illustrative system for credit sales transactions *(continued)*

the computer enters it into an open order file and a copy of the sales order form is produced on a printer in the sales order department and sent to the customer. When an order is not accepted, a message is displayed on the terminal indicating the reason for the rejection.

The approved sales order is electronically forwarded to the warehouse as authorization to release goods to shipping. The warehouse completes a packing slip and forwards goods to shipping. In shipping, personnel first make an independent check on agreement of the goods received with the accompanying sales order form. They then use their on-line terminals and a shipping program to retrieve the corresponding sales order from the open order file and add appropriate shipping data. The perpetual inventory system is also updated for the shipment of goods. Next the computer transfers the transaction from the open order file to a shipping file and produces a prenumbered shipping document on the printer in the shipping department. A report of unfilled orders and back orders is generated daily.

Sales invoices are automatically generated based on shipped goods. The computer checks vendor information and data on goods shipped against data entered in sales and shipping. The computer prices the sales invoice based on information on the sales order and checks the numerical accuracy of the sales invoice. The computer also checks dates shipped with dates on the sales invoice. As each billing is completed, the computer enters it into a sales transaction file. After all the transactions in the batch have been processed, the billing program compares the total invoices with the total shipments for the day.

The transaction file is processed and posted to the sales transaction file, the accounts receivable master file, and the general ledger master file. Run-to-run totals compare beginning balances plus processed transactions with ending balances immediately prior to posting the transactions. Exceptions are printed on an exception report, and these transactions are held in a suspense file to be cleared by the billing supervisor.

The program also produces monthly statements. All customer inquiries on monthly statements are directed to the controller's office for followup. A separate program also prints daily sales reports with sales, gross margins, and inventory-on-hand by product for management review. Management must also coordinate followup on all past-due receivables with the credit department.

LEARNING CHECK

14-7 a. State the functions that apply to sales transactions.
b. For each sales function, indicate (1) the department that performs the function, and (2) the principal document or record, if any, produced in performing the function.

14-8 If the auditor plans to assess control risk as low for a revenue cycle assertion based on programmed control procedures, discuss three types of controls that should be tested by the auditor and explain why each is important to the control risk assessment.

14-9 For each of the following potential misstatements for sales transactions, indicate a potential programmed control procedure and a possible computer-assisted audit technique to test the control:
a. Sales invoices may not be recorded.
b. Sales invoices may be recorded in the wrong accounting period.

c. A fictitious sales invoice, or a sales transaction for which revenue should not be recognized, is recorded.
d. Sales are made without credit approval.
e. A sales invoice has incorrect quantities or prices.
f. Sales invoices may not be posted or may be journalized.
g. Sales invoices may be posted to the wrong customer accounts.
h. Sales invoices may be recorded in the wrong time period.

14-10 Discuss several management controls that may help ensure that all sales transactions are properly recorded.

KEY TERMS

Accounts receivable master file, p. 640
Accounts receivable subsidiary ledger, p. 640
Authorized price list, p. 640
Authorizing sales, p. 640
Bill of lading, p. 640
Customer master file, p. 640
Customer monthly statement, p. 640
Customer order, p. 640
Delivery of goods and services, p. 640
Packing slip, p. 640
Recording sales, p. 640
Sales invoice, p. 640
Sales journal, p. 640
Sales order, p. 640
Sales transactions file, p. 640
Shipping document, p. 640

CONTROL ACTIVITIES FOR CASH RECEIPTS TRANSACTIONS

Audit Decision 7

■ What should be considered in evaluating control activities for cash receipts?

Cash receipts result from a variety of activities. For example, cash is received from revenue transactions, short- and long-term borrowings, the issuance of capital stock, and the sale of marketable securities, long-term investments, and other assets. The scope of this section is limited to cash receipts from cash sales and collections from customers on credit sales. Other sources of cash receipts are discussed in the investing and financing cycles in Chapter 17, and audit strategy and procedures for cash balances are presented in Chapter 18. When evaluating internal controls over cash receipts, it is important to understand the common documents and records and the controls associated with the cash receipts functions. The following discussion outlines the necessary controls that are relevant to the audit objectives identified at the outset of the chapter.

COMMON DOCUMENTS AND RECORDS

Important documents and records used in processing cash receipts include the following:

- **Remittance advice.** Document mailed to the customer with the sales invoices to be returned with the payment showing the customer's name and account number, invoice number, and amount owed (e.g., the portion of a telephone bill returned with payment).
- **Prelist.** Listing of cash receipts received through the mail.

- **Cash count sheets.** Listing of cash and checks in a cash register. Used in reconciling total receipts with the total printed by the cash register.
- **Daily cash summary.** Report showing total over-the-counter and mail receipts received by the cashier for deposit.
- **Validated deposit slip.** Listing prepared by the depositor and stamped by the bank showing the date and total of a deposit accepted by the bank and the detail of receipts comprising the deposit.
- **Cash receipts transactions file.** Computer file of validated cash receipts transactions accepted for processing; used to update the accounts receivable master file.
- **Cash receipts journal.** Journal listing cash receipts from cash sales and collections on accounts receivable.

Reference is made to each of the above in the following sections.

FUNCTIONS AND CONTROL ACTIVITIES

The **cash receipts function**, which includes the processing of receipts from cash and credit sales, involves the following subfunctions:

- Receiving cash receipts
- Depositing cash in bank
- Recording the receipts

As in the case of credit sales transactions, segregation of duties in performing these functions is an important internal control activity. The functions, applicable control activities, and relevant assertions and specific audit objectives are explained in the following sections. Many of the controls related to receiving and depositing cash involve manual checks and balances rather than computer checks and balances. Computer controls are most effective in controlling the recording subfunction. Figure 14-7 summarizes example control procedures related to the cash receipts function.

Receiving Cash Receipts

A major risk in processing cash receipts transactions is the possible theft of cash before or after a record of the receipt is made. Thus, control procedures should provide reasonable assurance that documentation establishing accountability is created at the moment cash is received and that the cash is subsequently safeguarded.

Over-the-Counter Receipts

For over-the-counter receipts, the use of a cash register or point-of-sale terminal is indispensable. These devices provide:

- Immediate visual display for the customer of the amount of the cash sale and the cash tendered
- A printed receipt for the customer and an internal record of the transaction on a computer file or a tape locked inside the register
- Printed control totals of the day's receipts processed on the device

Figure 14-7 ■ Control Risk Considerations—Cash Receipt Transactions

Function	Potential Misstatement	Computer Control[a] *(Manual Controls in Italics)*	C2	EO2	VA2	PD2
Cash Receipts Function	Cash sales may not be registered.	*Use of cash registers or point-of-sale devices.*	P			
		Periodic surveillance of cash sales procedures.	D			
	Mail receipts may be lost or misappropriated after receipt.	*Restrictive endorsement of checks immediately on receipt.*	P			
		Immediate preparation of prelist of mail receipts.	P	P	P	
	Cash and checks received for deposit may not agree with the cash count sheets and prelist.	*Independent check of agreement of cash and checks with cash count sheets and prelist.*	D	D	D	
	Cash may not be deposited intact daily.	*Independent check of agreement of validated deposit slip with daily cash summary.*	D	D	D	
	Remittance advices may not agree with the prelist.	*Independent check of agreement of remittance advices with prelist.*	D	D	D	
	Some receipts may not be recorded.	Computer agreement of amounts journalized and posted with daily cash summary.	D		D	
	Errors may be made in journalizing receipts.	*Preparation of periodic independent bank reconciliations.*	D	D	D	D
	Receipts may be posted to the wrong customer account.	*Mailing of statements to customers.*	D	D	D	D
	Errors may be made in recording the check.	Computer comparison of information on check summary with recorded cash receipt.		D	D	D
		Independent bank reconciliation.	D	D	D	D
		Management Control				
	Cash receipts may not be recorded or may be posted to the wrong accounts.	An appropriate level of management monitors cash daily, including cash receipts, the reasonableness of the amounts, and the amount of credit to accounts receivable.	D	D	D	
		Management actively follows up on past due receivables.	D	D	D	

[a] All computer controls assume that exceptions are either printed on an exception report for followup, or an error message appears during input and the transaction cannot be processed without correction and acceptance.
P = potential control to prevent misstatement or unauthorized use of resources.
D = potential control to detect misstatement or unauthorized use of resources.

The customer's expectation of a printed receipt and supervisory surveillance of over-the-counter sales transactions helps to ensure that all cash sales are processed through the cash registers or terminals (C2). In addition, supervisors may be assigned responsibility for performing independent checks on the accuracy of cash count sheets and verifying agreement of cash on hand with the totals printed by the register or terminal (EO2, VA2). The cash, count sheets, and register or terminal-printed totals are then forwarded to the cashier's department for further processing and inclusion in the bank deposit (EO2, C2, VA2).

Mail Receipts

To minimize the likelihood of diversion of mail receipts, most companies request customers to pay by check. Some companies with a large volume of mail receipts use a **lockbox system.** A lockbox is a post office box that is controlled by the company's bank. The bank picks up the mail daily, credits the company for the cash, and sends the remittance advices and a prelisting of cash receipts to the company for use in updating accounts receivable. This system expedites the depositing of checks, permits the company to receive credit for the receipts sooner, and provides external evidence of the existence of the transactions (EO2). It also eliminates the risk of diversion of the receipts by company employees and failure to record the receipts (C2).

In companies that process their own mail receipts, mailroom clerks should (1) immediately restrictively endorse checks for deposit only (C2—increases likelihood receipts will be deposited and recorded) and (2) list the checks on a multicopy prelist. The latter may be done manually or on a computer terminal. Immediate preparation of the prelist establishes accountability for the receipts (EO2) and provides a batch or control total for use in independent checks on the completeness (C2) and accuracy (VA2) of processing. Remittance advices received with the checks, and a copy of the prelisting of cash receipts, are forwarded to accounts receivable accounting for use in updating customer accounts.

Depositing Cash in Bank

Proper physical controls over cash require that all cash receipts be **deposited intact daily.** Intact means all receipts should be deposited. This control reduces the risk that receipts will not be recorded (C2), and the resulting bank deposit record establishes the existence or occurrence of the transactions (EO2).

When the cashier receives over-the-counter and mail receipts, an independent check should be made to determine their agreement with the accompanying cash count sheets and prelist, respectively (EO2, C2, VA2). The totals for each are then entered on a daily cash summary, and the deposit is prepared. After making the deposit, the daily cash summary and validated deposit slip should be forwarded to general accounting.

Recording the Receipts

This function involves journalizing over-the-counter and mail receipts and posting mail receipts to customer accounts. Controls should ensure that only valid receipts are entered (EO2) and that all actual receipts are entered (C2) at the correct amounts (VA2).

To ensure that only valid transactions are entered, physical access to the accounting records or computer terminals used in recording should be restricted to authorized personnel. Over-the-counter receipts are generally recorded in general accounting based on the daily cash summary received from the cashier.

It is common for accounts receivable clerks to use a terminal to enter mail receipts into a cash receipts transactions file, which is subsequently used in updating both the accounts receivable and general ledger master files. To ensure the completeness (C2), accuracy (VA2), and proper classification (PD2) of recording mail receipts, the computer can check the agreement of the amounts journalized and posted with the control totals of the amounts shown on the prelists received from the mailroom or the daily cash summary and validated deposit slip received from the cashier. In addition, periodic bank reconciliations should be performed by an employee not otherwise involved in executing or recording cash transactions.

ILLUSTRATIVE SYSTEM FOR CASH RECEIPTS

As noted previously for credit sales systems, there are also many variations in systems for processing receipts. A flowchart for an illustrative system for processing mail receipts is presented in Figure 10-24 on page 455. It is suggested that the flowchart and the accompanying narrative be reviewed at this time.

CONTROL ACTIVITIES FOR SALES ADJUSTMENT TRANSACTIONS AND OTHER CONTROLS

COMMON DOCUMENTS AND RECORDS

Audit Decision 8

■ What should be considered in evaluating control activities for sales adjustment transactions?

Important documents and records used in processing sales adjustments include the following:

- **Sales return authorization.** Form showing the description, quantity, and other data pertaining to the goods that the customer is authorized to return. It serves as the basis for initiating the sales return and internal processing of the customer returns by the seller.
- **Authorization for accounts receivable write-off.** A form showing the procedures taken to attempt collection and document authorization of accounts receivable write-off.
- **Receiving report.** Report prepared on the receipt of goods from customers showing the kinds and quantities of goods received.
- **Credit memo.** Form stating the particulars of a credit to accounts receivable, including the specific items returned, prices, and amount credited. It provides the basis for recording the sales return.
- **Journal entry.** A document used to record adjustments such as an accounts receivable write-off in the general ledger.

Reference is made to each of the above in the following sections.

FUNCTIONS AND CONTROL ACTIVITIES

Sales adjustment transactions involve the following sales adjustment transactions:

- Granting cash discounts
- Granting sales returns and allowances
- Determining uncollectible accounts

In many companies, the number and dollar value of these transactions is immaterial. However, in some companies, the potential for misstatements resulting from errors and fraud in the processing of these transactions is considerable.

Granting Cash Discounts

Cash discounts are commonly granted for timely receipt of payments from customers, such as a 1 percent discount granted if cash is received within 10 days of the invoice date. Trade terms are often stated on the invoice, and the computer can test the existence and occurrence (EO3) as well as the accuracy of the discount (VA3) by comparing cash receipts date with the invoice date and recomputing the cash discount. The accuracy of total cash discounts (VA3) can be tested by comparing cash received plus the cash discount to the amount credited to accounts receivable.

Granting Sales Returns and Allowances

The possibility of recording fictitious sales adjustment transactions is a primary concern because it may be used to conceal fraud in processing cash receipts. For example, an employee might misappropriate cash received from a customer and cover up the fraud by writing a credit memo to reduce the receivable from the customer. Accordingly, control activities useful in reducing the risk of fraud focus on establishing the existence or occurrence of such transactions (EO3) and include the following:

- All sales returns should be authorized by sales management (EO3).
- Goods should be received only with a proper sales return authorization, and an independent count of goods returned should be recorded on a receiving report (EO3).
- The computer should match credit memo information with the sales order, authorization of sale return, and the receiving report (EO3) and (VA3).
- The computer should print daily reports of authorized sales returns that have not been received in the receiving department, and receivings that have not resulted in the recording of a credit memo (C2).

Furthermore, there should be adequate segregation of duties for authorizing sales returns, receiving goods, and recording credit memos. Usually management that is held accountable for financial results in a department will have the responsibility of authorizing sales adjustment transactions.

When there is the potential for material misstatements from sales adjustments transactions, the auditor should obtain an understanding of all relevant aspects of the internal control structure components and consider the factors that affect the risk of such misstatements. If sales adjustments are estimated at quarter end, management should establish controls to ensure that adjustments are made based on reliable information and that adjustments are consistent from quarter to quarter. A disclosure committee should review these estimates if they can aggregate with other adjustments to an amount material to the financial statements.

Determining Uncollectable Accounts

Good internal controls over the write-off of uncollectable accounts is important to prevent write-offs from being used to conceal fraud in processing cash receipts.

For example, an employee might misappropriate cash received from a customer and cover up the fraud by writing the customer's account off against the allowance for uncollectable accounts.

Good internal controls include:

- Authorization of all write-offs of uncollectable accounts by the treasurer's office and supported by documentation, such as correspondence with the customer or collection agencies (EO3 and VA3).
- Appropriate review of journal entries to ensure the appropriateness of the transaction (EO3, VA3, and PD3).

In addition, management should establish controls over accounting estimates such as the provision for bad debt expense. Management should ordinarily establish a process for monitoring aging and the collectability of receivables. Hindsight should be used to evaluate the adequacy of prior provisions for bad debt expense compared with subsequent receivables that go bad. It is essential that the data used to develop a provision for bad debt expense (the history of accounts written off) be reliable. In addition, a qualified and independent disclosure committee should review the allowance on a regular basis. These controls are necessary to determine the adequacy of the allowance (C3, VA5).

OTHER CONTROLS IN THE REVENUE CYCLE

The previous discussion focused on controls over transactions. It is also important to control balances and disclosures.

The primary account balance in the revenue cycle is accounts receivable. If good controls exist over credit sales, cash receipts, and sales adjustments, the accounts receivable balance should also be controlled, as it is the product of recording these transactions. Most companies control the completeness (C4), existence (EO4), and valuation of receivables at historical cost (VA4) by sending monthly statements to customers. It is important to recognize that the function of following up on issues raised by customers should be independent of accounts receivable.

Controls over the rights and obligations assertion relate to whether the company has legal claim to receivables. A company normally gives up claims to receivables when it sells the receivables or it pledges receivables as collateral. These transactions may not exist in many entities. However, if an entity sells its receivables, it should keep a documentary record of receivables that have been sold. This record should be compared with monthly statements sent by a bank or factoring company. This provides an independent check on the accuracy of the company's records (RO1).

Finally, management should establish controls over the occurrence and rights and obligations of disclosures (PD4), the completeness of disclosures (PD5), the classification and understandability of disclosures (PD6) and the accuracy and valuation of information included in disclosures (PD7). Public companies normally accomplish this task through the workings of a disclosure committee that is independent of the CFO or controller who prepares the disclosures, and includes individuals who are knowledgeable about GAAP and the transactions and disclosures relevant to the revenue cycle. If management uses spreadsheets to summarize disclosures (e.g., sales by geographic region or product line, or receivables classified as trade, related parties, or from employees) standard controls over the use of spreadsheets discussed in Chapter 10 should be in place (PD5, PD7).

REVENUE CYCLE TESTS OF CONTROLS

Audit Decision 9

■ What are the relevant aspects of tests of controls when the auditor plans to assess control risk below the maximum for the revenue cycle.

Most auditors plan to test controls that are effectively designed in the revenue cycle because of the high volume of routine transactions in this cycle. Public company auditors test controls to support an opinion on internal controls. Private company auditors will test controls that appear to be effective because of the audit efficiencies that exist with this strategy.

If the auditor plans to assess control risk as low for revenue cycle assertions covered by computer controls, he or she will usually have to:

- Test the effectiveness of general controls.
- Use computer-assisted audit techniques (CAATs) to evaluate the effectiveness of programmed controls.
- Test the effectiveness of procedures to follow up on exceptions identified by programmed controls.

For example, the auditor might use test data to determine whether expected results appear on exception reports when he or she submits

- A missing or invalid customer code.
- An invalid product code.
- An order that exceeds a customer's credit limit.
- Transactions reporting shipments in quantities different from the amount ordered (both over and under).
- Prices, vendor numbers, or other information on sales invoices that do not match information on the sales order.
- Invoice quantities that do not match quantities on shipping documents.

The auditor might also use generalized audit software or a utility program to perform sequence checks and print lists of sales orders, shipping documents, or sales invoices whose numbers are missing in designated computer files.

LEARNING CHECK

14-11 What subfunctions are involved in the processing of cash receipts transactions?

14-12 a. Describe two important controls pertaining to cash sales and indicate the transaction class audit objective(s) to which they relate.
b. Describe two important controls pertaining to the initial handling of mail receipts for companies that process their own receipts.

14-13 a. What is a lockbox system, and how can it affect control risk for cash receipts transactions?
b. What is the meaning of deposited intact daily, and how does this control affect control risk for cash receipts transactions?

14-14 Identify four controls that can aid in preventing or detecting errors or fraud in recording cash receipts. For each control discuss the tests of controls you would perform to assess its operating effectiveness.

14-15 a. Identify the functions pertaining to sales adjustment transactions.
b. State three types of controls pertaining to sales adjustment transactions and identify their common focus.

14-16 a. Explain why controls over revenue cycle transactions should also control the accounts receivable balance.

b. Explain the primary control over the accounts receivable balance itself.
c. How is the rights and obligations assertion controlled for accounts receivable?
d. How are disclosures controlled for accounts receivable?

14-17 Using the information in Figures 14-5 and 14-7, develop a test of controls for each assertion related to credit sales and to cash receipts.

KEY TERMS

Authorization for accounts receivable write-off, p. 651
Cash count sheets, p. 648
Cash receipts function, p. 648
Cash receipts journal, p. 648
Cash receipts transactions file, p. 648
Credit memo, p. 651
Daily cash summary, p. 648
Deposited intact daily, p. 650
Journal entry, p. 651
Lockbox system, p. 650
Prelist, p. 647
Receiving report, p. 651
Remittance advice, p. 647
Sales adjustment transactions, p. 651
Sales return authorization, p. 651
Validated deposit slip, p. 648

SUBSTANTIVE TESTS OF ACCOUNTS RECEIVABLE

Accounts receivable represent the primary balance in the revenue cycle. Receivables include amounts due from customers, employees, and affiliates on open accounts, notes, and loans, and accrued interest on such balances. Our consideration here is directed at gross receivables due from customers on credit sales transactions and the related contra account, the allowance for uncollectible accounts. It is important to recall that by auditing accounts receivable the auditor audits the related sales. In general, the sales that are most likely to represent potential misstatements are the uncollected sales. However, in certain industries it is common to receive cash before revenue is recognized. In these situations revenue recognition problems may be associated with transactions that should have been recorded as unearned revenue. As discussed in Chapter 12, the auditor should (1) assess the risk of material misstatement (determine the appropriate level of detection risk) and (2) design substantive tests that are responsive to those risks. The following discussion illustrates how the auditor accomplishes this goal in the revenue cycle.

DETERMINING DETECTION RISK

Audit Decision 10

■ What are the factors involved in determining acceptable level of tests of details risk for accounts receivable assertions?

An example risk matrix for the revenue cycle and accounts receivable assertions is presented in Figure 14-8. The following discussion explains the development of preliminary audit strategies that are consistent with this example risk matrix.

Existence and Occurrence

The existence and occurrence assertion for sales and accounts receivable represents a significant inherent risk because of the potential for revenue recognition problems. As a result, inherent risk is assessed at the maximum for this assertion.

Figure 14-8 ■ Example Risk Matrix for Accounts Receivable Assertions

Risk Component	Existence or Occurrence	Completeness	Rights and Obligations	Valuation or Allocation	Presentation and Disclosure
Audit Risk	Very low	Very low	Very low	Very low	Very low
Inherent Risk	Max	Moderate	Moderate	Max	High
Control Risk—Credit Sales Transactions	Low	Low	Moderate	Moderate	Moderate
Control Risk—Cash Receipt Transactions	Low	Low	Moderate	Low	Moderate
Control Risk—Sales Adjustment Transactions	Moderate	Low	Moderate	Moderate	Moderate
Combined Control Risk for Accounts Receivable Tests	Low	Moderate	Moderate	Moderate	Moderate
Analytical Procedures Risk	Moderate	Low	High	High	High
Acceptable Test of Details Risk	Moderate	Very high	Moderate	Very low	Low

Recall from Chapter 11 that the combined control risk assessment for accounts receivable is a function of internal controls over the occurrence related to credit sales (low) and the completeness of cash receipts (low) and sales adjustment transactions (low). As a result, the combined risk assessment for the existence of accounts receivable would be low. A common internal control over the occurrence of sales would be having the computer match sales invoice information with bill of lading and packing slip information input during the shipment of goods. An example of internal control over the completeness of cash receipts would include strong internal controls over the opening of mail and creation of a prelist of cash receipts, and subsequent comparison of the recording of cash receipts with the prelist and the deposit slip. Internal controls over the completeness of sales returns might include a comparison of all authorized sales returns with the generation of credit memos.

Since the existence of accounts receivable represents a significant inherent risk, the auditor should not plan to obtain substantial assurance from analytical procedures. The auditor might perform analytical procedures similar to those explained in Figure 14-4. The comparison of financial numbers with other financial numbers, investigation of capacity compared to sales, and an understanding of the entity's market share and other operating statistics might result in an assessment of analytical procedures risk as moderate. If the auditor simply compares current year with the prior year, without obtaining information about underlying business activity, analytical procedures risk should probably be assessed as high.

As a result, the appropriate level of detection risk for test of details is moderate. The primary test of details would involve the sending of confirmations (see subsequent discussion). Based on the combined control risk assessment as low, the auditor might send confirmations at an interim date. Confirmations will only need to be moderately extensive owing to the need to accomplish a moderate test of details risk.

Completeness

The auditor might assess inherent risk for the completeness assertion as moderate. In most cases there is a greater risk of overstatement of receivables and sales than of understatement of receivables and sales.

When considering the combined control risk assessment for the completeness of receivables, the auditor should evaluate the completeness assertions related to credit sales (low in this example) with the existence and occurrence assertion for cash receipts (low) and for sales adjustments (moderate). In this example, the conservative combined control risk assessment would be moderate. Internal controls over the completeness of sales would usually include daily followup on items shipped that had not resulted in sales invoices. Controls over the occurrence of cash receipts would include comparison of recorded cash receipts with the underlying prelisting of cash. Finally, controls over the occurrence of sales returns would include matching of credit memo information with underlying receiving reports.

Analytical procedures related to the completeness of sales and receivables would involve a comparison of sales to the underlying physical business such as a comparison of sales to capacity, sales to production levels, development of a deep understanding of the entity's market share, and a comparison of sales to total assets or sales to fixed assets. If these tests show that all sales appear to be recorded, the auditor can reduce the extensiveness of other substantive tests. In this example the auditor assesses test of details risk as very high. The auditor might assess the information about the completeness of sales obtained from sending confirmations, and perform cutoff tests on the recording of sales transactions at the end of the year.

Rights and Obligations

The assessment of inherent risk for the rights and obligations assertions depends on the entity's performance. Entities with strong operating cash flows rarely need to sell or factor receivables. Entities with weak operating cash flows, however, are more likely to sell receivables or pledge receivables as collateral.

If receivables have been factored, it is common to keep records of receivables that have been sold and to compare those records with monthly statements from the factoring company. Analytical procedures are not particularly effective at identifying the sale of rights to receivables, so the auditor usually plans to obtain most assurance from substantive tests of details.

Auditors often use generalized audit software to scan the cash receipts journal for large cash receipts. Receivables are usually sold in larger batches, and this might provide evidence of selling receivables. If inquiry or other evidence shows that the company has sold receivables, the auditor will confirm the sale or pledging of receivable with the entity to which the receivables were sold. It is ineffective to confirm the pledging of receivables with customers because they rarely know if their receivables have been sold.

Valuation and Allocation

The assessment of inherent risk for the valuation and allocation assertion is often set at high or maximum for accounts receivable because of the subjective nature of the allowance for doubtful accounts.

Controls over the valuation and allocation assertion with respect to historical cost involve the controls over the valuation of sales, cash receipts, and sales adjustments. These might include computer comparison of prices on sales invoices with the master price list, comparison of recorded cash receipts with the cash prelist, or comparison of prices on credit memos with sales invoice prices. Controls over the allowance for doubtful accounts include controls over the granting of credit, comparison of balances plus orders to credit limits, the follow-up on past due receivables, controls over the accuracy of receivables aging, and the quality of work of a disclosure committee that reviews the allowance for doubtful accounts. Control risk might be set at moderate because of the complex nature of the work of the disclosure committee in evaluating the adequacy of the allowance.

Analytical procedures usually involve computing the entity's accounts receivable turn days. This is a rather blunt tool for careful analysis of valuation issues, so analytical procedures risk is often set at high or maximum.

In this example, test of details risk is set at very low as a result of subjectivity of the assertion. The auditor can often test valuation at historical cost by sending confirmations to customers. Confirmations, however, do not provide valid evidence about the collectability of receivables. The auditor will often test the allowance by using generalized audit software to recalculate client aging, to identify customers with past due balances, and to determine credit histories for customers with past due balances. Auditors pay particular attention to customers that demonstrate deteriorating payment history as the year progresses.

Presentation and Disclosure

In developing a preliminary audit strategy for the presentation and disclosures assertion the auditor will usually plan a primarily substantive approach. Inherent risk associated with disclosures is often set at high or maximum. The disclosures related to receivables are often not complex, so it is appropriate to set inherent risk as high. Controls usually involve the work of a disclosure committee. Because analytical procedures are rarely effective for testing disclosures, the auditor will usually place significant emphasis on tests of details of disclosures. These tests are discussed in detail in a subsequent section of the chapter.

DESIGNING SUBSTANTIVE TESTS

Audit Decision 11

■ How does the auditor determine the elements of an audit program for substantive tests to achieve specific audit objectives for accounts receivable?

The next step is to finalize the audit program to achieve the specific audit objectives for the revenue cycle. The specific objectives addressed here are the ones listed in Figure 14-2. In Chapter 12, we introduced a general framework for developing audit programs for substantive tests. Examples of that framework are illustrated if Figures 12-8 and 12-9. That framework is followed here in developing an audit program for substantive tests for the revenue cycle which are presented in Figure 14-9. Each of these tests is discussed in more detail below.

Figure 14-9 ■ Possible Substantive Tests of Accounts Receivable Assertions

Category	Substantive Test	Specific Audit Objectives
Initial Procedures	1. Obtain an understanding of the business and industry and determine:	All
	a. The significance of revenues and accounts receivable to the entity.	
	b. Key economic drivers that influence the entity's sales, margins, and collections.	
	c. Standard trade terms in the industry, including seasonal dating, collections period, etc.	
	d. The extent of concentration of activity with customers.	
	2. Perform initial procedures accounts payable balance and records that will be subjected to further testing.	
	a. Trace beginning balance for accounts receivable to prior year's working papers.	VA4
	b. Review activity in general ledger account for accounts receivable and investigate entries that appear unusual in amount or source.	RO1, EO1,EO4
	c. Obtain accounts receivable trial balance and determine that it accurately represents the underlying accounting records by:	
	i. Footing the trial balance and determining agreement with (1) the total of the subsidiary ledger or accounts receivable master file, and (2) the general ledger balance.	VA4
	ii. Testing agreement of customer and balances listed on the trial balance with those included in the subsidiary ledger or master file.	VA4
Analytical Procedures	3. Perform analytical procedures:	All
	a. Develop an expectation for accounts receivable using knowledge of the entity's business activity, market share, normal trade terms, and its history of accounts receivable turn days.	
	b. Calculate ratios:	
	i. Compare sales to the entity's capacity.	
	ii. Compare sales growth and receivable growth.	
	iii. Accounts receivable turn days.	
	iv. Uncollectable accounts expense to net credit sales.	
	v. Uncollectable accounts expense to accounts receivable write-offs.	
	c. Analyze ratio results relative to expectations based on prior years, industry data, budgeted amounts, or other data.	
Tests of Details of Transactions	4. Vouch a sample of recorded revenue cycle transactions to supporting documentation.	
	a. Vouch receivable debits to supporting sales invoices, shipping documents, and sales orders.	EO1, PD1, EO4, VA1
	b. Vouch receivable credits to supporting cash receipts and cash prelists.	EO2, PD2, EO4, VA2
	c. Vouch receivable credits to remittance advices or sales adjustment authorizations for sales returns and allowance or uncollectible account write-offs.	EO3, PD3,EO4, VA3
	5. Trace a sample of revenue transactions from shipments to recording in the sales journal. Also trace a sample of cash receipts and sales returns to their recording in the accounting records.	C1, C2, C3
	6. Perform cutoff test for sales and sales returns.	
	a. Select a sample of recorded sales transactions from several days before and after year-end and examine supporting sales invoices and shipping documents to determine sales were recorded in the proper period.	EO1, C1, EO4, VA1
	b. Select sample of credit memos issued after year-end, examine supporting documentation such as dated receiving reports, and determine that returns were recorded in the proper period. Also consider whether volume of sales returns after year-end suggest possibility of unauthorized shipments before year-end.	EO3, C3, EO4, VA3

(continues)

Figure 14-9 ■ (Continued)

Category	Substantive Test	Specific Audit Objectives
	7. Perform cash receipts cutoff test.	
	a. Observe that all cash received through the close of business on the last day of the fiscal year is included in cash on hand or deposits in transit and that no receipts of the subsequent period are included, or	EO2, C2, EO4, VA2
	b. Review documentation such as daily cash summaries, duplicate deposit slips, and bank statements covering several days before and after year-end for proper cutoff.	
Tests of Details of Balances	8. Confirm accounts receivable.	
	a. Determine the form, timing, and extent of confirmation requests.	EO4, C4, VA4, PD4
	b. Select and execute sample and investigate exceptions.	EO4, C4, VA4, PD4
	c. For positive confirmation requests for which no reply was received, perform alternative followup procedures: • Vouch subsequent cash receipts identifiable with items comprising account balance at confirmation date to supporting documentation. • Vouch items comprising balance at confirmation date to documentary support such as sale orders and shipping documents.	EO4, C4, VA4, PD4
	9. a. Make inquiries about the sale, factoring, or pledging of accounts receivable.	RO1
	b. Send confirmations to entities that have purchased accounts receivable or hold accounts receivable as collateral.	RO1
Tests of Details of Balances: Accounting Estimates	10. Evaluate adequacy of allowance component for each aging category and in the aggregate.	
	a. Foot and crossfoot the aged trial balance of receivables and agree total to the general ledger.	VA4
	b. Test aging by vouching amounts in aging categories for sample of accounts to supporting documents.	VA5
	c. For past-due accounts: • Examine evidence of collectability such as correspondence with customers and outside collection agencies, credit reports, and customers' financial statements. • Discuss collectability of accounts with appropriate management personnel.	VA5
	d. Evaluate management's process for estimating the allowance for doubtful accounts using hindsight.	VA5
	e. Evaluate the adequacy of the allowance given information about • Industry trends. • Aging trends. • Collection history for specific customers.	VA5
Required Procedures	11. Confirmation of receivable included in step 8 above.	EO4, C4, VA4, PD4
Tests of Details of Presentation and Disclosure	12. Compare statement presentation with GAAP.	
	a. Compare disclosures related to existence and rights and obligations of receivables to the results of tests performed above.	PD4
	b. Determine that receivables are properly identified and classified as to type and expected period of realization.	PD4
	c. Determine whether there are credit balances that are significant in the aggregate and that should be reclassified as liabilities.	PD4
	d. Determine the appropriateness of disclosures and accounting for related party, pledged, assigned, or factored receivables.	PD4
	e. Determine the need for disclosures regarding significant customers or sales by line of business.	PD5
	f. Evaluate the completeness of presentation and disclosures for receivables in drafts of financial statements to determine conformity to GAAP by reference to disclosure checklist.	PD5
	g. Read disclosures and independently evaluate their classification and understandability.	PD6
	h. Vouch the accuracy of receivable disclosures to tests performed above.	PD7

Initial Procedures

The starting point for every audit test is to obtain an understanding of the business and industry. As previously discussed, it is important to understand the entity's policies regarding revenue recognition, as well as the entity's underlying economic drivers that impact total revenues and gross margin. The auditor should also understand standard trade terms, industry and client collection experience, seasonal aspects of the industry, and the extent of concentration of business with particular customers. This knowledge provides the context for evaluating the results of analytical procedures, tests of controls, and substantive tests. For example, the evidence obtained when performing detail tests of transactions and balances, such as invoice prices or the value of receivables for particular customers, should be consistent with expectations about industry competitiveness, the entity's productive time capacity, and the existence of major customers.

An important initial procedure for verifying accounts receivable and the related allowance account is tracing the current period's beginning balances to the ending audited balances in the prior year's working papers (when applicable). Next, the current period's activity in the general ledger control account and related allowance account should be reviewed for any significant entries that are unusual in nature or amount and that require special investigation. For example, the auditor should investigate any receivables and revenues that are not booked by way of recording sales invoices in the sales journal. In addition, a listing of all customer balances, called an **accounts receivable trial balance,** is obtained (usually in digital form). The auditor usually uses generalized audit software to foot the accounts receivable trial balance, and the total should be compared with (1) the total of the subsidiary ledger or master file from which it was prepared and (2) the general ledger control account. The auditor should also compare a sample of the customer's balance shown on the trial balance with that in the subsidiary ledger and vice versa to determine that the trial balance is an accurate and complete representation of the underlying accounting records. It can then serve as the physical representation of the population of accounts receivable to be subjected to further substantive testing.

Alternatively, the auditor can produce the accounts receivable trial balance directly from the client's master file using audit software. If the auditor can obtain the client's records in machine-readable form, he or she can also use generalized audit software to identify significant customers, analyze the volume of transactions with customers, and identify unusual transactions or a high volume of transactions near year-end.

An example of a working paper for an aged trial balance of receivables is presented in Figure 14-10. This working paper not only provides evidence of performance of the initial procedures just described, but several of the other substantive tests as discussed in subsequent sections. The initial procedures in verifying the accuracy of the trial balance and determining its agreement with the general ledger balance relate primarily to the posting and summarization component of the valuation or allocation assertion.

Analytical Procedures

The importance of analytical procedures was discussed earlier in this chapter. The auditor's goal is to develop expectations of the accounts receivable balance, of the relationship of accounts receivable to sales, and of the entity's gross margins. Sev-

Figure 14-10 ■ Aged Trial Balance Working Paper

Bates Company
Aged Trial Balance - Accounts Receivable - Trade
December 31, 20X1
(PBC)

W/P Ref: B-1
Prepared By: A.C.E. Date: 1/15/X2
Reviewed By: P.A.R. Date: 1/20/X2

Acct. 120

		Past Due							
	Account Name	Over 90 Days	Over 60 Days	Over 30 Days	Current	Balance Per Books 12/31/X1	Adjustments	Balance Per Audit 12/31/X1	
	Ace Engineering		2,529.04	2,016.14	11,875.90	16,421.08 √		16,421.08	
ø	Applied Devices			15,938.89 ɣ	27,901.11 ɣ	43,840.00 √		43,840.00	C1
ø	Barry Manufacturing	1,088.92 ɣ	743.12 ɣ	3,176.22 ɣ	8,993.01 ɣ	14,001.27 √		14,001.27	C2
ø	Brandt Electronics	501.10 ɣ	7,309.50 ɣ	30,948.01 ɣ	24,441.25 ɣ	63,199.86 √		63,199.86	C3
	Cermetrics, Inc.			3,813.76	8,617.30	12,431.06 √		12,431.06	
ø	Columbia Components				4,321.18 ɣ	4,321.18 √		4,321.18	
	Drake Manufacturing			739.57	2,953.88	3,693.45 √		3,693.45	
	EMC		1,261.01	1,048.23	16,194.76	18,504.00 √		18,504.00	
ø	Groton Electric		7,799.36 ɣ	20,006.63 ɣ	89,017.15 ɣ	116,823.14 √		116,823.14	C4
	Harvey Industries		1,709.16	6,111.25	18,247.31	26,067.72 √		26,067.72	
ø	Jed Inc.	2,615.87 ɣ	12,098.00 ɣ	15,434.46 ɣ	56,536.88 ɣ	86,685.21 √	(9,416.96)	77,268.25	C5
	Jericho Electric		1,198.72	13,123.14		14,321.86 √		14,321.86	
	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	
ø	W & M Manufacturing Corp.		1,904.65 ɣ	2,166.78 ɣ	28,389.69 ɣ	32,461.12 √		32,461.12	C60
	Yancey Corp.	814.98	2,861.05	9,874.13	13,561.80	27,111.96 √		27,111.96	
		10,157.46	56,705.59	160,537.28	392,136.41	619,536.74 √	(9,416.96)	610,119.78	
		√	√	√	√	√ B	√ B	√ B	

√ Footed or crossfooted.
ø Customer name and balance per books agreed to subsidiary ledger
ɣ Aging verified by examining transaction/dates of related unpaid sales invoices in subsidiary ledger
C# Account selected for confirmation - see W/P B-2

eral analytical procedures that can be performed to provide evidence about accounts payable are shown in Figure 14-4. The auditor should pay particular attention to unexpected increases in revenues or receivables.

Tests of Details of Transactions

Tests of details of transactions may be performed during interim work along with tests of controls in the form of dual-purpose tests. This includes the test described in the next section. The cutoff tests described in subsequent sections are always performed as part of year-end work.

Vouch Revenue Transactions

The customer account file maintained by the client should contain such documents as customer orders, sales orders, shipping documents, sales invoices, credit memoranda, and correspondence. In performing this test, a sample of debits to customers' accounts can be vouched to supporting sales invoices and matching documents to provide evidence pertaining to the existence or occurrence, rights and obligations, and valuation or allocation assertions. Credits can be vouched to remittance advices and sales adjustment authorizations. Evidence that these reductions in customer balances are legitimate pertains to the completeness assertion for accounts receivable. These tests may be performed more extensively when the applicable level of detection risk to be achieved is low, when confirmation procedures are not practicable, or when it becomes necessary to supplement confirmation procedures.

Trace Revenue Transactions

In order to test the completeness assertion, the auditor should trace a sample of sales, cash receipts, and sales adjustment transactions to their recording in the accounting records. For sales, the auditor should start with a sample of shipments and trace transactions to the sales journal. For cash receipts the auditor would sample items off the prelisting of cash and trace them forward to the cash receipts journal. For sales returns the auditor would normally start with the sale returns authorization, and trace forward to the receiving report and the entry in accounting records.

Perform Cutoff Tests for Sales and Sales Returns

The **sales cutoff test** is designed to obtain reasonable assurance that (1) sales and accounts receivable are recorded in the accounting period in which the transactions occurred and (2) the corresponding entries for inventories and cost of goods sold are made in the same period.

Sales should be recorded in the period in which legal title to the goods passes to the buyer. The sales cutoff test is made as of the balance sheet date. For sales of goods from inventory, the test involves comparison of a sample of recorded sales from the last few days of the current period and the first few days of the next period with shipping documents to determine whether the transactions were recorded in the proper period. When prenumbered shipping documents are issued in sequence and the auditor is on hand to observe the number of the last shipping document used in the current period, he or she can then determine that each sales transaction recorded prior to year-end is supported by a shipping document with a number issued in the current period and that each sales transaction recorded after year-end is supported by a shipping document with a number issued in the subsequent period. For a calendar-year client, if January sales are recorded in December, there is a misstatement of the existence or occurrence assertion. Conversely, if December sales are not recorded until January, there is a misstatement of the completeness assertion.

The **sales return cutoff test** is similar and is particularly directed toward the possibility that returns made prior to year-end are not recorded until after year-end, resulting in the overstatement of receivables and sales. The correct timing can be determined by examining dated receiving reports for returned merchandise and correspondence with customers. The auditor should also be alert to the possibility that an unusually heavy volume of sales returns after year-end (perhaps up to the end of fieldwork and report date) could signal unauthorized shipments before year-end to inflate recorded sales and receivables.

Perform Cash Receipts Cutoff Test

The **cash receipts cutoff test** is designed to obtain reasonable assurance that cash receipts are recorded in the accounting period in which received. A proper cutoff at the balance sheet date is essential to the correct presentation of both cash and accounts receivable. For example, if December collections from customers are not recorded until January, accounts receivable will be overstated and cash will be understated at the balance sheet date. Conversely, if January collections from customers are recorded in December, cash will be overstated and accounts receivable will be understated. Thus, this test relates to the existence or occurrence and completeness assertions for both cash and accounts receivable.

Personal observation or a review of documentation can provide evidence concerning the promptness of the cutoff. If the auditor can be present at the year-end date, he or she can observe that all collections received prior to the close of business are included in cash on hand or in deposits in transit and are credited to accounts receivable. An alternative to personal observation is to review supporting documentation such as the daily cash summary and validated deposit slip for the last day of the year. The objective of the review is to determine that the deposit slip total agrees with the receipts shown on the daily cash summary. In addition, the auditor should determine that the receipts were recorded on the closing date.

Tests of Details of Balances

Audit Decision 12

■ How are confirmation procedures used in auditing accounts receivable?

Two primary sets of procedures in this category of substantive tests for accounts receivable are discussed in the following sections: (1) confirmation of receivables and the related followup procedures and (2) procedures for evaluating the adequacy of the allowance for uncollectable accounts.

Confirm Receivables

Confirmation of accounts receivable involves direct written communication between individual customers and the auditor. The confirmation of receivables is a generally accepted audit procedure. AU 330, *The Confirmation Process* (SAS 67), states that there is a presumption that the auditor will request the confirmation of receivables during an audit unless:

- Accounts receivable are immaterial to the financial statements.
- The use of confirmations would be ineffective as an audit procedure.

- The auditor's combined assessment of inherent risk and control risk is low, and that assessment, in conjunction with evidence expected to be provided by analytical procedures or other substantive tests of details, is sufficient to reduce audit risk to an acceptably low level for the applicable financial statement assertions. In many situations, both confirmation of accounts receivable and other substantive tests of details are necessary to reduce audit risk to an acceptably low level of the applicable financial statement assertions.

An auditor who does not request confirmation of receivables should document in the working papers how he or she overcame the presumption that confirmations should be requested. For example, the auditor might state the conclusion that based on the prior year's audit experience on that engagement, it is expected that the responses would be unreliable or the response rates would be inadequate in the current year. Also, in some cases, debtors may be unable to confirm balances if they use voucher systems that show the amount owed on individual transactions, but not the total amount owed to one creditor. This is generally true of governmental agencies. The auditor may be able to overcome this problem by confirming individual transactions rather than balances.

Occasionally, clients have prohibited auditors from confirming any or certain accounts receivable. Complete prohibition represents a serious limitation on the scope of the audit that generally results in a disclaimer of opinion on the financial statements. The effect of partial prohibition should be evaluated on the basis of management's reasons therefore, and whether the auditor can obtain sufficient evidence from other auditing procedures.

Forms of Confirmation

There are two forms of confirmation request: (1) the **positive confirmation,** which requires the debtor to respond whether or not the balance shown is correct, and (2) the **negative confirmation,** which requires the debtor to respond only when the amount shown is incorrect. The two forms are illustrated in Figure 14-11. The positive confirmation request is usually made in the form of a separate letter, but it may be in the form of a stamp on the customer's monthly statement. In contrast, the negative request is usually in the form of a stamp. The positive form generally produces the better evidence because under the negative form, the failure to receive a response can only lead to a presumption that the balance is correct, whereas the customer may have overlooked the request or neglected to return an exception.

A variation of the positive form is "the blank form," so named because the customer's balance is not stated. Instead, the customer is asked to fill in the balance. The use of this form provides a high degree of assurance about the information confirmed. However, the extra work required of the respondent may significantly reduce the response rate.

The selection of the form of the confirmation request rests with the auditor. In making the decision, the auditor considers the applicable level of detection risk and the composition of the customer balances. The positive form is used when detection risk is low or individual customer balances are relatively large. AU 330.20 indicates that the negative form should be used only when all three of the following conditions apply:

- The acceptable level of detection risk for the related assertions is moderate or high.