CHAPTER 8
INTERNAL CONTROL AND CASH

DISCUSSION QUESTIONS

1. **a.** The five elements of internal control are the control environment, risk assessment, control procedures, monitoring, and information and communication. The control environment is the overall attitude of management and employees about the importance of controls. Risk assessment includes evaluating various risks facing the business, including competitive threats, regulatory changes, and changes in economic factors. Control procedures are established to provide reasonable assurance that business goals will be achieved. Monitoring is the evaluation of the internal control system. Information and communication provide management with feedback about internal control.

   b. No. One element of internal control is not more important than another element. All five elements are necessary for effective internal control.

2. To reduce the possibility of errors and embezzlement, the functions of operations and accounting should be separated. Thus, one employee should not be responsible for handling cash receipts (operations) and maintaining the accounts receivable records (accounting).

3. The control procedure requiring that responsibility for a sequence of related operations be divided among different persons is violated in this situation. This weakness in the internal control may permit irregularities. For example, the ticket seller, while acting as ticket taker, could admit friends without a ticket.

4. The responsibility for maintaining the accounting records should be separated from the responsibility for operations so that the accounting records can serve as an independent check on operations.

5. Controls that could have prevented or detected the fraud include (1) requiring supporting documentation such as receiving reports and purchase orders of all payments, (2) requiring approval by an independent party, and (3) allowing payments only to vendors who have been previously approved by upper management.

6. The three documents supporting the liability are the vendor's invoice, the purchase order, and the receiving report. The invoice should be compared with the receiving report to determine that the items billed have been received and with the purchase order to verify quantities, prices, and terms.

7. The cash balance and the bank statement balance are likely to differ because of (1) a delay by the bank or company in recording transactions or (2) errors by the bank or company in recording transactions.

8. The purpose of a bank reconciliation is to determine the reasons for the difference between the balance according to the company's records and the balance according to the bank statement and to correct those items representing errors in recording that may have been made by the bank or the company.

DISCUSSION QUESTIONS (Continued)

9. **a.** Yes. Even though the petty cash fund is only $750, if the fund is replenished frequently, a significant amount of cash could be stolen. For example, if the fund is replenished weekly, $39,000 ($750 × 52 weeks) could be subject to theft.

b. Controls for petty cash include (1) designating one person who is responsible for the fund, (2) maintaining a written record of all payments, (3) requiring support (receipts) for payments from the fund, and (4) having an independent person periodically review the funds on hand and the payments.

10. **a.** Cash and cash equivalents are usually reported as one amount in the Current assets section of the balance sheet.

b. Examples of cash equivalents include certificates of deposit, U.S. government securities, corporate notes and bonds, and commercial paper.

PRACTICE EXERCISES

PE 8-1A

1. (c) monitoring
2. (a) the control environment
3. (b) control procedures

PE 8-1B

1. (a) the control environment
2. (c) information and communication
3. (b) control procedures

PE 8-2A

Item No.	Appears on the Bank Statement as a Debit or Credit Memo	Increases or Decreases the Balance of the Company's Bank Account
1	credit memo	increases
2	credit memo	increases
3	credit memo	increases
4	debit memo	decreases

PE 8-2B

Item No.	Appears on the Bank Statement as a Debit or Credit Memo	Increases or Decreases the Balance of the Company's Bank Account
1	credit memo	increases
2	debit memo	decreases
3	credit memo	increases
4	debit memo	decreases

PE 8-3A

a. **$8,180 as shown below.**

Bank section of reconciliation: $12,175 + $1,800 – $5,795 = $8,180
Company section of reconciliation: $9,480 – $50 – $1,250 = $8,180

b.

Accounts Receivable	1,250	
Miscellaneous Expense	50	
Cash		1,300

PE 8-3B

a. **$18,100 as shown below.**

Bank section of reconciliation: $23,900 + $5,500 – $11,300 = $18,100
Company section of reconciliation: $8,700 + $9,450 – $50 = $18,100

b.

Miscellaneous Expense	50	
Cash		50
Cash	9,450	
Notes Receivable		9,000
Interest Revenue		450

PE 8-4A

a.

Petty Cash	1,000	
Cash		1,000

b.

Repairs Expense	600	
Miscellaneous Selling Expense	56	
Cash Short and Over	29	
Cash		685

PE 8-4B

a.

Petty Cash	900	
Cash		900

b.

Store Supplies	550	
Miscellaneous Selling Expense	200	
Cash Short and Over	35	
Cash		785

PE 8-5A

a. $$\text{Monthly Cash Expenses} = \frac{\text{Negative Cash Flow from Operations}}{\text{12 months}}$$

$$= \frac{\$114{,}000}{\text{12 months}} = \$9{,}500 \text{ per month}$$

$$\text{Ratio of Cash to Monthly Cash Expenses} = \frac{\text{Cash as of Year-End}}{\text{Monthly Cash Expenses}}$$

$$= \frac{\$69{,}350}{\$9{,}500 \text{ per month}} = 7.3 \text{ months}$$

b. **The preceding computations indicate that Otto Company has 7.3 months of cash remaining as of December 31. Otto Company will need to generate positive cash flow from operations or raise additional financing from its owners or by issuing debt.**

PE 8-5B

a. $$\text{Monthly Cash Expenses} = \frac{\text{Negative Cash Flow from Operations}}{\text{12 months}}$$

$$= \frac{\$458{,}400}{\text{12 months}} = \$38{,}200 \text{ per month}$$

$$\text{Ratio of Cash to Monthly Cash Expenses} = \frac{\text{Cash as of Year-End}}{\text{Monthly Cash Expenses}}$$

$$= \frac{\$187{,}180}{\$38{,}200 \text{ per month}} = 4.9 \text{ months}$$

b. **The preceding computations indicate that Bonita Company has 4.9 months of cash remaining as of December 31. Bonita Company will need to generate positive cash flow from operations or raise additional financing from its owners or by issuing debt.**

EXERCISES

Ex. 8-1

Section 404 requires management's internal control report to:

(1) state the responsibility of management for establishing and maintaining an adequate internal control structure and procedures for financial reporting; and

(2) contain an assessment, as of the end of the issuer's fiscal year, of the effectiveness of the internal control structure and procedures of the issuer for financial reporting.

The complete AICPA summary of Section 404 of Sarbanes-Oxley is as follows:

Section 404: Management Assessment of Internal Controls.

Requires each annual report of an issuer to contain an "internal control report," which shall:

(1) state the responsibility of management for establishing and maintaining an adequate internal control structure and procedures for financial reporting; and

(2) contain an assessment, as of the end of the issuer's fiscal year, of the effectiveness of the internal control structure and procedures of the issuer for financial reporting.

Each issuer's auditor shall attest to, and report on, the assessment made by the management of the issuer. An attestation made under this section shall be in accordance with standards for attestation engagements issued or adopted by the Board. An attestation engagement shall not be the subject of a separate engagement.

The language in the report of the Committee that accompanies the bill to explain the legislative intent states, ". . . the Committee does not intend that the auditor's evaluation be the subject of a separate engagement or the basis for increased charges or fees."

Directs the SEC to require each issuer to disclose whether it has adopted a code of ethics for its senior financial officers and the contents of that code.

Directs the SEC to revise its regulations concerning prompt disclosure on Form 8-K to require immediate disclosure "of any change in, or waiver of," an issuer's code of ethics.

Ex. 8-2

a. **Agree. Jimmy has made one employee responsible for the cash drawer in accordance with the internal control principle of assignment of responsibility. In addition, Jimmy has segregated the operations (preparing the orders) from the accounting (taking orders and payments).**

b. **Disagree. It is commendable that Jimmy has given the employee a specific responsibility and is holding that employee accountable for it. However, after the cashier has counted the cash, another employee (or perhaps Jimmy) should remove the cash register tape and compare the amount on the tape to the cash in the drawer. Also, Jimmy's standard of no mistakes may encourage the cashiers to overcharge a few customers in order to cover any possible shortages in the cash drawer.**

c. **Disagree. Stealing is a serious issue. An employee who can justify taking a box of tea bags can probably justify "borrowing" cash from the cash register.**

Ex. 8-3

a. **The salesclerks could steal money by writing phony refunds and pocketing the cash supposedly refunded to these fictitious customers.**

b. **Ramona's Clothing suffers from inadequate separation of responsibilities for related operations because the clerks issue refunds and restock all merchandise. In addition, there is a lack of proofs and security measures because the supervisors authorize returns two hours after they are issued.**

c. **A store credit for any merchandise returned without a receipt would reduce the possibility of theft of cash. In this case, a clerk could only issue a phony store credit rather than taking money from the cash register. A store credit is not as tempting as cash. In addition, salesclerks could only use a few store credits to purchase merchandise for themselves without management getting suspicious.**

An advantage of issuing a store credit for returns without a receipt is that the possibility of stealing cash is reduced. The store will also lose less revenue if customers must choose other store merchandise instead of receiving a cash refund. The overall level of returns/exchanges may be reduced because customers will not return an acceptable gift simply because they need cash more than the gift. The policy will also reduce the "cash drain" during the weeks immediately following the holidays, allowing Ramona's Clothing to keep more of its money earning interest or use that cash to purchase spring merchandise or pay creditors.

Ex. 8-3 (Concluded)

A disadvantage of issuing a store credit for returns without a receipt is that preholiday sales might drop as gift-givers realize that the return policy has tightened. After the holidays, customers wanting to return items for cash refunds may be frustrated when they learn the store policy has changed. The ill will may reduce future sales. It may take longer to explain the new policy and fill out the paperwork for a store credit, lengthening lines at the return counter after the holidays. Salesclerks will need to be trained to apply the new policy and write up a store credit. Salesclerks also will need to be trained to handle the redemption of the store credit on future merchandise purchases.

d. The potential for abuse in the cash refund system could be eliminated if clerks were required to get a supervisor's authorization for a refund before giving the customer the cash. The supervisor should authorize the refund only after seeing both the customer and the merchandise that is being returned.

An alternative would be to use security measures that detect a salesclerk attempting to ring up a refund and remove cash when a customer is not present at the sales desk. These security measures could include cameras or additional security personnel discreetly monitoring the sales desk.

Finally, an employee on the following work shift could be assigned the responsibility of restocking returned merchandise and reconciling the returns to a refund list for the department.

Ex. 8-4

As an internal auditor, you would probably disagree with the change in policy. Pacific Bank has some normal business risk associated with default on bank loans. One way to help minimize this is to evaluate loan applications carefully. Large loans present greater risk in the event of default than do smaller loans. Thus, it is reasonable to have more than one person involved in making the decision to grant a large loan. In addition, loans should be granted on their merits, not on the basis of favoritism or mere association with the bank president. Allowing the bank president to have sole authority to grant large loans can lead to the president granting loans to friends and business associates without the required due diligence. This can result in a bank becoming exposed to very poor credit risks. Indeed, this scenario is one of the causes of the savings and loan failures of the past.

Ex. 8-5

The Societe Generale trading losses show how small lapses in internal control can have large consequences. When the losses became so large that they could no longer be hidden, it was too late. The loss could have been avoided using a number of internal controls. First, the separation of duties control was overcome by the trader's intimate knowledge of the monitoring software. This knowledge of the monitoring system allowed the trader to hide trades effectively. The design of the monitoring software would need to be improved and access prohibited by traders. If traders have access to the monitoring software, the separation of duties control is violated. Second, the trader should be under managerial oversight. For example, trades that exceed a certain amount of exposure should require management approval. In this way, a trader would be forced to slow down or stop once trades reached a certain limit. This would avoid the trader's tendency to try to "make up" losses with even larger bets. Finally, if the trader had had to take required vacation time, managers may have been alerted then to the hidden losses once the trader was unable to attend to the trading positions.

Ex. 8-6

This is an example of a fraud perpetrated with multiple parties in different positions of control, which makes detecting fraud more difficult. In this case, the fraud began with an employee responsible for authorizing claim payments. This is a sensitive position because his decisions would initiate payments. However, claims would need to be authorized and verified before payment would be made. Knowing this, the employee made sure each claim had a phony "victim." Thus, there was a verifiable story behind each claim. Only by tracking physical evidence of the accident could it be discovered that the claim was fictitious. However, the very nature of the process was to resolve small claims quickly without excessive control. Finally, corrupt lawyers were brought into the fraud to act as attorneys for the claimants. This gave the claims even more credibility. In actuality, the lawyers had done legitimate business with the trucking company, so all appeared normal. This fraud was discovered when the fraudulent employee's bank noticed irregularities in his bank account and notified authorities. As the saying goes, "Follow the money!"

Ex. 8-7

All-Around Sound Co. should not have relied on the unusual nature of the vendors and frequency of deliveries to uncover this fraud. The purchase and payment cycle is one of the most critical business cycles to control because the potential for abuse is so great. Purchases should be initiated by a requisition document. This document should be countersigned by a superior so that two people agree as to what is being purchased. The requisition should initiate a purchase order to a vendor for goods or services. The vendor responds to the purchase order by delivering the goods. The goods should be formally received using a receiving document. An accounts payable clerk matches the requisition, purchase order, and invoice before any payment is made. Such "triple matching" prevents unauthorized requests and payments. In this case, the requests were unauthorized, suggesting that the employee has sole authority to make a request. Another issue is that this employee had access to the invoices. This access allowed the employee to change critical characteristics of the invoice to hide the true nature of the goods being received. The invoice should have been delivered directly to the accounts payable clerk to avoid corrupting the document. There apparently was no receiving document (common for smaller companies); thus, only the invoice provided proof of what was received and needed to be paid. If there had been a receiving report, the invoice could not have been doctored and gone undetected because it would not have matched the receiving report.

Note to Instructors: **This exercise is based on an actual fraud.**

Ex. 8-8

a. **The most difficult frauds to detect are those that involve the senior managers of a company who are in a conspiracy to commit the fraud. The senior managers have the power to access many parts of the accounting system, while the normal separation of duties is subverted by involving many people in the fraud. In addition, the authorization control is subverted because most of the authorization power resides in senior management.**

b. **Overall, this type of fraud can be stopped if there is a strong oversight of senior management, such as an audit committee of the board of directors. Individual whistle-blowers in the company can make their concerns known to the independent or internal auditors who, in turn, can inform the audit committee. The audit committee should be independent of management and have the power to monitor the actions of management.**

Ex. 8-9

a. **The salesclerks should not have access to the cash register tapes.**

b. **The cash register tapes should be locked in the cash register and the key retained by the cashier. An employee of the cashier's office should remove the cash register tape, record the total on the memo form, and note discrepancies.**

Ex. 8-10

Big & Bad Burgers suffers from a failure to separate responsibilities for related operations.

Big & Bad Burgers could stop this theft by limiting the drive-through clerk to taking customer orders, entering them on the cash register, accepting the customers' payments, returning customers' change, and handing customers their orders that another employee has assembled. By making another employee responsible for assembling orders, the drive-through clerk must enter the orders on the cash register. This will produce a printed receipt or an entry on a computer screen at the food bin area, specifying the items that must be assembled to fill each order. Once the drive-through clerk has entered the sale on the cash register, the clerk cannot steal the customer's payment because the clerk's cash drawer will not balance at the end of the shift. This change also makes the drive-through more efficient and could reduce the time it takes to service a drive-through customer.

If another employee cannot be added, the weakness in internal control could be improved with more thorough supervision. The restaurant manager should be directed to keep a watchful eye on the drive-through area in order to detect when a clerk takes an order without ringing up the sale.

Another option is for Big & Bad Burgers to implement a policy that any customer who does not receive a receipt is entitled to a free burger and advertise this policy at the cash register and drive-through window. This approach uses the customer as an internal control.

Ex. 8-11

a. **The remittance advices should not be sent to the cashier.**

b. **The mailroom employees should send the remittance advices directly to the Accounting Department.**

Ex. 8-12

Cash	18,371	
Cash Short or Over	29	
Sales		18,400

Ex. 8-13

Cash	71,315	
Sales		71,220
Cash Short or Over		95

Ex. 8-14

The use of the voucher system is appropriate, the essentials of which are outlined below. (Although invoices could be used instead of vouchers, vouchers more satisfactorily provide for account distribution, signatures, and other significant data.)

1. **Each voucher should be approved for payment by a designated official only after completion of the following verifications: (a) that prices, quantities, terms, etc., on the invoice are in accordance with the provisions of the purchase order; (b) that all quantities billed have been received in good condition, as indicated on a receiving report; and (c) that all arithmetic details are correct.**

2. **The file for unpaid vouchers should be composed of 31 compartments, one for each day of the month. Each voucher should be filed in the compartment representing the last day of the discount period or the due date if the invoice is not subject to a cash discount.**

3. **Each day, the vouchers should be removed from the appropriate section of the file and checks issued by the disbursing official. If the bank balance is insufficient to pay all of the vouchers, those that remain unpaid should be refiled according to the date when payment should next be considered.**

4. **At the time of payment, all vouchers and supporting documents should be stamped or perforated "Paid" to prevent their resubmission for payment. They should then be filed in numerical sequence for future reference. The implementation and use of a computerized system would also reduce the chance that any available cash discounts are missed. For example, when invoices are received and approved for payment, they are automatically scheduled for payment within the discount period. However, even in a computerized system, the use of an approval process that requires supporting documents and indicating "paid" on these supporting documents is an important control for avoiding duplicate payments.**

Ex. 8-15

To prevent the fraud scheme described, Paragon Tech must separate responsibilities for related operations. As in the past, all service requisitions should be submitted to the Purchasing Department. After receiving the service request, Purchasing should complete a Service Verification form stating the service that has been ordered and the name of the company that will provide the service. This form should be delivered via intercompany mail to the person responsible for verifying that the service was performed. This person should have firsthand knowledge of whether the service was performed. This person, who must be someone other than the manager requesting the service, should fill in the date and time the service was received and sign the form. In addition, the vendor providing the service should sign the form before leaving the premises. When completed, the Service Verification form should be forwarded to the Accounting Department. Accounting will authorize payment of the vendor's invoice after the Service Verification form has been compared with the invoice.

Ex. 8-16

a. Addition to the balance per bank: (5)
b. Deduction from the balance per bank: (4), (6)
c. Addition to the balance per company's records: (7)
d. Deduction from the balance per company's records: (1), (2), (3)

Ex. 8-17

(1), (2), (3), (7)

The preceding additions and deductions to the cash balance according to the company's records require journal entries in the company's records. Additions and deductions to the cash balance according to the bank's records do not require the company to record journal entries.

Ex. 8-18

a.

MATHERS CO. **Bank Reconciliation** **July 31**	
Cash balance according to bank statement	$31,350
Add deposit in transit, not recorded by bank	4,150
Deduct outstanding checks	2,870
Adjusted balance	$32,630
Cash balance according to company's records	$32,110
Add error in recording check as $710 instead of $170	540
Deduct bank service charge	20
Adjusted balance	$32,630

b. $32,630; the adjusted balance from the bank reconciliation should be reported on the July 31 balance sheet for Mathers Co.

c. Yes. The bank reconciliation must always balance (reconcile) to an adjusted balance.

Ex. 8-19

July	31	Cash	540	
		Accounts Payable		540
	31	Miscellaneous Expense	20	
		Cash		20

Ex. 8-20

Cash	15,120	
Notes Receivable		14,000
Interest Revenue		1,120

Ex. 8-21

a.

CHESNER CO. Bank Reconciliation August 31		
Cash balance according to bank statement		**$20,300**
Add deposit in transit on August 31		**7,200**
Deduct outstanding checks		**3,585**
Adjusted balance		**$23,915**
Cash balance according to company's records		**$11,100**
Add: Error in recording Check No. 1056 as $950		
instead of $590	**$ 360**	
Note for $12,000 collected by bank, including		
interest	**12,480**	**12,840**
Deduct bank service charges		**25**
Adjusted balance		**$23,915**

b. $23,915

Ex. 8-22

a. 1. The heading should be "June 30," and not "For the Month Ended June 30."

2. The outstanding checks should be deducted from the balance per bank.

3. The deposit of June 30, not recorded by the bank, should be added to the balance per bank.

4. Service charges should be deducted from the balance per company's records.

5. The error in recording the June 17 deposit of $7,150 as $1,750 should be added to the balance per company's records.

6. The adjusted balances ($12,590 and $9,010) are not equal.

Ex. 8-22 (Concluded)

b. A correct bank reconciliation would be as follows:

POWAY CO. Bank Reconciliation June 30		
Cash balance according to bank statement		$16,185
Add deposit of June 30, not recorded by bank		6,600
Deduct outstanding checks:		
No. 1067	$ 575	
1106	470	
1110	1,050	
1113	910	3,005
Adjusted balance		$19,780
Cash balance according to company's records		$ 8,985
Add: Note and interest collected by bank	$6,300	
Error in recording June 17 deposit as $1,750		
instead of $7,150	5,400	11,700
Deduct: Check returned because of insufficient funds	$ 890	
Service charges	15	905
Adjusted balance		$19,780

Ex. 8-23

a. **The amount of cash receipts stolen by the salesclerk can be determined by attempting to reconcile the bank account. The bank reconciliation will not reconcile by the amount of cash receipts stolen. The amount stolen by the salesclerk is $4,135, determined as shown below.**

ALASKA IMPRESSIONS CO. Bank Reconciliation October 31	
Cash balance according to bank statement	$13,275
Deduct outstanding checks	3,670
Adjusted balance	$ 9,605
Cash balance according to company's records	$11,680
Add note and interest collected by bank	2,100
Deduct bank service charges	40
Adjusted balance	$13,740

Amount stolen: $4,135 ($13,740 – $9,605)

b. **The theft of the cash receipts might have been prevented by having more than one person make the daily deposit. Two individuals would then have been necessary to steal cash receipts. In addition, two employees making the daily cash deposits would tend to discourage theft of the cash receipts from the employees on the way to the bank.**

Daily reconciliation of the amount of cash receipts—comparing the cash register tapes to a receipt from the bank as to the amount deposited (a duplicate deposit ticket)—would also discourage theft of the cash receipts. In this latter case, if the reconciliation were prepared by an employee independent of the cash function, any theft of cash receipts from the daily deposit would be discovered immediately. That is, the daily deposit would not reconcile against the daily cash receipts.

Ex. 8-24

a.

Petty Cash	750	
Cash		750

b.

Office Supplies	248	
Miscellaneous Selling Expense	212	
Miscellaneous Administrative Expense	96	
Cash Short and Over	18	
Cash		574

Ex. 8-25

Toy manufacturers and retailers experience a seasonal trend in cash flows from operating activities. Mattel, Inc., experiences negative cash flows during the periods when merchandise is ordered and produced for the holiday season. Mattel, Inc., generates large positive cash flows during the holiday season, November–December. As a result, Mattel, Inc., reports overall positive net cash flows from operating activities for the year.

Ex. 8-26

a. **8.4 months ($1,415,400 ÷ $168,500)**

b. **At the current rate of operations, El Dorado has 8.4 months of cash remaining. El Dorado should either restructure its operations or plan on raising additional financing in order to continue in business.**

Ex. 8-27

a. **$1,918.2 ($23,018 ÷ 12)**

b. **16.8 months ($32,221 ÷ $1,918.2)**

c. **Capstone Turbine has cash to continue its operations for approximately 16.8 months.**

Note to Instructors: **Capstone has credit agreements with banks that it uses (draws on) for short-term cash needs. Thus, it appears that Capstone will be able to continue operating for the foreseeable future. However, in the long run, Capstone Turbine will have to generate postive cash flows from operations in order to survive.**

Ex. 8-28

a. **Year 3: $8,344.9 per month ($100,139 ÷ 12)**
Year 2: $4,305.8 per month ($51,669 ÷ 12)
Year 1: $3,816.2 per month ($45,794 ÷ 12)

b. **Year 3: 8.3 months ($69,485 ÷ $8,344.9)**
Year 2: 5.6 months ($24,074 ÷ $4,305.8)
Year 1: 11.4 months ($43,640 ÷ $3,816.2)

c. **At the end of Year 1, Amicus Therapeutics had 11.4 months of cash and cash equivalents remaining to use in operations.**

At the end of Year 2, Amicus had 5.6 months of cash and cash equivalents to use in operations. However, during Year 2, Amicus issued over $130 million of common stock, which was used to purchase short-term investments of $128 million. If the short-term investments of $128 million are included as being available to convert to cash, Amicus has 35.3 months of available cash to use in operations at the end of Year 2.

At the end of Year 3, Amicus had 8.3 months of cash and cash equivalents to use in operations. However, during Year 3, Amicus issued over $256 million of additional stock and at the end of Year 3 had short-term investments of $145 million. If the short-term investments of $145 million are included as being available to convert to cash, Amicus has 25.7 months of available cash to use in operations at the end of Year 3.

Overall, Amicus has been able to support its operations by issuing additional stock. However, its negative cash flows have increased from $(45,794) in Year 1 to $(100,139) in Year 3. Unless Amicus had generated positive cash flows from operations, its ability to continue raising funds from issuing stock or debt will be limited. Thus, in the long run, Amicus must generate positive cash flows from operations to survive.

PROBLEMS

Prob. 8-1A

Strengths: a, b, e, and f

Weaknesses:

c. **Employees should not be allowed to use the petty cash fund to cash personal checks. In any case, postdated checks should not be accepted. In effect, postdated checks represent a receivable from the employees.**

d. **Requiring cash register clerks to make up any cash shortages from their own funds gives the clerks an incentive to shortchange customers. That is, the clerks will want to make sure they don’t have a shortage at the end of the day. In addition, one might also assume that the clerks can keep any overages. This would again encourage clerks to shortchange customers. The shortchanging of customers will create customer complaints as well as other issues. The best policy is to report any cash shortages or overages at the end of each day. If a clerk is consistently short or over, then corrective action (e.g., training or removal) could be taken.**

g. **The mail clerk should prepare an initial listing of cash remittances before forwarding the cash receipts to the cashier. This establishes initial accountability for the cash receipts. The mail clerk should forward a copy of the listing of remittances to the accounts receivable clerk for recording in the accounts.**

h. **The bank reconciliation should be prepared by someone not involved with the handling or recording of cash.**

Prob. 8-2A

Jan.	1	Petty Cash	900	
		Cash		900
	12	Cash	6,180	
		Cash Short and Over		32
		Sales		6,148
	31	Store Supplies	470	
		Delivery Expense	140	
		Office Supplies	110	
		Miscellaneous Administrative Expense	90	
		Cash Short and Over	15	
		Cash		825
	31	Cash	4,536	
		Cash Short and Over	14	
		Sales		4,550
	31	Cash	200	
		Petty Cash		200

Prob. 8-3A

1.

AMERICAN MEDICAL CO. **Bank Reconciliation** **April 30**		
Cash balance according to bank statement		$388,600
Add: Deposit of April 30, not recorded by bank	$42,500	
Bank error in charging check as $420 instead		
of $240	180	42,680
Deduct outstanding checks		61,280
Adjusted balance		$370,000
Cash balance according to company's records		$334,985
Add note and interest collected by bank		42,000
Deduct: Error in recording check	$ 6,840	
Bank service charges	145	6,985
Adjusted balance		$370,000

2.

Apr.	30	Cash	42,000	
		Notes Receivable		40,000
		Interest Revenue		2,000
	30	Accounts Payable—Targhee Supply Co.	6,840	
		Miscellaneous Expense	145	
		Cash		6,985

3. $370,000; the adjusted balance from the bank reconciliation should be reported as cash on the April 30 balance sheet for American Medical Co.

Prob. 8-4A

1.

BRENTWOOD BIKE CO. **Bank Reconciliation** **May 31**		
Cash balance according to bank statement		$43,525
Add: Deposit of May 31, not recorded by bank	$1,850	
Bank error in charging check as $930 instead		
of $390	540	2,390
Deduct outstanding checks		6,440
Adjusted balance		$39,475
Cash balance according to company's records*		$35,670
Add note and interest collected by bank		5,250
Deduct: Check returned because of insufficient funds	$1,325	
Bank service charges	30	
Error in recording check	90	1,445
Adjusted balance		$39,475

* Cash balance, May 1	$ 34,250
Plus cash deposited in May	140,300
Less checks written in May	(138,880)
Balance per company's books, May 31	$ 35,670

2.

May	31	Cash	5,250	
		Notes Receivable		5,000
		Interest Revenue		250
	31	Accounts Payable—Adkins Co.	90	
		Accounts Receivable—Jennings Co.	1,325	
		Miscellaneous Expense	30	
		Cash		1,445

3. $39,475; the adjusted balance from the bank reconciliation should be reported as cash on the May 31 balance sheet for Brentwood Bike Co.

Prob. 8-5A

1.

BEELER FURNITURE COMPANY **Bank Reconciliation** **June 30, 20Y2**		
Cash balance according to bank statement		$13,624.71
Add deposit of June 30, not recorded by bank		1,117.74
Deduct outstanding checks:		
No. 738	$ 251.40	
756	113.95	
758	259.60	
759	901.50	1,526.45
Adjusted balance		$13,216.00
Cash balance according to company's records*		$10,145.50
Add: Note and interest collected by bank	$3,710.00	
Error in recording Check No. 743	90.00	3,800.00
Deduct: Check returned because of insufficeint funds	$ 550.00	
Error in recording June 10 deposit	100.00	
Error in recording June 24 deposit	4.50	
Bank service charges	75.00	729.50
Adjusted balance		$13,216.00

* Balance per cash in bank account, June 1	$ 9,317.40
Add June receipts	9,223.76
Deduct June disbursements	(8,395.66)
Balance per cash in bank account, June 30	$10,145.50

2.

20Y2				
June	30	Cash	3,800.00	
		Notes Receivable		3,500.00
		Interest Revenue		210.00
		Accounts Payable		90.00
	30	Sales ($100.00 + $4.50)	104.50	
		Accounts Receivable	550.00	
		Miscellaneous Expense	75.00	
		Cash		729.50

3. $13,216.00

4. The error of $540 ($930 – $390) in the canceled check should be added to the "balance according to bank statement" on the bank reconciliation. The canceled check should be presented to the bank with a request that the bank balance be corrected.

Prob. 8-1B

Strengths: a, b, e, and f

Weaknesses:

c. **An independent person (e.g., a supervisor) should count the cash in each cashier's cash register, unlock the record, and compare the amount of cash with the amount on the record to determine cash shortages or overages.**

d. **Cash receipts should not be handled by the accounts receivable clerk. This violates the segregation of duties between the handling of cash receipts and the recording of cash receipts.**

g. **The bank reconciliation should be prepared by someone not involved with the handling or recording of cash.**

Prob. 8-2B

June	1	Petty Cash	1,000	
		Cash		1,000
	12	Cash	9,506	
		Cash Short and Over		66
		Sales		9,440
	30	Store Supplies	375	
		Merchandise Inventory	215	
		Office Supplies	208	
		Miscellaneous Administrative Expense	134	
		Cash Short and Over	22	
		Cash		954
	30	Cash	13,350	
		Cash Short and Over	40	
		Sales		13,390
	30	Petty Cash	200	
		Cash		200

Prob. 8-3B

1.

STONE SYSTEMS **Bank Reconciliation** **July 31**		
Cash balance according to bank statement		$33,650
Add deposit of July 31, not recorded by bank		9,150
Deduct: Outstanding checks	$17,865	
Bank error in charging check as $1,180 instead		
of $1,810	630	18,495
Adjusted balance		$24,305
Cash balance according to company's records		$17,750
Add: Note and interest collected by bank	$ 6,095	
Error in recording check	540	6,635
Deduct bank service charges		80
Adjusted balance		$24,305

2.

July	31	Cash	6,635	
		Notes Receivable		5,750
		Interest Revenue		345
		Accounts Payable—Holland Co.		540
	31	Miscellaneous Expense	80	
		Cash		80

3. $24,305; the adjusted balance from the bank reconciliation should be reported as cash on the July 31 balance sheet for Stone Systems.

Prob. 8-4B

1.

COLLEGIATE SPORTS CO. Bank Reconciliation November 30		
Cash balance according to bank statement		$112,675
Add deposit of November 30, not recorded by bank		12,200
Deduct: Outstanding checks	$41,840	
Bank error in charging check as $2,750 instead		
of $7,250	4,500	46,340
Adjusted balance		$ 78,535
Cash balance according to company's records*		$ 66,935
Add: Note and interest collected by bank	$ 7,385	
Error in recording check as $7,600 instead of $760	6,840	14,225
Deduct: Check returned because of insufficient funds	$ 2,500	
Bank service charges	125	2,625
Adjusted balance		$ 78,535

* Cash balance, November 1	$ 81,145
Plus cash deposited in November	293,150
Less checks written in November	(307,360)
Balance per company's records, November 30	$ 66,935

2.

Nov.	30	Cash	14,225	
		Notes Receivable		7,000
		Interest Revenue		385
		Accounts Payable—Ramirez Co.		6,840
	30	Accounts Receivable—Hallen Academy	2,500	
		Miscellaneous Expense	125	
		Cash		2,625

3. $78,535; the adjusted balance from the bank reconciliation should be reported as cash on the November 30 balance sheet for Collegiate Sports Co.

Prob. 8-5B

1.

SUNSHINE INTERIORS
Bank Reconciliation
July 31, 20Y5

Cash balance according to bank statement		$11,601.41
Add deposit of July 31, not recorded by bank		1,177.87
Deduct outstanding checks:		
No. 613	$ 137.50	
628	837.70	
633	310.08	1,285.28
Adjusted balance		$11,494.00
Cash balance according to company's records*		$ 7,664.00
Add: Note and interest collected by bank	$4,160.00	
Error in recording July 23 deposit	18.00	
Error in recording Check No. 627	63.00	4,241.00
Deduct: Check returned because of insufficient funds	$ 375.00	
Bank service charges	36.00	411.00
Adjusted balance		$11,494.00

* Balance per cash in bank account, July 1……………….	$ 9,578.00
Add July receipts…………………………………………….	6,465.42
Deduct July disbursements……………………………….	(8,379.42)
Balance per cash in bank account, July 31…………….	$ 7,664.00

2.

20Y5				
July	31	Cash	4,241.00	
		Notes Receivable		4,000.00
		Interest Revenue		160.00
		Sales		18.00
		Accounts Payable		63.00
	31	Accounts Receivable	375.00	
		Miscellaneous Expense	36.00	
		Cash		411.00

3. $11,494.00

4. The error of $1,620 ($1,800 – $180) in the canceled check should be added to the "balance according to bank statement" on the bank reconciliation. The canceled check should be presented to the bank, with a request that the bank balance be corrected.

CASES & PROJECTS

CP 8-1

Both Tehra and her supervisor are acting in an unethical manner. While Tehra's disappointment at not receiving a raise may be justified, it is not appropriate for Tehra to submit personal expenses for reimbursement. By knowingly submitting false expense reimbursements, Tehra is effectively stealing from the company and exhibiting a failure of individual character. By allowing this behavior to happen and continue, Tehra's supervisor is creating a culture of ethical indifference in the organization. This will likely lead to larger and more frequent incidents, potentially impacting the company's financial results.

CP 8-2

Acceptable business and professional conduct requires Joel Knolls to notify the bank of the error. ***Note to Instructors:*** **Individuals may be criminally prosecuted for knowingly using funds that are erroneously credited to their bank accounts.**

CP 8-3

A sample solution based on Nike Inc.'s Form 10-K for the fiscal year ended May 31, 2015, follows:

1. a. $3,852 million (from balance sheet)

b. 24.1% ($3,852 ÷ $15,976) in 2015; 16.2% ($2,220 ÷ $13,696) in 2014. Cash as a percentage of total current assets has increased.

2. Management's Annual Report on Internal Control Over Financial Reporting is included in the annual report immediately before the financial statements.

a. Management

b. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America. Internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of assets of the Company; (ii) provide reasonable assurance the transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipt and expenditures of the Company are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets of the Company that could have a material effect on the financial statements.

c. Reasonable assurance

CP 8-4

Note to Instructors: **The purpose of this activity is to familiarize students with the internal controls used by specific businesses. For example, when you order food at a McDonald's drive-through lane, your order is processed as follows:**

1. **The order is taken at a remote location by speaking with the cashier who rings up the order and indicates the amount you owe.**
2. **The order is simultaneously shown on a computer screen in the food preparation area.**
3. **You then drive up and pay the cashier the amount owed and are handed a receipt.**
4. **You drive farther to where your order is delivered by an employee other than the cashier.**

The preceding procedures separate the handling of cash from the delivery of the food order. If the cashier also delivered your order, the cashier could pocket your cash, not ring up your order, and deliver your food without anyone knowing.

CP 8-5

MEMO

To: My Instructor
From: A+ Student
Re: Control Procedures for Self-Checkout Lanes

Wholesome and Happy Foods could incorporate several features into the kiosks that would increase the likelihood of customers scanning all of the items in their carts for purchase. First, the scanning system should be set up so that an audible beep is heard each time an item is scanned and a sale recorded. This will alert the attendant that the item has been scanned properly. If the attendant does not hear a beep for each item, the attendant should be trained to investigate to ensure that all items have been scanned properly. Second, the kiosk should include a built-in scale that measures changes in the total weight as items are placed in the bagging area. If the weight increases without an item being scanned, the attendant should be alerted by the system. Finally, the kiosk should remind customers to check their cart's bottom rack for any items they may have forgotten to scan.

CP 8-6

Several control procedures could be implemented to prevent or detect the theft of cash from fictitious returns.

One procedure would be to establish a policy of "no cash refunds." That is, returns could only be exchanged for other merchandise. However, such a policy might not be popular with customers, and Turpin Meadows Electronics might lose sales from customers who would shop at other stores with a more liberal return policy.

Another procedure would be to allow returns only through a centralized location, such as a customer service desk. The customer service desk clerk would issue an approved refund slip, which the customer could then take to a cash register to receive a cash refund. Because the customer service clerk does not have access to cash, the customer service clerk could not steal cash through fictitious returns.

Yet another procedure would be to allow returns at the individual cash registers but require that all returns be approved by a supervisor. In this way, cash could be stolen through fictitious returns only through the supervisor and the cash register clerk agreeing to steal.

CP 8-7

Several possible procedures for preventing or detecting the theft of grocery items by failing to scan their prices include the following:

a. **Most scanning systems are designed so that an audible beep is heard each time an item is rung up on the cash register. This is intended to alert the cashier that the item has been rung up properly. Thus, observing whether a cashier is ringing up all merchandise can be accomplished by standing near the cash register and listening for the beeps. Such observations might be done on a periodic, surprise basis by supervisors.**

b. **Some grocery stores have their cash registers networked so that a monitor in a centralized office, usually high above the floor, can monitor any cash register's activity. In this way, a supervisor could monitor cash register activity on a periodic basis.**

CP 8-8

1. **Several methods could be used to determine how much the cashier stole. The method described here is based on preparing a bank reconciliation as illustrated in the chapter. Because of the theft of the undeposited receipts, the bank reconciliation adjusted balances will not agree. The difference between the adjusted balances is the estimate of the amount stolen by the cashier.**

PARKER COMPANY
Bank Reconciliation
July 31

Balance according to bank statement		$10,575
Add undeposited cash receipts on hand		1,500
Deduct outstanding checks:		
No. 2670	$1,050	
3679	675	
3690	1,650	
5148	225	
5149	750	
5151	800	5,150
Adjusted balance		$ 6,925
Balance according to company's records		$10,400
Add note and interest collected by bank		2,400
Adjusted balance		$12,800
Adjusted balance according to company's records		$12,800
Adjusted balance according to bank statement		6,925
Amount stolen by cashier		$ 5,875

Note to Instructors: **The amount stolen by the cashier could also be computed directly from the cashier-prepared bank reconciliation as follows:**

Outstanding checks omitted from the bank reconciliation prepared by the cashier:		
No. 2670	$1,050	
3679	675	
3690	1,650	$3,375
Unrecorded note plus interest incorrectly recorded on the bank reconciliation prepared by the cashier		2,400
Addition error in the total of the outstanding checks in the bank reconciliation prepared by the cashier*		100
		$5,875

* ***Note:*** **The cashier has altered the adding machine tape so that the total is not correct.**

CP 8-8 (Concluded)

2. **The cashier attempted to conceal the theft by preparing an incorrect bank reconciliation. Specifically, the cashier (1) omitted outstanding checks on July 31 totaling $3,375, (2) added the list of outstanding checks shown on the bank reconciliation incorrectly so that the total is misstated by $100, and (3) incorrectly handled the treatment of the note and interest collected by the the bank.**

3. a. **Two major weaknesses in internal controls that allowed the cashier to steal the undeposited cash receipts are as follows:**

    - **Large amounts of undeposited cash receipts were kept on hand during the month. For example, cash receipts for July 30 and 31 had yet to be deposited as of July 31. The large amount of undeposited cash receipts allowed the cashier to steal the cash without arousing suspicion that any cash was missing.**
    - **The cashier prepared the bank reconciliation. This allowed the cashier to conceal the theft temporarily.**

   b. **Two recommendations that would improve internal controls so that similar types of thefts of undeposited cash receipts can be prevented are as follows:**

    - **All cash receipts should be deposited daily. This would reduce the risk of significant cash losses. In addition, any missing cash would be more easily detected.**
    - **The bank reconciliation should be prepared by an independent individual who does not handle cash or the accounting records. One possibility would be for the owner of Parker Company to prepare the reconciliation.**

Note to Instructors: **In addition to the above recommendations, Parker Company should be counseled that it is standard practice for any disgruntled employees, fired employees, or employees who have announced quitting dates to be removed from sensitive positions (such as the cashier position) so that company assets or records will not be jeopardized. Finally, checks that have been outstanding for long periods of time (such as Nos. 2670, 3679, and 3690) should be voided (with stop payment instructions given to the bank) and reentered in the cash records. This establishes control over these items and prevents their misuse.**

CP 8-9

1. **Year 3: $1,975.3 per month ($23,703 ÷ 12)**
   Year 2: $1,514.3 per month ($18,172 ÷ 12)
   Year 1: $1,102.8 per month ($13,234 ÷ 12)

2. **Year 3: 7.0 months ($13,838 ÷ $1,975.3)**
   Year 2: 10.8 months ($16,338 ÷ $1,514.3)
   Year 1: 34.3 months ($37,778 ÷ $1,102.8)

3. **At the end of Year 1, TearLab had 34.3 months of cash remaining. During Year 2, the monthly cash expenses increased from $1,102.8 to $1,514.3. At the end of Year 2, less than 11 months (10.8) of cash remained. In Year 3, TearLab increased its monthly cash expenses from $1,514.3 to $1,975.3. At the end of Year 3, less than eight months (7.0) of cash remained. Unless TearLab changes its operations or raises additional financing, it will run out of cash within a year. In the long term, unless the company improves its cash flows, it may have difficulty raising sufficient cash from investors or creditors to continue operations.**