## Illustrative Audit Case: Keystone Computers \& Networks, Inc. <br> Part III: Substantive Tests-Accounts Receivable and Revenue

This part of the audit case illustrates the manner in which the auditors design substantive tests of balances. The substantive tests are illustrated for two accounts-receivables and revenue. This aspect of the audit is illustrated with the following audit documentation:

- ABC's risk assessment working paper that combines the auditors' assessments of inherent and control risks into an overall risk of material misstatement for the assertions.
- The substantive audit program of accounts receivable and revenue.
- The audit sampling plan for the confirmation of accounts receivable.

Adams, Barnes \& Cos. assessment of control risk is described in Part II of the audit case on pages 441 through 454. To refresh your knowledge of the case, review that part as well as Part I on pages 213 through 220 of Chapter 6.

## Risk Assessment—Revenue Cycle

Client: Keystone Computers \& Networks, Inc.

Financial Statement Date: 12/31/X5

| Assertion | Inherent Risk | Control Risk | Overall Risk of Material Misstatement |
| :---: | :---: | :---: | :---: |
| Existence of receivables and occurrence of revenue transactions | Fraud risk | Moderate | High |
| Completeness of receivables and revenue | Moderate | Lom | Lom |
| Rights to receivables | High | Moderate | Moderate/Aigh |
| Valuation of receivables | Frand risk | Moderate | High |
| Presentation and disclosure | Moderate | Maximum | Moderate |

## Fraud Risks:

Description: Management may be motiuated to overstate revenne and receivables to improve financial results due to impending sale of bensiness.
Controls: Because Keystone is a nompublic company without an independent board or andit committee, there are no significant internal controls to prevent management from overstating results.
Audit Response: The nature, timing, and extent of andit procedures will be modified as described below:
a. Accounts receiwable will be confirmed at year-end using a 5 percent risk of incorrect acceptance.
b. A reviem of the monthly sales reports by salesperson will be performed to identify any unusuat individual sales or sales uolume.
c. Credit files of customers with large receiwables (ouer $\$ 25,000$ ) will be reviemed for indications of fictitions customers.

## Audit Program—Substantive Tests—Accounts Receivable and Revenues

Client: Keystone Computers \& Networks, Inc.

Financial Statement Date: $12 / 31 / \times 5$
Procedure

## Sales Transactions

1. Obtain an aged trial balance of accounts receivable as of 12/31/X5.

| MP $\quad 1 / 6 / X_{6}$ |
| :--- |

2. Select a sample of customers' accounts at $12 / 31 / X 5$ for positive confirmation using probability-proportional-to-size sampling based on the following parameters:
a. Risk of incorrect acceptance of $5 \%$.
b. Tolerable misstatement of $\$ 35,000$.
c. Expected misstatement of $\$ 10,000$.
3. Use generalized audit software to:
a. Foot the master file of accounts receivable at 12/31/X5.
b. Test the client-prepared aging of accounts receivable.
c. Select the specific accounts for confirmation.
4. Mail accounts receivable confirmation requests.
5. Send second requests for all unanswered confirmation requests.
$\xrightarrow[M P \quad 1 / 7 / X_{6}]{ }$
6. For confirmation requests to which no reply is received perform the following alternative procedures:
a. Test items subsequently paid to remittance advices which identify the specific invoices paid. If necessary, reconcile the amounts paid to sales invoices and delivery receipts.
b. For items not paid, inspect the invoices and delivery receipts for the sales transactions making up the account balance.
7. Resolve exceptions noted on confirmation requests.

| $\frac{M P}{M P}$ |  | $\frac{2 / 12 / \times 6}{1 / 7 / X_{6}}$ |
| :--- | :--- | :--- |
| $\frac{1 / 7 / X_{6}}{M P}$ |  |  |
| $\frac{1 / 8 / \times 6}{1 / 25 / \times 6}$ |  |  | esolve exceptions noted on confirmation requests.


| MP | 2/16/X6 |
| :---: | :---: |
| MP | $2 / 161 \times 6$ |
| MP | $2 / 161 \times 6$ |

8. Review credit files for customers with accounts receivable above $\$ 25,000$ at 12/31/X5. Investigate any indications of fictitious accounts.
9. Summarize the results of the confirmation procedures.

| MP | 2/16/X6 |
| :--- | :--- |
| $2 / 16 / X_{6}$ |  |

(Concluded)

Client: Keystone Computers \& Networks, Inc.

Financial Statement Date: $12 / 31 / X_{5}$
Procedure $\quad \frac{\text { Performed by }}{\text { Initials Date }}$
10. Review the adequacy of the allowance for uncollectible accounts by performing the following procedures:
a. Review the aged trial balance of accounts receivable with the president.
b. Review confirmation exceptions for indications of disputed amounts.
c. Analyze and review trends in the following relationships:
(1) Accounts receivable to net sales.
(2) Allowance for bad debts to accounts receivable.
(3) Bad debt expense to net sales.

| We | 2/13/X6 |
| :---: | :---: |
| We | 2/13/X6 |
| We | 2/15/X6 |
| WS | 2/15/X6 |
| W, | 2/15/X6 |

11. At year-end, review the file of sales invoices that are waiting to be matched with delivery receipts for any sales transactions that were not executed and, therefore, should be recorded in the subsequent period.
12. For all sales recorded in the last week of the year inspect the related delivery receipt to determine that the sale occurred before 12/31/X5.

| MP | 12/31/X5 |
| :---: | :---: |
| MP | 2112106 |

13. Review credit memoranda for sales returns and allowances through the last day of fieldwork to determine if an adjustment is needed to record the items as of year-end.
14. Perform analytical procedures for sales and accounts receivable including comparison of the following to prior years and/or industry data:
a. Gross profit percentage by month.
b. Sales by month by salesperson.
c. Accounts receivable turnover.
d. Advertising expense as a percentage of sales.
e. Net receivables as a percentage of total current assets.
15. Ascertain whether any accounts have been assigned, pledged, or discounted by review of agreements and confirmation with banks.
MP

2/16/X6
16. Ascertain by inquiry whether any accounts are owed by employees or related parties such as officers, directors, or shareholders, and:
a. Obtain an understanding of the business purpose for the transactions that resulted in the balances.
b. Ascertain the amounts involved.
$\frac{W \mathcal{L}}{\frac{W S}{W S}} \frac{2 / 16 / \times 6}{2 / 16 / \times 6}-1 / 25 / \times 6$
c. Confirm the balances.
Keystone Computers \& Networks, Inc.
B-9
Audit Sample Plan for Confirmation of Accounts Receivable we
12/31/X5 1/7/X6

Objective: Establish the existence and gross ualuation of accounts receiwable and occurrence and accuracy of sales by confirmation.
Population: The trial batance of 433 accounts receivalle at 12/31/X5, with a total book walue of $\$ 1,023,545$.
Definition of Misstatement: Any amount that is determined not to be a valid account receivable.
Sampling Technique: Probability-proportional-to-size.
Sampling Parameters:

1. Tolerable misstatement:

$$
\begin{array}{lr}
\text { Total materiality as indicated in the audit plan } & \$ 70,000 \\
\text { Less: Estimate of undetected misstatement ( } 50 \% \text { of ouerall materiality) } & 35,000 \\
\text { Toleradele misstatement for this test } & \$ 35,000
\end{array}
$$

2. Risk of incorrect acceptance:

Because we have assessed the risk of material misstatement as high, the risk of incorrect acceptance will be set at 5 percent.

## 3. Expected misstatement:

Based on prior-year audits, the expected misstatement for the account is \$10,000.

## Calculation of Sample Size and Sampling Interval:

$$
\begin{aligned}
\text { Sample sige } & =\frac{\text { Boak walue of population } \times \text { Reliability factor }}{\text { Tolerable misstatement }-(\text { Expected misstatement } \times \text { Expansion factor) }} \\
& =\frac{\$ 1,023,545 \times 3.00}{\$ 35,000-(\$ 10,000 \times 1.6)} \\
& =162 \\
\text { Sampling interval } & =\frac{\text { Boak ualue of population }}{\text { Sample sige }}=\frac{\$ 1,023,545}{162}=\$ 6,300 \text { (rounded) }
\end{aligned}
$$

Actual sample size was only 94 because a number of accounts were more than twice the sampling interual.
KEYSTONE COMPUTERS \& NETWORKS Monthly Sales Report For the Three Years Ended 12/31/X5

|  | Sales of Computers |  |  |  |  |  | Consulting Revenue |  |  |  |  | Service Revenue |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 20x3 |  | 20x4 |  | 20x5 |  | 20x3 | 20x4 |  | 20x5 | 20x3 | 20x4 | 20x5 |
| January | \$ | 587,000 | \$ | 701,000 | \$ | 784,000 | \$ | 63,000 | \$ 75,000 | \$ | 86,000 | \$ 12,000 | \$ 14,000 | \$ 15,000 |
| February |  | 590,000 |  | 744,000 |  | 862,000 |  | 72,000 | 75,000 |  | 90,000 | 13,000 | 16,000 | 17,000 |
| March |  | 643,000 |  | 762,000 |  | 907,000 |  | 67,000 | 82,000 |  | 102,000 | 13,000 | 15,000 | 17,000 |
| April |  | 656,000 |  | 733,000 |  | 762,000 |  | 66,000 | 81,000 |  | 92,000 | 12,000 | 16,000 | 19,000 |
| May |  | 668,000 |  | 731,000 |  | 806,000 |  | 68,000 | 79,000 |  | 95,000 | 14,000 | 15,000 | 17,000 |
| June |  | 657,000 |  | 765,000 |  | 894,000 |  | 66,000 | 84,000 |  | 111,000 | 13,000 | 17,000 | 18,000 |
| July |  | 681,000 |  | 702,000 |  | 796,000 |  | 73,000 | 79,000 |  | 96,000 | 14,000 | 16,000 | 18,000 |
| August |  | 679,000 |  | 754,000 |  | 856,000 |  | 69,000 | 87,000 |  | 102,000 | 13,000 | 15,000 | 17,000 |
| September |  | 675,000 |  | 802,000 |  | 932,000 |  | 68,000 | 84,000 |  | 116,000 | 13,000 | 16,000 | 19,000 |
| October |  | 701,000 |  | 764,000 |  | 758,000 |  | 75,000 | 87,000 |  | 105,000 | 15,000 | 16,000 | 18,000 |
| November |  | 734,000 |  | 774,000 |  | 849,000 |  | 73,000 | 91,000 |  | 113,000 | 14,000 | 16,000 | 18,000 |
| December |  | 737,000 |  | 812,000 |  | 951,000 |  | 72,000 | 92,000 |  | 127,000 | 14,000 | 15,000 | 18,000 |
| Total |  | 8,008,000 |  | ,044,000 |  | ,157,000 |  | $\underline{ }$ | \$996,000 |  | $\xrightarrow{1,235,000}$ | \$160,000 | \$187,000 | \$211,000 |

Appendix 11B Problems

Required:
11B-1. In Part II (Appendix 11A) of the audit case, the audit staff of Adams, Barnes \& Co. identified the following two internal control weaknesses:
a. Sales invoices are prepared and mailed prior to delivery of goods.
b. Accounts receivable are not written off on a regular basis.

Review the audit program on pages 457 through 458 and identify the substantive audit procedures that were designed specifically to address the misstatements that are made more probable due to these weaknesses.
11B-2. Assume that you have been assigned to the audit of Keystone after audit planning has occurred. Review the planning information on pages 213 through 220 and the audit program for the accounts receivable and revenue (B-6 on pages 457-458). The manager on the engagement has given you the task of reviewing the monthly revenue report on page 460 (B-11).
a. Based on your review of the report, describe any unusual relationships that might indicate a risk of misstatement of revenues based on your knowledge of the company derived from a review of the information on pages 213 through 220.
b. Identify any procedures on the audit program for receivables and revenue that might address the risk(s) identified in (a).
c. Design two other procedures that would address the risk(s) identified in $(a)$.

11B-3. Keystone Computers \& Networks, Inc. (KCN), has 433 accounts receivable, with a total book value of $\$ 1,023,545$. From that population, Adams, Barnes \& Co. (ABC), CPAs, selected a sample of 94 accounts for confirmation for the year ended December 31, 20X5, as illustrated by the working paper on page 459 . First and second confirmation requests resulted in replies for all but 10 of those accounts. ABC performed alternative procedures on those 10 accounts and noted no exceptions. Of the 84 replies, 5 had exceptions as described below (with ABC follow-up):

1. "The balance of $\$ 1,200$ is incorrect because we paid that amount in full on December 31, 20X5." Follow-up: An analysis of the cash receipts journal revealed that the check had been received in the mail on January 9, 20X6.
2. "Of the balance of $\$ 30,000, \$ 330$ is incorrect because on December 19 we returned a printer to Keystone when we found that we didn't need it. We ordered it in the middle of November when we had anticipated a need for it. When we received the printer we realized it was unnecessary and returned it unopened." Follow-up: An analysis of the transaction revealed that it was received by Keystone on December 31, 20X5, and that the adjustment to the account had been processed on January 2, $20 X 6$.
3. "The balance of $\$ 300$ is correct, and we paid it on January 5, 19X6." Follow-up: An analysis of the cash receipts journal revealed that the check had been received on January 10, $20 X 6$.
4. "Of the balance of $\$ 13,000, \$ 1,000$ is incorrect because it represents goods that we didn't receive until January 5, 20X6." Follow-up: Inspection of shipping records reveals that the item was shipped on January 3, 20X6.
5. "Of the account's $\$ 1,800$ balance, we paid $\$ 1,746$ and the $\$ 54$ ( 3 percent of the total) remains unpaid because the Keystone salesperson told us that she would be able to obtain a 'special' discount beyond the normal." Follow-up: While inspection of the sales agreement indicated no such discount arrangement, discussions with Loren Steele (controller) and Sam Best (president) indicated that the salesperson had inappropriately granted such a discount to the client. On January 15 of 20X6 they processed the discount and credited the account for $\$ 54$.
Required:
a. For each of the five exceptions, determine the account's proper "audited value."
b. Use the probability-proportional-to-size method with your analysis from part (a) to evaluate your sample's results. The risk of incorrect acceptance is 5 percent.
