disposal and business restructuring, fair values in nonmonetary exchanges.

Auditors' work on estimates amounts to inquiries and observations related to the features listed immediately above. Such inquiries are: Who prepares estimates? When are they prepared? What data are used? Who reviews and approves the estimates? Have you compared prior estimates with subsequent actual events? Observations include: study of data documentation, study of comparisons of prior estimates with subsequent actual experience, study of intercompany correspondence concerning estimates and operational plans.

The audit of an estimate deals with the substantive quality of the estimation process and of the estimate itself. Further substantive audit procedures include: recalculating the mathematical estimate, developing an auditor's own independent estimate based on alternative assumptions, and comparing the estimate to subsequent events to the extent they are known before the end of the field work.
Gulf & Western Industries (G&W) sold 450,000 shares of Pan American stock from its investment portfolio to Resorts International (Resorts). Resorts paid $8 million plus 250,000 shares of its unregistered common stock. G&W recorded the sale proceeds as $14,167,500, valuing the unregistered Resorts stock at $6,167,500, which was approximately 67 percent of the market price of Resorts stock at the time ($36.82 per share). G&W reported a gain of $3,365,000 on the sale.

Four years later, Resorts stock fell to $2.63 per share. G&W sold its 250,000 shares back to Resorts in exchange for 1,100 acres of undeveloped land on Grand Bahamas Island. For its records, Resorts got a broker-dealer's opinion that its 250,000 shares were worth $460,000. For property tax assessment purposes, the Bahamian government valued the undeveloped land at $525,000.

G&W valued the land on its books at $6,167,500, which was the previous valuation of the Resorts stock. The justification was an appraisal of $6,300,000 based on the estimated value of the 1,100 acres when ultimately developed (i.e., built into an operating resort and residential community). However, G&W also reported a loss of $5,527,000 in its tax return (effectively valuing the land at $640,500).

The SEC accused G&W of failing to report a loss of $5.7 million in its financial statements. Do you think the loss should have appeared in the G&W income statement?


### ASSERTIONS, SUBSTANTIVE PROCEDURES, AND AUDIT CASES

This part of the chapter covers the audit of various account balances and gains and losses. It is presented in three sections—owners’ equity, long-term liabilities and related accounts, and investments and intangibles. As in previous chapters, some cases illustrating errors and frauds are used to describe useful audit approaches. In addition, this chapter gives some assertions and procedures related to accounts in the cycle.

The cases begin with a description containing these elements:

*Method:* A cause of the misstatement (mistaken estimate or judgment, accidental error or fraud attempt), which usually is made easier by some kind of failure of controls.

*Paper trail:* A set of telltale signs of erroneous accounting, missing or altered documents, or a "dangling debit" (the false or erroneous debit that results from an overstatement of assets).
**Amount:** The dollar amount of overstated assets and revenue, or understated liabilities and expenses.

Each audit program for the audit of an account balance contains an audit approach that may enable auditors to detect misstatements in account balances. Each application of procedures contains these elements:

**Audit objective:** A recognition of a financial statement assertion for which evidence needs to be obtained. The assertions are about the existence of assets, liabilities, revenues, and expenses; their valuation; their complete inclusion in the account balances; the rights and obligations inherent in them; and their proper presentation and disclosure in the financial statements.

**Control:** A recognition of the control activities that should be used in an organization to prevent and detect errors and frauds.

**Test of controls:** Ordinary and extended procedures designed to produce evidence about the effectiveness of the controls that should be in operation.

**Audit of balance:** Ordinary and extended substantive procedures designed to find signs of mistaken accounting estimates, errors, and frauds in account balances and classes of transactions.

The cases first set the stage with a story about an accounting estimate, error, or fraud – its method, paper trail (if any), and amount. This part of each case gives you the "inside story," which auditors seldom know before they perform the audit work. The second part of each case, under the heading of the "audit approach," tells a structured story about the audit objective, desirable controls, test of control procedures, audit of balance procedures, and discovery summary. The audit approach segment illustrates the manner in which audit procedures can be applied and the discoveries they may enable auditors to make. At the end of the chapter, some similar discussion cases are presented, and you can write the audit approach to test your ability to design audit procedures for the detection of mistaken accounting estimates, errors, and frauds.

**OWNERS’ EQUITY**

Management makes assertions about the existence, completeness, rights and obligations, valuation, and presentation and disclosure of owners’ equity. Typical specific assertions include:

1. The number of shares shown as issued is in fact issued.
2. No other shares (including options, warrants, and the like) have been issued and not recorded or reflected in the accounts and disclosures.
3. The accounting is proper for options, warrants, and other stock issue plans, and related disclosures are adequate.
4. The valuation of shares issued for noncash consideration is proper, in conformity with accounting principles.
5. All owners’ equity transactions have been authorized by the board of directors.
**Documentation**

Owners' equity transactions usually are well documented in minutes of the meetings of the board of directors, in proxy statements, and in securities offering registration statements. Transactions can be vouched to these documents, and the cash proceeds can be traced to the bank accounts.

**Confirmation**

Capital stock may be subject to confirmation when independent registrars and transfer agents are employed. Such agents are responsible for knowing the number of shares authorized and issued and for keeping lists of stockholders' names. The basic information about capital stock – such as number of shares, classes of stock, preferred dividend rates, conversion terms, dividend payments, shares held in the company name, expiration dates, and terms of warrants and stock dividends and splits – can be confirmed with the independent agents. Many of these items can be corroborated by the auditors' own inspection and reading of stock certificates, charter authorizations, directors' minutes, and registration statements. However, when the client company does not use independent agents, most audit evidence is gathered by vouching stock record documents (such as certificate book stubs). When circumstances call for extended procedures, information on outstanding stock in corporations having only a few stockholders may be confirmed directly with the holders.
CASE 7.1: UNREGISTERED SALE OF SECURITIES

Problem

A. T. Bliss & Company (Bliss) sold investment contracts in the form of limited partnership interests to the public. These "securities" sales should have been under a public registration filing with the SEC, but they were not.

Method

Bliss salesmen contacted potential investors and sold limited partnership interests. The setup deal called for these limited partnerships to purchase solar hot water heating systems for residential and commercial use from Bliss. All the partnerships entered into arrangements to lease the equipment to Nationwide Corporation, which then rented the equipment to end users. The limited partnerships were, in effect, financing conduits for obtaining investors’ money to pay for Bliss's equipment. The investors depended on Nationwide's business success and ability to pay under the lease terms for their return of capital and profit.

Paper Trail

Bliss published false and misleading financial statements, which used a non-GAAP revenue recognition method and failed to disclose cost of goods sold. Bliss overstated Nationwide's record of equipment installation and failed to disclose that Nationwide had little cash flow from end users (resulting from rent-free periods and other inducements). Bliss knew—and failed to disclose to prospective investors—the fact that numerous previous investors had filed petitions with the U.S. tax court to contest the disallowance by the IRS of all their tax credits and benefits claimed in connection with their investments in Bliss's tax-sheltered equipment lease partnerships.

Amount

Not known, but all the money put up by the limited partnership investors was at risk largely not disclosed to the investors.
AUDIT APPROACH

Audit Objective

Obtain evidence to determine whether capital fund-raising methods comply with U.S. securities laws and whether financial statements and other disclosures are not misleading.

Control

Management should employ experts – attorneys, underwriters, and accountants – who can determine whether securities and investment contract sales do or do not require registration.

Test of Controls

Auditors should learn the business backgrounds and securities-industry expertise of the senior managers. Study the minutes of the board of directors for authorization of the fund-raising method. Obtain and study opinions rendered by attorneys and underwriters about the legality of the fund-raising methods. Inquire about management’s interaction with the SEC in any presale clearance. (The SEC will give advice.)

Audit of Balances

Auditors should study the offering documents and literature used in the sale of securities to determine whether financial information is being used properly. In this case, the close relationship with Nationwide and the experience of earlier partnerships give reasons for extended procedures to obtain evidence about the representations concerning Nationwide’s business success (in this case, lack of success).

Discovery Summary

The auditors gave unqualified reports on Bliss's materially misstated financial statements. They apparently did not question the legality of the sales of the limited partnership interests as a means of raising capital. They apparently did not perform procedures to verify representations made in offering literature respecting Bliss or Nationwide finances. Two partners in the audit firm were enjoined from violations of the securities laws. They resigned from practice before the SEC and were ordered not to perform any attest services for companies making filings with the SEC. (Source: SEC Litigation Release 10274, AAER 20, AAER 21.) They later were expelled from the AICPA for failure to cooperate with the Professional Ethics Division in its investigation of alleged professional ethics violations.

CASE 7.2: TAX LOSS CARRYFORWARDS

Problem

Aetna Life & Casualty Insurance Company had losses in its taxable income operations in 1981 and 1982. Confident that future taxable income would absorb the loss, the company booked and reported a tax benefit for the tax loss carryforward. The SEC maintained that the company understated its tax expense and understated its liabilities (Aetna reported the tax benefit as a negative liability). Utilization of the loss carryforward was not "assured beyond a reasonable doubt," as then required by the accounting standards. (In 1992, FASB issued Statement No. 109 that changed the criterion to a "more likely than not" judgment.)

Method

Aetna forecasted several more years of taxable losses (aside from its nontaxable income from tax-exempt investments), then forecasted years of taxable income, eventually offsetting the losses and obtaining the benefit of the tax law allowing losses to be carried forward to offset against future taxable income. The company maintained there was no reasonable doubt that the forecasts would be achieved.

Paper Trail

The amounts of tax loss were clearly evident in the accounts. Aetna made no attempt to hide the facts. The size of the portfolio of taxable investments and all sources of taxable income and deductions were well known to the company accountants, management, and independent auditors.

Amount

At first, the carryforward tax benefit was $25 million, soon growing to over $200 million, then forecast to become an estimated $1 billion before it was forecast to reverse by being absorbed by future taxable income. In 1983, the first full year affected, Aetna's net income was 35 percent lower than 1981, instead of 6 percent lower with the carryforward benefit recognized.
AUDIT APPROACH

Audit Objective

Obtain evidence to determine whether realization of the benefits of the tax loss carryforward are "realizable beyond a reasonable doubt."

Control

The relevant control in this case concerns the assumptions and mathematics involved in preparing the forecasts used to justify the argument for recording the tax loss carryforward benefit. These forecasts are the basis for an accounting estimate of "realization beyond a reasonable doubt."

Test of Controls

Auditors should make inquiries and determine: Who prepared the forecasts? When were they prepared? What data were used? Who reviewed and approved the forecast? Is there any way to test the accuracy of the forecast with actual experience?

Audit of Balances

Aside from audit of the assumptions underlying the forecast and recalculations of the compilation, the test of balances amounted to careful consideration of whether the forecast, or any forecast, could meet the test required by accounting standards. The decision was a judgment of whether the test of "realization beyond a reasonable doubt" was met.

The auditors should obtain information about other situations in which recognition of tax loss carryforward benefits were allowed in financial statements. Other companies have booked and reported such benefits when gains from sales of property were realized before the financial statement were issued and when the loss was from discontinuing a business line, leaving other businesses with long profit histories and prospects in operation.

Discovery Summary

The SEC was tipped off to Aetna's accounting recognition of the tax loss carryforward benefit by a story in Fortune magazine, which described the accounting treatment. Aetna and its auditors argued on the basis of the forecasts. The SEC countered with the theory that forecasts were not sufficient to establish "realization beyond a reasonable doubt." The SEC won the argument. Aetna revised its previously issued quarterly financial statements, and the company abandoned the attempt to report the tax benefit.
LONG-TERM LIABILITIES AND RELATED ACCOUNTS

The primary audit concern with the verification of long-term liabilities is that all liabilities are recorded and that the interest expense is properly paid or accrued. Therefore, the assertion of completeness is paramount. Alertness to the possibility of unrecorded liabilities during the performance of procedures in other areas frequently will uncover liabilities that have not been recorded. For example, when fixed assets are acquired during the year under audit, auditors should inquire about the source of funds for financing the new asset.

Management makes assertions about existence, completeness, rights and obligations, valuation, and presentation and disclosure. Typical specific assertions relating to long-term liabilities include:

1. All material long-term liabilities are recorded.
2. Liabilities are properly classified according to their current or long-term status. The current portion of long-term debt is properly valued and classified.
3. New long-term liabilities and debt extinguishments are properly authorized.
4. Terms, conditions, and restrictions relating to noncurrent debt are adequately disclosed.
5. Disclosures of maturities for the next five years and the capital and operating lease disclosures are accurate and adequate.
6. All important contingencies are either accrued in the accounts or disclosed in footnotes.

ENVIRONMENTAL LIABILITIES

The clock is ticking for corporations that missed the SEC's wakeup call to keep investors better informed about environmental liabilities. Companies may awaken to SEC enforcement actions, shareholder lawsuits, even criminal prosecution.

The focus on environmental disclosure is fairly recent--and it is gathering steam. Estimates of the nation's cost of hazardous waste cleanup range up to $1 trillion, but most shareholders have no idea the amounts specific companies must pay. Corporate annual reports tell very little.

Companies must disclose any environmental trends or uncertainties they expect to have a material impact. The SEC is particularly interested in appropriate accounting and disclosure if a company is designated a "potentially responsible party" under the Superfund laws. (Auditors can identify such companies in a national "potentially responsible party" data base.)

Confirmation

When auditing long-term liabilities, auditors usually obtain independent written confirmations for notes and bonds payable. In the case of notes payable to banks, the standard bank confirmation may be used. The amount and terms of bonds payable, mortgages payable, and other formal debt instruments can be confirmed by requests to holders or a trustee. The confirmation request should include questions not only of amount, interest rate, and due date but also about collateral, restrictive covenants, and other items of agreement between lender and borrower. Confirmation requests should be sent to lenders with whom the company has done business in the recent past, even if no liability balance is shown at the confirmation date. Such extra coverage is a part of the search for unrecorded liabilities. (Refer to Chapter 4 for more on the "search for unrecorded liabilities."

Off-Balance Sheet Financing

Confirmation and inquiry procedures may be used to obtain responses on a class of items loosely termed "off-balance sheet information." Within this category are: terms of loan agreements, leases, endorsements, guarantees, and insurance policies (whether issued by a client insurance company or owned by the client). Among these items is the difficult-to-define set of "commitments and contingencies" that often pose evidence-gathering problems. Some common types of commitments are shown in Exhibit 7-2.

Footnote disclosure should be considered for the types of commitments shown in Exhibit 7-2. Some of them can be estimated and valued and, thus, can be recorded in the accounts and shown in the financial statements themselves (such as losses on fixed-price purchase commitments and losses on fixed-price sales commitments).

EXHIBIT 7-2  Off-Balance Sheet Commitments

<table>
<thead>
<tr>
<th>Type of Commitment</th>
<th>Typical Procedures and Sources of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Repurchase or remarketing agreements.</td>
<td>1. Vouching of contracts, confirmation by customer, inquiry of client management.</td>
</tr>
<tr>
<td>2. Commitments to purchase at fixed prices.</td>
<td>2. Vouching of open purchase orders, inquiry of purchasing personnel, confirmation by supplier.</td>
</tr>
<tr>
<td>3. Commitments to sell at fixed prices.</td>
<td>3. Vouching of sales contracts, inquiry of sales personnel, confirmation by customer.</td>
</tr>
<tr>
<td>5. Lease commitments.</td>
<td>5. Vouching of lease agreement, confirmation with lessor or lessee.</td>
</tr>
</tbody>
</table>
Analytical Relationships

Interest expense generally is related item by item to interest-bearing liabilities. Based on the evidence of long-term liability transactions (including those that have been retired during the year), the related interest expense amounts can be recalculated. The amount of debt, the interest rate, and the time period are used to determine whether the interest expense and accrued interest are properly recorded. By comparing the audit results to the recorded interest expense and accrued interest accounts, auditors may be able to detect: (1) greater expense than their calculations show, indicating some interest paid on debt unknown to them, possibly an unrecorded liability; (2) lesser expense than their calculations show, indicating misclassification, failure to accrue interest, or an interest payment default; or (3) interest expense equal to their calculations. The first two possibilities raise questions for further study, and the third shows a correct correlation between debt and debt-related expense.

Deferred Credits--Calculated Balances

Several types of deferred credits depend on calculations for their existence and valuation. Examples include: (1) deferred profit on installment sales involving the gross margin and the sale amount; (2) deferred income taxes and investment credits involving tax-book timing differences, tax rates, and amortization methods; and (3) deferred contract revenue involving contract provisions for prepayment, percentage-of-completion revenue recognition methods, or other terms unique to a contract. All of these features are incorporated in calculations that auditors can check for accuracy.
CASE 7.3: OFF-BALANCE SHEET INVENTORY FINANCING

Problem

Verity Distillery Company used the "product repurchase" ploy to convert its inventory to cash, failing to disclose the obligation to repurchase it later. Related party transactions were not disclosed.

Method

Verity's president incorporated the Veritas Corporation, making himself and two other Verity officers the sole stockholders. The president arranged to sell $40 million of Verity's inventory of whiskey in the aging process to Veritas, showing no gain or loss on the transaction. The officers negotiated a 36-month loan with a major bank to get the money Veritas used for the purchase, pledging the inventory as collateral. Verity pledged to repurchase the inventory for $54.4 million, which amounted to the original $40 million plus 12 percent interest for three years.

Paper Trail

The contract of sale was in the files, specifying the name of the purchasing company, the $40 million amount, and the cash consideration. Nothing mentioned the relation of Veritas to the officers. Nothing mentioned the repurchase obligation. However, the sale amount was unusually large.

Amount

The $40 million amount was 40 percent of the normal inventory. Verity's cash balance was increased 50 percent. While the current asset total was not changed, the inventory ratios (e.g., inventory turnover, days' sales in inventory) were materially altered. Long-term liabilities were understated by not recording the liability. The ploy was actually a secured loan with inventory pledged as collateral, but this reality was neither recorded nor disclosed. The total effect would be to keep debt off the books, to avoid recording interest expense, and later to record inventory at a higher cost. Subsequent sale of the whiskey at market prices would not affect the ultimate income results, but the unrecorded interest expense would be buried in the cost of goods sold. The net income in the first year when the "sale" was made was not changed, but the normal relationship of gross margin to sales was distorted by the zero-profit transaction.

<table>
<thead>
<tr>
<th></th>
<th>Before Transaction</th>
<th>Recorded Transaction</th>
<th>Should Have Recorded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset</td>
<td>$530</td>
<td>$530</td>
<td>$570</td>
</tr>
<tr>
<td>Liabilities</td>
<td>390</td>
<td>390</td>
<td>430</td>
</tr>
<tr>
<td>Stockholder equity</td>
<td>140</td>
<td>140</td>
<td>140</td>
</tr>
<tr>
<td>Debt/equity ration</td>
<td>2.79</td>
<td>2.79</td>
<td>3.07</td>
</tr>
</tbody>
</table>
AUDIT APPROACH

Audit Objective

Obtain evidence to determine whether all liabilities are recorded. Be alert to undisclosed related party transactions.

Control

The relevant control in this case would rest with the integrity and accounting knowledge of the senior officials who arranged the transaction. Authorization in the board minutes might detail the arrangements; but, if they wanted to hide it from the auditors, they also would suppress the telltale information in the board minutes.

Test of Controls

Inquiries should be made about large and unusual financing transactions. This might not elicit a response because the event is a sales transaction, according to Verity. Other audit work on controls in the revenue and collection cycle might turn up the large sale. Fortunately, this one sticks out as a large one.

Audit of Balances

Analytical procedures to compare monthly or seasonal sales probably will identify the sale as large and unusual. This identification should lead to an examination of the sales contract. Auditors should discuss the business purpose of the transaction with knowledgeable officials. If being this close to discovery does not bring out an admission of the loan and repurchase arrangement, the auditors nevertheless should investigate further. Even if the "customer" name were not a giveaway, a quick inquiry at the state secretary of state office for corporation records (online in some databases) will show the names of the officers, and the auditors will know the related party nature of the deal. A request for the financial statements of Veritas should be made.

Discovery Summary

The auditors found the related party relationship between the officers and Veritas. Confronted, the president admitted the attempt to make the cash position and the debt/equity ratio look better than they were. The financial statements were adjusted to reflect the "should have recorded" set of figures shown above.
INVESTMENTS AND INTANGIBLES

Companies can have a wide variety of investments and relationships with affiliates. Investments accounting may be on the market value method, cost method, equity method, or full consolidation, depending on the nature, size, and influence represented by the investment. Purchase-method consolidations usually create problems of accounting for the fair value of acquired assets and the related goodwill.

Specific assertions typical of a variety of investment and intangibles account balances are these:

1. Investment securities are on hand or are held in safekeeping by a trustee.
2. The accounting for investment cost and market value is appropriate.
3. Controlling investments are accounted for by the equity method.
4. Purchased goodwill is properly valued.
5. Capitalized intangible costs relate to intangibles acquired in exchange transactions.
6. Research and development costs are properly classified.
7. Amortization is properly calculated.
8. Investment income has been received and recorded.
9. Investments are adequately classified and described in the balance sheet, including disclosures of restrictions, pledges, or liens.

Unlike the current assets accounts, which are characterized by numerous small transactions, the noncurrent investment accounts usually consist of a few large entries. This difference has internal control and substantive audit procedure implications. The effect on the auditors’ consideration of the control environment is concentration on the authorization of transactions, since each individual transaction is likely to be material in itself and the authorization will give significant information about the proper classification and accounting method. The controls usually are not reviewed, tested, and evaluated at an interim date but are considered along with the year-end procedures when the transactions and their authorizations are audited.

A few of the trouble spots in audits of investments and intangibles are in the box below.

<table>
<thead>
<tr>
<th>TROUBLE SPOTS IN AUDITS OF INVESTMENTS AND INTANGIBLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Valuation of investments at cost, market, or value impairment that is other than temporary.</td>
</tr>
<tr>
<td>• Determination of significant influence relationship for equity method investments.</td>
</tr>
<tr>
<td>• Proper determination of goodwill in purchase-method consolidations. Reasonable amortization life for goodwill.</td>
</tr>
<tr>
<td>• Realistic distinction between purchase and pooling consolidations.</td>
</tr>
<tr>
<td>• Capitalization and continuing valuation of intangibles and deferred charges.</td>
</tr>
<tr>
<td>• Realistic distinctions of research, feasibility, and production milestones for capitalization of software development costs.</td>
</tr>
<tr>
<td>• Adequate disclosure of restrictions, pledges, or liens related to investment assets.</td>
</tr>
</tbody>
</table>
Confirmation

The practice of obtaining independent written confirmation from outside parties is fairly limited in the area of investments, intangibles, and related income and expense accounts. Securities held by trustees or brokers should be confirmed, and the confirmation request should seek the same descriptive information as that obtained in a physical inspection by the auditor (described earlier in this chapter).

Inquiries about Intangibles

Company counsel can be queried about knowledge of any lawsuits or defects relating to patents, copyrights, trademarks, or trade names. This confirmation can be sought by a specific request in the attorney’s letter.

Income from Intangibles

Royalty income from patent licenses received from a single licensee may be confirmed. However, such income amounts usually are audited by vouching the licensee’s reports and the related cash receipt.

Inspection

Investment property may be inspected in a manner similar to the physical inspection of fixed assets. The principal goal is to determine actual existence and condition of the property. Official documents of patents, copyrights, and trademark rights can be inspected to see that they are, in fact, in the name of the client.

Documentation Vouching

Investment costs should be vouched to brokers’ reports, monthly statements, or other documentary evidence of cost. At the same time, the amounts of sales are traced to gain or loss accounts, and the amounts of sales prices and proceeds are vouched to the brokers’ statements. Auditors should determine what method of cost-out assignment was used (i.e., FIFO, specific certificate, or average cost) and whether it is consistent with prior-years’ transactions. The cost of real and personal property likewise can be vouched to invoices or other documents of purchase, and title documents (such as on land, buildings) may be inspected.

Market valuation of securities may be required in some cases. While a management may assert that an investment valuation is not impaired, subsequent sale at a loss before the end of audit field work will indicate otherwise. Auditors should review investment transactions subsequent to the balance sheet date for this kind of evidence about lower-of-cost-or-market valuation.
Vouching may be extensive in the areas of research and development (R&D) and deferred software development costs. The principal evidence problem is to determine whether costs are properly classified as assets or as R&D expense. Recorded amounts generally are selected on a sample basis, and the purchase orders, receiving reports, payroll records, authorization notices, and management reports are compared to them. Some R&D costs may resemble non-R&D cost (such as supplies, payroll costs), so auditors must be very careful in the vouching to be alert for costs that appear to relate to other operations.

**External Documentation**

By consulting quoted market values of securities, auditors can calculate market values and determine whether investments should be written down. If quoted market values are not available, financial statements related to investments must be obtained and analyzed for evidence of basic value. If such financial statements are unaudited, evidence indicated by them is considered to be extremely weak.

Income amounts can be verified by consulting published dividend records for quotations of dividends actually declared and paid during a period (e.g., Moody's and Standard & Poor's dividend records). Since auditors know the holding period of securities, dividend income can be calculated and compared to the amount in the account. Any difference could indicate a cutoff error, misclassification, defalcation, or failure to record a dividend receivable. In a similar manner, application of interest rates to bond or note investments produces a calculated interest income figure (making allowance for amortization of premium or discount if applicable).

**Equity Method Investments**

When equity method accounting is used for investments, auditors will need to obtain financial statements of the investee company. These should be audited statements. Inability to obtain financial statements from a closely held investee may indicate that the client investor does not have the significant controlling influence required by APB Opinion No. 18 (SAS 1, AU 332). When available, these statements are used as the basis for recalculating the amount of the client's share of income to recognize in the accounts. In addition, these statements may be used to audit the disclosure of investees' assets, liabilities, and income presented in footnotes (a disclosure recommended when investments accounted for by the equity method are material).

**Amortization Recalculation**

Amortization of goodwill and other intangibles should be recalculated. Like depreciation, amortization expense owes its existence to a calculation, and recalculation based on audited costs and rates is sufficient audit evidence.

Merger and acquisition transactions should be reviewed in terms of the appraisals, judgments, and allocations used to assign portions of the purchase price to tangible assets, intangible assets, liabilities, and goodwill. In the final analysis, nothing really substitutes for the inspection of transaction documentation, but verbal inquiries may help auditors to understand the circumstances of a merger.
Questions about lawsuits challenging patents, copyrights, or trade names may produce early knowledge of problem areas for further investigation. Likewise, discussions and questions about research and development successes and failures may alert the audit team to problems of valuation of intangible assets and related amortization expense. Responses to questions about licensing of patents can be used in the audit of related royalty revenue accounts.

Inquiries about Management Intentions

Inquiries should deal with the nature of investments and the reasons for holding them. Management's expressed intention that a marketable security investment be considered a long-term investment may be the only available evidence for classifying it as long term and not as a current asset. The classification will affect the accounting treatment of market values and the unrealized gains and losses on investments.

CASE 7.4: A CONSOLIDATION BY ANY OTHER NAME

Problem

Digilog, Inc., formed another company named DBS International (DBSI), controlled it, and did not consolidate its financial position and results of operations in the Digilog financial statements. Digilog income was overstated, and assets and liabilities were understated.

Method

Digilog, Inc., formed DBSI as a separate corporation to market Digilog's microcomputer equipment. DBSI was formed separately to avoid the adverse impact of reporting expected startup losses in Digilog's financial statements. Instead of owning stock in DBSI, Digilog financed the company with loans convertible at will into 90 percent of DBSI's stock. (Otherwise, the stock ownership was not in Digilog's name.) Since Digilog did not control DBSI (control defined as 50 percent or more ownership), DBSI was not consolidated, and the initial losses were not reported in Digilog's financial statements.

Paper Trail

Formation of DBSI was not a secret. It was authorized. Incorporation papers were available. Loan documents showing the terms of Digilog's loans to DBSI were in the files.

Amount

Several hundred thousand dollars of losses in the first two years of DBSI operations were not consolidated. Ultimately, the venture became profitable and was absorbed into Digilog.
AUDIT APPROACH

Audit Objective
Obtain evidence to determine whether proper accounting methods (cost, equity, consolidation) are used for investments.

Control
The relevant control in this case would rest with the integrity and accounting knowledge of the senior officials who arranged the transaction. Proper documentation of authorization and financing and operating transactions between the two corporations should be in the companies' files.

Test of Controls
Inquiries should be made about large and unusual financing transactions. Minutes of the board of directors' meetings should be studied to find related authorizations. These authorizations and supporting papers signal the accounting issues and the interpretations of generally accepted accounting principles required in the circumstances.

Audit of Balances
The central issue in this case was the interpretation of accounting standards regarding required consolidation. Existence, completeness, valuation, and ownership were not problematic audit issues. Accounting standards required consolidation of over-50 percent owned subsidiaries, and prohibited consolidation of subsidiaries owned less than 50 percent. Digilog's purpose in financing DBSI with loans instead of direct stock ownership was to skirt the 50 percent "ownership" criterion, thus keeping the DBSI losses out of the Digilog consolidated financial statements. The "test of the balance" (decision of whether to require consolidation) amounted to an interpretation of the substance versus form of "ownership" through convertible notes instead of direct stock holding.

Discovery Summary
Digilog, with concurrence of its independent audit firm, adopted the narrow interpretation of "ownership." Since Digilog did not "own" DBSI stock, DBSI was not "controlled," and its assets, liabilities, and results of operations were not consolidated. The SEC disagreed and took action on the position that the convertible feature of the loans and the business purpose of the DBSI formation were enough to attribute control to Digilog. The company was enjoined from violating certain reporting and antifraud provisions of the Securities Exchange Act of 1934 and was required to amend its financial statements for the years in question (consolidating DBSI). The SEC also took action against the audit firm partner in charge of the Digilog audit. (Sources: SEC Litigation Release No. 10448 and Securities Act of 1933 Release No. 6542.) Later, the SEC amended its consolidation rules to make the over-50 percent consolidation criterion presumptive instead of determinative, along with language requiring consideration of substance over form in making consolidation accounting interpretations.
OTHER ASPECTS OF CLEVER ACCOUNTING AND FRAUD

The types of clever accounting and fraud that must be considered are those that affect the fair presentation of material equity accounts, investments, and intangibles. Improper accounting presentations are engineered more frequently by senior officials than by middle management or lower ranks. Top management personnel who deal with the transactions involved in investments, long-term debt, and stockholders’ equity are not subject to the same kind of control as lower-level employees, and they generally are able to override detail procedural controls.

LONG-TERM LIABILITIES AND OWNERS' EQUITY

The kinds of clever accounting and fraud connected with liability and owners' equity accounts differ significantly from those associated with asset and revenue accounts. Few employees are tempted to steal a liability, although fictitious liabilities may be created as a means of misdirecting cash payments into the hands of an officer. Auditors should be alert for such fictions in the same sense that they are alert to the possibility of having fictitious accounts receivable.

Although employees have opportunities to commit fraud against the company, the area of liabilities and owners’ equity also opens up possibilities for company fraud against outsiders. This class of fraud is most often accomplished through material misrepresentations or omissions in financial statements and related disclosures.

Officers and employees can use stock or bond instruments improperly. Unissued stock or bonds and Treasury stock or bonds might be used as collateral for personal loans. Even though the company may not be damaged or suffer loss by this action (unless the employee defaults and the securities are seized), the practice is unauthorized and is contrary to company interests. Similarly, employees might gain access to stockholder lists and unissued or Treasury bond coupons and cause improper payments of dividends and interest on securities that are not outstanding.

Proper custodial control of securities (either by physical means, such as limited-access vaults, or by control of an independent disbursing agent) prevents most such occurrences. An auditing procedure of reconciling authorized dividend and interest payments (calculated using declared dividend rates, coupon interest rates, and known quantities of outstanding securities) to actual payments detects unauthorized payments. If the company did not perform this checking procedure, auditors should include it among their own analytical recalculation procedures.

Many liability, equity, and off-balance sheet transactions are outside the reach of normal internal controls, which can operate effectively over ordinary transactions (such as purchases and sales) processed by clerks and machines. Auditors generally are justified in performing extensive substantive auditing of long-term liability, equity, and other high-level managed transactions and agreements since control depends in large part on the integrity and accounting knowledge of management.
Income tax evasion and fraud result from actions taken by managers. Evasion and fraud may be accomplished:

1. by simple omission of income,
2. by unlawful deductions (such as contributions to political campaigns, depreciation on nonexistent assets, or depreciation in excess of cost), or
3. by contriving sham transactions for the sole purpose of avoiding taxation.

Auditors should be able to detect errors of the first two categories if the actual income and expense data have been sufficiently audited in the financial statements. The last category – contrived sham transactions – is harder to detect because a dishonest management can skillfully disguise them. Some of the procedures outlined in Chapter 1 may be useful and effective.

Financial statements may be materially misstated by reason of omission or understatement of liabilities and by failure to disclose technical defaults on loan agreement restrictions. The procedures you have learned to discover unrecorded liabilities through a "search for unrecorded liabilities" may be used to discover such omissions and understatements (Chapter 4). If auditors discover that loan agreement terms have been violated, they should bring the information to the client's attention and insist on proper disclosure in notes to the financial statements. In both situations (liability understatement and loan default disclosure), management's actions, reactions, and willingness to adjust the financial figures and to make adverse disclosures are important insights for auditors' subjective evaluation of managerial integrity. An accumulation of inputs relevant to managerial integrity can have an important bearing on the auditors' perceptions of relative risk for the audit engagement taken as a whole.

A company, its individual managers, and the auditors can violate securities regulations if they are not careful. Auditors must know the provisions of the securities laws to the extent they can identify situations that constitute obvious fraud, and so they can identify transactions that might be subject to the law. Having once recognized or raised questions about a securities transaction, auditors should not act as their own attorney. The facts should be submitted to competent legal counsel for an opinion. Even though auditors are not expected to be legal experts, they have the duty to recognize obvious instances of impropriety and to pursue investigations with the aid of legal experts.

Similarly, auditors should assist clients in observing SEC rules and regulations on matters of timely disclosure. In general, the timely disclosure rules are phrased in terms of management's duties, and they do not require auditors to do any specific procedures or to make any specific disclosures. The regulations' purpose and spirit are to require management to disseminate to the public any material information, whether favorable or unfavorable, so investors can incorporate it in their decision making. Various rule provisions require announcements and disclosures very soon after information becomes known.
Often, relevant situations arise during the year when the independent auditors are not present, so, of course, they cannot be held responsible or liable. However, in other situations, auditors may learn of the information inadvertently or the auditors’ advice may be sought by the client. In such cases, auditors should advise their clients about the requirements of laws and regulations.

Presently, pressures are on the auditors to discover more information about off-balance sheet contingencies and commitments and to discover the facts of management involvement with other parties to transactions. Auditors’ knowledge of contingencies and commitments that are not evidenced in accounting records depends in large part on information the management and its attorneys will reveal. Nevertheless, certain investigative procedures are available (Chapter 1). The current pressures on auditors to discover more information is a part of the public pressure on auditors to take more responsibility for fraud detection.

INVESTMENTS AND INTANGIBLES

Theft, diversion, or unauthorized use of investment securities can occur in several ways. If safekeeping controls are weak, securities simply may be stolen and the theft becomes a police problem, rather than an auditing problem. Somewhat more frequent, however, are diversions, such as using securities as collateral during the year, returning them for a count, then giving them back to the creditor without disclosure to the auditor. If safekeeping methods require entry signatures (as at a safe-deposit vault), auditors may be able to detect the in-and-out movement. The best chance of discovery is that the creditor will confirm the collateral arrangement. In a similar manner, securities may be removed by an officer and sold, then repurchased before the auditors’ count. The auditors’ record of the certificate numbers should reveal this change since the returned certificates (and their serial numbers) will not be the same as the ones removed.

Cash receipts from interest, royalties on patent licenses, dividends, and sales proceeds might be stolen. The accounting records may or may not be manipulated to cover the theft. In general, this kind of defalcation should be prevented by cash receipts control; but, since these receipts usually are irregular and infrequent, the cash control system may not be as effective as it is for regular receipts on trade accounts. If the income accounts are not manipulated to hide stolen receipts, auditors will find less income in the account than the amount indicated by their audit calculations based on other records, such as license agreements or published dividend records. If sales of securities are not recorded, auditors will notice that securities are missing when they try to inspect or confirm them. If the income accounts have been manipulated to hide stolen receipts, vouching of cash receipts will detect the theft, or vouching may reveal some offsetting debit buried in some other account.

Accounting values may be manipulated in a number of ways, involving purchase of assets at inflated prices, leases with affiliates, acquisitions of patents for stock given to an inventor or promoter, sales to affiliates, and fallacious decisions about amortization. Business history has recorded several cases of nonarm's-length transactions with promoters, officers, directors, and controlled companies (even "dummy" companies) designed to drain the company's resources and fool the auditors.
In one case, a company sold assets to a dummy purchaser set up by a director to bolster sagging income with a gain. The auditors did not know that the purchaser was a shell. All the documents of sale looked in order, and cash sales proceeds had been deposited. The auditors were not informed of a secret agreement by the seller to repurchase the assets at a later time. This situation illustrates a very devious manipulation. All transactions with persons closely associated with the company (related parties) should be audited carefully with reference to market values, particularly when a nonmonetary transaction is involved (such as stock exchanged for patent rights). Sales and lease-back and straight lease transactions with insiders likewise should be audited carefully.

**SUMMARY**

The finance and investment cycle contains a wide variety of accounts – capital stock, dividends, long-term debt, interest expense, income tax expense and deferred taxes, financial instruments, marketable securities, equity method investments, related gains and losses, consolidated subsidiaries, goodwill, and other intangibles. These accounts involve some of the most technically complex accounting standards. They create most of the difficult judgments for financial reporting.

Transactions in these accounts generally are controlled by senior officials. Therefore, internal control is centered on the integrity and accounting knowledge of these officials. The procedural controls over details of transactions are not very effective because the senior managers can override them and order their own desired accounting presentations. As a consequence, auditors’ work on the assessment of control risk is directed toward the senior managers, the board of directors, and their authorizations and design of finance and investment deals.
PRACTICAL CASE PROBLEMS
INSTRUCTIONS FOR CASES

These cases are designed like the ones in the chapter. They give the problem, the method, the paper trail, and the amount.

Please note: you are not required to complete this assignment as part of your CPE certification. However this exercise will reinforce your comprehension and ability to address the audit approach. If you choose to complete this exercise, in each of the following cases your assignment is to write the "audit approach" portion of the case, organized around these sections:

Objectives: Express the objective in terms of the facts supposedly asserted in financial records, accounts, and statements.

Control: Write a brief explanation of control considerations, especially the kinds of manipulations that might arise from the situation described in the case.

Test of controls: Write some procedures for getting evidence about existing controls, especially procedures that could discover management manipulations. If there are no controls to test, then there are no procedures to perform; go then to the next section. A "procedure" should instruct someone about the source(s) of evidence to tap and the work to do.

Audit of balance: Write some procedures for getting evidence about the existence, completeness, valuation, ownership, or disclosure assertions identified in your objective section above.

Discovery summary: Write a short statement about the discovery you expect to accomplish with your procedures.

Once you have completed writing the audit approach, sample responses are included for your review to compare your response to that suggested by the author.
CASE STUDY:
IN PLANE VIEW—
Related Party Transaction Valuation.

Write the audit approach section like the cases in the chapter.

Problem: Whiz Corporation overstated the value of stock given in exchange for an airplane and, thereby, understated its loss on disposition of the stock. Income was overstated.

Method: Whiz owned 160,000 shares of Wing Company stock, carried on the books as an investment in the amount of $6,250,000. Whiz bought a used airplane from Wing, giving in exchange (1) $480,000 cash and (2) the 160,000 Wing shares. Even though the quoted market value of the Wing stock was $2,520,000, Whiz valued the airplane received at $3,750,000, indicating a stock valuation of $3,270,000. Thus, Whiz recognized a loss on disposition of the Wing stock in the amount of $2,980,000.

Whiz justified the airplane valuation with another transaction. On the same day it was purchased Whiz sold the airplane to the Mexican subsidiary of one of its subsidiary companies (two layers down; but Whiz owned 100 percent of the first subsidiary, which in turn owned 100 percent of the Mexican subsidiary). The Mexican subsidiary paid Whiz with US$25,000 cash and a promissory note for US$3,725,000 (market rate of interest).

Paper trail: The transaction was within the authority of the chief executive officer, and company policy did not require a separate approval by the board of directors. A contract of sale and correspondence with Wing detailing the terms of the transaction were in the files. Likewise, a contract of sale to the Mexican subsidiary, along with a copy of the deposit slip, and a memorandum of the promissory note was on file. The note itself was kept in the company vault. None of the Wing papers cited a specific price for the airplane.

Amount: Whiz overvalued the Wing stock and justified it with a related party transaction with its own subsidiary company. The loss on the disposition of the Wing stock was understated by $750,000.
CASE STUDY
AUDIT APPROACH: IN PLANE VIEW

Objective. Obtain evidence to determine the proper valuation of asset exchanges involving noncash property.

Control. Management should have policies and procedures for documenting the valuation of noncash property given and received in exchanges of assets. In this case, since the Wing stock had a quoted market value, its value was the proper amount to use when valuing the airplane received by Whiz. (The value of the airplane is less reliably determinable.)

Test of Controls. Auditors should inquire about investment asset dispositions, especially any involving noncash consideration. Upon learning from inquiries or from scanning the accounts, the transaction documentation should be studied to determine whether control of the accounting determinations was exercised. This procedure is part of the substantive work as well as a test of control.

Audit of Balances. Upon knowing the date of the transaction purchasing the airplane from Wing and the number of Wing shares transferred, the auditors can look up the quoted market price in newspapers or other library sources for market price history. The finding of the market price should determine the proper amount to record for the airplane.

Auditors should have a list of all subsidiary companies and should be able to recognize the Mexican subsidiary as a related party. With this relationship, the amount of the transaction price is suspect. However, efforts can be made to obtain new and used airplane prices to determine whether the $3,750,000 price to the Mexican subsidiary bore any relation to observable airplane valuations.

If the value were $3,750,000, the "gain" exists in the transaction with the subsidiary, subject to elimination in consolidation. This "gain", if any, should not be offset against the loss from the exchange with Wing.

Discovery Summary. The auditors were astute. They found that the market value of the Wing stock was $2,520,000, and insisted that the airplane be valued at $3 million instead of $3,750,000, thus making the loss on the exchange of Wing stock $750,000 larger. They also made sure that the subsequent gain on the sale to the Mexican subsidiary was eliminated in consolidation, awaiting any future profit confirmation by a sale to an outside party.
CASE STUDY
SHARP HEDGE CLIPPERS—
Loss Deferral on Hedged Investments.

This case contains complexities that preclude writing the entire audit approach according to the instructions. Instead, respond to these requirements:

a. What is the objective of the audit work on the investment account described in the Sharp Hedge Clippers case?
b. What is your conclusion about the propriety of deferring the losses on the hedged investments sales and the futures contracts? About the proper carrying amount of the investment in the balance sheet?
c. Do you believe the successor auditors were independent? Competent? Discuss the practice of "shopping around" for an unqualified audit report.

Problem: Southeastern Savings & Loan Company (Southeastern) overstated its assets and income by improperly deferring losses on hedged investment transactions.

Method: In the course of its normal operations, Southeastern held investments in 15 percent and 16 percent GNMA certificates. Fearing an increase in interest rates and a consequent loss in the market value of these investments, Southeastern sought to hedge by selling futures contracts for U.S. Treasury bonds. If market interest rates increased, the losses in the GNMA investments would be offset by gains in the futures contracts.

However, interest rates declined, and Southeastern was caught in an odd market quirk. The value of the GNMAAs increased with the lower interest rates, but not very much. (GNMAAs are certificates in pools of government-backed mortgages, which pass through the interest and principle collections to the certificate holders.) As interest rates declined, the market perceived that the underlying mortgages would be paid off more quickly, that investors would receive all their proceeds earlier than previously expected, and that they would need to reinvest their money at the now-lower interest rates. Consequently, the 15 percent and 16 percent GNMAAs held by Southeastern began trading as if the expected maturity were 4-5 years instead of the previously expected 8-12 years, which means that their prices did not rise as much as other interest-sensitive securities. On the other hand, the U.S. Treasury bonds with fixed maturity dates fell in price, and the futures hedge generated large losses.

Southeastern sold its 15 percent and 16 percent GNMAAs and realized a $750,000 gain. Before and after these sales, the company purchased 8.0-12.5 percent GNMAAs. The goal was to be invested in substantially different securities, ones that had a market return and the normal 8-12-year expected life payout. Later, Southeastern closed out its Treasury bond futures and realized a loss of $3.7 million. Still later, Southeastern sold GNMA futures contracts to hedge the investment in the 8.0-12.5 percent GNMA investments. The net loss of about $3 million was deferred in the balance sheet, instead of being recognized as a loss in the income statement.
Paper trail/accounting principles: The accounting for these transactions is complex and requires some significant judgments. In general, no gain or loss is recognized when the security sold is simultaneously replaced by the same or substantially the same security (a "wash" transaction), provided that any loss deferral does not result in carrying the investment at an amount greater than its market value.

When a futures hedge is related to the securities sold, gains and losses on the futures contracts must be recognized when the hedged securities are sold, unless the sale of the hedged securities is part of a wash sale.

The significant accounting judgment is the identification of the disposition and new investment as a wash transaction. In turn, this requires a determination of whether the sale and reinvestment is "simultaneous" and involves "substantially the same security."

The "paper trail" is littered with information relevant to these judgments:

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Southeastern Transaction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Timing:</strong></td>
<td>Some of the 15 percent and 16 percent GNMAAs were sold six weeks after the 8.0 – 12.5 percent GNMAs were purchased.</td>
</tr>
<tr>
<td>Substantial similarity:</td>
<td>Both the securities sold and the securities purchased were GNMAAs.</td>
</tr>
<tr>
<td>Same issuer.</td>
<td>The yields on the two different GNMA series differed by about 3 percentage points.</td>
</tr>
<tr>
<td>Similar market yield.</td>
<td>The contractual maturity dates were the same.</td>
</tr>
<tr>
<td>Similar contractual maturity date.</td>
<td>The market priced the 15 percent and 16 percent GNMAAs sold as though payback would occur in 4-5 years and the 8.0 – 12.5 percent GNMAAs as though payback would occur in 8-12 years.</td>
</tr>
<tr>
<td>Similar prospects for redemption.</td>
<td></td>
</tr>
<tr>
<td>Carrying value:</td>
<td>Asset value in financial statements exceeded the market value.</td>
</tr>
<tr>
<td>Asset carrying amount, including</td>
<td></td>
</tr>
<tr>
<td>any deferred loss, shall not</td>
<td></td>
</tr>
<tr>
<td>exceed securities’ market value.</td>
<td></td>
</tr>
</tbody>
</table>
Paper trail/auditor involvement: Southeastern’s independent auditors concluded that the losses should not be deferred. Southeastern fired the auditors and reported the disagreement in the 8-K reported filed with the SEC. After consulting several other auditors, who agreed with the former auditors, Southeastern finally found a CPA firm whose local partners would give an unqualified audit report on financial statements containing the deferral.

In February, the auditors who disagreed with the deferral were fired. The new auditors were hired on February 18 to audit the financial statements for the year ended the previous December 31. The unqualified audit report was dated March 28, 39 days after the new auditors were engaged by Southeastern’s audit committee.

The new auditors were well aware of the accounting judgments required. They knew the former auditors and another CPA firm had concluded that the losses should not be deferred. They saw memoranda of the disagreement and the conclusion in the predecessor’s working papers. They spoke with the predecessor partner on the engagement.
CASE STUDY
SHARP HEDGE CLIPPERS—Loss Deferral on Hedged Investments.

a. What is the objective of the audit work on the investment account described in the Sharp Hedge Clippers case?

Objective. Obtain evidence to determine whether the securities transactions were a wash sale—simultaneous and involving substantially similar securities—thus qualifying for loss deferral accounting. Obtain evidence of the market value of the investment to determine whether it exceeds the carrying value in the balance sheet.

b. What is your conclusion about the propriety of deferring the losses on the hedged investments sales and the futures contracts? About the proper carrying amount of the investment in the balance sheet?

The SEC, in Accounting and Enforcement Release No. 32, concluded that the deferral was improper because the transaction were not wash sales. The sales and purchases were not entirely simultaneous. The securities were not substantially similar.

The SEC also faulted the company and the auditors for reporting the assets at amounts in excess of the market value.

c. Do you believe the successor auditors were independent? Competent? Discuss the practice of "shopping around" for an unqualified audit report.

The SEC alleged the auditors were not independent. They seemed to have given the opinion management wanted on the accounting management wanted justified. They skirted important facts and perceptions that would have led to the non-deferral conclusion already reached by two other CPA firms in their consideration of the issues. The SEC censured the auditors for lack of care in considering the issues, the facts, and for failing to consult with enough experts in the firm. The auditors were not explicitly labeled "incompetent," but they were criticized for seemingly being more interested in pleasing the client than in exploring the issue thoroughly.

The SEC deplored the practice of "shopping around" for an audit report. This proceeding led directly to SEC pressure for an "opinion shopping" SAS, and the Auditing Standards Board later issued SAS 50, AU 625 ("Reports on the Application of Accounting Principles").

Three audit partners were disciplined by the SEC. They were prohibited from involvement with audits of public companies for three years.
CHAPTER 7: INVESTMENTS, LIABILITIES, AND EQUITIES

The following summarizes the important points related to the chapter just completed. Following the outline are review study questions with suggested solutions which provide evaluative and responsive feedback. You should answer the study questions and review the suggested solutions to confirm that you have a clear understanding of the material presented prior to proceeding to subsequent chapters.

OUTLINE

The finance and investment accounting cycle covers several types of transactions that are typically large and infrequent.

A. Finance and Investment Cycle: Typical Activities

1. Financial planning and raising capital
2. Interacting with the acquisition and expenditure cycles
3. Interacting with the production and payroll cycles
4. Interacting with the revenue and collection cycles
5. Entering into mergers, acquisition, and other investments

B. Debt and Stockholder Equity Capital

Transactions in debt and stockholder equity capital are normally few in number but large in monetary amount. They are handled by the highest levels of management – the control-related duties and responsibilities reflect this high-level attention.

1. Authorization: The following are involved with different transactions related to this cycle: chief executive officers, chief financial officers, chair of the board of directors, and perhaps other high-ranking officers on financial documents

2. Custody:
   a. Stock certificate books
      i. registrar
      ii. transfer agents
   b. Debt instruments

3. Recordkeeping: records of notes and bonds payable are maintained by the accounting department and the CFO or controller. The procedures should be similar to those used to account for vendor accounts payable

4. Periodic Reconciliation: periodic inspection of the stock certificate book
C. Investments and Intangibles

1. Authorization: investment policies should be approved by the board of directors or its investment committee

2. Custody: custody depends on the nature of the assets

3. Recordkeeping: The procedures for purchase of stock and bond investments involve the voucher system described in the acquisition and expenditure cycle (see Chapter 4). Recordkeeping for many kinds of investments and intangibles can be complicated and often complex accounting standards enter the picture

4. Periodic Reconciliation: the most significant reconciliation opportunity in the investments and intangibles accounts is the inspection and count of negotiable securities certificates

D. Control Over Accounting Estimates

1. An accounting estimate is an approximation of a financial statement element, item, or account. Estimates are often included in basic financial statements because

   a. The measurement of some amount of valuation is uncertain or
   b. Relevant data cannot be accumulated on a timely, cost-effective basis

E. Assertions, Substantive Procedures, and Audit Cases

Related to the audit of various account balances and gains and losses.

1. Owner’s Equity: management makes assertions about the existence, completeness, rights and obligations, valuation, and presentation and disclosure of owner’s equity

   a. Documentation
   b. Confirmation

2. Long-term liabilities and related accounts: the primary audit concern with the verification of long-term liabilities is that all liabilities are recorded and that the interest expense is properly paid or accrued

   a. Confirmation
   b. Off-balance sheet financing
   c. Analytical relationships
   d. Deferred credits – calculated balances
3. Investments and Intangibles: companies can have a wide variety of investments and relationship with affiliates. Investments accounting can be performed using a variety of methods. There are a few trouble spots in audits of investments and intangibles:

   a. Confirmation
   b. Inquiries about intangibles
   c. Income from intangibles
   d. Inspection
   e. Documentation vouching
   f. External documentation
   g. Equity method investments
   h. Amortization recalculation
   i. Inquiries about management intentions

F. Other Aspects of Clever Accounting and Fraud

1. Long-Term Liabilities and Owner’s Equity
2. Investments and Intangibles
CHAPTER 7 – REVIEW QUESTIONS

1. The finance and investment cycle contains a large number of accounts and records, ranging across tangible and intangible assets, liabilities, deferred credits, stockholders’ equity, gains and losses, expenses and income taxes.
   a) true
   b) false

2. Financial planning starts with the:
   a) sales forecast
   b) marketing forecast
   c) research and development forecast
   d) cash flow forecast

3. Which of the following is an example of “off balance sheet” authorization:
   a) leases
   b) letters of credit
   c) commitments to sell at fixed prices
   d) all of the above

4. In large companies, custody of stock certificate books is a significant management problem.
   a) true
   b) false

5. The most significant reconciliation opportunity in the investments and intangibles accounts is the inspection and count of negotiable securities certificates.
   a) true
   b) false

6. Which of the following is not a substantive audit procedure appropriate for estimates:
   a) recalculating the mathematical estimate
   b) developing an auditor’s own independent estimate based on alternative assumptions
   c) comparing the estimate to subsequent events to the extent they are known before the end of field work
   d) preparing confirmations for estimated amounts

7. Owners’ equity transactions usually are well documented.
   a) true
   b) false
8. Which of the following is not true regarding confirmation of long-term liabilities:
   
a) independent written confirmations are usually obtained for notes and bond payables
b) the standard bank confirmation may be used for notes payable to banks
c) confirmation requests for liabilities should only be sent to lenders with liabilities listed in the statements
d) the long-term liability confirmation request should include questions about collateral, restrictive covenants, and other items of agreement between lender and borrower

9. Noncurrent investment accounts usually consist of:
   
a) many large entries
b) few large entries
c) few small entries
d) many small entries

10. The area of liabilities and owners’ equity opens up possibilities for company fraud against outsiders.
    
a) true
b) false
For question 11 below, review the case study and write on a separate piece of paper the “audit approach” portion of the case, organized around these sections:

Objective: Express the objective in terms of the facts supposedly asserted in financial records, accounts, and statements.

Control: Write a brief explanation of desirable controls, missing controls, and especially the kinds of “deviations” that might arise from the situation described in the case.

Test of controls: Write some procedures for getting evidence about existing controls, especially procedures that could discover deviations from controls. If there are no controls to test, then there are no procedures to perform; go then to the next section. A “procedure” should instruct someone about the source(s) of evidence to tap and the work to do.

Audit of balance: Write some procedures for getting evidence about the existence, completeness, valuation, ownership, or disclosure assertions identified in your objective section above.

Discovery summary: Write a short statement about the discovery you expect to accomplish with your procedures.

After writing your audit approach, review the proposed audit approach attached to compare and contrast ideas and opinions.

Write the "audit approach" section like the cases in the chapter.

Problem: A contrived amount of goodwill was used to overstate assets and disguise a loss on discontinued operations.

Method: Gulwest Industries, a public company, decided to discontinue its unprofitable line of business of manufacturing sporting ammunition. Gulwest had capitalized the startup cost of the business, and, with its discontinuance, the $7 million deferred cost should have been written off.

Instead, Gulwest formed a new corporation named Amron and transferred the sporting ammunition assets (including the $7 million deferred cost) to it in exchange for all the Amron stock. In the Gulwest accounts, the Amron investment was carried at $12.4 million, which was the book value of the assets transferred (including the $7 million deferred cost).

In an agreement with a different public company (Big Industrial), Gulwest and Big created another company (BigShot Ammunition). Gulwest transferred all the Amron assets to BigShot in exchange for (1) common and preferred stock of Big, valued at $2 million, and (2) a note from BigShot in the amount of $3.4 million. Big Industrial thus acquired 100 percent of the stock of BigShot. Gulwest management reasoned that it had "given" Amron stock valued at $12.4 million to receive stock and notes valued at $5.4 million, so the difference must be goodwill. Thus, the Gulwest accounts carried amounts for Big Industrial Stock ($2 million) BigShot Note Receivable ($3.4 million), and Goodwill ($7 million).

Paper trail: Gulwest directors included in the minutes an analysis of the sporting ammunition business's lack of profitability. The minutes showed approval of a plan to dispose of the business, but they did not use the words "discontinue the business." The minutes also showed approval of the creation of Amron, the deal with Big Industrial along with the formation of BigShot, and the acceptance of Big's stock and BigShot's note in connection with the final exchange and merger.

Amount: As explained above, Gulwest avoided reporting a write-off of $7 million by overstating the value of the assets given in exchange for the Big Industrial stock and the BigShot Ammunition note.
CHAPTER 7 – SOLUTIONS AND SUGGESTED RESPONSES

1. **A: True is correct.** This area includes some of the more complicated topics in accounting, such as equity method accounting for investments, consolidation accounting, goodwill, income taxes, and financial instruments.

   B: False is incorrect. Its major functions are financial planning and raising capital; interacting with the acquisition and expenditure, production and payroll, and revenue and collection cycles; and entering into mergers, acquisitions, and other investments. The finance and investment cycle contains a large number of accounts and records which include some of the more complicated topics in accounting.

   (See page 7-1 of the course material.)

2. A: Incorrect. The sales forecast is not the starting point. It is not complete enough.

   B: Incorrect. The marketing forecast is not the starting point. It is not complete enough.

   C: Incorrect. The research and development forecast is not the starting point. It is not complete enough.

   **D: Correct.** This forecast informs the board of directors and management of the business plans, the prospects for cash inflows, and the needs for cash outflows. It is usually integrated with the capital budget.

   (See page 7-3 of the course material.)

3. A: Incorrect. Leases are an example of an “off the balance sheet” commitment, but this is not the best answer.

   B: Incorrect. Letters of credit are an example of an “off the balance sheet” commitment, but this is not the best answer.

   C: Incorrect. Commitments to sell at fixed prices are an example of an “off the balance sheet” commitment, but this is not the best answer.

   **D: Correct.** “Off the balance sheet” sheet authorizations include all of these, as well as endorsements on discounted notes or on other companies’ obligations, guarantees, repurchase or remarketing agreements, commitments to purchase at fixed prices, and certain kinds of stock options.

   (See page 7-3 of the course material.)
4. A: True is incorrect. In large companies, custody of stock certificate books is not a significant management problem. Large companies employ banks and trust companies to serve as registrars and transfer agents, whereas small companies often keep their own stockholder records.

   B: False is correct. Large companies typically employ banks and trust companies to serve as registrars and transfer agents.

   (See page 7-4 of the course material.)

5. A: True is correct. This reconciliation is similar to a physical inventory in that it consists of an inspection of certificates on hand, along with comparison to the information recorded in the accounts.

   B: False is incorrect. A securities count in a financial institution that holds thousands of shares in multimillion-dollar asset accounts is a major undertaking. Companies should perform this reconciliation reasonably often and not wait for an annual visit by the independent auditors. This reconciliation is similar to a physical inventory in that it consists of an inspection of certificates on hand, along with comparison to the information recorded in the accounts.

   (See page 7-8 of the course material.)

6. A: Incorrect. Recalculating a mathematical estimate is a substantive audit procedure that should be performed on estimates.

   B: Incorrect. Developing an auditor's own independent estimate based on alternative assumptions is a substantive procedure that should be performed on estimates.

   C: Incorrect. Comparing the estimate to subsequent events to the extent they are known before the end of the field work is a substantive procedure that should be performed on estimates.

   D: Correct. The audit of an estimate deals with the substantive quality of the estimation process and of the estimate itself. Since the value is an estimate, there is not anything to confirm.

   (See page 7-9 of the course material.)

7. A: True is correct. Documentation can be found in the minutes of the meetings of the board of directors, in proxy statements, and in securities offering registration statements.

   B: False is incorrect. Transactions can be vouched to the minutes of the meetings of the board of directors, in proxy statements, and in securities offering registration statements.

   (See page 7-12 of the course material.)
8. A: Incorrect. Auditors usually obtain independent written confirmations for both notes and bonds payable.

B: Incorrect. Notes payable to banks can be confirmed using the standard bank confirmation. The amount and terms of bonds payable, mortgages payable, and other formal debt instruments can be confirmed by requests to holders or a trustee.

C: Correct. As part of the search for unrecorded liabilities, confirmation requests should also be sent to lenders with whom the company has done business in the recent past, even if no liability balance is shown at the confirmation date.

D: Incorrect. The confirmation request should include questions of amount, interest rate, and due date, as well as about collateral, restrictive covenants, and other items of agreement between lender and borrower.

(See page 7-18 of the course material.)

9. A: Incorrect. Noncurrent investment accounts are not characteristically made up of many entries.

B: Correct. Noncurrent investment accounts are characterized by few large entries.

C: Incorrect. Noncurrent investment accounts are not characteristically made up of small entries.

D: Incorrect. Current assets are characterized as having many small entries, but this is not true of noncurrent investment accounts.

(See page 7-22 of the course material.)

10. A: True is correct. This class of fraud is most often accomplished through material misrepresentations or omissions in financial statements and related disclosures.

B: False is incorrect. Employees have opportunities to commit fraud against the company and outsiders in the area of liabilities and owners’ equity.

(See page 7-27 of the course material.)
11. Case Study: Audit Approach: Hide the Loss Under the Goodwill

**Objective:** Obtain evidence of the valuation of assets given in exchange for stock and notes to find the proper valuation of recorded goodwill.

**Control:** Control rests with the management and accounting estimates of the value of the assets given in exchange. Estimates of this type should be made with faithfulness to the underlying nature of the assets and their proper valuation.

**Test of Controls:** Auditors should determine the extent of management involvement in major investment and disposal transactions. Studying the minutes of the board and internal correspondence can help contribute this information. All other procedures bear directly on the substantive valuation evidence.

**Audit of Balance:** Since the Amron stock asset valuation was based on the transfer of the ammunition business assets to the new corporation, the underlying composition and book value of the assets should be determined in detail. This work should reveal that the Amron stock carrying value included the deferred cost amount of $7 million. The hard part is discerning that the business purpose of the transactions is to get out of the sporting ammunition manufacturing business. If the auditors concentrate on the flow of the transaction and don’t get the big picture, they might miss the event of discontinuance.

The Big Industrial-Gulwest transaction appears to be clear. Gulwest received stock and a note with total value of $5.4 million. Piercing the veil of the intervening corporate creation transactions and transfers, Gulwest gave assets that were on its original books at $12.4 million.

**Discovery Summary:** The evidence of value received and cost given indicated a loss of $7 million. Auditors may need to be perceptive and a bit clever to identify it directly with the discontinued line of business, or even to call it “discontinued.” Nevertheless, they were able to identify the amount as a loss and force its recognition in the Gulwest income statement. The spurious “goodwill” was removed from the Gulwest balance sheet.
<table>
<thead>
<tr>
<th>Glossary</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Account balance (substantive) audit program</strong></td>
<td>A specification (list) of procedures designed to produce evidence about the assertions in financial statements.</td>
</tr>
<tr>
<td><strong>Accounting estimate</strong></td>
<td>An approximation of a financial statement element, item, or account – often made by an organization’s management.</td>
</tr>
<tr>
<td><strong>Acquisition and Expenditure Accounting Cycle</strong></td>
<td>Covers purchasing, receiving, accounts payable, and cash disbursements.</td>
</tr>
<tr>
<td><strong>Admission-Seeking Questions</strong></td>
<td>Used in the fraud interview process only when there is a reasonable probability the respondent has committed the fraud under investigation.</td>
</tr>
<tr>
<td><strong>Amount (audit case situation)</strong></td>
<td>The dollar amount of overstated assets and revenue, or understated liabilities and expenses.</td>
</tr>
<tr>
<td><strong>Assessment questions</strong></td>
<td>Used in the fraud interview process to establish the credibility of the respondent.</td>
</tr>
<tr>
<td><strong>Audit objective (audit approach section)</strong></td>
<td>A recognition of a financial statement assertion for which evidence needs to be obtained.</td>
</tr>
<tr>
<td><strong>Audit of balances (audit approach section)</strong></td>
<td>Ordinary and extended substantive procedures designed to find signs of errors and frauds in account balances and classes of transactions.</td>
</tr>
<tr>
<td><strong>Benford’s Law</strong></td>
<td>A mathematical theory used with audit technology to detect abnormal occurrences of specific digits, digit combinations, specific numbers, and round numbers.</td>
</tr>
<tr>
<td><strong>Bribery</strong></td>
<td>The offering of money or other incentives to persuade somebody to do something, especially something dishonest or illegal.</td>
</tr>
<tr>
<td><strong>Capital Budget</strong></td>
<td>Contains the plans for assets purchases and business acquisitions and investments.</td>
</tr>
<tr>
<td><strong>Cash flow forecast</strong></td>
<td>Used by the chief financial officer to inform the board of directors and management of the business plans, the prospects for cash inflows, and the needs for cash outflows.</td>
</tr>
<tr>
<td><strong>Chain of custody</strong></td>
<td>The crucial link of the evidence to the suspect – called the “relevance” of evidence by attorneys.</td>
</tr>
</tbody>
</table>
Check kiting | The practice of building up balances in one or more bank accounts based on uncollected (float) checks drawn against similar accounts in other banks.

Closing questions | Used in the fraud interview process for the purposes of reconfirming the facts, obtaining previously undiscovered information, seeking new evidence, and maintaining goodwill.

Common Law | One of the two sources of substantive law in the United States. Consists of usages and customs of society interpreted by the judicial system.

Confirmation forms (positive and negative) | Provide evidence of existence and, to a limited extent, of valuation of accounts and notes receivable.

Conflict of interest (related to management fraud) | Occurs when a company official or insider has an undisclosed financial interest in a transaction.

Control (audit approach section) | A recognition of the control activities that should be used in an organization to prevent and detect errors and frauds.

Corroborative witnesses | People who can corroborate facts relating to a specific offense.

Cutoff bank statement | An auditor's information source for vouching the bank reconciliation items which is a complete bank statement including all paid checks and deposit slips.

Defalcation | Employee fraud, embezzlement and larceny.

Detection rates | The ratio of the number of exceptions reported to auditors to the number of account errors intentionally reported to customers.

Digital Analysis | The analysis of data to detect abnormal occurrences of specific digits, digit combinations, specific numbers, and round numbers.

Direct-effect illegal acts | Violations of laws or government regulations by the company or its management or employees that produce direct and material effects on dollar amounts in financial statements. (SAS 54 / SAS 82)
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic crimes</td>
<td>Acts in violation of civil and criminal law designed to bring financial reward for the offender. These are crimes against property, not crimes characterized by force or violence against people.</td>
</tr>
<tr>
<td>Embezzlement</td>
<td>To take for personal use money or property that has been given in trust by others, without their knowledge or permission.</td>
</tr>
<tr>
<td>Employee Fraud</td>
<td>A type of occupational crime – it is the use of fraudulent means to take money or other property from an employer.</td>
</tr>
<tr>
<td>Errors</td>
<td>Unintentional misstatements or omissions of amounts or disclosures in financial statements.</td>
</tr>
<tr>
<td>External auditors</td>
<td>Refers to independent CPAs who audit financial statements for the purpose of rendering an opinion.</td>
</tr>
<tr>
<td>Extortion</td>
<td>The crime of obtaining something such as money from somebody using illegal methods of persuasion.</td>
</tr>
<tr>
<td>False Imprisonment</td>
<td>Restraint by one person of the physical liberty of another without consent or legal justification.</td>
</tr>
<tr>
<td>Fiduciary Duty</td>
<td>Relating to the relationship between a trustee and the person or body for whom the trustee acts. Persons in such a position of trust owe certain duties imposed by law to their principals or employers – the duties are loyalty and care.</td>
</tr>
<tr>
<td>Finance and Investment accounting cycle</td>
<td>Covers several types of transactions that are typically large and infrequent. Contains a large number of accounts and records, ranging across tangible and intangible assets, liabilities, deferred credits, stockholders’ equity, gains and losses, expenses and income taxes.</td>
</tr>
<tr>
<td>Financial statement (management) fraud</td>
<td>The deliberate fraud committed by management that injures investors and credits through materially misleading financial statements.</td>
</tr>
<tr>
<td>Forensic accounting</td>
<td>The application of accounting and auditing skills to legal problems, both civil and criminal.</td>
</tr>
<tr>
<td>Forensic document examination</td>
<td>The application of science to the resolution of fraud issues.</td>
</tr>
<tr>
<td>Forfeiture</td>
<td>Government seizure of property derived from or used in criminal activity.</td>
</tr>
</tbody>
</table>

Glossary

G-3
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fraud</td>
<td>Knowingly making material misrepresentations of fact, with the intent of inducing someone to believe the falsehood and act upon it, and thus, suffer a loss or damage.</td>
</tr>
<tr>
<td>Fraud auditing</td>
<td>A proactive approach to detect financial frauds using accounting records and information, analytical relationships, and an awareness of fraud perpetration and concealment schemes.</td>
</tr>
<tr>
<td>Fraud examiners</td>
<td>People engaged specifically for fraud investigation work, particularly persons qualified as Certified Fraud Examiners.</td>
</tr>
<tr>
<td>Fraudulent financial reporting</td>
<td>Intentional or reckless conduct, whether by act or omission, that results in materially misleading financial statements.</td>
</tr>
<tr>
<td>Government auditors</td>
<td>Auditors whose work is governed by the GAO audit standards, whether they are audit employees of governments or of public accounting firms engaged to perform government audits.</td>
</tr>
<tr>
<td>Illegal acts (SAS 54)</td>
<td>Term used to refer to violations of laws and regulations that are “far removed” from financial statement effects (e.g., violations relating to insider securities trading, occupational health and safety, food and drug administration, environmental protection, and equal employment opportunity).</td>
</tr>
<tr>
<td>Improper revenue recognition</td>
<td>Involves sham transactions made to enhance the reported income or per-share earnings.</td>
</tr>
<tr>
<td>Informational questions</td>
<td>Used in the fact gathering portion of the fraud interview process. Questions are classified as open, closed, and leading.</td>
</tr>
<tr>
<td>Internal auditors (Certified Internal Auditors)</td>
<td>Person who can be both independent and CPAs but are employed within organization.</td>
</tr>
<tr>
<td>Internal control</td>
<td>A process, effected by an entity’s board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following three categories: reliability of financial reporting, compliance with applicable laws and regulations, effectiveness and efficiency of operations.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Kiting</td>
<td>The process whereby cash is recorded in more than one bank account, but in reality, the cash is either nonexistent or is in transit.</td>
</tr>
<tr>
<td>Lapping</td>
<td>A method of concealing a defalcation, wherein cash received from a customer is originally misappropriated by the employee, and at a later date, cash received from another customer is credited to the first customer’s account.</td>
</tr>
<tr>
<td>Larceny</td>
<td>The unlawful taking and removal of another person’s property.</td>
</tr>
<tr>
<td>Management fraud</td>
<td>Deliberate fraud committed by management that injures investors and creditors through materially misleading financial statements.</td>
</tr>
<tr>
<td>Method (audit case situation)</td>
<td>A cause of the misstatement (accidental error or fraud attempt), which usually is made easier by some kind of failure of controls.</td>
</tr>
<tr>
<td>Misclassification of assets</td>
<td>Scheme used to inflate the current assets and understate long-term assets.</td>
</tr>
<tr>
<td>Motive</td>
<td>Some kind of pressure experienced by a person and believed unshareable with friends and confidants.</td>
</tr>
<tr>
<td>Neutral third-party witness</td>
<td>A person not involved in a specific instance of fraud.</td>
</tr>
<tr>
<td>Occupational crime</td>
<td>A category of white-collar crime; largely committed by individuals or small groups of individuals working in connection with their occupation.</td>
</tr>
<tr>
<td>Organizational crime</td>
<td>A category of white-collar crime; committed by business and government.</td>
</tr>
<tr>
<td>Organized Crime</td>
<td>A conspiratorial activity, involving the coordination of many people in planning and executing illegal activity or in the pursuit of a legitimate activity through unlawful means.</td>
</tr>
<tr>
<td>Paper trail (audit case situation)</td>
<td>A set of telltales gins of erroneous accounting, missing or altered documents, or a “dangling debit” (the false or erroneous debit that results from an overstatement of assets).</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Payroll accounting cycle</td>
<td>Covers numerous activities from hiring and firing to pay distribution to filing of governmental (tax) and internal reports.</td>
</tr>
<tr>
<td>Predication</td>
<td>The circumstance (tips, red flags, shortages, etc) that lead professionally trained people to believe a fraud has occurred, is occurring, or will occur.</td>
</tr>
<tr>
<td>Production accounting cycle</td>
<td>Covers the activities related to internal cost accounting for manufacture of products.</td>
</tr>
<tr>
<td>Registrar</td>
<td>Keeps the stockholder list and from time to time determines the shareholders eligible to receive dividends and those entitled to vote at the annual meeting.</td>
</tr>
<tr>
<td>Reportable conditions</td>
<td>Matters the auditors believe should be communicated to the client’s audit committee because they represent significant deficiencies in the design or operation of the internal controls that could adversely affect the organization’s ability to record, process, summarize, and report financial data in the financial statements.</td>
</tr>
<tr>
<td>Required degree of compliance</td>
<td>The auditors’ decision criterion for good control performance.</td>
</tr>
<tr>
<td>Search for unrecorded liabilities</td>
<td>The set of procedures designed to yield audit evidence of liabilities that were not recorded in the reporting period.</td>
</tr>
<tr>
<td>Sham transactions</td>
<td>Transactions with no economic substance or purpose – commonly used to inflate earnings or assets.</td>
</tr>
<tr>
<td>Skimming</td>
<td>The removal of cash from the business before the cash is recorded in the accounting system.</td>
</tr>
<tr>
<td>Statutes</td>
<td>One of the two sources of substantive law in the United States. Statutes are passed by Congress and state legislatures and include regulations enacted by administrative and regulatory agencies.</td>
</tr>
<tr>
<td>Subpoena duces tecum</td>
<td>Ordinarily issued by a court or by a grand jury as a means to obtain documentary evidence – calls for the production of documents and records.</td>
</tr>
<tr>
<td>Substantive audit procedures</td>
<td>The detail audit and analytical procedures designed to detect material misstatements in account balances and footnote disclosures.</td>
</tr>
<tr>
<td>Glossary Term</td>
<td>Definition</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Test of controls</td>
<td>Ordinary and extended procedures designed to produce evidence about the effectiveness of the controls that should be in operation.</td>
</tr>
<tr>
<td>(audit approach section)</td>
<td></td>
</tr>
<tr>
<td>Transfer agent</td>
<td>Handles the exchanges of shares, channeling the shares surrendered by sellers and issuing new certificates to buyers.</td>
</tr>
<tr>
<td>White-collar crime</td>
<td>Non-violent crime for financial gain committed by means of deception by persons whose occupational status is entrepreneurial, professional or semi-professional and utilizing their special occupational skills and opportunities; also non-violent crime for financial gain utilizing deception and committed by anyone having special technical and professional knowledge of business and government, irrespective of the person's occupation.</td>
</tr>
</tbody>
</table>


Index

A
Account balance (substantive) audit program, 2-6
Accounting estimate, 7-9, 7-11, 7-16, 7-39
Acquisition and expenditure cycle, 4-1
Application controls, 2-12

B
Bank reconciliations, 3-21
Bank transfer schedule, 3-21

C
Capital budget, 7-3
Cash disbursements and payables, 4-1, 4-42
Cash flow forecast, 7-3
Cash receipts journal, 3-7
Completeness assertion, 4-1, 4-6, 4-9, 4-31
Control activities, 2-3, 2-5, 2-9, 2-11, 2-12, 2-14, 2-20, 2-21, 2-25, 2-26, 2-29
Control procedures, 1-9
Control risk, 2-1, 2-3, 2-5, 2-6, 2-8, 2-19, 2-20, 2-21, 2-23, 2-24, 2-25, 2-28
COSO Report, 2-1
Cost accounting, 6-1, 6-3, 6-4, 6-6, 6-9, 6-11, 6-15, 6-16, 6-17, 6-21, 6-22
Cutoff bank statement, 3-17, 3-21

D
Defalcation, 1-3, 1-43
Depreciation schedule, 6-6

E
Embezzlement, 1-3, 1-18, 1-43, 1-45, 1-48, 1-49, 1-50, 1-51, 4-3, 4-14, 4-31, 4-34, 4-44, 4-50
Employee fraud, 1-3, 1-11, 1-45
Existence assertion, 3-1, 3-7, 3-37

F
Finance and investment accounting cycle, 7-1, 7-28
Forensic accounting, 1-32
Fraud auditing, 1-3, 1-43

G
Government payroll tax report, 5-8, 5-18
Input control activities, 2-16
Intangibles, 7-1, 7-6, 7-7, 7-8, 7-10, 7-22, 7-23, 7-24, 7-27, 7-30, 7-39, 7-40, 7-41
Internal control, 1-7, 1-13, 1-14, 1-44, 1-46, 1-53, 2-1, 2-2, 2-3, 2-5, 2-6, 2-7, 2-8, 2-9, 2-11, 2-14, 2-20, 2-22, 2-23, 2-24, 2-25, 2-26, 2-27, 2-28, 2-29, 2-30
Internal control components, 2-3

I
Input control activities, 2-16
Intangibles, 7-1, 7-6, 7-7, 7-8, 7-10, 7-22, 7-23, 7-24, 7-27, 7-30, 7-39, 7-40, 7-41
Internal control, 1-7, 1-13, 1-14, 1-44, 1-46, 1-53, 2-1, 2-2, 2-3, 2-5, 2-6, 2-7, 2-8, 2-9, 2-11, 2-14, 2-20, 2-22, 2-23, 2-24, 2-25, 2-26, 2-27, 2-28, 2-29, 2-30
Internal control components, 2-3

K
Kiting, 3-16, 3-19, 3-21, 3-42

L
Labor cost analysis, 5-6
Lapping, 3-16, 3-17, 3-12
Larceny, 1-3, 1-43, 1-51
Long-term liabilities, 7-1, 7-6, 7-10, 7-17, 7-18, 7-27, 7-39, 7-41, 7-45
M
Management fraud, 1-3, 1-43

N
Negative confirmations, 3-12, 3-15

O
Off the balance sheet, 7-3
Output control activities, 2-18
Owner’s equity, 7-10, 7-11, 7-27

P
Payroll accounting, 5-1, 5-4, 5-6, 5-17, 5-19, 5-22, 5-23
Payroll cycle, 5-1
Payroll distribution, 5-1, 5-17
Payroll register, 5-6
Periodic reconciliation, 4-3
Personnel files, 5-5
Physical inventory observation, 4-1, 4-5, 4-31
Positive confirmations, 3-12, 3-15
Processing control activities, 2-13, 2-17
Production accounting cycle, 6-1, 6-16, 6-21
Production orders, 6-3, 6-4, 6-5, 6-6, 6-10, 6-11, 6-15, 6-16, 6-17, 6-22

R
Reportable conditions, 2-5, 2-7
Revenue and collection cycle, 3-1, 3-37, 3-41, 3-51

S
Sales forecast, 6-3, 6-5, 6-6, 6-16, 6-7, 6-21, 6-22
Search for unrecorded liabilities, 4-5, 4-6, 4-31, 4-44, 4-49
Social security numbers, 1-24, 1-30
Standard bank confirmation form, 3-10, 3-39
Stockholder equity capital, 7-3

T
Timekeeping, 5-1, 5-3, 5-4, 5-5, 5-7, 5-18

W
White-collar crime, 1-2