1947

Loading and hauling equipment manufacturer; Case studies in auditing procedure no. 01

American Institute of Accountants. Committee on Auditing Procedure

NUMBER I

CASE STUDIES

IN

AUDITING PROCEDURE

A LOADING AND HAULING EQUIPMENT MANUFACTURER

This is the first of a series of case studies prepared by individual members of the Committee on Auditing Procedure of the American Institute of Accountants to illustrate actual application of auditing procedures

Published by

AMERICAN INSTITUTE OF ACCOUNTANTS

270 MADISON AVE., NEW YORK 16, N. Y.

The price of single copies of these Case Studies is fifty-cents. A reduction of 10 per cent is made for orders of 10 or more copies. A special price of twenty-five cents per copy is made to accounting students enrolled in recognized colleges or schools. If delivery is to be made in Greater New York, add 2 per cent Sales Tax.

★

Order from American Institute of Accountants
270 Madison Avenue, New York 16, New York

Case Studies

IN

AUDITING PROCEDURE

★

Published by the American Institute of Accountants, 270 Madison Ave., New York 16, N. Y.

★

Sponsored by 1946-1947 Committee on Auditing Procedure, American Institute of Accountants:

PAUL GRADY, *Chairman*

WILLIAM D. CRANSTOUN

DAVID B. GALLOWAY

RALPH H. GALPIN

ALVIN R. JENNINGS

C. ALVIN KOCH

EDWARD A. KRACKE

LEWIS LILLY

JOHN A. LINDQUIST

IRA B. McGLADREY

HAROLD A. MOCK

J. S. SEIDMAN

CYRIL TALBOT

W. C. WAGGONER

KARL R. ZIMMERMANN

CARMAN G. BLOUGH,
Director of Research

A LOADING AND HAULING EQUIPMENT MANUFACTURER

CONTENTS

FOREWORD

IN 1941, when the short form of auditors' report now in general use was recommended by the American Institute of Accountants, it incorporated for the first time two significant statements relative to the scope of the examination. These were (1) "Our examination was made in accordance with generally accepted auditing standards," and (2) The examination "included all procedures which we considered necessary." During recent years the Committee on Auditing Procedure of the American Institute of Accountants has given a great deal of consideration to the development of a more explicit statement of the meaning of generally accepted auditing standards. Comprehensive papers were presented by members of the Committee at the last annual meeting of the Institute and the Committee expects to publish a statement on the subject in the near future. The substance of the generally accepted standards tentatively adopted by the Committee may be summarized as follows:

General Standards

1. The examination is to be performed by a person or persons having adequate technical training and proficiency as an auditor.
2. In all matters relating to the assignment an independence in mental attitude is to be maintained by the auditor or auditors.
3. Due professional care is to be exercised in the performance of the examination and the preparation of the report.

Standards of Field Work

1. The work is to be adequately planned and assistants, if any, are to be properly supervised.

2. There is to be a proper study and evaluation of the existing internal control as a basis for reliance thereon and for the determination of the resultant extent of the tests to which auditing procedures are to be restricted.

3. Sufficient competent evidential matter is to be obtained through inspection, observation, inquiries and confirmations to afford a reasonable basis for an opinion regarding the financial statements under examination.

Standards of Reporting

1. The report shall state whether the financial statements are presented in accordance with generally accepted principles of accounting.

2. The report shall state whether such principles have been consistently observed in the current period in relation to the preceding period.

3. Informative disclosures in the financial statements are to be regarded as reasonably adequate unless otherwise stated in the report.

A consideration of the foregoing summary of standards will indicate that auditing procedures are the means by which the independent auditor attains or complies with the generally accepted auditing standards applicable to field work. Auditing procedures are so numerous and should be varied so greatly to meet particular circumstances that it is not possible to make an enumeration of procedures which would be applicable generally, or even widely. It is natural that this is the case because if the examination of accounts and financial statements could be reduced to a stereotyped check list of instructions, there would be no need for a public accounting profession. Experienced professional judgment determines the scope and nature of audit procedures to be followed in each individual engagement.

It is the view of the Committee on Auditing Procedure that the most satisfactory method of presenting auditing procedures is the preparation of a series of case studies illustrating the auditing procedures adopted and applied in actual examinations. Accordingly, each member of the Committee has been requested to submit a comprehensive description of audit work performed on a complete engagement. The following excerpt from the memorandum submitted for the guidance of the members of the Committee will indicate the general nature of the studies:

"It is believed that the case study material would be rendered more valuable, both to the practitioner and student, if an entire examination is covered. It is suggested therefore that each member of the Committee on Auditing Procedure should select a case within his own practice which he considers typical of current practices and procedures and that he should prepare a complete written audit program which will be fully descriptive of the work which actually took place. In this connection, it is important that actual procedures should be described even though the member may feel upon reconsideration and with the benefit of hindsight that certain modifications of the program should have been made. The principal purpose of the case study material is to illustrate typical current practices and not to set forth perfect or ideal models which might be misleading and perhaps even dangerous to hold out as representative of current practice. If rather complete information can be given as to the system of internal control and other pertinent circumstances the cases should bring out the importance of professional judgment in the selection and application of procedures as the principal means by which the independent accountant complies with generally accepted auditing standards."

The accompanying memorandum represents a case study submitted by one of the members of the Committee covering an examination of a loading and hauling equipment manufacturer. This case study is not a representation of the views of the Committee on Auditing Procedure; it has not been reviewed by the various members of the Committee. It represents the description of the auditing procedures which were actually followed in the particular case by one member of the Committee. The auditing procedures described may be applicable only due to particular circumstances surrounding this examination and, even in this case, alternative procedures might have been used to accomplish the general audit objectives.

The Committee hopes that the case study material will serve a useful purpose not only within the profession, but also in the various colleges and universities throughout the country which offer advanced instruction in accounting and auditing subjects.

Committee on Auditing Procedure.

September, 1947.

No. 1: A LOADING AND HAULING EQUIPMENT MANUFACTURER

DESCRIPTION OF BUSINESS

THE company chosen for this case study was organized to manufacture track-type wheeled equipment such as trailers and wagons of various capacities and body types for use in rock and earth moving, highway, dam, and airport construction, cane hauling, and orchard use. The trailers are designed for use with a track-type tractor produced by one of the largest manufacturers of such equipment, but can be used with any other tractor of sufficient power.

In recent years, the company has developed two types of loaders. The first is a front-pick-up and rear-discharge loader which is mounted on and powered from a track-type tractor for handling earth and other materials including coal, sand, gravel and sugar beets. The other is a self-powered and self-propelled windrow pick-up tool. It is used to pick up material windrowed on a highway and to load it into trucks in such manner as not to block both lanes of traffic.

The company's products are distributed through independent dealers. A large percentage of such dealers are also dealers for one of the largest manufacturers of tractors. The company has a number of directly employed regional sales engineers rendering consulting service and advice to the dealers and to their customers.

PERMANENT FILE

Purpose and Operation

The purpose of the permanent file developed by our firm several years ago is three-fold; from it can be obtained by staff members unfamiliar with the client's business, a quick picture of the financial history of the business; it provides a ready reference for, and a brief summary of, recurring or continuing items, thus eliminating repeated review of lengthy documents and searches among old working papers; and it serves to eliminate the preparation, year after year, of new working papers covering items showing few or no changes. The permanent file is carefully bound and may be carried to the assignment along with the working papers of the preceding audit. To it will be added whatever recent changes have occurred in the items which it contains and, when the audit has been completed, it is reviewed by the auditor's principal, along with the current working papers, as the record of the work done. Even though the "quick picture" afforded by the permanent file is taken advantage of only by succeeding years' auditors, it serves a most useful purpose to them; it refreshes their memories or, for auditors newly assigned, it gives them a ready, assimilable introduction to the client's affairs. Each auditor should take professional pride in adding accurate and useful information to the file for the benefit of next year's field staff.

To aid in serving these purposes, certain forms have been provided. An index-cover is supplied and a sheet containing a list of those who from year to year have reviewed the file. To this index, which already contains several essential preliminary items, should be added titles of account summaries explained below. The general-information sheets next following call for data frequently referred to. No forms are provided for the summary balance sheets and income statements; it is intended that any one statement, somewhat condensed and revealing any important features, with the balance-sheet containing subtotals only for current assets and current liabilities, occupy a single column so that items may be easily compared for a series of periods and so that one 14-column worksheet may last for a number of years.

Summaries of analyses, or, where practicable, the analyses themselves, should be provided for the more important accounts, particularly for such accounts as:

- Long-term investments
- Land
- Buildings
- Machinery
- Furniture and fixtures
- Reserves for depreciation
- Intangibles
- Long-term deferred charges, such as bond discount
- Amortization schedule
- Long-term liabilities
- Reserves
- Capital stock
- Paid-in surplus
- Earned surplus including dividend record
- Sales by products
- Cost of sales by products

Where the current audit work required on any of the above items is minor, the detail added to the record in the permanent file need not again appear in the current working papers, provided reference is made, on the working trial balance, to the page number of the permanent file.

Other information and documents or briefs thereof which will increase the usefulness of the permanent file include:

Organization chart
Plant and office layouts
Articles of incorporation
By-laws
Accounting principles followed
Manual of accounts
Office memoranda relating to accounting
Inventory procedures
Bonus and profit sharing plans
Pension plans
Labor agreements
Stock and bond samples or photostats
Minutes of stockholders
Minutes of directors
Minutes of executive committee
Patent-litigation details
Leases
Long-term contracts
Guarantee agreements

The permanent file also provides for recording the following information:

1. Exact corporate name	
2. Address	
3. Incorporation date	State of incorporation
4. Other states in which authorized to do business	
5. Subsidiaries and branches	
6. Securities listed	Exchange
7. Transfer agent	Registrar
8. Fiscal year ends	
9. Persons responsible for records	
10. Copies of reports distributed to	
11. Names of directors, officers and executives	
12. Depositaries, signatures and countersignatures	
13. Owners of 10% or more of each class of capital stock	
14. Assets mortgaged or pledged	
15. Leases	
16. Federal income tax status	
17. Bonus plans	

The permanent file also contains a section on the subject of internal control including subsections for:

1. Cash receipts
2. Cash disbursements
3. Payrolls
4. Receivables
5. Inventories
6. Fixed assets
7. Payables
8. Long-term debt
9. Net worth

AUDIT PROGRAM

The audit program was prepared in advance of the field work by the senior in charge and was reviewed with his principal.

The program was prepared on a summary sheet on which appear the following headings:

1. Items to be examined
2. Actual time required previous year
3. Estimated time for current year
4. Actual time for current audit

Each major group of accounts such as cash, accounts receivable, etc., shown on the summary was put on supporting work sheets under which appear the points to be covered. These points were not necessarily followed rigidly but were altered where conditions warranted.

Actual time required the previous year was copied from last year's summary. Estimated time was placed on the summary after reviewing the time required the previous year, noting unusual conditions which may have prolonged or shortened the time required for that year. Explanations for significant differences between estimated time and actual time were required for review by the principal.

As mentioned in a previous paragraph, it is the practice of our firm to maintain an internal control section in the permanent file of each client. This section is a printed series of questions dealing with internal controls which are considered standard. On a first engagement these questions are answered by the auditor in charge. Weaknesses are brought to the attention of a responsible official and recommendations are made for improvements. During each subsequent engagement the file is continually reviewed for possible deviations from established procedures at the same time noting whether action had been taken on our past recommendations, and whether there is room for further improvement. The auditor is constantly aware of the weak spots revealed by the use of this outline and will modify the conduct of his work accordingly.

As we have been the auditors for the client under discussion for many years, the use of the above method of constant review of internal control and recommendations for improvements has resulted in a system of internal control which we consider satisfactory. Descriptions of procedures followed with respect to internal control are discussed in the sections relating to the verification of accounts.

Except for our observation of the May 31, 1946, physical inventory taken by the company, all audit work was performed after the close of the client's fiscal year ended December 31, 1946. The audit was commenced on January 6 and completed on January 24, 1947. From one to three men were used on the audit depending upon the availability of manpower.

To indicate the size of the company we have inclosed the accompanying somewhat disguised balance sheet and statement of profit and loss:

BALANCE

As at December

ASSETS

CURRENT ASSETS:		
Cash		$ 250,000.00
Accounts receivable—Trade	$ 390,000.00	
Less—Reserve for doubtful accounts	5,000.00	385,000.00
Due from officers and employes		6,000.00
Inventories—Stated at the lower of cost or market—Raw materials, goods in process and finished goods		1,850,000.00
TOTAL CURRENT ASSETS		$2,491,000.00
FIXED ASSETS—Stated at cost:		
Land	$ 103,000.00	
Buildings	460,000.00	
Machinery and equipment	450,000.00	
Patterns, jigs, etc.	43,000.00	
Shop fixtures	30,000.00	
Small tools	3,000.00	
Automobiles	11,000.00	
Office equipment	30,000.00	
	$1,130,000.00	
Less—Reserves for depreciation	257,000.00	873,000.00
LEASEHOLD IMPROVEMENTS—		
Less amortization		30,000.00
DEFERRED CHARGES:		
Supplies	$ 35,000.00	
Unexpired insurance	9,000.00	44,000.00
		$3,438,000.00

SHEET

31, 1946

LIABILITIES AND CAPITAL

CURRENT LIABILITIES:			
Notes payable—Banks			$1,200,000.00
Accounts payable:			
Trade		$ 232,000.00	
Customers advance payments		28,000.00	
Royalties		10,000.00	
Federal withholding tax		1,000.00	
Employes savings bond deductions		3,000.00	274,000.00
Accrued expenses:			
Salaries and wages		$ 95,000.00	
Real estate and personal property taxes		6,000.00	
Social security taxes		16,000.00	117,000.00
Provision for Federal taxes on income and renegotiation of war contract			251,000.00
TOTAL CURRENT LIABILITIES			$1,842,000.00
CAPITAL:			
Capital stock, common, par value $4.00:			
	Shares		
Authorized and issued	150,000	$ 600,000.00	
Less—In treasury	1,000	4,000.00	
	149,000		596,000.00
EARNED SURPLUS:			
Balance—January 1, 1946		$ 704,000.00	
Net profit for the year ended December 31, 1946		370,000.00	
		$1,074,000.00	
Less—Dividends paid		74,000.00	1,000,000.00
			$3,438,000.00

STATEMENT OF PROFIT AND LOSS

For the year ended December 31, 1946

NET SALES		$4,500,000.00
COST OF SALES:		
Inventory—January 1, 1946	$ 900,000.00	
Purchases	2,500,000.00	
Direct labor	600,000.00	
Manufacturing expense	1,210,000.00	
Royalties	40,000.00	
	$5,250,000.00	
Less—Inventory—December 31, 1946	1,850,000.00	3,400,000.00
GROSS PROFIT		$1,100,000.00
SELLING EXPENSES	$ 235,000.00	
ADMINISTRATIVE AND GENERAL EXPENSES	165,000.00	400,000.00
NET PROFIT FROM OPERATIONS		$ 700,000.00
OTHER INCOME:		
Discounts earned	$ 16,000.00	
Royalties earned	9,000.00	25,000.00
		$ 725,000.00
DEDUCTIONS FROM INCOME:		
Discounts allowed	$ 100,000.00	
Interest paid	10,000.00	
Other	15,000.00	125,000.00
NET INCOME—Before provision for Federal taxes on income		$ 600,000.00
PROVISION FOR FEDERAL TAXES ON INCOME		230,000.00
NET INCOME TO SURPLUS		$ 370,000.00

Sales and Revenues

Separate sales and cost of sales accounts are maintained for each class of product sold. Terms are 2%—10 days, net 30 days. Sales were tested in the following manner:

1. Tape listings of the duplicate sales invoices were prepared, noting the sequence of the numbers, for May, November, and December. The totals were compared with the entries to the sales account.
2. The same procedure was followed for returns and allowances.
3. Recorded sales for the last week in December were traced to shipping data to ascertain that shipments thereon were made in December.
4. Open sales contracts were reviewed, the sales prices being compared with current costs, to determine possible inability to fill sales contracts at a profit.
5. Credits to customers recorded in January, 1947 were examined for possible significant returns or allowances on sales made in the year under review.
6. The ratio of returns and allowances to sales for the year under review was compared with the ratio for the previous year. The returns and allowances were not disproportionate so the only further test of returns and allowances made was to examine the credit memos for the months of November and December for proper approval and to trace December returns to the receiving record.
7. Approximately fifty of the larger sales transactions for the month of December were followed through from the order to the receipt of payment to ascertain that the points of internal control listed under the following notes and accounts receivable section were being observed.

Other income consisted of the following:

Discount earned
Royalties earned

In all phases of our examination where reference to paid invoices was made, we ascertained whether advantage of all possible discounts had been taken. In addition, the ratio of total discounts to total purchases for the current year was compared with ratios of prior years.

Verification of sales and revenues required three per cent of the total time required to complete the entire audit, including the preparation of the audit report.

Beginning with January 1, 1947, the company is to maintain statistics on quantities of the various products shipped. It is our intention to use these statistics in subsequent audits to further test sales by multiplying quantities by sales prices.

Notes and Accounts Receivable

Notes receivable did not appear on the beginning or ending balance sheets of the year under review.

Accounts receivable comprised approximately twelve per cent of the total assets as of December 31, 1946. Reference to our permanent file indicated that the individual customers accounts are machine posted, the transactions affecting accounts receivable being posted to the ledger sheet and the customers statement simultaneously. Previous to our beginning the examination of the customers accounts receivable we requested that the customers statements be not detached from the ledger sheets. We also arranged to obtain a copy of the accounts receivable trial balance for our working papers.

Reference to the internal control section of our permanent file for previous years indicated the following:

1. The person in charge of the customers ledger does not have access to incoming mail, does not bill customers, and does not mail the customers monthly statements.
2. That verification of prices and clerical accuracy of invoices is made by the assistant controller. He also maintains control over prenumbered invoice forms.
3. That complaints and other communications from customers are sent to the treasurer directly from the mail desk.
4. That each month reports of past due balances are prepared for the treasurer.
5. That bad debt chargeoffs are approved by the president.
6. That control over returns and discounts and other credits to customers is maintained by the treasurer and controller.

Satisfying ourselves that the above controls were being observed currently we proceeded to verify the customers accounts receivable in the following manner:

1. The names, addresses and balances shown on the statements were compared with those shown on the ledger sheet. At the same time, the balances shown on the ledger sheets were compared with those on the trial balance and the statements were separated from the ledger sheets.
2. The total of the trial balance was proved and compared with the amount appearing on the general ledger control.
3. It was decided to request positive confirmation on all customers accounts with a balance of $1,000.00 and over, comprising 89% of the accounts, and to make negative circularization on the balance of the accounts. The envelopes in which we mailed the statements bore the return address of our firm so as to prevent undelivered requests being returned to the client. Undelivered requests returned by the post office

were investigated, corrected addresses obtained, and the requests re-mailed. Second requests were mailed to customers from whom no confirmation had been received after a lapse of two weeks. Differences reported by the customers were investigated and where adjustments were necessary they were brought to the attention of the client. Seventy-five per cent of the total trade accounts receivable were confirmed by the customers.

4. No analysis was made of the trade accounts receivable control account but the entries for the entire year were scrutinized and unusual entries were substantiated by reference to supporting detail.

5. Collections and non-cash credits since December 31, 1946 were posted to the trial balance of customers accounts to aid us in determining the collectibility of the accounts and the adequacy of the reserve for doubtful accounts. Delinquent accounts were listed and discussed with the credit manager. A review of the estimated reserve requirements was made and the last year's estimate was compared with actual experience. Detail supporting accounts written off as uncollectible during the year were examined for proper approval.

Accounts receivable other than trade consisted of amounts due from officers. Transcripts of these accounts were made for the entire year and submitted to the debtor officers for confirmation. Officers accounts on which large repayments were made in the last week of December, 1946, were examined for the month of January, 1947 to determine whether company checks were issued to him immediately following the date of the balance sheet.

Customers' advance payments were totaled and reclassified as accounts payable.

By use of the above program relating to notes and accounts receivable we were able to verify approximately eighty-seven per cent of the amount appearing on the December 31, 1946 balance sheet in the best manner known, direct confirmation by the debtors. The audit of this section consumed ten per cent of the time applied to the entire audit.

Costs and Expenses of Operations

Procedures followed in the verification of cost of sales, payrolls, royalties, repairs, depreciation, insurance expense, and taxes are covered in the sections relating to balance sheet accounts.

We believe that the best method of testing the general accuracy of the profit and loss account is to compare the profit and loss account for the period under audit with the profit and loss account of the previous period. Bearing this in mind, we prepared a columnar schedule of the profit and loss accounts for each month together with the per cent to net sales, for the year ended December 31, 1946. Each month's and full year's percentage was compared with the corresponding percentages for the previous year. Where significant differences were noted an analysis of the account was prepared and the transactions traced to supporting evidence to determine the reason for the variation.

Accounts not analyzed were scanned by the auditor in charge, noting the nature of postings, testing their sources and being on the alert for:

1. Errors of classification.
2. Changes in classification.
3. Entries from unusual sources.
4. Material adjustments.
5. Debit entries in income accounts and credit entries in expense accounts.
6. Faulty explanations accompanying postings.

The cost system in use by the client is covered in the section relating to inventories.

Time required to complete the verification of costs and expenses of operations other than those verified in connection with balance sheet accounts was three per cent of the total.

Inventories

Inventories, consisting of raw materials, work in process, finished goods, and consigned products comprised approximately fifty-four per cent of the total assets. A physical inventory was not taken as at December 31, 1946; however, we were present at the taking, and did test the most recent physical inventory taken as at May 31, 1946.

On May 10, 1946, the company informed us that it was their desire to take a physical inventory as at the close of the month. A copy of the inventory instructions was submitted to us for approval.

The plant was closed during the period between May 20 and June 1, 1946. Before a count was attempted, a thorough job of housecleaning was performed, such as arranging materials in such a manner as to facilitate an accurate count and, wherever practical, to transfer identical items found in various parts of the plant to a common location. All completed orders were shipped before taking the count. Materials received during the shutdown were immediately placed in a pre-designated location away from items to be inventoried.

Prior to, and during our test of quantities we observed whether the following pertinent points covered in the instructions for taking the physical inventory were actually being carried out:

1. Control should be maintained over inventory tags.
2. Tags should be attached to materials immediately after the spaces on the tags calling for part number, description, and in the case of work in process, the code number signifying stages of completion have been filled in by the foremen together with a representative from the production control department.
3. Materials covered by each tag should be counted twice by two separate crews and each count should be initialed. In case of differences between counts, the foreman should be notified. He shall assign a third crew for a recount.
4. Obsolete, spoiled, scrapped, or inactive materials should be inventoried but the tag should be adequately marked to that effect.
5. Upon completion of the count, a representative of the cost department accompanied by a representative of the production department shall tour the plant and satisfy themselves that each bin, barrel, etc., has been tagged and has been inventoried. They will then detach the tags and account for all tags issued.

Our test of counts was confined to items having large dollar value, to items which appeared to be difficult to count, and to items on which the count shown on the tag appeared to be in excess or short of the number of items covered by the tag. We tested approximately sixty-five per cent of the total inventory.

After the inventory had been priced, extended, and footed by the client's staff we proceeded to make the following tests:

1. The quantities counted by our men were traced to the inventory records in order to ascertain that quantities were not changed.
2. Extensions on each item over $200.00 appearing on the inventory listing were tested. We scanned the items under $200.00.
3. Each page of the inventory was footed and a tape listing of the page totals was prepared, the total of which was compared with the total obtained by the company.
4. Raw materials which we had counted were listed on fourteen-column work sheets headed as follows:

Per Inventory:	Per Invoice:
Part Number	Date
Description	Vendor
Quantity	Quantity
Unit Price	Amount
Amount	Freight
	Total
	Remarks

Since pricing is based on the first-in, first-out method the client's staff was requested to remove from the files most recent invoices supporting at least the quantities shown on the inventory listing and list the information in the columns under "Per Invoice" and "Freight." We checked the information listed and compared the valuation with the amounts shown on the inventory. Differences were brought to the attention of the client's staff for correction.

5. Market prices were obtained for significant items.
6. For work in process and finished goods items which were test counted, we requested the client's staff to furnish us with cost cards. Material prices were compared with those appearing on the price test of raw materials and, if not, price tested to invoices. Labor was checked to labor distributions and the rate of overhead applied was compared with the actual percentage of overhead to labor. The totals of all three elements of cost were compared with the amounts shown on the current inventory listing. Differences were brought to the attention of the client's staff for correction. Current prices were also compared with prices shown on the previous inventory and with current selling prices.
7. The company's journal entry adjusting the inventory was reviewed and the account balances, as adjusted, were compared with the totals on the inventory summary.
8. The client was requested to furnish us with a letter certifying as to the method of determining quantities, the basis of valuation, etc.

The book inventory as at December 31, 1946, appeared at the following approximate values:

Raw materials	$1,146,000.00
Goods in process	530,000.00
Finished goods	174,000.00
Total	$1,850,000.00

Perpetual inventory cards were being maintained by the company for raw materials at the close of the year, the system being in force since the physical inventory on May 31, 1946. Our review of the cards indicated that quantities of each major item of raw material had been compared with actual quantities on hand at least once during the period from June 1 to December 31, 1946. Our test was conducted as follows:

1. A test of quantities on hand was made on January 9, 1947. Cards representing approximately twenty-five per cent of the total raw material inventory were removed from the inventory file. Quantities on hand appearing on the cards were compared with actual quantities counted in the plant. Significant differences were brought to the attention of the client's staff for investigation and correction. Quantities added to the cards since January 1, 1947, were traced to purchase invoices and quantities deducted were traced to material requisitions.

Records supporting goods in process inventory consisted of cost sheets, each sheet bearing a lot number representing a certain quantity of like products put into production at the same time. Material and direct labor had been entered at actual cost and manufacturing overhead at a percentage of direct labor.

It is the practice of the client to transfer finished goods at estimated cost and adjust these estimated costs to actual when the entire lot has been completed. Goods in process inventory was substantiated in the following manner:

1. The total of the amounts shown on the cost sheets was compared with the controlling account balance.
2. Extensions and footings on all cost sheets were verified.
3. Material, direct labor, and manufacturing overhead charges entered on cost sheets, approximating seventy-five per cent of the goods in process inventory, were tested as follows:
   (1) Quantities of materials were traced to material requisitions. Unit prices were traced to perpetual inventory records.
   (2) Direct labor was traced to payroll distributions.
   (3) The rate of overhead applied was compared with the ratio of actual overhead to direct labor.
4. The cost of estimated finished goods transferred from goods in process inventory was compared with actual costs on identical products appearing on completed lot numbers.

Perpetual inventory records are also maintained for finished products. The total of the inventory cards was compared with the amount appearing in the controlling account. Costs were compared with amounts appearing on the related completed lot cost sheets. In turn, costs appearing on the completed lot cost sheets were compared with costs verified in connection with our check of goods in process. Actual quantities on hand were checked on the same day as raw materials, deductions since January 1, 1947 being traced to shipping records, and additions to cost sheets.

In addition to the above, percentages of each product's cost of sales were computed for every month subsequent to May. Substantial variations between months were noted and discussed with the controller. Satisfactory explanations were received for each variation.

Consigned products were verified by confirmation.

Upon completion of our examination of inventories, the client was requested to furnish a certificate stating that the December 31, 1946, inventory was based on the May 31, 1946, physical inventory and that due care was taken in the calculation and additions to the inventory records to insure an accurate valuation.

The above verification required forty-nine per cent of the total time employed to complete the engagement.

Property Accounts, Depreciation and Maintenance

Property accounts, less the related reserves for depreciation, comprised approximately twenty-six per cent of total assets. The client's assets classified under the above caption are as follows:

Land
Buildings
Machinery and Equipment
Patterns, Dies and Jigs
Shop Fixtures
Small Tools
Office Equipment
Autos
Leasehold Improvements

The land and buildings, formerly occupied under lease, were purchased in December, 1946. Since we have audited the books and records of this client for many years, prior years' transactions appearing in our permanent file, our review of the accounts under this caption was confined to the year ended December 31, 1946. Property accounts are carried at cost.

To assist us in the verification of property accounts we prepared a summary schedule showing the balance at the beginning of the year, the additions during the year, the sales and retirements during the year, and the balance at the end of the year. A similar schedule was prepared for the reserves for depreciation, provision for depreciation being substituted for additions.

The cost of land and buildings purchased during the year was traced to the purchase contract, cancelled checks, and the minutes of the board of directors. Title had not cleared to the time of our completion of the audit. Leasehold improvements transferred to buildings were examined for evidence that they actually were applicable to the buildings purchased. A review of the method used in applying a valuation to the land indicated that the cost applied to land was in direct ratio of the assessed valuation of land for real estate tax purposes to the total assessed valuation. No provision for depreciation on buildings was made and no decision had been reached as to the estimated life of the building up to the time of our completion of the audit.

Additions to machinery and equipment aggregated approximately

$150,000.00. All additions in excess of $100.00 were listed and traced to supporting invoices. The company does not construct its own machinery and equipment. Credits to this account totaled approximately $63,000.00, approximately $50,000.00 of which represented fully-depreciated machinery and equipment. The balance represented machinery scrapped. Reference to our permanent file indicated that the company writes off property when it becomes fully depreciated. A prepared listing of the fully-depreciated items was traced to the property ledger.

Scrapped machinery was traced to supporting evidence originated by the factory superintendent and to the property ledger to determine the propriety of the amounts of write-off, the accumulated depreciation, and the resulting profit or loss. Depreciation rates are based upon estimated lives of each machine. The provisions for the current year were reviewed by testing approximately fifty per cent of the calculations and scanning the remainder. After completion of the above, tape listings of the December 31, 1946 balances of the machinery and equipment and the related reserves for depreciation were prepared from the property ledger and the totals compared with the balances shown on the general ledger.

Transactions affecting patterns, dies and jigs and the related reserves were verified in the same manner as for machinery and equipment. Retirements represented fully-depreciated patterns, dies, and jigs acquired in 1942, depreciation being based on a four year estimated life, except for certain dies acquired in 1946 purchased for a specific limited quantity of a special product. These dies are being written off on the basis of the number of units completed. The rate per piece was checked, the total number of items to be produced was traced to the purchase order, the number of items produced was traced to cost records, and the accumulated write-off computations were verified.

Shop fixtures, small tools, and office equipment were also verified in the same manner as for machinery and equipment. Depreciation has been provided at the following rates:

Shop Fixtures	8%
Small Tools	50
Office Equipment	6⅔

Additions to autos represented the acquisition of one machine, the purchase of which was traced to the paid invoice. Depreciation, based on mileage driven, was verified by reference to monthly reports prepared by the salesmen in possession of company automobiles.

Additions to leasehold improvements were traced to supporting invoices on file. Improvements transferred to buildings were verified by tracing the items transferred to evidence shown in the property ledger. Items not transferred were reviewed for the purpose of determining whether they actually pertained to property still under lease. Amortization of leasehold improvements, based on the remaining life of the lease, was verified by testing the client's computations.

Total provision for depreciation was reconciled to profit and loss.

All the above rates of depreciation and amortization are the same as those used for Federal income tax purposes and have been approved by the Internal Revenue Department.

In addition to the above verification of proper capital charges we prepared schedules of repair and maintenance accounts for possible capital items. Each item over $100.00 appearing in such accounts was traced to paid invoices.

Items which we considered to be proper capital charges were brought to the attention of the controller who prepared correcting journal entries.

Verification of the accounts relating to this section consumed eight per cent of the total time employed.

Prepaid Expenses, Deferred Charges and Intangible Fixed Assets

The items includable under this caption comprised approximately 1% of total assets at the year end. They are as follows:

1. Prepaid insurance
2. Deferred supplies
3. Airline deposit

The client's staff was requested to prepare a schedule of unexpired premiums which we tested. The points noted in the examination of the insurance policies were:

1. Whether the policy was in the name of the client.
2. Whether the policy contained a co-insurance clause.
3. Whether the policy indicated a lien on the property insured.

Information such as dates of policies, property covered, premiums, and expiration dates were traced to the insurance ledger.

Significant changes in coverage over the previous year were brought to the attention of the client and satisfactory reasons for such changes were obtained. Charges applicable to 1946 were compared with the amounts shown in insurance expense accounts.

In the absence of a physical inventory of supplies (a physical inventory was taken at May 31, 1946 which we had previously tested as to quantities and prices) we traced the major additions to the deferred supplies account to paid vouchers. Credits to the account were traced to supporting supply requisitions.

The airline deposit was verified by confirmation.

Verification of deferred charges took one per cent of the time required for the entire examination.

Cash

The company has five bank accounts, the cash being located in three banks. Three accounts are used for general purposes, one for employees savings bond deductions, and one for payroll. Cash comprised approximately seven per cent of the total assets.

In our review of internal control of cash we satisfied ourselves as to the following:

Cash receipts:

1. A list of incoming receipts is prepared and such lists are subsequently independently compared with the cash book entries.
2. One employee makes cash book entries, another makes up the deposit slip, and a third posts to ledgers.
3. Receipts are deposited intact daily.

Cash disbursements:

1. Petty cash is maintained on an imprest basis.
2. Disbursements, except for petty cash, are made by check.
3. Payroll and other advances to employees are authorized by the controller only.
4. Checks are prenumbered, fully accounted for, and in the custody of the treasurer.
5. Checks are signed at the time of payment and never in advance.
6. Vouchers are audited by a voucher clerk who has neither purchasing nor disbursing functions.
7. Safeguards against payment of same or duplicate invoices are (1) entering the amount of each voucher on a voucher index card maintained for each creditor, (2) attaching the original receiving tickets to each invoice, and (3) vouchers and invoices are mutilated as soon as paid.

Payrolls:

1. An individual record is maintained showing original and subsequent wage rates for each employee.
2. Wage rates are approved by the factory superintendent.
3. Time is recorded on clock cards and job tickets. The clock cards are compared with the job tickets.

4. Employees compensation is paid by check and distribution is made by persons other than those who prepare payroll or write checks.
5. Unclaimed wages are turned over to controller's office after three days and employees must claim them there.

Completed standard bank confirmation forms were mailed to each bank, requesting the December 31, 1946 cash balance, whether the company was directly liable for loans, acceptances, etc., on that date, and whether the company was contingently liable as endorser of notes discounted and/or as guarantor at the close of business on that date. At the same time the banks were requested to mail the bank statements as of the close of business January 6, 1947, the date of our cash count, together with the cancelled checks, directly to us.

The following reconciliation form was used in preparing the December 31, 1946 and the January 6, 1947 bank reconciliations:

Particulars	*Balance Beginning*	*Interim Transactions Deposits*	*Interim Transactions Withdrawals*	*Balance End*
Transactions per bank	$ –	$ –	$ –	$ –
In transit deposits:				
Beginning				
End				
Outstanding checks:				
Beginning				
End				
Unrecorded charges and credits				
Transactions per books . . .	$ –	$ –	$ –	$ –

The use of this form permitted us to verify the total receipts and total disbursements per books without footing the cash book.

Each detail of the client's November 30, 1946 reconciliations was investigated, the footings were proved, and the totals were compared with book balances. We then proceeded to prepare our own reconciliations as at December 31, 1946 and January 6, 1947 in the following manner:

1. The bank statements for both dates were proved by preparing tape listings of the deposits per bank statements and of the checks and other charges which had cleared the bank.
2. The dates and amounts of deposits per the bank statements were compared with the entries in the cash receipts book. Explanations were requested for all items on which there was a spread of more than one banking day between the date of receipt and the date of deposit.
3. Checks dated prior to December 1, 1946, were checked to the list of outstanding checks as at November 30, 1946. The date, payee, and amounts on checks dated subsequent to November 30, 1946 were checked

to recorded cash disbursements. Listings were prepared of the outstanding checks.

4. Checks outstanding on January 6, 1947, which were outstanding on November 30, 1946, were traced to recorded cash disbursements and to supporting detail.
5. Checks representing bank transfers for the period from December 1, 1946 to January 6, 1947 were traced to deposits shown on bank statements noting the time lapse between the date of the check and the date of deposit.
6. Bank charges not recorded on the books were brought to the attention of the client's staff.

Invoices supporting cash disbursements for the period from December 1, 1946 to January 6, 1947 were examined noting the following:

1. Date of invoice.
2. That approval appeared on invoice for receipt of material, price and terms, footing and extension and payment.
3. Distribution of invoices to proper accounts.
4. Mutilation of invoice.

The balance of cash shown on the employees savings bond deductions account was reconciled with the contra liability.

Since the balance in the payroll account remains constant, the account being reimbursed for actual payroll, we compared each transaction appearing in the account with amounts shown on payroll summaries. In addition to the above, we examined payroll records for the two weeks ended December 28, 1946 in the following manner:

1. The number of hours shown on time cards was compared with the number of hours on the payroll register.
2. The rates per hour were compared with rate authorization cards of the personnel department.
3. Computations of gross payroll, payroll deductions, net payroll, extensions and footings of the payroll register were checked.
4. Withholding exemption certificates on file were examined and compared with exemptions for payroll purposes.
5. Examined authorizations on file for other payroll deductions.
6. Checked postings from payroll distribution to the accounts.

The petty cash fund was counted on the morning of the beginning of the audit, January 6, 1947. The total counted was compared with the amount shown on the general ledger account. Non-cash items such as petty cash vouchers, I O U's and salary advances were listed. Approval by the treasurer was requested on the I O U's and salary advances.

Other cash on hand at the time of our count consisted of checks received from customers. These were listed, totaled, and compared with the deposit. The checks were deposited in our presence. Subsequently we ascertained whether any of the checks so deposited, had been charged back by the bank as uncollectible.

Verification of the items appearing under this section took ten per cent of the total time.

Investments and Related Income

Investments did not appear at the beginning or ending balance sheets of the period under review.

Liabilities

Liabilities as at December 31, 1946 were all current and consisted of notes payable, accounts payable, accrued expenses, and the provision for Federal taxes on income and renegotiation of war contracts.

Notes payable to banks comprised approximately sixty-five per cent of total liabilities. The loan was made in December, 1946, primarily to provide funds to purchase the land and buildings formerly occupied under lease. The company proposes to issue fifteen year 4¼ per cent bonds to provide funds to repay the major portion of notes payable. The notes payable were verified by confirmation from the holders thereof. Interest paid and the accrued interest computation were also verified.

Accounts payable were verified as follows:

1. A list of the payables as at December 31, 1946 was obtained from the company, the details were compared with the voucher register and creditors statements, the total was compared with the general ledger account, and the list was footed.
2. Items in excess of $2,000.00 were traced through to payment, noting any significant reductions and their possible effect on the amount outstanding on December 31, 1946.
3. An examination was made of items payable at the end of the year which were also unpaid at the time of our audit and reasons for the delay of payment were requested.
4. The file of open purchase orders and contracts was reviewed for unusual items.
5. Invoices and other entries to accounts payable subsequent to the balance sheet date were reviewed for possible unrecorded liabilities.
6. Positive confirmations were requested from creditors whose balances were in excess of $5,000.00 and who did not furnish the client with statements.
7. Items not trade accounts, namely royalties payable, withholding

taxes, and employees savings bond deductions were reclassified. They were verified in the following manner:

(1) Royalty contracts were examined and the royalty computations checked.

(2) Credits to the withholding tax account were compared with amounts appearing on payroll summaries and debits were traced to disbursements. Total debits and total credits were reconciled with withholding tax returns.

(3) A tape listing of the individual employees savings bond deduction cards was prepared and the total compared with the amount reclassified.

8. Customers' advance payments were verified in connection with accounts receivable.

Accrued expenses consisted of the following:

Salaries and wages
Real estate and personal property taxes
Social security taxes

The accrual for salaries and wages represented actual salaries payable for the week ended December 28, 1946, accrued salaries and bonuses and wages for the 30th and 31st of December, and also possible retroactive wages payable upon settlement of union agreement. Salaries and wages payable for the week ended December 28, 1946, were verified in connection with cash. Accrued salaries and wages for the 30th and 31st of December were checked to a listing of actual hours worked by each employee for the two days. The hours were tested by reference to time cards, the extensions were scanned and the listings footed. The union agreement was signed during our examination. The accrual for retroactive wages was verified by reference to actual payments made on January 14, and January 24, 1947.

A detailed analysis of real estate, personal property, and social security taxes was prepared and the accruals tested as follows:

1. The accrual for real estate taxes was verified by reference to the proration sheet upon which the purchase price of the real estate was based. The personal property tax accrual was compared with the prior year's tax bill.

2. Total wages and salaries reported on Federal withholding and social security reports were reconciled with amounts recorded in the books.

3. Salaries and wages reported on the various social security reports were compared.

4. We ascertained that W-2 forms had been distributed to employees for Federal income tax withheld.

5. Provisions for taxes shown on our detailed schedules were reconciled with charges to expense during the year.

6. Tax returns filed or tax bills in support of tax bills paid were examined.

The provision for Federal taxes on income was tested by adjusting the net profit to a tax basis and applying the current tax rates to the taxable profit. Revenue agents reports through 1944 were reviewed for possible additional assessments of income tax.

The provision for renegotiation of war contracts had not changed during the year. It represents the estimated refund due for the year 1945, computed by our firm, on which clearance had not been received. When clearance was later obtained, no refund was required.

During the entire audit we were on the alert for possible contingent liabilities which may have arisen from the following:

1. Accounts receivable discounted.
2. Claims for damages.
3. Guarantees of product or performance by others.
4. Endorsements.
5. Threatened or active litigation.
6. Compliance with orders of governmental agencies.

In addition, we secured representation from the client's independent legal counsel on any items with which he may have been conversant.

Verification of liabilities required eight per cent of the total time.

Capital Stock and Surplus

No changes occurred in the capital stock account during the year under review. The number of shares of the client's only issue, common stock, was confirmed by the Registrar. The client's holdings of treasury stock were verified by an inspection of the stock certificates.

The changes in the earned surplus account were the addition of the net profit for the year ended December 31, 1946 and the deduction of a dividend paid during the year. The propriety of the payment to the paying agent was verified by a review of the minutes of the board of directors. The actual payment was traced to the cash book, and cancelled check.

Time consumed in the verification of the accounts under this section was negligible.

Federal Income Tax Return

The tax return was prepared by our tax department, requiring three per cent of total time.

Annual Report Form 10-K

This report for the Securities and Exchange Commission was prepared by the senior in charge of the audit at a later date and required five per cent of total time.