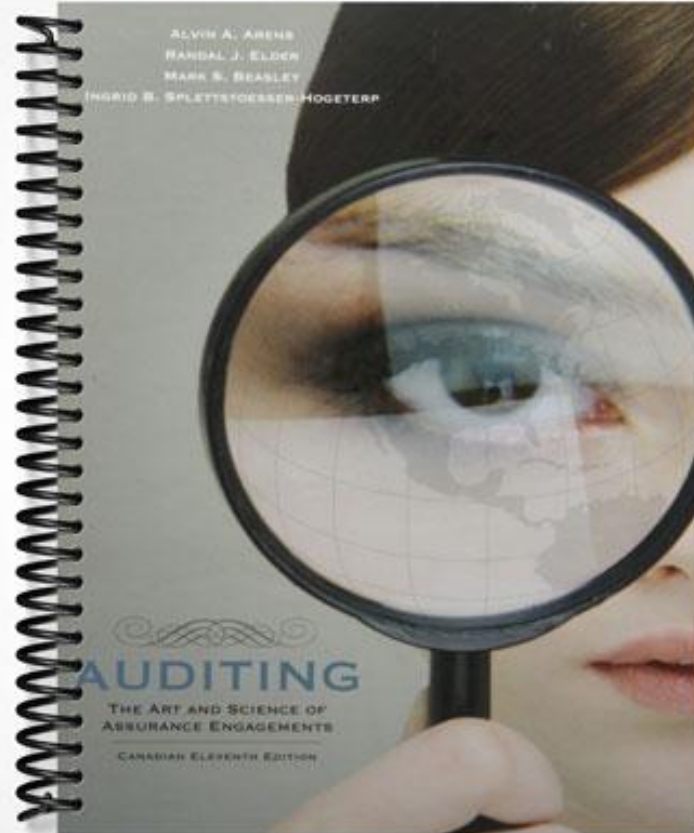


# SOLUTIONS MANUAL



ALVIN A. ARENS  
RANDAL J. ELDER  
MARK S. BEASLEY  
INGRID B. SPLETTSCHESSER-HOGETERP

## AUDITING

THE ART AND SCIENCE OF  
ASSURANCE ENGAGEMENTS

CANADIAN ELEVENTH EDITION

## **Chapter 1**

### **The Demand for an Auditing and Assurance Profession**

#### **Audit Challenge 1-1: Assessing Privacy Practices**

- 1.** Hospital data could be obtained from numerous sources: for example, unshredded documentation from garbage bins, reports or files taken home by employees to work on, reports left lying around on a doctor's desk or nurse's station. Poor security practices, such as weak passwords, passwords written on paper and stored under keyboards, or out of date firewalls (enabling hackers to access the hospital system) could also provide access to hospital data.
- 2.** Auditors should know the requirements of Canada's privacy legislation, the nature of control systems for manual and automated information systems, have awareness of best practices for security and privacy. Someone on the audit team should also be able to assess technical matters such as the functioning of firewalls, routers, data communications, and other security software in use by the hospital.
- 3.** Internal auditors (with the CIA) designation, and qualified accountants (CA, CGA, CMA) should be skilled in control systems. Team members on the audit should also have skills in information technology (perhaps with the CISA designation).

#### **Review Questions**

**1-1** You will be looking at his accounting records (evidence) and evaluating and collecting information about those records. Your evaluation process will be done using relatively standard audit procedures (part of GAAS – generally accepted auditing standards). Your objective is to compare the evidence (his accounting records) to the financial statements that he has prepared (which will become information available to others, such as the Canada Revenue Agency). To help you evaluate his records (the evidence) you will use criteria (GAAP – generally accepted accounting principles). You are able to add value to the financial statements because you are an independent professional qualified accountant.

**1-2** To do an audit, there must be information in a verifiable form and some standards (criteria) by which the auditor can evaluate the information. Examples of established criteria include generally accepted accounting principles, and the *Income Tax Act*. Determining the degree of correspondence between information and established criteria is determining whether a given set of information is in accordance with the established criteria using audit procedures that conform with GAAS – generally accepted auditing standards. The information for Glickle Ltd.'s tax return is the corporate tax returns filed by the company. The criteria are the *Income Tax Act* and all interpretations. For the audit of Glickle Ltd.'s financial statements, the information is the financial statements being audited and the established criteria are generally accepted accounting principles and generally accepted auditing standards.

**1-3** The primary evidence the Canada Revenue Agency auditor will use in the audit of Glickle Ltd.'s tax return includes all available documentation and other information available in

Glickle's office or from other sources. For example, when the auditor examines taxable income, a major source of information will be bank statements, the cash receipts journal, and deposit slips. The auditor is likely to emphasize unrecorded receipts and revenues. For expenses, major sources of evidence are likely to be cancelled cheques, vendors' invoices, and other supporting documentation.

**1-4** This apparent paradox arises from the distinction between the function of auditing and the function of accounting.

The accounting function is the process of recording, classifying, and summarizing economic events to provide relevant information to decision makers.

The rules of accounting are the criteria used by the auditor for evaluating the presentation of economic events for financial statements and he or she must therefore have an understanding of generally accepted accounting principles (GAAP), as well as generally accepted auditing standards (GAAS).

The accountant need not, and frequently does not, understand what auditors do, unless he or she is involved in doing audits, or has been trained as an auditor.

**1-5** The auditor could provide an audit of the financial statements, an attestation report on internal control over the financial statements, or a variety of special assurance engagements. For example, a WebTrust or SysTrust report could be prepared for transactions made via the hospital's secure web site or with respect to the quality of information systems used to process prescription medication. If there are leased premises on the hospital grounds, the auditor could provide a review engagement report with respect to common area costs for use by the tenants of the premises. Other examples are possible.

**1-6**

	<b>Audits of Financial Statements</b>	<b>Compliance Audits</b>	<b>Operational Audits</b>
<b>Purpose</b>	To determine whether the financial statements are presented in accordance with GAAP	To determine whether the client is following specific procedures set by higher authority	To evaluate whether operating procedures are efficient and effective
<b>Users of Audit Report</b>	Different groups for different purposes—mainly outside entities	Authority setting down procedures, internal or external	Management of organization
<b>Nature</b>	Highly standardized	Not standardized, very specific, often very subjective, but usually objective	Highly non-standardized

<b>Performed By:</b>			
<b>Public Accountant</b>	Almost universally	Occasionally	Frequently
<b>Government Auditors</b>	Occasionally	Frequently	Frequently
<b>Canada Revenue Agency Auditors</b>	Never	Universally	Never
<b>Internal Auditors</b>	Never, although they might review them for management	Frequently	Frequently

**1-7** Five specific examples of operational audits that could be conducted by an internal auditor in a manufacturing company are:

- Examination of employee time cards and personnel records to determine if sufficient information is available to maximize the effective use of personnel.
- Review the processing of sales invoices to determine if it could be done more efficiently.
- Review the acquisitions of goods, including costs to determine if they are being purchased at the lowest possible cost considering the quality needed.
- Review and evaluate the efficiency of the manufacturing process.
- Review the processing of cash receipts to determine if they are deposited as quickly as possible.

Other examples are possible.

**1-8** Audit services could be: financial statement audit. Other attestation services could be reviews of the personal financial statements of individual lawyers for inclusion with their tax returns. Attestation services could include a report on sales revenue for submission to a landlord (to adjust lease payments), or a report that provides assurance on the quality of accounts receivable for a bank holding a loan with the firm. Other examples are possible.

**1-9** Many clients are using e-commerce to conduct their business transactions, so an auditor needs to be familiar with such technologies when conducting the financial statement audit. Also, the auditor may be called upon to conduct a special engagement, such as a WebTrust engagement, where knowledge of e-commerce technologies are required to effectively conduct the engagement.

**1-10** The accounting organizations in Canada are:

The Canadian Institute of Chartered Accountants (CICA), whose members are chartered accountants (CAs). CAs are licensed to perform audits in all provinces and also are employed in government, industry, and education.

The Certified General Accountants Association of Canada (CGAAC), whose members are certified general accountants (CGAs). CGAs perform audits in most provinces and are employed in government, industry, and education.

The Society of Management Accountants of Canada (SMAC), whose members are certified management accountants (CMAs). CMAs are primarily employed in government, industry, and education, and may also be licensed as PAs.

The Institute of Internal Auditors (IIA) includes members who may have a certified internal auditor (CIA) designation. Members are primarily in internal auditing but also in other positions in government, industry, and education.

The Information Systems Audit and Control Association (ISACA) requires members to pass an examination and have relevant work experience before receiving a CISA (Certified Information Systems Auditor). Members are primarily in internal auditing but also in other positions in government, industry, and education.

Roles of these organizations include:

The CICA is the organization that sets accounting and auditing standards that have been given quasi-legal status by legislative acts such as the *Canada Business Corporations Act* and by the provincial securities administrators.

All three of the CICA/CGAAC/SMAC conduct research and publish materials on many different subjects related to accounting, auditing, management advisory services, and taxes. The organizations also prepare and grade the CA, CGA, and CMA accounting examinations, respectively, and provide continuing education to their members. Finally, the organizations set out professional standards regulating the professional conduct of their members.

The IIA and CISA perform similar standard setting, research and examination administration functions for their members.

**1-11** The major differences in the scope of audit responsibilities are:

- Public accountants perform audits in accordance with generally accepted auditing standards of published financial statements prepared in accordance with generally accepted accounting principles.
- Government auditors from the auditor generals (federal or provincial) perform compliance or operational (value-for-money) audits in order to assure the Parliament that the expenditure of public funds is in accordance with its directives and the law and is done with efficiency, economy and effectiveness. They also do financial statement audits of Crown Corporations, or sub-contract this work to external public accountants.
- Canada Revenue Agency auditors perform compliance audits to enforce the federal tax laws as defined by Parliament, interpreted by the courts, and regulated by the *Income Tax Act*.
- Internal auditors perform compliance or operational audits in order to assure management or the board of directors that controls and policies are properly and consistently developed, applied and evaluated.

**1-12** Assuming a bank is deciding to make a loan to a business, the bank will charge a rate of interest determined primarily by the following three factors:

- *Risk-free interest rate.* This is approximately the rate the bank could earn by investing in Canadian treasury bills for the same length of time as the business loan.
- *Business risk.* This risk reflects the possibility that the business will not be able to repay its loan because of economic or business conditions such as a recession, poor management decisions, or unexpected competition in the industry.
- *Information risk.* This risk reflects the possibility that the information upon which the business risk decision was made was inaccurate. A likely cause of the information risk is the possibility of inaccurate financial statements.

Auditing has no effect on either the risk-free interest rate or business risk. However, auditing can significantly reduce information risk.

- *Conduct:* employs a professional staff of sufficient size to provide a broad range of expertise. Continuing education is supported. The firm promotes a professional, independent attitude and competence among its professional staff. Consultation among professional staff is encouraged.

### Discussion Problems

**1-13** a. The following parts of the definition of auditing are related to the narrative:

- (1) Virms is being asked to issue a report about qualitative and quantitative information relating to trucks. The trucks are therefore the quantifiable information with which the auditor is concerned.
- (2) There are three criteria which must be evaluated and reported by Virms: Existence of the trucks on the night of June 30, physical condition of each truck, and fair market value of each truck.
- (3) Susan Virms will *accumulate* and *evaluate* four basic types of *evidence*:
  - *Count the trucks* to determine their existence.
  - *Use registration documents* held by Charon for comparison to the serial number on each truck to determine ownership.
  - *Examine the trucks* to determine each truck's physical condition.
  - *Examine the current blue book* to determine the fair market value of each truck.
- (4) Susan Virms, public accountant, appears qualified as a *competent, independent person*. She is a public accountant, and she spends most of her time auditing used automobile and truck dealerships and has extensive specialized knowledge about used trucks that is consistent with the nature of the engagement.
- (5) The *report results* are to include:
  - which of the 20 trucks are parked in Regional's parking lot the night of June 30
  - the condition of each truck, using established guidelines
  - the fair market value of each truck using the current blue book for trucks

- b. The only parts of the audit which will be difficult for Virms are:
- Evaluating the condition, using the guidelines of poor, good, and excellent. It is highly subjective to do so. If she uses a different criterion than the blue book, the fair market value will not be meaningful. Her experience will be essential in using this guideline.
  - Determining the fair market value, unless it is clearly defined in the blue book for each condition.

- 1-14** a. The interest rate for the loan that requires a review report is lower than the loan that did not require a review because of lower information risk. A review report provides moderate assurance to financial statement users, which lowers information risk. An audit report provides further assurance and lower information risk. As a result of reduced information risk, the interest rate is lowest for the loan with the audit report.
- b. Given these circumstances, Vial-tek should select the loan from Second National Bank that requires an annual audit. In this situation, the additional cost of the audit is less than the reduction in interest due to lower information risk. The following is the calculation of total costs for each loan:

<b>LENDER</b>	<b>PA SERVICE</b>	<b>COST OF PA SERVICES</b>	<b>ANNUAL INTEREST</b>	<b>ANNUAL LOAN COST</b>
Existing loan	None	0	\$ 142,500	\$ 142,500
First National Bank	Review	\$ 12,000	\$ 127,500	\$ 139,500
Second National Bank	Audit	\$ 20,000	\$ 112,500	\$ 132,500

**1-14 (continued)**

- c. Vial-tek should select the loan from First National Bank due to the higher cost of the audit and the reduced interest rate for the loan from First National Bank. The following is the calculation of total costs for each loan:

LENDER	PA SERVICE	COST OF PA SERVICES	ANNUAL INTEREST	ANNUAL LOAN COST
Existing loan	None	0	\$ 142,500	\$ 142,500
First National Bank	Review	\$ 12,000	\$ 120,000	\$ 132,000
Second National Bank	Audit	\$ 25,000	\$ 112,500	\$ 137,500

- d. Vial-tek may desire to have an audit because of the many other positive benefits that an audit provides. The audit will provide Vial-tek's management with assurance about annual financial information used for decision-making purposes. The audit may detect errors or fraud, and provide management with information about the effectiveness of controls. In addition, the audit may result in recommendations to management that will improve efficiency or effectiveness.
- e. The auditor must have a thorough understanding of the client and its environment, including the client's e-commerce technologies, industry, regulatory and operating environment, suppliers, customers, creditors, and business strategies and processes. This thorough analysis helps the auditor identify risks associated with the client's strategies that may affect whether the financial statements are fairly stated. This strategic knowledge of the client's business often helps the auditor identify ways to help the client improve business operations, thereby providing added value to the audit function.

- 1-15 a. & b**
1. (1) Audit of historical financial statements
  2. (2) An attestation service other than an audit service; or  
(3) An assurance service that is not an attestation service (*WebTrust* developed from the AICPA Special Committee on Assurance Services, but the service meets the criteria for an attestation service.)
  3. (2) An attestation service other than an audit service
  4. (2) An attestation service other than an audit service
  5. (2) An attestation service other than an audit service
  6. (2) An attestation service that is not an audit service (Review services are a form of attestation, but are performed according to Review Standards.)
  7. (2) An attestation service other than an audit service
  8. (2) An attestation service other than an audit service
  9. (3) An assurance service that is not an attestation service



Justification for these decisions is based upon the type of report to be issued and the criteria used.

**1-16** a. The services provided by Consumers Union are very similar to assurance services provided by PA firms. The services provided by Consumers Union and assurance services provided by PA firms are designed to improve the quality of information for decision makers. PAs are valued for their independence, and the reports provided by Consumers Union are valued because Consumers Union is independent of the products tested.

b. The concepts of information risk for the buyer of an automobile and for the user of financial statements are essentially the same. They are both concerned with the problem of unreliable information being provided. In the case of the auditor, the user is concerned about unreliable information being provided in the financial statements. The buyer of an automobile is likely to be concerned about the manufacturer or dealer providing unreliable information.

c. The four causes of information risk are essentially the same for a buyer of an automobile and a user of financial statements:

- *Remoteness of information* It is difficult for a user to obtain much information about either an automobile manufacturer or the automobile itself without incurring considerable cost. The automobile buyer does have the advantage of possibly knowing other users who are satisfied or dissatisfied with a similar automobile.
- *Biases and motives of provider* There is a conflict between the automobile buyer and the manufacturer. The buyer wants to buy a high quality product at minimum cost whereas the seller wants to maximize the selling price and quantity sold.
- *Voluminous data* There is a large amount of available information about automobiles that users might like to have in order to evaluate an automobile. Either that information is not available or too costly to obtain.
- *Complex exchange transactions* The acquisition of an automobile is expensive and certainly a complex decision because of all the components that go into making a good automobile and choosing between a large number of alternatives.

d. The three ways users of financial statements and buyers of automobiles reduce information risk are also similar:

- *User verifies information for him or herself* That can be obtained by driving different automobiles, examining the specifications of the automobiles, talking to other users, and doing research in various magazines.
- *User shares information risk with management* The manufacturer of a product has a responsibility to meet its warranties and to provide a reasonable product. The buyer of an automobile can return the automobile for correction of defects. In some cases a refund may be obtained.
- *Examine the information prepared by Consumer Reports* This is similar to an audit in the sense that independent information is provided by an independent party. The information provided by *Consumer Reports* is comparable to that provided by a PA firm that audited financial statements.

## Professional Judgment Problems

**1-17** The PA firm for the Internet company described in this problem could address these customer concerns by performing a WebTrust attestation engagement. The WebTrust assurance service was created by the profession to respond to the growing need for assurance resulting from the growth of business transacted over the Internet.

Relevant principles for each of the customer concerns noted in the problem are as follows:

- processing integrity for: Accuracy of product descriptions and adherence to stated return policies
- online privacy and security for: credit card and other personal information
- online privacy and security for: selling information to other companies
- availability for: system failure

**1-18** a. The operational efficiency of the sales department could be assessed by a qualified accountant (which could include a PA, internal auditor, or other qualified accountant), while the other departments could be assessed by qualified accountants together with a qualified researcher and manufacturing consultant. Skills present should be familiarity with best business practices in the industry and functional area under audit, as well as skills in information technology, research and development, and production development and management.

b. The auditors may have difficulty developing criteria to conduct the audit (unless there are standard best practices available for the industry), which will make the engagement more judgmental. They may also have difficulty writing the report, since such audits are unique, and the report will need to be custom-written for the engagement.

## Case

**1-19** a. First, you the student. Then, the faculty member and the school (as school reputation rests upon the quality of the student). Other stakeholders could be recipients of the grades in the future, such as other schools where the student has applied as a Masters student, or professional associations where grades are submitted to obtain credit for having taken courses.

b. To answer this question, we must consider that students are likely to report grades that are too low, but may not report grades that are too high. So, grades that are too high are at most risk of being incorrect.

c. The instructor could double check grades as they are recorded. Also, preliminary grades with a detailed breakdown could be posted for students to review. On the assumption that all work is returned to students and that they are informed the grades for each portion of their work, the student should check to ensure that the grades are recorded correctly by the instructor.

d. Auditing the grades would be asking for a detailed breakdown and a comparison to the source records. This is known as reperformance, since the work done by the instructor is repeated.

### **Ongoing Small Business Case: Thinking about CondoCleaners.com**

**1-20** Jim and Cecilia have worked with a variety of businesses, and learned about good quality and poor quality documentation methods and internal control systems. This knowledge will help them design their own systems should they decide to set up a business. They have also learned assessment techniques for evaluating documents and comparing them to the reported results in the financial statements. These assessment techniques will help them to assess suppliers and customers (for example for credit worthiness), and to develop clear reports for potential customers. As part of their work, they will have had to communicate their needs and the results of their findings, improving their communication skills. These skills will help them work with employees or outsiders when developing their own business.

### **Internet Research Problem**

**1-21** Answers to these questions will vary depending upon the research conducted by students.

SOLUTIONS TO INTEGRATED CASE APPLICATIONS—PINNACLE  
MANUFACTURING

**Chapter 6**

**Integrated Case Application—Pinnacle Manufacturing: Part I**

a.

Amounts (in thousands)

<b>Ratios</b>		<b>2009</b>	<b>2008</b>	<b>2007</b>
	Current assets	44,497	36,196	36,005
	Current liabilities	<u>25,926</u>	<u>17,605</u>	<u>16,341</u>
Current ratio:		1.72	2.06	2.20
	Debt	47,161	37,033	35,801
	Equity	<u>55,826</u>	<u>52,759</u>	<u>50,873</u>
Debt to equity:		84.5%	70.2%	70.4%
	Net income before taxes	4,274	3,870	2,660
	Sales	<u>149,245</u>	<u>137,580</u>	<u>125,814</u>
Net income before taxes/sales:		2.9%	2.8%	2.1%
	Gross profit	44,437	40,984	37,129
	Sales	<u>149,245</u>	<u>137,579</u>	<u>125,814</u>
Gross margin %:		29.8%	29.8%	29.5%
	COGS	104,808	96,596	88,685
	Average inventory	<u>25,119</u>	<u>22,091</u>	<u>21,975</u>
Inventory turnover:		4.2	4.4	4.0

- b. There is a low risk that Pinnacle will fail financially in the next twelve months. The company has been profitable the past three years, is generating significant cash flows and most of the ratios indicate no financial difficulties. The current ratio and debt to equity have deteriorated somewhat, but not enough to cause significant concerns. For example, the current ratio is still over 1.0 in the current year, implying that the company has enough current assets to pay its current obligations. This implies that no unusual obligations will be incurred in the coming year. Debt has increased somewhat, but income remains stable, indicating the ability to cover costs, including interest expenses and debt repayment. Gross profit over the years is stable, which should actually be queried – with the new divisions, we would expect some fluctuation in these figures.

C.

**Pinnacle Manufacturing  
Company  
Income Statement - All Divisions  
For the Year Ended December 31**

	<b>2009 Dollar Value</b>	<b>2009 % of Sales</b>	<b>2008 Dollar Value</b>	<b>2008 % of Sales</b>	<b>2007 Dollar Value</b>	<b>2007 % of Sales</b>
Sales	149,424,646	100.00%	137,741,766	100.00%	125,982,294	100.00%
Sales Returns and Allowances	179,470	0.12%	162,102	0.12%	168,022	0.13%
Cost of Sales*	<u>104,807,966</u>	70.14%	<u>96,595,908</u>	70.13%	<u>88,685,361</u>	70.40%
Gross Profit	44,437,210	29.74%	40,983,756	29.75%	37,128,911	29.47%
<b>OPERATING EXPENSES- Allocated</b>						
Salaries-Management	2,348,025	1.57%	2,190,819	1.59%	1,995,723	1.58%
Salaries-Office	324,392	0.22%	272,185	0.20%	266,831	0.21%
Licensing and certification fees	196,229	0.13%	158,608	0.12%	141,112	0.11%
Security	566,716	0.38%	584,936	0.42%	548,133	0.44%
Insurance	95,924	0.06%	95,268	0.07%	94,340	0.07%
Group insurance benefits	24,415	0.02%	27,021	0.02%	25,052	0.02%
Advertising	167,268	0.11%	163,311	0.12%	144,068	0.11%
Business publications	7,194	0.00%	5,096	0.00%	673	0.00%
Property taxes	23,246	0.02%	163,311	0.12%	152,776	0.12%
Bad debts	866,330	0.58%	948,679	0.69%	862,690	0.68%
Amortization expense	5,492,959	3.68%	4,258,699	3.09%	3,797,885	3.01%
Accounting fees	281,973	0.19%	273,190	0.20%	260,684	0.21%
Total operating expenses-Allocated	<u>10,394,671</u>	6.96%	<u>9,141,123</u>	6.64%	<u>8,289,967</u>	6.56%
<b>OPERATING EXPENSES-Direct</b>						
Salaries-Sales	15,408,771	10.31%	14,062,181	10.21%	12,960,341	10.29%
Wages Rental	506,186	0.34%	546,228	0.40%	500,630	0.40%
Wages-Mechanics	1,146,126	0.77%	1,229,015	0.89%	1,159,488	0.92%
Wages-Warehouse	5,034,197	3.37%	4,899,331	3.56%	4,759,347	3.78%
Garbage collection	28,458	0.02%	27,313	0.02%	33,017	0.03%
Payroll benefits	2,735,670	1.83%	2,695,165	1.96%	2,516,783	2.00%
Rent- Warehouse	826,350	0.55%	701,235	0.51%	659,430	0.52%
Telephone	33,350	0.02%	41,443	0.03%	50,319	0.04%
Utilities	270,072	0.18%	244,959	0.18%	238,578	0.19%
Postage	92,390	0.06%	122,494	0.09%	131,546	0.10%
Linen service	17,788	0.01%	11,330	0.01%	13,985	0.01%
Repairs and maintenance	171,872	0.12%	154,500	0.11%	154,968	0.12%
Cleaning service	92,428	0.06%	74,852	0.05%	67,903	0.05%
Legal service	407,605	0.27%	174,807	0.13%	132,381	0.11%
Fuel	294,933	0.20%	313,020	0.23%	243,054	0.19%
Travel and entertainment	106,415	0.07%	95,268	0.07%	87,373	0.07%
Pension expense	235,244	0.16%	217,752	0.16%	110,444	0.09%
Office supplies	154,213	0.10%	136,092	0.10%	148,790	0.12%
Miscellaneous	308,969	0.21%	97,185	0.07%	125,228	0.10%
Total operating expenses-Direct	<u>27,871,037</u>	18.65%	<u>25,844,170</u>	18.78%	<u>24,093,605</u>	19.13%
Total Operating Expenses	<u>38,265,708</u>	25.61%	<u>34,985,293</u>	25.42%	<u>32,383,572</u>	25.69%
Operating Income	6,171,502	4.13%	5,998,463	4.33%	4,745,339	3.78%
Other Expense-Interest	<u>1,897,346</u>	1.27%	<u>2,128,905</u>	1.55%	<u>2,085,177</u>	1.66%
Income Before Taxes	4,274,156	2.86%	3,869,558	2.78%	2,660,162	2.12%
Income Taxes	1,013,745	0.68%	1,399,001	1.02%	1,166,553	0.93%

<b>Net Income</b>	<u><u>3,260,411</u></u>	2.18%	<u><u>2,470,557</u></u>	1.76%	<u><u>1,493,609</u></u>	1.19%
-------------------	-------------------------	-------	-------------------------	-------	-------------------------	-------

\*Details of manufacturing expense not incl.

For the overall financial statements, the focus for potential misstatements is on all accounts except direct expenses. For the direct expenses, it is better to use the disaggregated information.

<u>Account Balance</u>	<u>Estimate of \$ Amount of Potential Misstatement</u>
Property taxes	Decrease of \$140,000 when property increased. It could be that one or more properties' real property taxes have not been included.
Bad debts	See requirement f for an analysis
Depreciation expense	Increase of \$1.2 million, perhaps partly due to new building and equipment purchases
Income Taxes	IT as a % of NIBT was 36% in 2008. 36% of 2009 NIBT is \$1.539 million. Actual IT for 2009 was \$1.014 million. Difference of \$525,000.
Interest expense	Short-term plus long-term interest bearing debt increased by 25%, from \$27.3 million to \$34. 1 million, but interest expense decreased. If interest rates have not changed, interest expense would be expected to increase by a similar amount to \$2,661,000 (\$2,129,00 x 1.25). Potential misstatement of \$764,000 (\$2,661,000 - \$1,897,000).

d.

**Pinnacle Manufacturing Company  
Income Statement - Welburn Division  
For the Year Ended December 31**

	2007 \$ Value	2007 % of Div. Sales	2006 \$ Value	2006 % of Div. Sales	2005 \$ Value	2005 % of Div. Sales
Sales	121,371,795	100.00%	111,877,873	100.00%	102,308,887	100.00%
Sales Returns and Allowances	126,522	0.10%	113,483	0.10%	117,627	0.11%
Cost of Sales*	<u>86,671,580</u>	71.41%	<u>79,914,454</u>	71.43%	<u>73,370,003</u>	71.71%
Gross Profit	34,573,693	28.49%	31,849,936	28.47%	28,821,257	28.18%
<b>OPERATING EXPENSES-Allocated</b>						
Salaries-Management	1,905,965	1.57%	1,774,466	1.59%	1,616,447	1.58%
Salaries-Office	263,320	0.22%	220,457	0.20%	216,121	0.21%
Licensing and certification fees	144,046	0.12%	117,118	0.10%	104,199	0.10%
Security	460,017	0.38%	473,767	0.42%	443,958	0.43%
Insurance	77,861	0.06%	77,159	0.07%	76,407	0.07%
Group insurance benefits	19,956	0.02%	22,048	0.02%	20,441	0.02%
Advertising	135,777	0.11%	132,276	0.12%	116,690	0.11%
Business publications	4,336	0.00%	2,735	0.00%	361	0.00%
Property taxes	18,396	0.02%	132,276	0.12%	123,743	0.12%
Bad debts	708,015	0.58%	762,910	0.68%	693,759	0.68%
Amortization expense	4,329,633	3.57%	3,449,347	3.08%	3,076,109	3.01%
Accounting fees	<u>230,075</u>	0.19%	<u>220,363</u>	0.20%	<u>210,276</u>	0.21%
Total operating expenses-Allocated	8,297,397	6.84%	7,384,922	6.60%	6,698,511	6.54%
<b>OPERATING EXPENSES-Direct</b>						
Salaries-Sales	12,947,327	10.67%	11,646,277	10.41%	10,733,735	10.49%
Wages-Warehouse	4,124,063	3.40%	3,968,235	3.55%	3,854,855	3.77%
Payroll benefits	2,099,069	1.73%	2,182,959	1.95%	2,038,477	1.99%
Rent- Warehouse	690,375	0.57%	571,916	0.51%	537,821	0.53%

Telephone	26,659	0.02%	33,069	0.03%	40,152	0.04%
Utilities	200,398	0.17%	198,409	0.18%	193,240	0.19%
Postage	80,204	0.07%	99,207	0.09%	106,538	0.10%
Linen service	14,539	0.01%	9,642	0.01%	11,900	0.01%
Repairs and maintenance	127,063	0.10%	107,833	0.10%	108,159	0.11%
Cleaning service	67,780	0.06%	60,628	0.05%	55,000	0.05%
Legal service	119,122	0.10%	120,490	0.11%	91,247	0.09%
Fuel	224,342	0.18%	253,526	0.23%	196,858	0.19%
Travel and entertainment	82,614	0.07%	77,159	0.07%	70,765	0.07%
Pension expense	193,389	0.16%	176,367	0.16%	89,454	0.09%
Office supplies	125,176	0.10%	110,228	0.10%	120,513	0.12%
Miscellaneous	58,819	0.05%	<u>53,130</u>	0.05%	<u>68,461</u>	0.07%
Total operating expenses-Direct	<u>21,180,939</u>	17.46%	19,669,075	17.60%	18,317,175	17.91%
Total operating expenses	<u>29,478,336</u>	24.30%	<u>27,053,997</u>	24.20%	<u>25,015,686</u>	24.45%
<b>OPERATING INCOME</b>	<u>5,095,357</u>	4.19%	<u>4,795,939</u>	4.27%	<u>3,805,571</u>	3.73%

\* Details of manufacturing expenses are not included in this schedule.

**Pinnacle Manufacturing Company**  
**Income Statement - Solar-Electro**  
**Division**  
**For the Year Ended December 31**

	<b>2007</b>	<b>2007</b>	<b>2006</b>	<b>2006</b>	<b>2005</b>	<b>2005</b>
	<b>\$ Value</b>	<b>% of Div.</b>	<b>\$ Value</b>	<b>% of Div. Sales</b>	<b>\$ Value</b>	<b>% of Div</b>
		<b>Sales</b>				<b>Sales</b>
Sales	22,381,936	100.00%	20,073,876	100.00%	18,373,763	100.00%
Sales Returns and Allowances	43,430	0.19%	35,208	0.18%	36,494	0.20%
Cost of Sales*	<u>16,311,635</u>	72.88%	<u>14,687,724</u>	73.17%	<u>13,484,900</u>	73.39%
Gross Profit	6,026,871	26.93%	5,350,944	26.65%	4,852,369	26.41%
<b>OPERATING EXPENSES-Allocated</b>						
Salaries-Management	347,907	1.55%	323,147	1.61%	294,370	1.60%
Salaries-Office	48,064	0.21%	40,146	0.20%	39,356	0.21%
Licensing and certification fees	19,868	0.09%	14,025	0.07%	12,478	0.07%
Security	83,967	0.38%	86,281	0.43%	80,853	0.44%
Insurance	14,212	0.06%	14,054	0.07%	13,917	0.08%
Group insurance benefits	3,641	0.02%	4,015	0.02%	3,722	0.02%
Advertising	24,783	0.11%	24,087	0.12%	21,249	0.12%
Business publications	900	0.00%	497	0.00%	66	0.00%
Property taxes	3,360	0.02%	24,087	0.12%	22,533	0.12%
Bad debts	124,019	0.55%	144,706	0.72%	131,590	0.72%
Amortization expense	915,513	4.09%	628,135	3.13%	560,167	3.05%
Accounting fees	<u>40,824</u>	0.18%	<u>40,999</u>	0.20%	<u>39,122</u>	0.21%
Total operating expenses-Allocated	1,627,058	7.26%	1,344,179	6.69%	1,219,423	6.64%
<b>OPERATING EXPENSES-Direct</b>						
Salaries-Sales	2,256,643	10.08%	2,204,049	10.98%	2,031,351	11.06%
Wages-Warehouse	716,283	3.20%	722,659	3.60%	702,011	3.82%
Payroll benefits	492,677	2.20%	397,542	1.98%	371,231	2.02%
Rent- Warehouse	107,026	0.48%	100,370	0.50%	94,386	0.51%
Telephone	4,868	0.02%	6,025	0.03%	7,315	0.04%
Utilities	54,837	0.25%	36,131	0.18%	35,190	0.19%
Postage	7,340	0.03%	18,069	0.09%	19,404	0.11%
Linen service	2,653	0.01%	1,367	0.01%	1,688	0.01%
Repairs and maintenance	35,120	0.16%	36,131	0.18%	36,241	0.20%
Cleaning service	21,300	0.10%	11,039	0.05%	10,014	0.05%
Legal service	276,825	1.24%	42,156	0.21%	31,925	0.17%
Fuel	55,555	0.25%	46,171	0.23%	35,851	0.20%
Travel and entertainment	18,729	0.08%	14,054	0.07%	12,889	0.07%
Pension expense	35,301	0.16%	31,182	0.16%	15,815	0.09%
Office supplies	22,849	0.10%	20,073	0.10%	21,946	0.12%
Miscellaneous	<u>241,764</u>	1.08%	<u>39,433</u>	0.20%	<u>50,811</u>	0.28%
Total operating expenses-Direct	4,349,770	19.44%	3,726,451	18.57%	3,478,068	18.94%
Total operating expenses	<u>5,976,828</u>	26.70%	<u>5,070,630</u>	25.26%	<u>4,697,491</u>	25.58%
<b>OPERATING INCOME</b>	<u>50,043</u>	0.23%	<u>280,314</u>	1.39%	<u>154,878</u>	0.83%

\* Details of manufacturing expenses are not included in this schedule.



**Pinnacle Manufacturing Company**  
**Income Statement - Machine-Tech**  
**Division**  
**For the Year Ended December 31**

	<b>2007</b>	<b>2007</b>	<b>2006</b>	<b>2006</b>	<b>2005</b>	<b>2005</b>
	<b>\$ Value</b>	<b>% of Div. Sales</b>	<b>\$ Value</b>	<b>% of Div. Sales</b>	<b>\$ Value</b>	<b>% of Div. Sales</b>
Sales		100.00%		100.00%	5,299,644	100.00%
Sales Returns and Allowances	5,670,915		5,790,017		13,901	0.26%
Cost of Sales*	9,518	0.17%	13,411	0.23%	<u>1,830,458</u>	34.54%
	<u>1,824,751</u>		<u>1,993,730</u>			
Gross Profit		67.65%		65.34%	3,455,285	65.20%
	3,836,646		3,782,876			
<b>OPERATING EXPENSES-Allocated</b>						
Salaries-Management	94,153	1.66%	93,206	1.61%	84,906	1.60%
Salaries-Office	13,008	0.23%	11,582	0.20%	11,354	0.21%
Licensing and certification fees	32,315	0.57%	27,465	0.47%	24,435	0.46%
Security	22,732	0.40%	24,888	0.43%	23,322	0.44%
Insurance	3,851	0.07%	4,055	0.07%	4,016	0.08%
Group insurance benefits	818	0.01%	958	0.02%	889	0.02%
Advertising	6,708	0.12%	6,948	0.12%	6,129	0.12%
Business publications	1,958	0.03%	1,864	0.03%	246	0.00%
Property taxes	1,490	0.03%	6,948	0.12%	6,500	0.12%
Bad debts	34,296	0.60%	41,063	0.71%	37,341	0.70%
Amortization expense	247,813	4.37%	181,217	3.13%	161,609	3.05%
Accounting fees	<u>11,074</u>	0.20%	<u>11,828</u>	0.20%	<u>11,286</u>	0.21%
Total operating expenses-Allocated	470,216	8.29%	412,022	7.11%	372,033	7.01%
<b>OPERATING EXPENSES-Direct</b>						
Salaries-Sales	204,801	3.61%	211,855	3.66%	195,255	3.68%
Wages Rental	506,186	8.93%	546,228	9.43%	500,630	9.45%
Wages-Mechanics		20.21%		21.23%	1,159,488	21.88%
	1,146,126		1,229,015			
Wages-Warehouse	193,851	3.42%	208,437	3.60%	202,481	3.82%
Garbage collection	28,458	0.50%	27,313	0.47%	33,017	0.62%
Payroll benefits	143,924	2.54%	114,664	1.98%	107,075	2.02%
Rent- Warehouse	28,949	0.51%	28,949	0.50%	27,223	0.51%
Telephone	1,823	0.03%	2,349	0.04%	2,852	0.05%
Utilities	14,837	0.26%	10,419	0.18%	10,148	0.19%
Postage	4,846	0.09%	5,218	0.09%	5,604	0.11%
Linen service	596	0.01%	321	0.01%	397	0.01%
Repairs and maintenance	9,689	0.17%	10,536	0.18%	10,568	0.20%
Cleaning service	3,348	0.06%	3,185	0.06%	2,889	0.05%
Legal service	11,658	0.21%	12,161	0.21%	9,209	0.17%
Fuel	15,036	0.27%	13,323	0.23%	10,345	0.20%
Travel and entertainment	5,072	0.09%	4,055	0.07%	3,719	0.07%
Pension expense	6,554	0.12%	10,203	0.18%	5,175	0.10%
Office supplies	6,188	0.11%	5,791	0.10%	6,331	0.12%
Miscellaneous	<u>8,386</u>	0.15%	<u>4,622</u>	0.08%	<u>5,956</u>	0.11%
Total operating expenses-Direct		41.29%		42.30%	2,298,362	43.36%
	2,340,328		2,448,644			
Total operating expenses		49.58%		49.41%	<u>2,670,395</u>	50.37%
	<u>2,810,544</u>		<u>2,860,666</u>			
<b>OPERATING INCOME</b>		18.07%		15.93%	<u>784,890</u>	14.83%
	<u>1,026,102</u>					

\* Details of manufacturing expenses are not included in this schedule.

For disaggregated information it is best to ignore the allocated expenses.

**Account Balance Estimate of \$ Amount of Potential Misstatement**

*Solar Electro:*

Payroll benefits	Increased almost \$100,000 without a similar sized increase in salary and wages. Payroll benefits in Welburn decreased while salary and wages increased in this division. Potential misallocation between divisions.
Legal Service	Large increase may be indicative of other issues affecting disclosures and asset or liability valuation.
Miscellaneous	\$200,000 increase needs investigation.

*Welburn*

\$120,000 increase in warehouse rent even though there is no evidence of any change in facilities.

- e. Both the companywide and the divisional income statements are useful, but for different purposes. The companywide information is useful for identifying material fluctuations in the financial statements. However, the disaggregated information is more helpful in identifying the source of the fluctuations.

f.

**Estimate of Potential Understatement in Allowance**

<b>A/R Turnover</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>
Sales	149,245	137,580	125,814
Average accounts receivable	9,247	7,888	7,582
Turnover	16.1	17.4	16.6

**Days Sales Outstanding**

365	365	365	365
Turnover	16.1	17.4	16.6
<b>Days</b>	22.6	20.9	22.0

**Allowance as a Percentage of Gross Receivables**

Allowance	699	699	682
Gross Receivables	10,300	8,194	7,582
<b>Percentage</b>	6.8%	8.5%	9.0%

**Potential understatement in allowance**

Suggested percent	9.5%	Estimate based on decrease in turnover
Gross accounts receivable	10,300	
Suggested allowance	979	
Actual Allowance	699	
<b>Potential understatement</b>	<b>280</b>	

## Chapter 8

### Integrated Case Application—Pinnacle Manufacturing: PART II

a. Acceptable Audit Risk and Engagement Risk Issues:

*External users' reliance on financial statements:*

1. The company is privately held, but there is a large amount of debt, therefore the financial statements will be used fairly extensively. Also, management is considering selling the Machine-Tech division, which has the potential to result in extensive use of the statements by the buyers.
2. Item 4 in the planning phase indicates plans for additional debt financing.

As both of these items result in potential additional users to the financial statements, they have the effect of reducing audit risk.

*Likelihood of financial difficulties:*

1. The solar power engine business revolves around constantly changing technology, thus making it inherently more risky than other businesses, with a better chance of subsequent bankruptcy. Item 1 in the planning issues raises a concern about the viability of the Solar-Electro division, but not necessarily the entire company.
2. The conclusion in Part I of the case was that the likelihood of financial failure is low, even considering the issue with Solar-Electro.
3. Item 7 in the planning phase indicates there is a debt covenant requiring a current ratio above 2.0 and a debt-to-equity ratio below 1.0. The current ratio has fallen below 2.0. This could result in the loan being called unless a waiver of the loan covenant is granted, or that management may have a bias towards misstating the financial statements in favour of increasing the debt-to-equity ratio.

Overall, there seems to be little likelihood of financial failure, unless the company is unable to refinance the loan that relates to Item 7.

*Management integrity:*

No major issue exists that would cause the auditor to question management integrity, but the auditor should have done extensive client acceptance procedures before accepting the client. It is possible that Item 6 in the planning phase, turnover of internal audit personnel, could be intentional and increases the risk of fraudulent financial reporting.

- b. Acceptable audit risk is likely to be medium to low because of the factors listed in Part A, especially the planned increase in financing and the potential violation of the debt covenant agreement. Some might prefer the low acceptable risk because it is a first year audit.

- c. We look at inherent risks by examining each of the 11 items in the planning phase.
1. No effect on inherent risk. There is a potential effect on going concern of the division, which was discussed in Part A.
  2. The primary concern is the possibility of obsolete inventory, which affects the valuation of inventory at the lower of cost or market.  
Accounts Affected: Inventory, cost of good sold
  3. There is a potential related party transaction, which could affect the valuation of the transaction and may require disclosure as a related party transaction.  
Accounts Affected: Manufacturing equipment, footnote disclosures
  4. No effect on inherent risk
  5. There is a potential related party transaction, which could affect the valuation of the transaction and may require disclosure as a related party transaction.  
Accounts Affected: Repairs and maintenance expense and accounts payable.
  6. Although this does not directly affect inherent risk, it is possible that turnover of internal audit personnel could be intentional (for example, due to poor attitudes towards internal audit by management) and increases the risk of fraudulent financial reporting. The turnover may also affect the auditor's assessment of control risk.  
Accounts Affected: All accounts
  7. In addition to affecting acceptable audit risk, the auditor should be concerned about the risk of fraudulent financial reporting due to the incentive to make certain that all debt covenants have been met.  
Accounts Affected: All accounts
  8. A receivable outstanding for several months from a customer making up 15% of the company's outstanding accounts receivable balance may indicate a major collection problem, which could result in an understatement of the allowance for uncollectible accounts.  
Accounts Affected: Accounts receivable, bad debt expense, allowance for uncollectible accounts
  9. Inherent Risk: An ongoing dispute with the Internal Revenue Service may require an adjustment to income tax liability or a disclosure in footnotes for a contingency, depending on the status of the dispute.  
Accounts Affected: Income tax expense and income taxes payable

10. This situation involves a related party transaction (Solar-Electro borrowed money from the Welburn division). Because this transaction was not conducted with an outside party, it is possible that the related receivable and payable might not have been properly eliminated on Pinnacle's consolidated financial statements.

Accounts Affected: Notes payable, notes receivable, interest expense and interest income.

11. This situation involves a nonroutine transaction where there is a risk that materials, labor and/or overhead are incorrectly applied to the property accounts.

Accounts Affected: Property accounts, inventory and cost of sales.

*Conclusion:* Overall, the auditor may conclude that inherent risks are moderate to high for the accounts affected. In particular, if management has not clearly disclosed the related party transactions, the auditor needs to investigate whether there are additional related party transactions.

## Chapter 10

### Integrated Case Application—Pinnacle Manufacturing: Part III

Following are control risk matrices and related notes that are used to direct a discussion of the requirements of the case. It should be understood that judgment is a critical element in this case, and accordingly, there often is no single right answer.

Computer-prepared matrices using Excel are contained on the Companion Website and on the Instructor's Resource CD-ROM, which is available upon request. They are essentially the same as the matrices on the next two pages.

b. 1. Questions to be asked pertaining to access controls:

- which employees have access to which functions in the purchasing and accounts payable information systems?
- how many different levels of passwords are there in the information systems?
- how are passwords and user identification codes assigned? who approves or checks these?
- is physical access to computer equipment restricted?
- how frequently are passwords changed?

Other questions could be asked, but would focus around the quality of the passwords, the type of access that is provided with the passwords, and whether password systems are monitored.

2. Combined controls are those that require information systems to effectively function. Automated controls are those that pertain only to the information systems.

Examples of automated controls that might be present at the company and that potentially could be relied upon (refer to the flowchart included with Pinnacle III):

- calculations in the purchase order (quantity times unit price)
- additions in the accounts payable master file (previous balance plus additional invoice amounts to result in the new accounts payable balance for a particular vendor)
- sorting of transactions to indicate which ones are due for payment
- cheque or payment preparation based upon stating which invoices or payments are to be paid

Examples of potential combined controls would include:

- review of outstanding purchase order list by a competent individual to determine which items should be ordered
- review of cash requirements report by a competent individual to determine which invoices should be paid

**PINNACLE MANUFACTURING: Part III**  
**Control Risk Matrix – Acquisitions**

<b>Transaction-Related Audit Objective</b>  <b>Internal Controls</b>	<b>Recorded acquisitions are for goods and services received (occurrence).</b>	<b>Existing acquisition transactions are recorded (completeness).</b>	<b>Recorded acquisition transactions are stated at the correct amounts (accuracy).</b>	<b>Recorded acquisition transactions are properly included in the master files, and are properly summarized (posting and summarization).</b>	<b>Acquisition transactions are properly classified (classification).</b>	<b>Acquisition transactions are recorded on the correct dates (timing).</b>
1. Required use of PO and receiving report with check of completeness	C					
2. Proper approval	C		C			
Segregation of functions	C					
4. Cancellation of documents	C					
5. Prenumbering of documents with accounting for sequence		C				
6. Internal verification of documents/records	C		C	C	C	C
7. Use of chart of accounts					C	
8. Procedures requiring prompt processing						C
9. Monthly reconciliation of A/P master file with general ledger				C		
Assessed control risk	Low	Low	Low	Low	Low	Low

**PINNACLE MANUFACTURING: Part III**  
**Control Matrix - Cash Disbursements**

<b>Transaction-Related Audit Objectives</b>  <b>Internal Controls</b>	<b>Recorded cash disbursements are for goods and services actually received (occurrence).</b>	<b>Existing cash disbursements transactions are recorded (completeness).</b>	<b>Recorded cash disbursement transactions are stated at the correct amounts (accuracy).</b>	<b>Recorded cash disbursement transactions are properly included in the master file and are properly summarized (posting and summarization).</b>	<b>Cash disbursement transactions are properly classified (classification).</b>	<b>Cash disbursement transactions are recorded on the correct dates (timing).</b>
1. Segregation of functions	C					
2. Review of support, signing of checks by authorized person	C					
3. Prenumbered checks; accounted for		C				
4. Use of chart of accounts					C	
5. Procedures for prompt recording						C
6. Monthly reconciliation of A/P master file with G/L				C		
Deficiencies 1. Lack of an independent bank		W	W			



**PINNACLE MANUFACTURING: Part III  
Control Matrix - Cash Disbursements**

<b>Transaction-Related Audit Objectives</b>  <b>Internal Controls</b>	<b>Recorded cash disbursements are for goods and services actually received (occurrence).</b>	<b>Existing cash disbursements transactions are recorded (completeness).</b>	<b>Recorded cash disbursement transactions are stated at the correct amounts (accuracy).</b>	<b>Recorded cash disbursement transactions are properly included in the master file and are properly summarized (posting and summarization).</b>	<b>Cash disbursement transactions are properly classified (classification).</b>	<b>Cash disbursement transactions are recorded on the correct dates (timing).</b>
1. Segregation of functions	C					
reconciliation (Done by Treasurer)						
2. Lack of internal verification of documentation package by cash disbursements clerk.	W		W		W	
3. Lack of internal verification of key entry into cash disbursements file.	W	W	W			
Assessed control risk	Medium	Medium	High	Low	Low	Low

### Notes to Pinnacle Manufacturing: Part III

1. The purpose of Part III is to:
  - (a) have the students develop specific transaction-related audit objectives for a cycle,
  - (b) obtain controls from a flowchart description,
  - (c) relate controls to objectives,
  - (d) evaluate a set of controls as a system in the context of the greater control environment.
  
2. Control is quite good for acquisitions. If misstatements in acquisitions occur, they will result from the incorrect application of controls, not their absence. This demonstrates the inherent deficiencies in any control system. It explains the reasons why some misstatements were found last year. However, they were not material. It also indicates the need for tests of controls and substantive tests of details of balances and/or transactions.

Controls for cash disbursements are not nearly as good, given the three deficiencies. This provides an opportunity to discuss both fraud and errors. Given the deficiencies, there is potential for fraud in the cash cycle.
  
3. It is appropriate to use the matrices to consider whether all controls shown are important to both the client and to the auditor. Is it necessary to have all controls (e.g., prenumbering of requisitions)? Are the controls costly (e.g., internal verification of *all* acquisitions)? Should all controls be tested (e.g., cancellation of documents)?

**Chapter 12**  
**Integrated Case Application—Pinnacle Manufacturing: Part IV**

a., b., and c.

#	a. Key Internal Control	a. Transaction Related Audit Objectives	b. Test of Control	c. Substantive Test of Transaction
1.	Segregation of the purchasing, receiving, and cash disbursements functions.	Recorded acquisitions are for goods and services actually received (occurrence). Recorded cash disbursements are for goods and services actually received (occurrence).	Discuss segregation of duties with personnel and observe activities.	Trace entries in the acquisitions journal to related vendors' invoices, receiving reports, and purchase orders.
2.	Independent reconciliation of the monthly bank statements.	Existing cash disbursement transactions are recorded (completeness). Recorded cash disbursement transactions are stated at the correct amounts (accuracy).	Examine file of completed bank reconciliations.	Reconcile recorded cash disbursements with the cash disbursements on the bank statement (proof of cash disbursements).
3.	Use of prenumbered voucher packages, properly accounted for.	Existing acquisition transactions are recorded (completeness).	Account for a sequence of voucher packages.	Trace from a file of vendors' invoices to the acquisitions journal.
4.	Use of prenumbered cheques, properly accounted for.	Existing cash disbursement transactions are recorded (completeness).	Account for a sequence of cheques.	Reconcile recorded cash disbursements with the cash disbursements on the bank statement (proof of cash disbursements).
5.	Use of prenumbered receiving reports, properly accounted for.	Existing acquisition transactions are recorded (completeness).	Account for a sequence of receiving reports.	Trace from a file of receiving reports to the acquisitions journal.
6.	Internal verification of document package before cheque preparation.	Recorded acquisitions are for goods and services actually received (occurrence). Recorded acquisitions are stated at the correct amounts (accuracy). Acquisition transactions are properly included in the master files, and are properly summarized (posting and summarization). Acquisitions are properly classified (classification).	Examine document package for indication of internal verification.	Examine supporting documents for propriety and recompute information on the supporting documents.

		Acquisitions are recorded on the correct dates (timing).		
7.	Review of supporting documents and signing of cheques by an independent, authorized person.	Recorded cash disbursements are for goods and services actually received (occurrence).	Examine cheques for signature.	Trace the cancelled cheque to the related acquisitions journal entry and examine for payee name and amount.
8.	Cancellation of documents prior to signing of the cheque.	Recorded acquisitions are for goods and services actually received (occurrence).	Examine indication of cancellation.	Examine the acquisitions journal for duplicate entries to a vendor.
9.	Monthly reconciliation of the accounts payable master file with the general ledger.	Acquisition transactions are properly included in the master files, and are properly summarized (posting and summarization).  Cash disbursement transactions are properly included in the master file, and are properly summarized (posting and summarization).	Inquire of client about monthly reconciliation procedures.	Foot acquisitions and cash disbursements journals and trace postings to the general ledger and accounts payable and inventory master files.

d.

***Acquisitions Substantive Tests of Transactions***

Note: More than one audit procedure is listed for certain objectives even though the requirement is for only one procedure.

**Transaction-Related Audit Objective**

**Substantive Audit Procedures**

---

<b>Occurrence</b>	<ul style="list-style-type: none"><li>• Compare prices on vendor invoices with approved price limits established by management.</li><li>• Review the acquisitions journal, general ledger, and accounts payable master file for large or unusual amounts.</li></ul>
<b>Completeness</b>	<ul style="list-style-type: none"><li>• Trace a sample of receiving reports to the acquisitions journal.</li><li>• Trace from a file of vendors' invoices to the acquisitions journal.</li><li>• Trace from additions in perpetual inventory records to recorded acquisitions.</li></ul>
<b>Accuracy</b>	<ul style="list-style-type: none"><li>• Compare amounts for entries in acquisitions journal to related vendors' invoices, purchase orders and receiving reports.</li><li>• Recompute information on vendor invoices.</li><li>• Compare prices on vendor invoices with approved price limits established by management.</li></ul>
<b>Posting and Summarization</b>	<ul style="list-style-type: none"><li>• Trace individual entries in accounts payable master file to acquisitions journal.</li></ul>
<b>Classification</b>	<ul style="list-style-type: none"><li>• Examine vendors' invoices for proper classification.</li><li>• Compare classification with chart of accounts by reference to vendors' invoices.</li></ul>
<b>Timing</b>	<ul style="list-style-type: none"><li>• Compare dates of receiving reports and vendors' invoices with dates in the acquisitions journal.</li></ul>

---

14-25

e.

***Cash Disbursements Substantive Tests of Transactions***

Note: More than one audit procedure is listed for certain objectives even though the requirement is for only one procedure.

**Transaction-Related Audit Objective**

**Substantive Audit Procedures**

---

<b>Occurrence</b>	<ul style="list-style-type: none"><li>• Trace cancelled cheque numbers in the cash disbursements journal to related cancelled cheques and examine for payee, name, and amount.</li><li>• Examine cancelled cheque for authorized signature, proper endorsement, and cancellation by the bank.</li><li>• Review the cash disbursements journal, general ledger, and accounts payable master file for large or unusual amounts.</li><li>• Trace cancelled cheque to the related acquisitions journal entry and examine for payee name and amount.</li></ul>
<b>Completeness</b>	<ul style="list-style-type: none"><li>• Trace entries in acquisitions journal to subsequent payment in cash disbursements journal.</li></ul>
<b>Accuracy</b>	<ul style="list-style-type: none"><li>• Compare cancelled cheques with the related acquisitions journal and cash disbursements journal entries.</li><li>• Recompute cash discounts.</li></ul>
<b>Posting and Summarization</b>	<ul style="list-style-type: none"><li>• Trace individual entries in accounts payable master file to cash disbursements journal.</li></ul>
<b>Classification</b>	<ul style="list-style-type: none"><li>• Compare classification with chart of accounts by reference to vendors' invoices and acquisitions journal.</li></ul>
<b>Timing</b>	<ul style="list-style-type: none"><li>• Compare dates on cancelled cheques with cash disbursements journal.</li><li>• Compare dates on cancelled cheques with the bank cancellation date.</li></ul>

---

f.

Note: Student answers will depend on answers in requirements b through f.

### **General**

1. Discuss the following items with client personnel and observe activities:
  - a. Segregation of duties
  - b. Monthly reconciliation of accounts payable master file with the general ledger.
2. Test journal summarization and posting for a test month:
  - a. Foot acquisition journal and trace postings to the general ledger and accounts payable and inventory master files.
  - b. Foot cash disbursements journal and trace postings to general ledger and accounts payable master file.
3. Examine file of completed bank reconciliations.
  4. Account for a sequence of cancelled cheques.
5. Reconcile recorded cash disbursements with cash disbursements on the bank statement.
6. Review the acquisitions journal, cash disbursements journal, general ledger, and accounts payable master file for large or unusual amounts.
7. Examine underlying documents (vendors' invoices, receiving reports, purchase orders, and purchase requisitions) for indication of cancellation and reasonableness.

### **Acquisitions Audit Program**

8. Trace entries in the acquisitions journal to related vendors' invoices, receiving reports, and purchase orders.
  - a. Examine indication of internal verification of dates, unit costs, prices, extensions and footings, account classification, recording in the journal, and posting and summarization.
  - b. Examine supporting documents for propriety.
  - c. Compare prices on vendors' invoices with approved price limits established by management.
  - d. Recompute information on vendors' invoices.
  - e. Examine vendors' invoices for proper classification.
  - f. Compare dates on recorded acquisitions with dates on receiving reports and vendors' invoices.
  - g. Examine document package for indication of internal verification.
9. Account for a sequence of receiving reports and voucher packages.
10. Trace a sample of receiving reports and vendors' invoices to the acquisitions journal.

## Cash Disbursements

11. Select a sample of cancelled cheques and:
  - a. Trace cancelled cheque to the related cash disbursements journal entry and acquisitions journal entry and examine for payee, name, amount, and date.
  - b. Examine cheque for signature, proper endorsement, and cancellation by the bank.
  - c. Compare date on cancelled cheque with bank cancellation date.
  - d. Recompute cash discounts.



## Chapter 13

### Integrated Case Application—Pinnacle Manufacturing: Part V

a. Two assertions are listed as having a high risk of material misstatement. The student is asked to identify the risk – i.e. what could go wrong, with each of these assertions.

#### Completeness:

1. Some cash disbursements transactions might not be recorded. Practically, this means that either unauthorized payments might be made, duplicate payments might be made for the same invoice (and not recorded), or other forms of unauthorized payments could be made.

2. Some acquisitions transactions might not be recorded. This could mean that a purchase order or an invoice is not recorded. If a purchase order is not recorded, then purchases could be initiated without proper tracking, resulting in the order of goods that the company does not need, or for personal purposes. If an invoice is not recorded, it is likely that the supplier will request payment by sending an additional invoice when payment is late.

#### Timing or Cut-off:

1. Some cash disbursements transactions may be recorded in the incorrect period. Given the potential for violating a debt covenant, management may be inclined to want to overstate cash, so the bias would be that cash disbursements could actually be for the current year but recorded in the subsequent year.

2. Some acquisitions transactions may be recorded in the incorrect period. In line with the above bias, management might want to understate expenses for the current year, overstating income. This means that invoices could be received but recorded in the subsequent year rather than in the current year.

b.

<b>Audit step</b>	<b>Sampling applies?</b>	<b>Reason sampling applies or does not apply</b>	<b>Type of sampling to be used</b>	<b>Reason for type of sampling selected</b>
<p>1. Discuss the following items with client personnel and observe activities:</p> <p>1.1 Segregation of duties</p> <p>1.2 Use of an adequate chart of accounts</p> <p>1.3 Monthly reconciliation of accounts payable master file with general ledger balance in accounts payable</p>	No	<p>Discussion deals with asking about procedures, and occurs once.</p> <p>Observation is done at a point in time, and is not normally sampled.</p>	N/A	
<p>2. Foot acquisitions and cash disbursements journals for a test month and trace postings to the general ledger.</p>	Yes	The auditor needs to select the month that will be used for the audit test.	Haphazard	The auditor will use professional judgment to select one of the twelve months of the year for the sample.
<p>3. Examine file of completed bank reconciliations.</p>	No	The auditor will be looking at all of the bank reconciliations.	N/A	
<p>4. Account for a sequence of 100 cancelled cheques.</p>	Yes	The auditor must select which 100 cancelled cheques will be accounted for.	Block sample combined with haphazard	The auditor will use professional judgment to decide which 100 cheques to track (the haphazard portion), while the actual 100 cheques constitute the block sample.
<p>5. Reconcile recorded cash disbursements with cash disbursements on the bank statement for a test month.</p>	Yes	The auditor needs to select the month that will be used for the audit test.	Haphazard	The auditor will use professional judgment to select one of the twelve months of the year for the sample.
<p>6. Trace entries in the acquisitions transaction file to related vendors' invoices, receiving reports, and</p>	Yes	If the auditor intends to rely upon the controls that affect these actions, then transactions covering the entire period of audit (normally a year) need to be examined.	Attribute sampling or MUS (monetary unit sampling) if dual-purpose tests are considered	Attribute sampling applies to non-dollar tests (such as examining internal verification), while the MUS will allow the auditor to better quantify the potential

purchase orders. Note that this row applies to audit steps 6 and 6.1 to 6.7				effect of errors. The auditor will likely pick one sample using MUS and apply the entire list of audit tests.
7. Account for a sequence of purchase orders and voucher document packages.	Yes	The auditor must select how many and which blocks of purchase orders and voucher document packages will be accounted for.	Block sample combined with haphazard	The auditor will use professional judgment to decide how many documents to track (the haphazard portion), while the actual transactions constitute the block sample.
8. Trace a sample of receiving reports to the acquisitions journal.	Yes	If the auditor intends to rely upon the controls that affect these actions, then transactions covering the entire period of audit (normally a year) need to be examined.	Attribute sampling	Attribute sampling applies to non-dollar tests (such as tracing the receiving quantities and details) to the purchase records
9. Select a sample of cancelled cheques and conduct audit steps 9.1 to 9.4	Yes	If the auditor intends to rely upon the controls that affect these actions, then transactions covering the entire period of audit (normally a year) need to be examined.	Attribute sampling or MUS (monetary unit sampling) if dual-purpose tests are considered	Attribute sampling applies to non-dollar tests (such as examining cheque for signature and endorsement) while the MUS will allow the auditor to better quantify the potential effect of errors. The auditor will likely pick one sample using MUS and apply the entire list of audit tests.

c.

<b>Audit Step</b>	<b>Potential error or exception</b>
10. Foot acquisitions and cash disbursements journals for a test month and trace postings to the general ledger.	- adding the acquisitions and cash disbursements could result in a different amount than listed in those journals - the total in the journals disagrees with the posting in the general ledger for that period
11. Account for a sequence of 100 cancelled cheques.	- one or more cheques is missing from the sequence - one or more cheque numbers is duplicated (used more than once)
12. Reconcile recorded cash disbursements with cash disbursements on the bank statement for a test month.	- recorded cash disbursements disagree with the bank statement - there are amounts on the cash disbursements listing that are not on the bank statement or vice versa
6.1 Examine indication of internal verification of dates, unit costs, prices, extensions and footings, account classifications, recording in the	- indication of internal verification is absent on the selected invoices

transaction file, and posting and summarization.	
6.2 Examine supporting documents for propriety.	<ul style="list-style-type: none"> <li>- payments are made and there are no supporting documents</li> <li>- supporting documents disagree with the payment amount</li> <li>- supporting documents do not provide valid support for the payment</li> </ul>
6.3 Compare prices on vendors' invoices with approved price limits established by management.	- prices on vendors' invoices exceed approved price limits established by management
6.4 Recompute information on vendors' invoices.	- there are calculation errors on vendors' invoices that were not detected
6.5 Examine vendors' invoices for proper account classification.	- vendors' invoices were allocated to the incorrect general ledger accounts
6.6 Compare dates of recorded acquisitions with dates on receiving reports.	- dates of recorded acquisitions are not the same as the receiving reports
6.7 Examine voucher document package for indication of internal verification.	- indication of internal verification is absent on the selected voucher packages
13. Account for a sequence of purchase orders and voucher document packages.	<ul style="list-style-type: none"> <li>- one or more purchase orders is missing from the sequence</li> <li>- one or more purchase order numbers is duplicated (used more than once)</li> <li>- one or more voucher numbers is missing from the sequence</li> <li>- one or more voucher numbers is duplicated (used more than once)</li> </ul>
9.1 Trace the cancelled cheque to the related cash disbursements journal entry and date.	<ul style="list-style-type: none"> <li>- cheque amounts disagree with the bank cash disbursements amounts or the date is different</li> <li>- there are cheques present that are not on the cash disbursements listing or cheques are duplicated on the cash disbursements listing</li> </ul>
9.2 Examine cheque for signature, authorized endorsement, and cancellation by the bank.	<ul style="list-style-type: none"> <li>- cheques are signed by individuals who are not authorized to sign cheques</li> <li>- endorsements on the back of the cheque do not match the payee</li> <li>- cheques have multiple endorsements</li> <li>- cheques are not stamped by the bank as cancelled</li> </ul>
9.3 Compare date on cancelled cheque with bank cancellation date.	- there is a large time lag between the date of the cheque and the bank cancellation date
9.4 Recompute cash discounts.	<ul style="list-style-type: none"> <li>- discounts were not taken when they were entitled to take discounts</li> <li>- the discount amount is incorrect</li> </ul>