AN EXPERIMENTAL HANDBOOK IN BASIC ACCOUNTING WITH SPECIAL APPLICATION FOR STUDENTS OF TELEVISION AND RADIO

Thesis for the Degree of M. A.

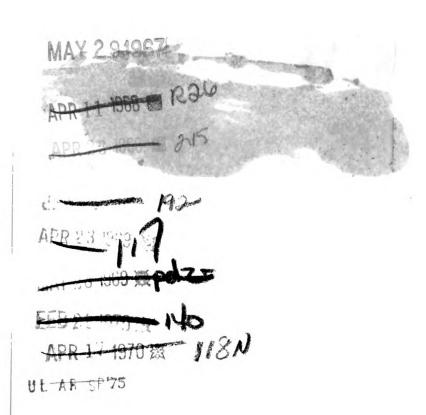
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ABSTRACT

AN EXPERIMENTAL HANDBOOK IN BASIC ACCOUNTING WITH SPECIAL APPLICATION FOR STUDENTS OF TELEVISION AND RADIO

by George E. Lott, Jr.

This thesis seeks to initiate work which might help to fill an existing gap between that which members of the commercial broadcasting industry would like graduates of television-radio departments to know and that which television-radio undergraduates are taught. Evidence seems to indicate that the industry would like its employees to have either training or experience in business administration. Further evidence seems to indicate that most undergraduate television-radio majors do not receive an appreciable amount of formal education in business courses. This thesis addresses itself to the exploration of a method whereby broadcasting majors might be made more aware of the importance of one aspect of the business side of broadcasting, the role of the accountant.

Most of the results of the exploratory work appear in the form of a handbook for possible use by undergraduates in a unit of an existing course. The handbook relates basic accounting theory and terminology to areas of broadcasting in which the student has an interest and with which

he is familiar. The accounting material, a part of that which would be taught in an introductory course, is discussed in terms of:

- 1. Basic procedures and theory.
- 2. Accounting practices as related to the three generally accepted divisions of a radio or television station:
 - a. Sales.
 - b. Engineering.
 - c. Programming.
- 3. Accounting procedures as they relate to top management.

The criteria used to determine which accounting materials should be included in this instrument were largely subjective in nature. Decisions which were reached were based on the author's education in preparation for the Certified Public Accountant's Examination, his experience in both commercial and non-commercial radio and his graduate work in broadcasting.

This handbook seeks to acquaint the student with basic accounting information as it applies to broadcasting. More importantly, it seeks to provide a basis for motivation of the student toward a desire for further study in accounting. The product of the application of these goals, and the resultant compilation of information is the handbook which constitutes Chapters III, IV and V of this thesis. Some testing and evaluation of this handbook were accomplished prior to its final drafting.

AN EXPERIMENTAL HANDBOOK IN BASIC ACCOUNTING WITH SPECIAL APPLICATION FOR STUDENTS OF TELEVISION AND RADIO

Ву

George E. Lott, Jr.

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CHAPTER I

DEFINITION OF THE PROBLEM

In broad terms, the general problem toward which this study is addressed in part concerns itself with education for the broadcasting industry. In more specific terms, the problem centers around a means whereby teachers of broadcasting can improve the education of undergraduate television-radio majors in an area which appears to be of vital and growing concern to the broadcasting industry and, therefore, to broadcasting education. The general problem may be stated as follows: given the proposition that the industry expects institutions of higher education to produce graduates who are knowledgeable in the business aspects of broadcasting, to what extent and by what means might higher education meet this expectation in an efficient manner?

In 1947, John Tinnea wrote in the Quarterly Journal of Speech that he felt that broadcasting might be taught in schools of business administration rather than in the departments in which it was being taught at the time: English, Speech, etc. 1 Tinnea's statement is just one example

¹John W. Tinnea, "A Radio Station Manager to Teachers of Radio," <u>Quarterly Journal of Speech</u>, Vol. 33 (October, 1947), p. 335.

of the feeling on the part of broadcasters that colleges and universities should graduate television-radio majors who are well-versed in the business aspects of broadcasting.

In 1962, the Association for Professional Broadcasting Education published the results of a study which was

. . . provide basic information on the background of those who work in broadcasting and to shed light on current employment and education needs and problems in the industry. It was felt that such information would be helpful in directing the work of the NAB in this area, in providing educators with information useful in preparing students for the industry.²

The results of this research by the APBE added substance to the feeling which Tinnea had expressed. The survey which was conducted by APBE compiled and analyzed answers from 2,345 managers, employees and former employees of the broadcasting industry, 3 and the results warrant some detailed consideration. In general terms the study showed that

. . . both television and radio managers chose sales and/or promotional experience as the most helpful single field in a broadcasting career. They also agreed that business education was the next most valuable field. The underlying theme is that broadcasting is a business to be run on sound business

²National Association of Broadcasters, <u>People in</u>
Broadcasting, A Research Study by the Association for <u>Professional Broadcasting Education and the National Association of Broadcasters</u> (Washington, D.C.: National Association of Broadcasters, 1962), p. i.

³ Ibid.

principles.4

The belief that broadcasting is essentially a business as opposed to an art, such as acting, existed throughout the study. When both managers and employees were asked, "If you had college or university training in broadcasting where do you think the emphasis should be placed?" the majority of both groups answered: "A business approach with emphasis on marketing, advertising, and business management. . ."

The study split the respondents into three categories: Supervisory (general manager, program manager, and chief engineer), Specialist (news director, announcer, producer-director), and Other (promotion manager, production man, continuity writer, etc.). The supervisory groups ranked the business approach to broadcasting as the aspect of education which they thought should receive primary emphasis. The specialist group ranked the liberal arts approach first, followed by business. The mothers ranked the business approach first. Further, advertising, marketing and business management courses were considered to be very valuable by 65 percent of the respondents and

⁴<u>Ibid</u>., p. 8.

⁵Ibid., p. 64.

⁶Ibid., p. 65.

⁷<u>Ibid</u>., p. 81.

moderately valuable by another 25 percent. There are, therefore, some rather positive feelings in the industry, on the parts of both managers and employees, about the importance of business education for the broadcaster. The comment of a TV promotion manager of a medium-market station sums up these feelings:

I think more emphasis should be given to basic management and business courses in college training. . . Administrative and management techniques are better learned in the classroom. Broadcasting today is big business and must be managed as such if it is to continue to grow and avoid the pitfalls of payola and rigging scandals.

As far as the APBE study is concerned, therefore, it would appear that those in broadcasting who hire college graduates have some definite ideas about what parts of their education are most valuable to them in their work.

Further study was conducted to determine if more recent graduates are receiving the business training which the industry considers so valuable. A random sample of 33 television-radio graduates from Michigan State University from 1960-1965, representing about 20 percent of the total, was drawn. The sample yielded the following results with respect to the number of credit hours of business courses which were completed by these graduates:

70% of the graduates had no courses in business. 12% of the graduates had 3 hours of business courses.

^{8&}lt;u>Ibid</u>., p. 78.

⁹Ibid., p. 87.

The number of television-radio students, then, who have had any exposure to formal instruction in business appears to be very small at Michigan State University and the same sort of situation might very well exist at other institutions.

It seems that education may not be meeting the requirements or desires of the broadcasting industry as well as it might. There may be several reasons for the existence of this situation. First, the problem could exist because departments which offer majors in broadcasting lack the personnel who are trained to teach the business of broadcasting. An awareness of the need for business training in broadcast curricula did not exist when many college professors of broadcasting attended college. The individuals who might best teach the business principles which the industry seems to value could be those who have acquired business experience in the industry. Few managers and sales and administrative personnel, however, have the advanced degrees which are the usual prerequisites to college teaching.

A second possible reason for the problem may be administrative rather than academic. Autonomous departments of television and radio are still somewhat rare. Niven's

"Tenth Survey of Colleges and Universities Offering Courses in Broadcasting, 1965-66," disclosed the information that courses in broadcasting were offered in ten different departments or schools. 10 Of the 131 colleges and universities offering bachelor's degrees in broadcasting, 67 offered the courses in departments of speech. 11 Whenever broadcasting becomes an area of study within a department which is dedicated to a specific discipline, broadcasting courses reflect the philosophies and goals of that department. These philosophies and goals may not necessarily conform to those of the broadcasting industry. Normally, it could not be expected that courses in business would be a part of a curriculum in such unrelated areas as Speech or English.

A third possible reason for the problem is philosophical in nature. Head wrote in <u>Broadcasting in America</u> that "... until the broadcasting industry took shape and became stabilized there was nothing definable to educate people <u>for</u> in broadcasting." In other words, education for broadcasting lacked a business philosophy during the

Harold Niven, "Tenth Survey of Colleges and Universities Offering Courses in Broadcasting, 1965-1966,"

Journal of Broadcasting, Vol. 10 (Summer, 1966), p. 230.

¹¹ Ibid.

¹²Sydney W. Head, <u>Broadcasting in America: A Survey of Television and Radio</u> (Boston: Houghton Mifflin Company, 1956), p. 412.

early years of the broadcasting industry. Head and Martin wrote in the Journal of Broadcasting that

It has taken decades of experience and many further innovations to reach the point where it is possible to make meaningful generalizations about broadcasting—in fact, to develop a philosophy of the subject.13

Broadcasting as an industry is only some forty-five years old. It still could very well be considered as being in its formative stages. As a consequence, a complete philosophy of education for broadcasting may take some time to develop.

Another reason for the existence of this problem could lie within the confines of the student himself. Most individuals in modern society come into contact with broadcasting in any of a number of forms and through any of a number of personal experiences. The student who enters college with the hope of majoring in broadcasting has, therefore, many preconceptions about what the industry is, what it does and where he will fit into it. The student, however, usually has had little contact with anything other than the "show business" side of the industry. Generally, he lacks proper awareness of the business emphasis of broadcasting. The student's preconceptions seem to make themselves manifest through his lack of interest in anything

¹³Sydney W. Head and Leo A. Martin, "Broadcasting and Higher Education: A New Era," <u>Journal of Broadcasting</u>, Vol. 1 (Winter, 1956-1957), p. 39.

but performance and studio operations courses. It would seem that the student would need to be made aware of the business aspects of broadcasting before he could be expected to become interested in those aspects for career purposes.

The first, and most obvious, action to accomplish this objective would be to revise the television-radio curricula so that they might reflect greater emphasis on the business of broadcasting. There are several reasons why this might not be immediately practical. First, the execution of such a curricular revision is no small task. It requires a vast amount of time from many individuals both within and without the television-radio areas. is impossible to make radical changes in a curriculum in a short space of time. Second, even after such a revision were made, departmental administrators would be faced with a problem which has already been identified: a lack of qualified teaching personnel for the new courses. mation and problems reflecting the business aspects of the broadcasting industry will not remedy the situation unless individuals are available who can teach these courses competently. Third, it is appropriate to raise a philosophical question: should broadcasting education lead the industry or should the industry lead broadcasting education in determining curriculum standards? This problem has been debated in a series of articles by Woodliff, Pennybacker

and Devlin in the <u>Journal of Broadcasting</u>. ¹⁴ Curricular revision is an evolutionary process which is not usually adaptable to panaceas which can instantly solve immediate problems.

Another action which could give television-radio students more business background would be to require them to minor in business administration. A major difficulty with such action is the student himself. It has already been mentioned that the early interest of most students lies in the area of studio operations courses, not in the area of the business of broadcasting. This interest continues as a strong motivational force for those students who hope eventually to seek employment in the production areas of the industry. To meet with any sort of success in business courses, students must want to acquire an understanding of industry economics. Students interested in production normally do not have this desire. To require these students to minor in business administration would not solve the problem.

It is known from experience that many students do

¹⁴ John N. Pennybacker, "Comment on Davlin," <u>Journal of Broadcasting</u>, Vol. 9 (Fall, 1965), p. 337; "Comment on Woodliff," <u>Journal of Broadcasting</u>, Vol. 9 (Fall, 1965), p. 332; and "Working with Universities," <u>Journal of Broadcasting</u>, Vol. 9 (Spring, 1965), pp. 183-187. John A. Davlin, "A Newcomer Looks at the Broadcasting Curriculum Controversy," <u>Journal of Broadcasting</u>, Vol. 9 (Spring, 1965), pp. 129-142. Charles M. Woodliff, "Catch Me If You Can," <u>Journal of Broadcasting</u>, Vol. 9 (Fall, 1965), pp. 329-332.

become interested in further study in business administration through exposure to the business aspects of the broadcasting industry in required courses in the major. This would seem to be the most practical of all possible solutions to the problem.

This thesis addresses itself to the exploration of a method whereby all broadcasting majors might be made more aware of one important aspect of the business side of broadcasting, the role of accounting.

CHAPTER II

THE ACCOUNTING HANDBOOK:

An Experimental Approach

Thus far, this study has concentrated upon an apparent need for increased amounts of education in the business of broadcasting for undergraduate television-radio majors. In this chapter, the investigation narrows to the specific field of accounting, because that is the aspect of education for broadcasting which this study attempts to explore.

Chapters III, IV and V of this thesis, referred to hereafter as the handbook, represent an experimental approach to the teaching of accounting and its uses in broadcasting stations. Nothing of this nature appears to have been attempted before. A review of existing literature in the area of education for broadcasting reveals only scattered attempts to acquaint students of broadcasting with the field of accounting. Tower developed a course outline for the study of station management. The stated objective of the course was:

• • • to provide an insight into the theory, the structure and the substance of management. The presentation is in terms of broadcasting management problems. Its essential elements are

applicable to business management everywhere. 1

This course devoted one week of a sixteen-week semester to accounting. Tower stated that his course represented a *modest beginning.**2

In the book <u>Television Station Management</u>, edited by Yale Roe, Mikita presents a discussion of "The Controller's Role in Management." In this treatment, no attempt is made to acquaint the student with the basics of accounting. Mikita explains what the controller does but he does not treat the reasons for the controller's actions.

Reinsch and Ellis discuss accounting in their book,

Radio Station Management.⁴ One chapter is devoted to the
accounts, the books and the ledgers which are used but the
reasons for their use are not explained. The material is
directed at people who already have some knowledge of the
fundamentals of accounting.

The handbook contained in this thesis was designed to present an understanding of accounting for students who are unfamiliar with it. Because of the motivation problems

Charles H. Tower, "Syllabus for a Course in Broadcast Management," <u>Journal of Broadcasting</u>, Vol. 1 (Winter, 1956-1957), p. 79.

²<u>Ibid</u>., p. 80.

³Joseph K. Mikita, "The Controller's Role in Management," <u>Television Station Management</u>, ed. Yale Roe (New York: Hastings House, Publishers, 1964), pp. 91-106.

⁴J. Leonard Reinsch and Elmo Israel Ellis, <u>Radio</u>
<u>Station Management</u> (2nd revised ed.; New York: Harper & Row, <u>Publishers</u>, 1960), pp. 185-208.

which were discussed in Chapter I, 5 the handbook carries this basic exposure a step further. Basic principles and methods of accounting are related to the field of broad-casting with which the student should already be familiar and interested. The handbook attempts to show how accounting is used as a management tool in all areas of administration of a broadcasting station.

There were two objectives in the construction of the handbook. First, it was an attempt to acquaint the student with basic accounting terminology and procedure so that, even if the student should have no further interest in accounting, he may gain an awareness of how it is used in broadcasting. The second objective was to provide a basis whereby the student might become motivated for further study in the field of accounting.

Five course-areas compose the usual core of training for the accounting profession. These five areas are: the principles of accounting, intermediate accounting, auditing, cost accounting and advanced accounting. At Michigan State University, for instance, the Department of Accounting and Financial Administration offers twenty-one different undergraduate courses. Of these twenty-one, only two courses do not, either directly or indirectly, require one of the above five areas as prerequisites. The

<sup>5
&</sup>lt;u>supra</u>, pp. 7-8.

following table shows the curriculum of the ${\tt Department.}^6$

COURSE	TITLE	PREREQUISITE			
201	Principles of Accounting	x			
202	Principles of Accounting	201			
301	Intermediate Accounting: Equities	202			
302	Intermediate Accounting: Assets	301			
303	Cost Accounting	202			
315	Survey of Accounting Concepts	X			
320	Survey of Cost Accounting	202			
333	Elements of Tax Accounting	202			
391	Financial Management	202			
392	Investment Planning	391			
4 00H	Honors Work	202			
401	Federal Income Tax Accounting	302			
402	Federal Income Tax Accounting II	401			
410	Auditing	302			
420	Managerial Cost Analysis	303			
421	Accounting Information Systems	303			
430	Advanced Accounting	202			
468	Field Studies	18-27 cr.			
491	Market Strategy in Financial Manageme	nt 391			
492		391			
493	Advanced Financial Management	491, 492			

Of the five generally recognized core areas, the principles of accounting was chosen as the basis for the handbook. A course in the principles of accounting is the point at which the potential professional accountant begins his training. It is a survey course which covers most of the separate areas of accounting. Since the handbook represents the first exposure of most students of broadcasting to the field of accounting, it is appropriate that instruction begin at the beginning.

It was judged unnecessary and impractical to include

Michigan State University Publication, <u>Catalogue</u> <u>Issue</u>, Vol. 60, No. 8 (East Lansing: Michigan State University, December, 1965), pp. A-3-A-4.

all of the material which is usually contained in the survey course. Therefore, decisions needed to be reached about what materials to include in the handbook and what not to include. The selection of materials represents the author's judgment based on his training in preparation for the Certified Public Accountant's Examination as an undergraduate, his experience in both commercial and non-commercial radio and his graduate study in television-radio.

The handbook is divided into three parts:

- 1. Basic accounting procedures and related theory, introduced through the balance sheet.
- 2. Accounting practices as they relate to the three generally accepted divisions of a radio or television station:
 - a. Sales.
 - b. Programming.
 - c. Engineering.
- 3. General accounting procedures that relate more directly to station management than to any of the above three divisions.

The first part provides a foundation for the student's understanding of accounting by exposing him to procedures related to the most familiar of the accounting statements: the balance sheet. After acquiring this general knowledge, the "tools of the trade," the student should be prepared for the second part of the handbook which applies

the basic procedures to the specialized areas of broadcasting: sales, programming and engineering. Each of these areas provides many examples of procedures in which accounting processes are employed. Additionally, these are the areas of familiarity to the student and his understanding of accounting should be facilitated when it is related to these areas. The third part of the handbook is concerned with the accounting processes which are used at the top management level of station operation.

The handbook, then, should acquaint the student of broadcasting with one important aspect of the field of accounting and it should expose him in a way that will permit him to understand its importance to the broadcasting industry. It is hoped that the student should be able to read and understand the handbook material himself, thereby making it unnecessary to take up class and instructor time with explanations. Hopefully, the student should be able to realize further applications and uses of accounting in broadcasting as a result of what he reads. As a first objective, all students of broadcasting ought to learn what accounting is, they should have a realization of its function and why it is needed, and they should have some understanding of how station managers can use accounting to help do their jobs more efficiently. Further, the handbook should be regarded as an introduction to a new field which may be capable of stimulating desires in some students for further accounting training in greater depth.

CHAPTER III

BASIC ACCOUNTING PROCEDURE

3.1 Introduction

Accounting procedure is not something that has a start and a finish. The processes of accounting for all of the transactions which take place within a business firm every day do not start at point "A" and end at point "Z." Rather, accounting is a cycle, with no absolute start nor finish. One can say that a given transaction starts the moment that a contract is signed or a service is rendered; one can say that the transaction ends when the appropriate figures are placed in the appropriate accounts. But, while one transaction is starting, others are in every conceivable stage of completion, so that they never all end at the same time. When accountants close the books of a business to make up the statements at the end of a business year, they force a halt to this cycle. It is an unnatural halt: business just does not stop.

Because accounting is cyclical in nature, it is possible to discuss the procedures used by starting anywhere within the cycle. However, when beginning a discussion with an individual who does not have any accounting experience, jumping into the thick of things from the outset

is more than a little foolish. To understand "Topic D" one must, of necessity, also understand "Topic A," "Topic B," and "Topic C." Therefore, what will follow in this chapter is somewhat artificial. The discussion will begin at that stage which represents the artificial halt that the accountants force on a business operation. This stage is the balance sheet. From this single statement the fundamentals will be extracted, and, then, once those are well in hand, the discussion will follow transactions from start to finish. The fundamentals which have been taken from the balance sheet will be amplified by these examples, and to finish this first part of the discussion of accounting, the theory of cash versus accrual accounting will be explained. In essence, the accounting cycle will be picked apart and put back together to fit the general object of explaining this field to the student to whom it is new.

The balance sheet is a good place to start because there are very few people who have not seen one at some time or another during their lives. Banks and savings and loan associations are required by law to publish their balance sheets in newspapers once a year. Public utilities are required to do the same thing. Many people own stock, and consequently, they receive the statements of their company at least once a year, if not every quarter. Thus, many people have at least a fair idea of what a balance

sheet looks like, even though they might not have given it very close examination before.

3.2 Balance Sheet Equation

Figure 1 is a balance sheet of a hypothetical broad-casting company. The only thing that makes this balance sheet different from any other is that there are no figures on it, with the exception of the two \$100,000 totals. The two totals of \$100,000 are on this balance sheet to show their equality, because this equality is an expression of what might very easily be called "Accounting's Axiom:"

Assets = Liabilities + Owners' Equity²

3.21 Assets

Having stated the axiom, it would certainly seem appropriate to define the three terms contained within it. The definitions are very simple. First of all, an asset is anything of measurable value which is owned in whole or in part by the company. In simplest terms, assets are "... things of value owned."

¹ The Accounting Manual for Broadcasters (New York: The Institute of Broadcast Financial Management, 1963), "Financial Statement Forms," p. 10.

²H. A. Finney and Herbert Miller, <u>Principles of Accounting: Introductory</u> (5th ed., Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1958), p. 5.

John N. Myer, <u>Accounting for Non-Accountant</u> (New York: New York University Press, 1957), p. 4.

⁴Finney and Miller, <u>Principles of Accounting: Introductory</u>, p. 4.

Figure 1

A BROADCASTING COMPANY

BALANCE SHEET

December 31, 1966

ASSETS

Current Assets: \$ Cash Temporary investments Receivables, less reserves Investories Broadcasting rights Prepaid expenses Total current assets x x x xFixed assets, less depreciation Deferred charges Broadcasting rights, noncurrent Other assets Intangibles \$100,000.00 \$100,000.00 Total assets LIABILITIES AND CAPITAL Current Liabilities: Accounts and notes payable Taxes and amounts withheld from employees Accrued expenses Federal income taxes payable Total current liabilities \$ x x x x Deferred income taxes Deferred credits Long-term debt Other liabilities **\$** X X X X Capital stock Additional paid-in capital Retained earnings Treasury stock Common Preferred \$ x x x x X X X XTotal liabilities and capital \$100,000.00

3.22 Liabilities

Liabilities are debts; ⁵ they represent the money that the company owes to individuals or businesses. The building that a radio station builds to house its operation is an asset because it is something of value owned in part by the station. However, the mortgage is a liability because the station still owes money to the bank to pay for the building.

3.23 Owners' Equity

Lastly, Owners' Equity, or Capital, 6 is the difference between the value of the assets and the value of the liabilities: 7

Assets -Liabilities Owners' Equity

The assets come from two sources:

- (1) The stockholders or owners of a corporation through the money that they pay for stock, and from
- (2) The creditors—the people who still have a claim against parts of the assets of a corporation. For instance, by purchasing a building through a mortgage, a company

⁵I<u>bid</u>., p. 5.

⁶For a discussion of trends in accounting terminology see: Finney and Miller, <u>Principles of Accounting:</u> <u>Introductory</u>, pp. 110-111.

⁷I<u>bid</u>., p. 5.

acquires an asset: the building. This asset was not acquired by money received from stockholders; rather, it was purchased on credit. Therefore, the creditor, in this case the bank which holds the mortgage, has been the source of an asset. Without the bank the building would not be owned by the station. Therefore, the creditor (the bank) is a source of an asset (the building).

Assets, then, are partly owned by the stockholders and partly owned by creditors and if one subtracts that part owned by the creditors (liabilities) from the total, the difference will be that portion owned by the stockholders, known as owners' equity.

3.24 Income Statement Categories

The three groups of accounts which have been mentioned so far do not include all those involved in the accounting cycle. There are two others: REVENUES and EXPENSES. The interaction of expenses and revenues yields a figure known as NET INCOME, which is ultimately transferred to the balance sheet under owners' equity. There is a formula involved with these two categories, just as there is with the three balance sheet categories:

Net Income = Revenues - Expenses

The definitions of revenues and expenses are much more involved than the ones which have just been presented, and, therefore, they must be saved for later. It is

sufficient now to be aware of the existence of these two additional groupings.

These five classifications encompass everything that happens within the accounting cycle. Whatever is involved in any transaction, it must be in one or more of these five categories:

Assets
Liabilities
Owners' Equity
Revenues
Expenses

3.3 Balance Sheet Equality

Accounting's Axiom, as stated previously, is that
the sum of the liabilities and owners' equity of a company
must be equal to the amount of the company's assets. In
dealing with this equation, one must perpetually keep in
mind the fact that the equality must be maintained at all
times. Equality is necessary because this is the way accounting is set up. Just as the statement that "the shortest distance between two points is a straight line" forms
one of the theoretical bases for plane geometry, so the
statement that "the sum of the liabilities and owners'
equity of a business must equal the assets" forms the theoretical basis for accounting. Because one is dealing with
nothing more than an algebraic equation when he works with
the balance sheet equation, several rules of algebra also
apply here:

- (1) If equals are added to equals, their sums will be equal, and
- (2) If equals are subtracted from equals, their differences will be equal.

An example will help make this application clearer.

A radio station has purchased a new audio console for \$1,500.

The station ordered the console, received it and was billed for the cost. Assume that the balance sheet had the following totals as of the time when the station received the console:

The station has acquired an asset, the console, with a value of \$1,500, and, therefore, the assets of the business have been increased:

Assets = Liabilities + Owners' Equity \$10,000 = \$7,000 + \$3,000

Add the value of the console. . . . 1,500

New Totals. . . . \$11,500 \$7,000 + \$3,000

The equation is no longer in balance, and to bring it back into balance the \$1,500 must be added to the right-hand side of the equation, somewhere. The station received the console, and it was billed for the cost. In other words, the station incurred an obligation to pay for the console. It had increased its liabilities at the same time that it had increased its assets. Thus:

	\$10,000 = \$7,000 + \$3,000
Add the value of the console	
to the assets	1,500
Add the value of the debt to	
the liabilities	1,500
New Totals	\$11,500 = \$8,500 + \$3,000

A continuation of this example will illustrate another aspect of balance sheet equality. After an appropriate time, 8 the station pays the debt it owed to the company
from which it purchased the console. By paying this bill,
the station does two things:

- (1) Pays out \$1,500 in cash, thereby decreasing
 its assets, and
- (2) Eliminates the \$1,500 debt that it had incurred earlier, thereby decreasing its liabilities.

In other words, when the bill is paid, \$1,500 is deducted from both sides of the equation:

		\$11, 500	=	\$ 8,500	+	\$3, 000	
(1)	Deduct the amount of cash						
	paid out from the assets	- 1,500					
(2)	Deduct the value of the						
, _ ,	debt from the liabilities			<u>-1,500</u>			
	New Totals	\$10,000	=	\$ 7,000	+	\$3, 000	

The balance sheet totals are now the same as they were before the transaction took place. Assets have been

⁸Companies usually demand payment in full 30 days after the debtor receives the invoice. Some companies, in order to stimulate prompt payment, will give debtors a discount for prompt payment, usually 2% if paid within ten days.

neither increased nor decreased; liabilities and owners' equity have been neither increased nor decreased. There has been merely a change in form—an exchange of assets.

The station gave up \$1,500 worth of an asset called "cash," and it received, in return, \$1,500 worth of an asset known as "equipment."

It is entirely possible that the station might have paid cash for the console at the time that it was delivered. If this had been done, the situation would have looked like this:

	\$10,000	=	\$ 7,000	+	\$3,000
Add the value of the console to the assets	1,500				
Deduct the amount of cash paid out	_1,500				
New Totals	\$ 10,000	=	\$ 7,000	+	\$3, 000

Earlier, it was stated that the algebraic axioms of adding equals to equals and subtracting equals from equals applies equally to accounting. When one thinks of those two rules he usually gets the following mental picture:

However, is not the following possible in algebra?

It certainly is possible in algebra, and it is just as possible, and very likely, in accounting. A continuation of the example started earlier will demonstrate this point:

Assume now that, in purchasing the console, the station pays \$500 in cash and decides to pay the remaining \$1,000 over a 6-month period. Three things happen as a result of this decision:

- (1) An asset valued at \$1,500 is acquired;
- (2) An asset, \$500 in cash, is given up; and
- (3) A liability of \$1,000 is assumed.

Graphically it would look like this:

		\$10,000	=	\$7,000	+	\$3,000
(1)	Add the value of the console to the assets	1,500				·
(2)	Deduct the amount of cash	•				
	paid out from the assets	- 500				
(3)	Add the value of the debt					
	incurred to the liabilities			1,000		
	New Totals	\$11,000	=	\$8,000	+	\$3, 000

3.31 Double Entry Bookkeeping

In the above example, there were more than just

Finney and Miller, <u>Principles of Accounting: Introductory</u>, p. 19.

two parts. However, they were combined into just two components. The \$1,500 increase in assets was counteracted by a \$500 decrease in assets for a net increase of \$1,000. The liabilities were also increased by \$1,000. In essence, \$1,000 was added to each side of the equation just as 6 was added to the algebraic equation in the form of 4+2. This is a rather over-simplified example of double entry bookkeeping: each transaction must have two equal components. One should not accept this as law at this point, because it is not entirely accurate. Somewhat later when the mechanics of bookkeeping are revealed in a little more detail, double entry bookkeeping should be much clearer.

3.4 The "T" Account 10

Thus far the discussion has been in terms of general categories: assets, liabilities, and owners' equity. Each one of these balance sheet classifications has, as can be noted in Figure 1, many individual accounts within it. The changes that were mentioned above take place within the individual accounts, not in terms of the general classifications. For instance, the account "cash" is increased and decreased many times every day. There is no account called "assets" upon which the operations of accounting are performed.

¹⁰Ibid., p. 12.

If a station makes a change in the cash account at the end of every day, that single account will have 20 or more different figures in it every month. If the station is large, or is one of a group-owned set of stations, many more than that number might be recorded in a single day. Obviously, unless some efficient, yet simple, method could be devised to handle increases and decreases in all of the accounts, complete and utter chaos would result, not to mention the ease with which some less-than-honest employee might relieve the station of its valuables. The form that was devised by some individual who is long since lost to posterity is in the shape of a "T:"

Increases are recorded on one side of this "T," and decreases are recorded on the other. Therefore, when it comes time to total up the balance of the account, a process which is known as FOOTING, all that need be done is to add each column separately, and subtract one from the other. Every account that a business has is maintained on a form that is merely a more sophisticated version of this "T."

This sophisticated version is known as the LEDGER, an example of which is shown in Figure 6.

3.41 Increases and Decreases in Balance Sheet Accounts

Given the "T" account, the question now becomes, "On which side are the increases recorded and on which side are the decreased recorded?" In Figure 1, the assets, liabilities and owners' equity are listed one under the other. However, the balance sheet might very easily be set up in the manner illustrated in Figure 2, 11 a manner which parallels the balance sheet equation. The side of the "T" account which is used to register increases or decreases depends on whether the account itself is an asset account, on the one hand, or a liability or owners' equity account, on the other. To put it another way, the side used for increases and decreases depends on the side of the balance sheet where this account is normally found. Two of the top textbook writers in the field of accounting, H. A. Finney and Herbert Miller, state this reasoning in rather effective fashion: 12

Assets are shown on the left side of the balance sheet. Consistency suggests that asset accounts should, therefore, have balances on the left...side. For an asset account to have the [balance on the left], it is necessary that increases and decreases in the asset be recorded thus:

The Accounting Manual for Broadcasters, "Financial Statement Forms," p. 10, rearranged.

¹²Finney and Miller, <u>Principles of Accounting, Introductory</u>, p. 13.

Figure 2

A BROADCASTING COMPANY

BALANCE SHEET

December 31, 1966

ASSETS

LIABILITIES AND CAPITAL

Current Assets:	>	Current Liabilities:	•
Cash	*XXXX	Accounts and notes payable	*XXXX
Temporary investments	XXXX	Taxes and amounts withheld	
Receivables, less reserves	XXXX	from employees	xxxx
Inventories	XXXX	Accrued expenses	XXXX
Broadcasting rights	XXXX	Federal income taxes payable	XXXX
Prepaid expenses	XXXX	Total current liabilities	××\$
Total current assets	* × \$	Deferred income taxes	XXXX
Fixed assets, less depreciation	XXXX	Deferred credits	XXXX
Deferred charges	XXXX	Long-term debt	XXXX
Broadcasting rights, noncurrent	XXXX	Other liabilities	XXXX
Other assets	XXXX	Total liabilities	××\$
Intangibles	XXXX		
	××\$	Capital stock	XXXX
		Additional paid-in capital	XXXX
		Retained earnings	XXXX
		Treasury stock	
		Common	XXXX
		Preferred	XXXX
		Total capital	××\$
TOTAL ASSETS	\$XXXX	TOTAL LIABILITIES AND CAPITAL	\$XXXX

	Any Asset	Account	
increases			decreases

equity are shown on the right side of the balance sheet, consistency also suggests that increases and decreases in liabilities and increases and decreases in owners' equity be recorded in the manner indicated below:

Any Liability	y Account or
Any Owners' Ed	quity Account
decreases	increases

In general, then:

TYPE OF ACCOUNT	INCREASES	DECREASES
A sset	left	right
Liability	right	left
Owners' Equity	right	left

3.42 Increases and Decreases in Income Accounts

As is usually the case with something that is relatively simple as this, there are complications. In the above chart, only those accounts which call the balance sheet their home are considered. Earlier, it was mentioned that the balance sheet only encompasses three types of accounts. There are two others which show up only on the income statement. How are increases and decreases recorded on these? The reasoning is a little more complex than that used above, but it follows much the same lines:

- 1. Owners' Equity accounts are on the right side of the balance sheet; therefore
- 2. Increases in owners' equity accounts are recorded on the right side.
- 3. "Sales" does not appear on the balance sheet, BUT
- 4. "Sales" does appear on the income statement.
- 5. The gross sales of a business, less:
 - (a) discounts,
 - (b) all expenses, and
 - (c) taxes

yields NET INCOME.

- 6. NET INCOME is transferred to owners' equity account as an increase, and therefore,
- 7. The figure representing net income is recorded on the RIGHT side of owners' equity account.
- 8. Therefore, because "sales" is the basis for NET INCOME, and because NET INCOME represents an INCREASE in owners' equity and is recorded on the RIGHT, INCREASES IN "SALES" ARE ALSO RECORDED ON THE RIGHT. (See Figure 3.)

The account "sales" was used in the above reasoning as a representative of the general account grouping
known as Revenue Accounts. REVENUE is defined as:

• • • an inflow of assets in the form of cash, receivables, or other property from customers or clients, and is related to the rendering of services and the disposal of goods. Revenue also can be earned from investments. 13

In broadcasting, revenue would be any inflow of assets which came about through the selling of time, the

^{13&}lt;u>Ibid</u>., p. 22.

Figure 3

DEBITS AND CREDITS FOR SALES AND EXPENSES

	S A L E S - Discounts - Expenses - Taxes NET INCOME	
	Owners' Equity	
Decrease		Increase ←
	Sales	
Decrease		Increase ←
.	Expenses	·····
Increase		Decrease

rental of equipment to outside groups, the renting of a Muzak-type service to clients, etc.

"Expense is the cost of the use of things or services for the purpose of generating revenue." Expenses are the opposite of revenues, and they are deducted from revenues to arrive at the figure known as NET INCOME. Because expenses are the reverse of revenues, the sides used to record the increases and decreases are reversed. For the expense accounts, increases are recorded on the left and decreases are recorded on the right.

3.43 Debits and Credits 15

In discussing where the increases and decreases are recorded within the various classes of accounts, the words <u>left</u> and <u>right</u> have been used. This is probably not too shocking to the beginner, but it is blasphemy of a high order to a trained accountant. The words <u>left</u> and <u>right</u> are not used by accountants to specify sides of an account. Two words have been substituted by professionals to mean <u>left</u> and <u>right</u>: <u>debit</u>, meaning <u>left</u>, and <u>credit</u>, meaning <u>right</u>, and herein lies one of the biggest stumbling blocks to the non-accountant. <u>Debit</u> is a word which has a some-what sinister connotation, and <u>credit</u> seems to imply

¹⁴<u>Ibid.</u>, p. 23.

^{15&}lt;u>Ibid</u>., pp. 12-13.

goodness. Thus, one is very liable to think that <u>debit</u> means decrease and <u>credit</u> means increase. Such is not the case to even the slightest degree. In fact, this is one of those circumstances where one can make an absolutely positive statement, with no qualifications whatsoever:

DEBIT = LEFT CREDIT = RIGHT

There is nothing more, nor nothing less, implied in the two words. They refer simply to the sides of an account. The two words are nouns, if one travels to the grammar of the field for a moment, and they are also verbs. Thus when a figure is recorded on the left side of an account it is known as a <u>debit</u>. When one records a figure on the left side of an account, he is <u>debiting</u> the account. One should make a definite effort to get used to seeing and using these two terms as soon as possible, for they will be used exclusively when specific procedures are discussed later.

With these two words in one's vocabulary, it is now possible to correct something which was said earlier. Mention was made earlier of the fact that every transaction has two components but what these components were and how they fit together to make up the written picture of a transaction were not clearly brought out. The reason is that there was not sufficient terminology available at that point. Now, with the terms debit and credit, this point

can be clarified. The two components of the transaction are the debit and the credit. When the transaction is finally put on paper, the sum of the debits <u>MUST</u> equal the sum of the credits. This is merely an extension of the balance sheet equation to the individual transaction level. For instance, recall the example used above: the radio station purchased a console for \$1,500, paying \$500 in cash and promising to pay \$1,000 at some future time. In this example, three different accounts were affected:

- (1) "cash" was decreased by \$500,
- (2) "accounts payable" (the liability account)
 was increased by \$1,000, and
- (3) "equipment" was increased by \$1,500.

Would the increases and decreases to these various accounts be debits or credits? (KEEP IN MIND THE DEFINITION OF DEBIT AND CREDIT!!!)

- (1) "Cash" is an asset, and "cash" is decreased. A decrease in an asset account is recorded by a credit, THEREFORE, CREDIT "CASH" FOR \$500.
- (2) "Accounts payable" is a liability, and it is
 increased. An increase in a liability account
 is recorded by a credit. THEREFORE, CREDIT
 "ACCOUNTS PAYABLE" FOR \$1,000.
- (3) "Equipment" is an asset account, and it is increased. An increase in an asset account is recorded by a debit. THEREFORE, DEBIT "EQUIPMENT" FOR \$1,500.

In summary:

	<u>DEBITS</u>	CREDITS
(1)		\$ 500
(2) (3)	\$1, 500	1,000
,		***
TOTAL	\$1, 500	= \$1,500

The debits and the credits are equal. But also take note of the fact that there might well be more than one debit and one credit to any single transaction. No matter how many debits and credits one entry has, however, the sums of each must be equal.

3.51 Journal Entries 16

The methods that have been discussed and presented so far would be tremendously impractical if they were to be used every day. If a radio station were to pay 100 bills at the end of a given month, then the bookkeeper would have to turn to 200 or more different accounts, make the entries and necessary notations, keeping in mind, all the while, what the figures represented. The process would be time-consuming and costly. Instead of doing this, the bookkeeper precedes any marking in the individual accounts with entries in what is known as a <u>JOURNAL</u>. A journal is a series of loose-leaf sheets such as the one in Figure 4, which permits the bookkeeper to show what accounts will

^{16&}lt;u>Ibid</u>., pp. 15-17.

Figure 4
SAMPLE JOURNAL PAGE (BLANK)

 REF	DEBITS	CREDITS

be debited and credited to accurately reflect the transaction under consideration. The journal is the place where the first record of a transaction is found. To illustrate the use of the journal, consider the following example:

Station WXXX purchased a microphone from the Collins Radio Corporation for \$50 on account. The microphone has the model number KT-42, and it was purchased on November 30, 1964.

This transaction would be recorded in the journal in the following way:

50.00

1966
Nov. 30 Microphones 50.00
Accounts Payable
Purchased one microphone from
Collins Radio, Model KT-42, on
account.

The journal entry is a form of shorthand. It assembles in one place all of the facts that are necessary for the accurate transferral to, and recording in, the actual accounts. When an invoice, or some other official document, is presented to a bookkeeper, he looks at it and reasons along the following lines:

Purchased a microphone . . . that is an asset. So I'll debit the account "microphones." The bill will follow the shipment of the mike, so the engineer must have charged it . . . that would be a credit to "accounts payable." The amount is \$50.

¹⁷Myer, pp. 23-25.

That is all that the bookkeeper need do to record the transaction. As soon as he has finished that one, he can pick up some other invoice, bill, cancelled check or voucher and proceed to make that entry directly under the one he has just finished. Figure 5 shows how a typical journal page might look at the end of a business day. Of course, there might be a good many pages making up the history of the station's business day, but they would all resemble Figure 5 in format. This type of procedure might very well appear to be total confusion, but it is far from that. It is disguised organization and the reasons for its being that way will be explained later.

There are several parts to a journal entry which bear closer examination. Consider the entry to record the purchase of the microphone:

- (1) 1966 (3) (4) (5) (6) (7) (2) Nov. 30 Microphones 50.00 Accounts Payable 50.00 Purchased one microphone
 - (8) from Collins Radio, Model KT-42, on account.
- (1) The year is written once on the top of every journal page. After that it need not be repeated unless it should change before a page is full.
- (2) The day and the month are handled in the following manner: the month is written once on every page,

Figure 5

SAMPLE JOURNAL PAGE (COMPLETED)

1966			
Nov. 30	Microphones Accounts Payable Purchase of one microphone from Collins Radio, Model KT-42, on account.	50.00	50.00
30	Cash Accounts Receivable Received payment of account for Mark's Sports Center, bill #10043. Paid by check #146.	29.50	29.50
30	Supplies Expense Cash Purchased new mop.	4.95	4.95
30	Freight Expense Cash Paid freight charges on new audio console. Check #1324.	25.00	25.00
30	Travel Expense Cash Reimbursed Sales Manager for trip to New York to see Agency and Rep.	153.60	153.60

unless it should change in the middle of a page. The day is written before each individual journal entry. If the entries for one day carry over to another page, both the month and the day are repeated for the new page.

- (3) The account which is debited is written close to the left hand margin, in keeping with the fact that the word <u>debit</u> refers to <u>left</u>. The account to be debited is also written first in the journal entry.
- (4) The account to be credited is written on the following line and indented--moved closer to the right margin, again in keeping with the fact that <u>credit</u> means <u>right</u>. Every debit and every credit are given a single line. No two accounts are ever written on the same line.
- (5) This column may or may not have the letters
 "L.F." over it. The "L.F." means ledger folio, and it refers to the number of the account which is to be debited
 or credited. Each account on the station's books has a
 coded number. For instance, all accounts dealing with cash
 might have numbers starting with 10:
 - 1001 Cash in banks -- general account
 - 1010 Cash in banks -- payroll accounts
 - 1020 Cash in banks -- savings accounts
 - 1030 Cash on hand18

When the transaction is transferred from the journal to the individual accounts, the bookkeeper places the

¹⁸ The Accounting Manual for Broadcasters, p. 3.

account number in the column marked "LF." In the example under consideration, the number 1620 would appear in this column after "microphones," and the number 2001 would appear in this column after "accounts payable." To repeat, the number is entered only after the transaction has been transferred to the ledger.

- (6) The left column of the two where figures appear is for the debit figure. There is a small column for each digit. As far as the cents are concerned, it is fairly common to use a dash when there are no cents involved. However, two zeros might be used, such as are used in the example.
- (7) The right column of the two is for the credit figure. In both of these columns, the figure is on the same horizontal line as the account name with which it is associated.
- (8) This is the explanation. It is a listing of all the pertinent facts which accompany the transaction, and it is used because the explanation, coupled with the rest of the entry, provide a complete record of the transaction in one place. When it comes time to transfer the information to the accounts, the bookkeeper does not have to run down the hall shouting, "Hey, Charlie, remember that mike the Chief bought last month? What was the model number of that?—I lost the invoice." Parenthetically, it should be noted that, as soon as the invoice is lost, the

model number probably will not be readable on the mike, or else the engineer may have loaned it to his second cousin to use at a barn dance. This might sound silly, but it does happen. If all the pertinent information is written down when the item is received, it makes no difference to the procedural progression what happens to the invoice, the microphone nor to Charlie's second cousin. The bookkeeper has all the information that he needs.

This is the first step in the recording of a transaction. The next step is the transfer to the ledger, a procedure known as posting.

3.52 Posting 19

Earlier, the "T" account was introduced as the form designed by accountants to enable them to separate the various debits and credits to an individual account. The "T" account that was referred to is, as a result, a somewhat unsophisticated version of the ledger account shown in Figure 6.

The various journal entries are posted on the appropriate sides of the ledger. For example, assume that it is now appropriate for the bookkeeper of station wxxx to post, or transfer to the ledger, the information that was recorded in the journal. After he has posted the two

¹⁹ Finney and Miller, Principles of Accounting: Introductory, pp. 17-19.

Figure 6
SAMPLE LEDGER PAGE (BLANK)

 T T					T
	 REF	DEBITS		REF	CREDITS
					;
					·
					, ,
		·			
				i	
		,			
		4 -			
		Ĭ			
]

ledgers, one for "microphones" and the other for "accounts payable," would look like this:

		Microphones						
1966		REF	DEBITS		REF	CREDITS		
Nov. 30	KT-42	1	50.00					

Accounts Payable

No. 2001

REF	DEBITS	1966	REF	CREDITS
		Nov. 30	1	50.00

Take notice of several key factors in the setup of the ledger sheets. First of all, each account has its own separate sheet, similar to Figure 6. As in the journal, the date, the year at the top, and the month and day preceding each entry, are written. The account number appears in the upper right hand corner of the ledger page. The entries under the columns marked "debits" and "credits" are made in the same way as they were in the journal. The only difference lies in the fact that debits and credits are not made together; they are each placed in their own appropriate account.

The one unique aspect of the ledger is the column marked "Ref." In this column the page number from the journal is written when the entry is posted. The reason for

this is to permit an easy tracing of the information back through the accounting process to the source: the invoices, checks, etc. For example, suppose that the manager is examining the books of station WXXX, and he discovers, in the "microphone" account, a single entry which debits the account for \$5,000. It might look like this:

		T		Т	
1966		REF	DEBITS		
Dec. 1	LV-X4T	1	5000.00		

Immediately this glaring discrepancy will strike the manager's eye. He will look to the column marked "REF.," where he will see the number 1 which means page 1 of the journal. He will then go to that page of the journal to check the entry. If he finds that the entry was indeed for \$5,000 he will read the explanation, try to find the invoice and order, etc., and then try to find the explanation for the figure. It could be that: (1) someone has been stealing from the station and covering it up by making false entries of asset acquisition, or (2) someone has made a clerical error, or (3) someone has been, perhaps, just a bit too extravagant in buying microphones. number of the journal page were not listed in the ledger, the manager might very well spend a good portion of his day leafing through the journal trying to find the entry he needs.

When one entry has been posted, the bookkeeper

returns to the journal and posts another entry. This process continues until all of the entries have had the individual debits and credits placed in the separate accounts. It is a process that is not really too complex, but one need not let his imagination run riot to realize that the situations might be very complicated without much difficulty.

Regardless of how complicated the journal entries might get, one can always find reassurance in one fact: the principles which govern that which is being done always remain the same. The principles will apply whether the smallest 250-watt operation in the most remote corner of the least populated state buys a roll of stamps or whether a large station in New York makes out a multi-thousand dollar payroll.

3.60 Cash vs. Accrual Accounting 20

The next few pages are within the "twilight zone" of accounting theory. In accounting, as with just about everything else, one can never say that there is just one way of doing something. There are always alternatives and one pair of these alternatives is of immediate concern right here. When one sets up an accounting system, he must make a decision concerning the theoretical basis for that system: the CASH basis or the ACCRUAL basis. Usually, the decision is an easy one.

²⁰Ibid., pp. 64-66.

3.61 Cash Basis Accounting

Cash basis accounting operates on the following major premise which, at best, is rather shaky: income is never earned until the cash is collected; expenses do not exist until the cash is paid out. The following example will demonstrate:

During one month, WXXX sold \$2,000 worth of time, and it aired \$2,000 worth of commercials. At the end of that month the station sent out bills amounting to \$2,000.

Also, during the same month, the station had expenses amounting to \$2,500, but none of this \$2,500 had been paid.

According to Cash Basis Accounting, the station had the following net income:

Income \$0 -Expenses 0

Net Income \$0

Why? Because no cash had been collected from the spots that had been aired, and, therefore, nothing had been earned. But, also, none of the bills had been paid, and, therefore, no expenses had been incurred.

Clearly, this is so much foolishness. The station had fulfilled its end of the contracts by performing the service of airing the commercials; it had earned the money for those commercials, even though no cash had been received. The expenses had been incurred, and it would be unrealistic to claim that they did not exist just because they had not been paid. As far as a logical foundation for the Cash Basis is concerned, there isn't one. The only reason that it exists as a method of accounting is because of its

simplicity. All one needs to set up a system using this basis is a check book and bank deposit slips. This might work in a small business where the amount of money taken in and the amount spent are never very large, but for most stations, Cash Basis Accounting just will not work.

3.62 Accrual Accounting

Accrual Accounting operates on the assumption that income is earned the moment that a service is performed or a product is sold; that expenses are incurred as soon as the obligation is created. It functions on the theory that one has to spend money to earn money: that one must incur expenses to receive income. Therefore, when one speaks of net income for a period, he must be speaking of the excess of the earnings of that period over the expenses which created those earnings. It is a process of attempting to match, as closely as possible, earnings with expenses that generated those earnings. In the example given above, the hypothetical station had operated for one month. It had earned \$2,000, and it had spent \$2,500 during that same space of time. Therefore, that \$2,500 had been spent to generate \$2,000 of revenue. The net income would be:

Income	\$ 2,000				
-Expenses	2,500				
Net Loss	\$ (500)				

There is a profound difference between no income

at all and a loss of \$500. Surely, the loss of \$500 more accurately reflects just what happened during the month in question.

Accrual Accounting is, then, the basis for the large majority of the accounting systems that are set up. As mentioned above, it is somewhat more complex. New accounts come into existence, and these accounts end up in what might be thought to be rather unusual places. Consider the following:

Radio Station WXXX has its studios and offices on the second floor of a hotel. According to the agreement with the hotel owners, the station is to pay the rent for three months in advance. In other words, in January the station must pay \$3,600 to the hotel as rent for January, February and March.

How would this be recorded in the books? If the station pays \$3,600 in January it does not incur a \$3,600 expense. The reason is that the station acquires no benefit from the total payment of the money. Therefore, the bookkeeper should not charge the \$3,600 to an expense account. The station, however, pays enough money to eliminate the need to pay out any more for another three months. The manager of the station can rest assured that he will not get thrown out of his office until March 31, at the earliest. In essence, the station acquires something of value—an asset, which is the right to use the hotel for three months. Therefore, the \$3,600 must be put in an asset account. The account that is used is called "prepaid rent:"

Jan. 1 Prepaid Rent 36.00

Cash 36.00

Payment of Rent for Jan., Feb., and Mar.

By February first, one month will expire of the three months for which the rent was paid. The station then derives benefit from some of the \$3,600 it paid out. One—third of the three months will have passed, and the station will have used one—third of the \$3,600. Therefore, the following entry would be made:

Feb. 1 Rent Expense 12.00
Prepaid Rent 12.00
Charge for January rent.

As of February, then, the "prepaid rent" account would look like this:

PREPAID RENT					
Jan. 1	3600.00	Feb. 1	1200.00		

By the first of March two-thirds of \$3,600 will be used up because two months of the three will have passed. One-third of the \$3,600 was removed as rent for January. Now, another third must be removed for February:

Mar. 1 Rent Expense 1200.00
Prepaid Rent 1200.00
To charge to Expense the amount of Rent applicable to February.

The "prepaid rent" account will look like this:

Jan. 1	3600.00	Feb. 1 Mar. 1	1200.00
	l	1	

The same thing would be done on April first, and at that time the entire amount of \$3,600 would be used. The procedure would start all over again.

The term "prepaid" is only one side of the coin.

The other half exists under the term "accrued." "Prepaid" refers to money paid out today but which will give the station no benefit until the future. "Accrued" refers to money that should have been paid yesterday, but which was not.

Thus, if the station had not paid its rent on time the following entry would be made on the station's books:

May 1 Rent Expense 1200.00

Accrued Rent Payable 1200.00

To record rent owed but not paid for the month of April.

Notice that an expense account was charged, even though no cash was paid out. An expense has been incurred even though it has not been paid. That station has gone into debit by not paying the rent when it was done, and, therefore, the "accrued rent payable" account is a liability. When the station gets around to paying the rent the following entry would be made:

May 10 Accrued Rent Payable 1200.00

Cash 1200.00

Payment of April Rent.

The liability then would be eliminated.

The same sort of thing can happen with revenues as with expenses. Here, however, there is only one unfamiliar account, "revenue received in advance," which is similar to the prepaid expense accounts. If a client of the station should pay the station in advance of the airing of his commercials, the station would receive money for which it would not yet have rendered service. The money is not really the station's, and, for this reason, the "revenue received in advance" account is a liability. The station has to air the spots or give back the client's money. As the liability is eliminated by airing the spots, the value of the liability is decreased and income is increased in exactly the same way that the asset was decreased before the expense account was increased.

Accrual accounting, then, is the best way available to accurately match income and expense. It is used by the greatest number of businesses in the country today, both large and small. When accrual accounting is applied to expenses, two new types of accounts arise:

Prepaid Expenses Accrued Expenses Payable

Prepaid expenses are assets. Accrued expenses payable are liabilities. When accrual accounting is applied

to revenues, one new account is created: "revenues received in advance," which is a liability. There is another accrued income account called "accrued income receivable," which is usually only connected with interest from stocks, bonds, and savings accounts, etc., and need not be of concern here.

3.70 Summary

This chapter has been a very swift overview of the fundamentals of accounting procedure and theory. Once each year, when accountants make up the financial statements of a business, they force an unnatural halt to the accounting cycle. One of the statements which is born as a result of this halt is the balance sheet. The balance sheet demonstrates "accounting's axiom:"

Assets = Liabilities + Owners' Equity

This equation makes a single very important demand on the accountant: it must always be kept equal. This demand for equality is carried down to the individual transaction level where every transaction is broken down into debits and credits. In any single journal entry the sum of the debits must always equal the sum of the credits.

The journal entry is, however, only the starting place for a transaction. After the entry is made according to the prescribed form, the information is transferred to the <u>ledgers</u>: a process known as <u>posting</u>. In actual practice, a day's or a week's journal entries are posted at one time. Therefore, it is important that all pertinent

information be included in the journal entry when it is first prepared.

When posting is completed, the facts of a single transaction wait for their routing into the various <u>state-ments</u> which summarize a company's financial position.

There are two possible theoretical frameworks within which an accountant might set up the books of a company. The first is the <u>cash basis</u>, which functions on the premise that income is earned only when cash is received, and expenses are charged only when cash is paid out. It is used primarily for its simplicity but it becomes unwieldy and extremely inaccurate as businesses grow in size.

The majority of the businesses in the country use the <u>accrual basis</u> for their accounting systems. This system operates on the theory that income is earned whenever a service is performed or a product is sold; that expenses are charged whenever an obligation is incurred. It does not recognize any correlation between cash circulation and business income and expense. As a system, it is somewhat more complicated but its advantage lies in the fact that it permits very accurate matching of revenues with the expenses which generate those revenues. For this reason it is widely used.

With this background, it is now possible to examine specific accounting applications to the different areas of a broadcasting station.

CHAPTER IV

ACCOUNTING FOR THE BROADCASTING EMPLOYEE

Accounting is of the utmost importance to any business operation and broadcasting is just as much a business operation as any other commercial enterprise. The manager must understand accounting for obvious reasons. It is the basis for determining whether his method of conducting business has yielded the owners a profit or a loss. And because accounting is important to a manager it should be important to the employee, that individual whose job it is to carry out management decisions and policies. more understanding that exists between employee and management, the easier it will be for the two to work together toward common goals. Of course, this chapter will not make a broadcasting accountant out of anyone and it probably will not give him enough knowledge to handle the large percentage of the problems which may present themselves to an accountant even in a single day. It should, however, create an awareness of some of the general methods by which these problems are solved.

To generate an understanding by creating an awareness, that is the primary purpose of what is to be presented here. But there is another purpose for all of this, another reason why it is important that the student make an effort to understand what is presented in the following pages. The reason is simply this: broadcasting is a business, and it has to be run like one. If one wants to work for a commercial station then he has to know what methods, what procedures and practices are used to determine whether the station is making a profit. The day has long since passed, if indeed it ever existed, when a station could operate in a financial void, when one needed to be only an entertainer or a creative genius to be a success in the business. The dollar sign is just as important in broadcasting as it is in the auto industry or the steel industry and the employees should be just as aware of financial methods in broadcasting as are the corresponding employees in the auto and steel industries.

The topics which will be treated in this and the following chapters may be considered representative and illustrative of the many aspects of the work of an accountant in a radio or television station. In this chapter, these will include:

4.10 The Salesman

- 4.11 The accounting treatment of sales
- 4.12 The treatment of discounts
- 4.15 Sales commissions
- 4.16 Station representatives and agency sales

- 4.20 The Engineer
 - 4.21 Purchases
 - 4.22 Additions, improvements, replacements and repairs
- 4.30 The Programmer
 - 4.31 Record subscriptions
 - 4.32 License fees
 - 4.33 Broadcasting rights

The Salesman

4.11 The Accounting Treatment of Sales

Sales in radio and television are rarely made on a cash basis. The client is usually billed at the end of the month for the amount of the contract that has been fulfilled during that space of time. Consider the following example:

A salesman sells a certain amount of station time to a businessman in town. The amount of the contract is \$360. The journal entry would be as follows:

Jan. 20 Accounts Receivable 360.00
Sales 360.00
Contract for 100 1-minute spots
to J. A. Woodward.

This is the simplest possible entry for a sale of any sort. The only part which demands any explanation is "accounts receivable." "... the accounts which record

the sums owing to the business from customers, or clients, as the case may be, are called accounts receivable. The Accounting Manual for Broadcasters expresses this same idea by saying that accounts receivable are the "amounts due from customers which arise in the normal course of business. **2 In the above example the account might read: *accounts receivable -- local advertisers." Nevertheless, an entry is made to an accounts receivable account whenever a sale is made to an advertiser. The phrase "normal course of business, " used in The Accounting Manual for Broadcasters, should be kept in mind. As far as broadcasting is concerned, the "normal course of business" refers to time sales and rental fees derived from making station equipment available to outside users. Thus, if an employee were to buy a roll of stamps from the station and ask that the cost be deducted from his next paycheck, the entry would not include a debit to any of the normal accounts receivable accounts. Rather, the entry would be to an account with the title of "other receivables. Only money derived from advertising and other sources associated with the operation of a broadcasting station would be listed in "accounts receivable."

4.12 The Treatment of Discounts

The above example is rather naive in its simplicity.

¹Myer, p. 13.

²The Accounting Manual for Broadcasters, p. 16.

Someone must have sold the time, and that same someone must be paid for his services. Additionally, what relation does the \$360 figure have to the actual rate-card price for the amount of time that was sold? Did the station give the client a discount, or did he receive a "deal" of some sort? This must be reflected in the entry, somehow. Consider this:

Stanley Marlowe, a salesman for station WXXX, sold a contract for 100 participation announcements to J. A. Woodward, the owner of a grocery store. The rate-card figure for the spots was \$4.00 apiece, or a total sale of \$400. However, because Woodward had purchased such a large quantity of time, Marlowe gave him a 10% discount on the rate card. Thus, the total amount of the contract was \$360. Marlowe works on a 15% commission.

The entry to reflect this sale would be as follows:

Jan. 20 Accounts Receivable--Local
Advertisers 360.00
Sales Discounts 40.00
Local Time Sales--Participations 400.00
Contract #47235. 100 spots.
10% quantity discount.
J. A. Woodward.

An analysis of this entry brings out several principles which should be noted. The figure debited to "accounts receivable--local advertisers" is \$360, the total amount which the station can expect to receive from Mr. Woodward. This \$360 was arrived at in the following manner:

 $$400 - (10\% \times 400 = 40) = 360

In all circumstances, regardless of what is done

to the rate card, the figure recorded in "accounts receivable" is only the sum which the station can expect to receive from its client—no more, no less.

The second account which is debited is "sales discounts." This account is debited for the amount which was, in effect, lost on the sale. It is necessary because the credit to "sales" is always for the full amount of the sale, had that sale been consummated at the rate card figure. In the example, the rate for the number of spots that Marlowe sold to Woodward was \$400 and, therefore, the sale should have been for \$400, and that is the figure which is recorded in the "local time sales—participation" account. However, the station can only expect to receive \$360 from Woodward, and that is all that it can enter as a receivable. There is a difference of \$40, and that is debited to "sales discounts."

There is another reason for having an account in which to place all discounts. At the end of an accounting period, by totalling up the account, the manager can readily see just what portion of his total income was lost due to discounts. This is good information to have because it prevents, to some extent, the destructive policy of discounting at fantastic rates, just to get a sale. If quarterly statements are prepared, the manager can become fully aware of the discount situation at any time, and he can take steps to correct it before it gets completely out of hand.

The figure, then, that is credited to "local time sales--participations" is that figure which should have been received for the sale--what is termed the gross sales price. Notice that the general category of "sales" has been rather thoroughly broken down. The Accounting Manual for Broadcasters lists 17 different accounts for sales, broken down into the categories of local sales, network sales, and talent and facilities sales. The Manual explains this breakdown in the following way:

Differential between local and national time sales may be based on the character of the advertiser or the originating sales force. National sales usually are commissionable to the station's national representative. Those stations not differentiating on the basis of the nature of advertisers will be required to reclassify revenues for reporting to the FCC, since form 324 requires such a breakdown.⁴

4.13 The Sale in Context

When Marlowe first went to see Woodward, he mentioned all of the various reasons why Woodward should buy time on WXXX. Woodward wasn't sold, immediately. However, on the third visit Woodward agreed to buy time and he signed a contract. The manager reviewed it, OK'd the terms and passed it on to whoever was responsible for the daily log. This person read the contract and made a note of the times that the spots were supposed to run and their length on

³Ibid., p. 34.

⁴ Ibid.

what is known as a start order. The contract was then passed on to the bookkeeper who made the above entry.

4.14 Payment of an Account

At the end of a month, the station bills Mr. Woodward for the spots that were aired during that time. the conclusion of each day, the log is reviewed and notes are made on the account cards for each individual client as to how many spots of what length were aired for how much money. At the end of the month, then, the secretary has but to look at the card and immediately she can see that all of Woodward's spots have been aired during the month. Therefore, she sends a bill to Woodward for \$360. On the tenth of the next month, the station receives a check from Woodward for \$200, in partial payment of the invoice. problem now is to determine how this fact should be made manifest in the books of the station. The receipt of the check represents an increase in the asset "cash." Therefore, "cash" would be debited for \$200. By paying part of the amount he owed, Woodward has eliminated a portion of the station's claim against him. The station's claim is represented in the books by the debit to "accounts receivable--local advertisers." To reduce that claim, this account has to be credited. Thus, the following entry is made when Woodward's check is received:

Feb. 10 Cash 200.00

Accounts Receivable--Local Advertisers Payment on J. A. Woodward acct.

200.00

This entry is simply a partial reversal of the entry that was made when the time was sold to Woodward. When the bookkeeper posts this entry he will discover that there is no single account entitled "accounts payable--local advertisers." Instead, there is liable to be an entire accounts receivable -- local advertisers ledger. Within this ledger will be a group of individual ledger sheets for each local advertiser who either is currently advertising with the station or has advertised with the station in the immediate past. The ledger sheets within this ledger will have an arrangement somewhat different from the arrangement of the general model which was illustrated in Figure This form permits the keeping of a running balance for each client. Because "accounts receivable -- local advertisers" is not a single account, but rather a collection of accounts for each of the station's clients, it is called a controlling account. The controlling account situation will exist under all circumstances where detailed accuracy within individual items is required: accounts related to all types of receivables and all types of payables, including salaries and wages and normal trade payables. At the end of an accounting period the balance of a controlling account is determined by adding up the individual balances

with the classifications. This is an extremely efficient method of handling these kinds of situations and it permits one to give the balance of an individual client almost immediately, without figuring.

When the entry was made to record Woodward's payment one should notice that neither "sales discounts" nor "local time sales--participations" were affected. The only time that either of these would be touched would be in situations such as this:

On the 22nd of the month the station's transmitter went off the air because of a power failure in the city. It was 35 minutes before the station could get back on the air. During that time two of Woodward's spots were supposed to have been run. It was impossible to reschedule them that day, and Woodward did not want to run them at any other time.

What has happened, in reality, is that the contract with Woodward has been reduced. Whereas he originally contracted for 100 spots, he only gets 98. Thus, the contract is now only worth the 98 spots multiplied by the \$4.00-perspot rate, or \$392. Thus, the \$400 figure that was originally credited to "local time sales--participation" must be reduced to \$392.

If the figure entered in the "sales" account is now incorrect, then the figure in the "sales discount" account must also be incorrect, as the one is based on the other. In Woodward's case, he was given a 10% discount. On the \$400 price this discount amounted to \$40. However, in the corrected situation the sales prices is only \$392,

and the discount should only be 10% of \$392, or \$39.20.

Thus, the \$40 figure that was originally credited to "sales discounts" must be reduced to \$39.20.

If the gross sales price is in error and if the sales discount is also in error, then the figure entered in "accounts receivable—local advertisers" must also be in error, since that figure is the difference between the gross sales price and the discount. Originally, the figure was \$360, arrived at by subtracting \$40 from \$400. The \$400 now stands at \$392, and the \$40 has been reduced to \$39.20. Thus, "accounts receivable—local advertisers" must be reduced to \$352.80.

In summary, the above information would look like this:

To make these corrections, the following entry should be made:

Feb. 10 Local Time Sales--Participations 8.00

Accounts Receivable--Local
Advertisers 7.20

Sales Discounts .80

Contract #47235. 2 missed spots.
J. A. Woodward. Transmitter off.
Power failure.

"Local time sales--participations" has a credit
balance and it is reduced by a debit. "Accounts receivable-local advertisers" has a debit balance and it is reduced
by a credit. And "sales discounts" has a debit balance
and it is reduced by a credit.

4.15 Commissions

Stanley Marlowe, WXXX's salesman, has a commission coming to him on his sale to Woodward. Commissions are due a salesman when he fulfills his duties for the contract involved. These duties extend further than just getting a client's signature on a piece of paper. The salesman is also obligated to service the account: to see that the client is happy with the copy, to see that he is pleased with the production used on his spots, to see that the times his spots are aired are suitable to him. He is obligated, in a good many stations, to see that the client pays his bill. Thus, the salesman has not fulfilled his obligation to the station until the client has paid for the spots that have been aired. When a client makes his payment, the station then incurs a liability to pay the salesman.

In Marlowe's case, Woodward paid \$200 of \$360 that he owed. Therefore, the station owes Marlowe 15% of \$200, or \$30. This liability is represented by a credit to "accrued salaries and wages," and, as was the case with "accounts receivable—local advertisers," this is a controlling account. The debit of this journal entry is to

"salaries and wages--salesmen," an expense account. When Woodward makes his payment of \$200 to WXXX, Marlowe's commission would be recorded as follows:

Feb. 10 Salaries and Wages--Salesmen 30.00
Accrued Salaries and Wages 30.00
Commission to Marlowe: 15% of \$200 payment by J. A. Woodward #47235.

When payday arrives, the bookkeeper makes a series of entries which will be discussed in the next chapter. The result of these entries will be to eliminate the liability by a debit to "accrued salaries and wages" and to decrease "cash" by the amount which Marlowe will be paid. The amount paid will be less than the figure in the liability account because of taxes and various other withholding items.

4.16 Station Representatives and Agency Sales

Whenever a station does its own selling, the situation is handled in the manner which has been discussed. When a station representative company does the selling or when the station gets its business from an agency, the procedure is somewhat different.

"Reps" and agencies usually remit the gross sales prices less their commissions to the station. Assume that the Fenton and Salesworth Advertising Agency desires to put spots for "Fend-Off" deodorant on WXXX. The rate on

\$550. The contract is signed, the spots are aired, the
agency is billed, and WXXX receives a check from the agency
for \$467.50. This figure is arrived at in the following
way:

\$550 **X** 15% = \$82.50 \$550 - \$82.50 = \$467.50

The agency charges a commission of 15% and it deducts its commission before sending the money to the station. The journal entry which would be made under these circumstances would be:

Agency Commissions--National
Sales
82.50
Accounts Receivable--National
Advertisers
National Time Sales--Participation
550.00
Spots received from Fenton and
Salesworth Agencies--*Fend-off*
Deodorant. 15% agency commission.

This entry is made at the time of the sale and it differs from the entry which is made when the station salesman makes a sale because the commission due on the agency sale is considered at the time of the sale. When dealing with agencies, the commission is usually charged to expense immediately because the agency only sends the net amount due the station (rate card figure less commission). If the station is to receive any money it will be a net figure.

Agencies and representatives usually take their pound of flesh first and give the station what is left. THUS, WHEN DEALING WITH SALES MADE THROUGH AN AGENCY OR A REP THE COMMISSION IS CHARGED TO EXPENSE AT THE SAME TIME THAT THE SALE IS RECORDED, AND ACCOUNTS RECEIVABLE IS DEBITED FOR THE SALES PRICE LESS THIS COMMISSION.

The Engineer

4.21 Purchases

It is one of the duties of the chief engineer to maintain a complete and appropriately large supply of the replacement parts necessary for uninterrupted operation of the station. These consist of tubes, for both studio equipment and transmitter, or other replacement parts, and also audio and video tape, tape splicers, splicing tape and the like. To see how the accountant might handle purchases of these items, consider the following example:

Milow Farley, WXXX's chief engineer, finds that it is necessary to purchase both audio and video tape. He, therefore, places the following order:

50 rolls of audio tape at \$3.00/roll \$150.00 2 rolls of video tape at \$225.00/roll 450.00

Obviously, the purchase of these items calls for an expenditure of cash <u>OR</u> the creation of an account payable. For simplicity here, it will be assumed that the station is paying cash. Because the station is reducing its amount of cash, and because cash is an asset, the account "cash" will be credited. But what about the debit

to this journal entry? Whatever is debited will be increased because the station is acquiring something in return for the cash that it is spending. According to the explanation in the previous chapter, the only two kinds of accounts that can be increased by debits are ASSETS and EXPENSES. The question now becomes, not what is the debit, but is the debit made to an asset account or to an expense account?

One might think that the definitions that were given earlier would provide the answers. But this is not the case. An asset was defined as something of value that is owned by the station. Clearly, both types of tape have value, and they are owned by the station. Expenses were defined as costs that are incurred to generate revenue. Both of these types of tape are necessary for broadcasting and thus are necessary for the generation of revenue. So, as far as the definitions are concerned, they are no help at all. The consistency for which the accountant strives says that some yardstick must be established so that all stations may handle situations such as this in the same fashion. This yardstick is composed of two aspects: usellife and relative cost.

According to definition, use-life is that period

⁵See notes 3 and 4, Chapter III.

⁶See note 14, Chapter III.

of time during which an item will function economically for the business. 7 In other words, how long will it last? The lengths of time used here are not hours and days but rather fractions or multiples of the business cycle. definition of the business cycle is rather complex, but generally it is considered to be one year. In general, if the item that is purchased will be of use to the station for a period of time that is longer than one year, then this item would be capitalized, i.e., charged to an asset account. The reason for this is that the money that was spent will serve the station for more than one year and, therefore, an accurate picture of the station's financial operation would not be given if it were all charged to a single year. If the station expenses an item that would be of use for more than one year, this distortion would take place. Consider the roll of video tape at a cost of \$225. This roll of tape will probably last the station for two years. If the station had sales of \$1,000 in a given year, then it would have a net income of \$775 if the tape were expensed: \$1,000-\$225. However, if the tape is capitalized, the cost would be spread over 2 years, because the tape will be of use to the station for that length of time. Thus, again assuming \$1,000 in sales, the

⁷H. A. Finney and Herbert Miller, <u>Principles of Accounting: Intermediate</u> (5th ed., Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1958), p. 357.

net income would be \$887.50: \$1,000 - (1/2 X 225 = \$112.50) = \$887.50. The difference would certainly be of consequence if both the sales and expense or capitalization were several times larger. The general rule is, then, to treat the expenditure in such a manner that the cost will be spread over the entire use-life of the item that is purchased. If the item lasts less than a business cycle, charge the cost to expense; if it lasts more than a business cycle, charge the cost to an asset account.

Relative cost is the second factor which makes up the yardstick. In short, if the cost is small, it is expensed at the time of purchase. If the cost is large, it is capitalized. The trick here is to try to determine whether the cost is large or small and that determination is no easy task. To make the determination as easy as possible, the accountant might set up an arbitrary figure called a cut-off point. If the cut-off point is \$100, then everything that costs less than \$100 is charged to expense and everything that costs more than \$100 is capitalized. Another method of remedying the problem would be to draw up a list of what are considered borderline goods and then assign a classification to each. Either way, the decision is liable to be arbitrary to a large extent.

Considering the aspects of cost and use-life, then, how would the two types of tape that Farley purchased be handled in the journal entry? First of all, the audio tape

would be charged to expense immediately because:

- (1) It has a very short use-life under normal circumstances, and
- (2) It has a relatively low unit cost.

The video tape would be capitalized because:

- (1) It has a use-life that extends beyond one business cycle, and
- (2) It has a relatively high unit cost.

The following would be the two journal entries:

Mar.	1	Tape Expense Cash 50 rolls of audio tape at \$3 per roll from Allied Radio	150.00	150.00
Mar.	1	Studio Equipment Cash 2 rolls of video tape at \$225 per roll from Allied Radio	450.00	450.00

4.22 Additions, Improvements, Replacements and Repairs

Engineers do more around a station than just take meter readings or read the latest technical magazines. They perform operations which result in changes in the station's equipment, changes which can be classified in one of four categories. The accounting treatment for each of these four classifications differs, and the differences are accounted for partly through definition and partly through

^{8&}lt;u>Ibid.</u>, pp. 331-334.

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a consideration of cost.

First of all, ADDITIONS imply an increase in the quantity or size of an asset. If a new wing is built on the side of the station's building, it is an addition. the transmitter is engineered so that it will have greater power, it is also an addition. In other words, whenever an asset is in some respect greater than it was before the work was done on it, the labor and material that are used are considered as an asset and the sum of these two is the amount that is added to the value of the original asset. ALL COSTS ASSOCIATED WITH AN ADDITION ARE CAPITALIZED. Consider the following example:

Milow Farley worked on WXXX's audio console so that it would accommodate stereo multiplexing. The work involved the installation of a new VU meter and the addition of new circuitry to the The total cost was \$969.50. console.

This is an example of an addition because there was more equipment in the console after Farley completed his work than there was when he started. The object of Farley's efforts was to rebuild the console so that it could do more for the station. The console can now handle normal broadcasting PLUS stereo multiplexing. The journal entry would be:

> Studio and technical equip. 969.50 Parts inventory Adjustments to audio console for stereo.

969.50

For the sake of simplification here, two adjustments have been made. First, no labor has been added to the cost and, second, it has been assumed that all parts necessary for the addition came from an asset account called "parts inventory," when, in reality, they might have been charged to expense. To include both of these items would involve somewhat more background than is available in this handbook. This same simplification exists throughout this section.

The second category is IMPROVEMENTS. Whereas additions imply an increase in QUANTITY, improvements concern themselves with an increase in QUALITY. Consider the following example:

Farley made some basic changes in the turntable pre-amplifiers in WXXX's studios, the result of which was a greatly improved frequency response. The cost was \$50.

In this example, the station cannot do anything more with what it has than it could before Farley made his changes. However, what it does do can now be done better. The QUALITY of the station operation has been improved. Because the asset is better than it was before, it must be more valuable and, therefore, the cost is capitalized:

Studio and tech. equip.
Parts inventory
Improvements in turntable
pre-amps.

50.00

50.00

REPLACEMENTS involve a substitution of one part

for another. However, when the replacement is made, the end result is no better than the asset was when the station purchased it. There is no change in quality or quantity. For example:

Several tubes in the audio console went out, and Farley replaced them with new ones. The cost was \$10.25.

After Farley has replaced the tubes the console is better than it was before he fixed it, but IT IS NO BET-TER THAN IT WAS WHEN THE STATION ORIGINALLY BOUGHT IT. The entry would be:

Equipment parts and supplies 10.25
Parts inventory 10.25
Repairs to audio console.

This entry charges the replacement to expense.

However:

Because of excessive heat at the transmitter building, a portion of the monitoring equipment overheated and had to be entirely replaced. The cost was \$2,500.

The entry would be: 9

Transmitter equipment 2500.00

Cash 2500.00

Replacement of monitor due to overheating.

⁹In a situation such as this the cost of the asset which has been destroyed or otherwise put out of commission would have to be removed from the asset account. Otherwise the account would include the replacement plus that which was replaced.

This cost is capitalized because it is unusually high and if it were expensed it would distort the station's earnings in the year in which the replacement was made. Therefore, whether replacements are expensed or capitalized depends upon the size of the cost. Again, a cut-off point probably would be established.

What has been said about replacements also applies to REPAIRS. Repairs usually involve minor maintenance but they might also involve a replacement. In reality, the line between these two categories is rather thin. Again, if the cost of the repair is unusually high, it will be capitalized. If the cost is low, it will be expensed. A repair might be the cleaning of the heads on a tape recorder or the replacement of tubes in the various pieces of equipment. In the latter case the repair involves replacements.

What should be noted here is that it is the size of the cost involved in the repair or replacement that is the basis for the decision as to whether that cost should be capitalized or expensed. However, when dealing with situations where an asset is increased in size or where an asset is increased in quality, i.e., additions or improvements, the costs are always capitalized.

The Programmer

4.31 Record Subscriptions

An expense is a cost which is expended by a business in order to generate revenue. 10 Radio today exists on records; take the recording away and the vast majority of the stations would die, particularly the small market enterprises. Record costs are expenses of doing business. However, one might ask if the money spent on records might not be capitalized. After all, the station receives something tangible when it pays out the money and the item received certainly lasts longer than one year. In fact, an album today might last five, six or seven years or more with proper care. Considering these factors, should not the cost of recordings be capitalized? The answer is no. The cost of recordings is expensed. An analysis of the procedure involved in the process of subscribing to records might explain the reasoning behind this answer.

A radio or TV station may pay the recording company, or in some cases a distributor for this company, a sum of money. The payment of the sum obligates the company to send the station a fixed number of records during the time for which payment is in effect. The station will not receive two or three records every month, but rather, it might receive seven or eight records one month, none

¹⁰ See note 14, Chapter III.

the next, and maybe one or two the third month. Consider the following:

WXXX signed a contract with Entertainment Records which stated that for \$120 Entertainment Records would send WXXX 100 of its new releases during the following 12-month period.

If the station were to capitalize the \$120, it would mean spreading that amount of money over the lives of the The records cost \$1.20 apiece and they will last records. about four years. That means that each record would lose 30¢ a year in value, or it would depreciate 30¢ every year. 11 Additionally, it is improbable that the station would have only one subscription service. It might have three or four and all of these might start and end at different dates. In order to keep the costs of all of the recordings straight, the station would have to keep rather involved records on each recording, noting when it was received, the amount of the contract under which it was purchased, the cost per recording, the amount of the contract under which it was purchased, the yearly depreciation, etc. In short, if the cost of the subscription were capitalized, the station would have more bookkeeping than the 30¢ a record would warrant. Therefore, for purely practical reasons, the cost of the record subscription is expensed in the year during which the contract is effective. In the case of the above example,

 $^{^{11}}$ Depreciation is given thorough consideration in Chapter V.

the following journal entry would be made:

Jan. 1 Music, Recordings and Transcriptions 120.00

Cash 120.00

Entertainment record subscription
1/1/65 - 12/31/65

It should be kept in mind that if the record contract and the station's business or fiscal year do not coincide, the cost of the subscription service must be split over two business years. For instance, if WXXX should sign a contract on June 30, which will be in effect until June 29 of the following year, and if WXXX's business year should run from January 1 to December 31, then the whole amount which is paid for the service cannot be charged to the year in which the contract was signed. The reason is that the contract will benefit two business years: part of the one from June 30 to December 31 and part of the one from January 1 to June 30. Therefore, the cost must be split equally between the two years which will benefit from the contract. If the cost of the contract were, again, \$120, the following entry would be made on June 30:

June 30 Other prepaid Expenses 120.00

Cash 120.00

Entertainment Subscription
Service, 6/30/65 - 6/29/66

This entry gives recognition to the fact that the

station has paid out an amount of money for a service from which it has yet to derive any benefit. On December 31, the bookkeeper would give recognition to the fact that the station had derived benefit from one-half of the money paid out in June by charging one-half of the \$120 to expense, removing it from the prepaid expense account. Remember that prepaid expenses are assets, and that assets are reduced by credits. Expenses are increased by debits:

Dec. 31 Music Recordings and Transcriptions 60.00
Other prepaid expenses 60.00
Entertainment subscription contract applicable to 1965.

On June 29 of the next year, the last half of the contract would be used, and, therefore, the bookkeeper would remove it from the prepaid expense account:

1966
June 29 Music Records and Transcriptions 60.00
Other prepaid expenses 60.00
To charge remainder of Entertainment subscription to expense

The principle which governs these three entries is that expenses should be matched with the revenues which those expenses generated.

4.32 License Fees

All stations which derive income from the public performance of published materials, songs, plays, books, poetry, etc., must pay royalties to the publisher and performer of the materials. The American Society of Composers, Authors and Publishers (ASCAP), Broadcast Music, Incorporated (BMI), and SESAC are the three agencies which collect these royalties for the parties who are entitled to them. The charge is not made to a station on the basis of a set amount per performance. This would be ludicrous because a station plays so many different songs by so many different artists and writers during a year that to keep track of each separate performance would be a mountainous task. The charges made by ASCAP, BMI and SESAC are made on the basis of gross income per year. Consider the following:

Station WXXX is licensed by ASCAP, BMI and SESAC to use the music listed in the catalogues of these agencies. ASCAP's charge is 1% of the gross income per year, while BMI and ASCAP's is 3/4% of the gross income. In 1965, WXXX's gross income was \$100,000.

The journal entries that would be made when these fees were paid would be:

Dec. 31	Music License Fees	1000.00	
	Cash		1000.00
	1965 ASCAP license fees		

31 Music License Fees 750.00
Cash 750.00
1965 B.M.I. license fees

The entry is not made until the end of the accounting period. The amount that is paid by the station bears no direct relationship to the number of songs or other copyrighted material that the station might play during the year. The license fee is an expense because without the payment of the fee, or the signing of an agreement which leads to the fee, the station would have no legal means by which it could play almost 100% of the music on the market.

4.33 Broadcast Rights

One aspect of programming where a cost is not expensed is in the area of broadcasting rights. Broadcasting rights are privileges given to the station in return for monetary reimbursement. They apply to syndicated programs, feature film, sports events, etc. Consider the following:

WXXX has signed an agreement with the state university whereby WXXX is given the sole rights to broadcast all of the university's football games for the next three years. In return for these rights WXXX agrees to pay the state university \$75,000.

The rights which WXXX acquires as a result of this agreement are an asset. WXXX has the sole rights to broadcast those games over the next three years and WXXX can do with those rights as it pleases, within bounds. In other words, if WXXX wanted to grant other stations the rights along a network it could do so unless prohibited

by terms of the contract. Therefore, when the contract is signed, the following journal entry would be made:

Broadcast Rights to Other
Programs 75000.00
Cash 75000.00
3 year right to broadcast
football games of State
University

Each year, the value of WXXX's asset declines by a set amount because, once having broadcast a season's games, WXXX has no further claim against the university for that year. The contract is for \$75,000 and, therefore, the station must charge to expense one-third of that amount at the end of each season's games. The station has used up one-third of its rights and therefore it has accumulated an expense equal to one-third of the total amount it paid for the rights, \$25,000. This charging off process is known as amortization, and it is accomplished by the following journal entry:

Amortization Exp.--Bdcst.
Rights 25000.00
Acc. Amort.--Bdcst.
Rights 25000.00
Charge off of 1/3 of cost
of State University football
rights

The debit is simply an expense account. This portion of the asset is expensed because it has generated

revenue -- whatever the amount and from whatever source.

Again, as in the case of prepaid expenses discussed above,
the object is to match revenues and expenses.

The credit in this entry is not to "broadcast rights," as might be expected. It is to "accumulated amortization--broadcast rights." When the asset "broadcast rights to other programs" appears on the balance sheet it must be shown at its original purchase price regardless of how much of that cost has been used. However, it is also necessary to show how much of that asset has been charged off, and how much of the asset still remains unused. The "accumulated amortization--broadcast rights" account has a credit balance. It shows what portion of the original cost of the asset has been charged to expense. On the balance sheet, this information might be presented in the following fashion after one-third of the \$75,000 has been used:

BROADCAST RIGHTS

Football Games (State University)
Less Accumulated Amortization

\$75**,**000

25,000 \$50,000

This type of presentation gives full disclosure to all the information that is pertinent to this transaction. If special statements need to be made about these rights, or further explanations of some sort or another, the statements will be footnoted in precisely the same way that a writer footnotes a research paper.

At the end of the third year, in the example above,

the following two entries would be made in the station's books:

Amortization Exp.--Bdcst.

Rights 25000.00

Accumulated Amort.-Bdcst. Rights 25000.00

Charge off of last 1/3 of cost of rights to State University football

Accumulated Amortization-Bdcst. Rights 75000.00

Broadcast Rights to
other pams. 75000.00

other pgms.
Removal of rights to State
Univ. football--expired
contract

The first entry records the expense for the third year of the broadcast rights. The second entry removes the asset from the books. In the previous years, the asset account has not been touched. After the third year, when the station has no more rights to the football games under the contract, the asset account will still have a balance in it. But, the balance has no meaning—the station has no asset any longer. If the second of the two entries were not made, the following situation would exist in the balance sheet at the end of the third year:

BROADCAST RIGHTS:

Football Games (State

University) \$75,000

Less Accumulated Amorti-

zation 75,000 -0-

There would be no point in listing something like

this on the balance sheet. Therefore, when a contract for broadcasting rights expires, the associated asset must be removed. The removal is instituted by crediting the asset account for the amount paid for the rights and by debiting the "accumulated amortization—broadcast rights" account for the total amortization. This removes an asset which no longer has any value. It also removes an amortization account which has no meaning since its corresponding asset is gone.

One might think that it would be easier to make the journal entry directly to the asset account at the end of each year. This way the asset account would automatically disappear at the end of the contract. This is true but one of the basic principles of accounting is that of full disclosure. The statements of any firm must present, fully, all information which might be necessary for an accurate interpretation of the firm's financial position. If the entry were made directly to an asset account, this full disclosure would be harmed.

In Summary

The Salesman

When a station makes a sale through one of its own

¹²Finney and Miller, <u>Principles of Accounting:</u> <u>Intermediate</u>, pp. 57-58 and 168.

salesmen, several questions must be answered before the sale can be recorded on the station's books. First, was this sale made at the full rate or was a discount granted? If the sale was made at the full rate, the entry is made by a debit to an account receivable and a credit to a sales account.

If, however, the sale was made at a discount, the account "sales discounts" is used to take up the difference between the sales price according to the rate posted on the rate card and the sales price as the contract is written:

Sales figure on the rate card -Sales figure on the contract

Sales Discount

With a discount, two debits are necessary instead of one: one debit is to an account receivable account and the other is to "sales discount." The credit remains to a sales account. Under all circumstances, whether a discount is granted to a client or not, the figure which is credited to the sales account is always the rate card figure.

The <u>accounts receivable accounts</u> mentioned above are <u>asset accounts</u>, and, therefore, they can <u>only be reduced</u> by a credit. This credit comes into existence when a client pays all or part of his debt to the station. The corresponding debit is to cash, under most circumstances. There is no entry made to either the accounts receivable account or the sales discount account. Neither of these

is touched under <u>normal circumstances</u>. The only time that they are disturbed is when the original contract is changed so that the figure originally entered is no longer correct. And, if neither the sales figure nor the sales discount figure is correct, then it follows that the amount originally entered into the accounts receivable account must also be in error as all three of these accounts are interdependent.

A salesman is not due a commission the moment that he gets his client's name on the contract. He usually gets his commission when the client pays the station. Therefore, no entry giving recognition to the amount of commission which is due the salesman is made until the client pays. When payment is made "salaries and wages—salesmen" is debited and "accrued salaries and wages" is credited.

"Salaries and wages—salesmen" is a controlling account—it has no balance in itself but is made up of many sub—accounts, one for each of the salesmen. There will be controlling accounts for talent, executives, engineers, etc.

Certain portions of a station's sales are made by station representatives or are acquired through advertising agencies. The same principles apply here as when sales are made under the conditions discussed above, but one aspect is different. Most agencies and "reps" take the commission that is due them <u>before</u> they send the money to the

station. Therefore, the commission is charged to expense when the sale is recorded and the net amount which the station receives is debited to the accounts receivable account.

The Engineer

One aspect of the engineer's job is the purchasing of items needed for daily broadcasting and the purchasing of parts which have become non-functional in broadcasting equipment. These purchases give rise to a question as to whether the items purchased are to be treated as assets or expenses. The question is answered in terms of (1) the relative cost of the item, and (2) the relative use-life of the item.

Generally, the <u>greater the cost</u> of an item, the better are the chances that it will be <u>treated as an asset</u>. The <u>greater the use-life</u> of the item, also the greater the possibility of <u>treating it as an asset</u>. <u>Use-life</u> is defined as that space of time during which an asset is economically useful to a business enterprise.

These two rules are functional when one is dealing with items that are at either end of a continuum. However, when an item could be either an asset or an expense, when the items are border-line cases, arbitrary cut-off points are established by the accountant. These might be put in the form of a policy statement by the accountant.

Capitalization refers to the treatment of an item as an asset, i.e., putting it in an asset account and

depreciating it over its use-life. The problem of depreciation is discussed in the next chapter.

In the long run, many decisions as to expensing or capitalizing items must be arbitrarily made; however, once the decision is made it must be faithfully followed.

Engineers also perform actions which physically change a station's assets. An <u>addition</u> is an <u>increase</u> in the size or <u>quantity</u> of an asset. All costs associated with an addition are capitalized.

An <u>improvement</u> is an <u>increase</u> in the <u>quality</u> of an asset. All costs associated with an improvement are capitalized.

A replacement is a <u>substitution</u> of one part for another. The asset is no better after the replacement than it was when it was new. The size of the cost of the replacement determines whether that cost will be capitalized or expensed. Again, a cut-off point would probably be established.

Repairs involve minor maintenance. Again, if the cost of the repair is great, it will be capitalized. If the cost is small, it will be expensed.

The Programmer

Three areas where accounting affects the program manager and his employees are: record subscriptions, license fees and program rights.

The costs of <u>record subscriptions</u> and acquisitions

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are charged to expense, because of the clumsiness of the bookkeeping that would be involved if they were capitalized. A subscription might be treated as a prepaid expense if the contract with the company or distributor were for more than one year or if the contract extended over two business periods. If the cost were a prepaid expense, a portion of that prepayment would be expensed at appropriate periods of time.

License fees paid by radio and television stations to ASCAP, BMI and SESAC take the form of a percentage of gross income for a given business year. These fees are expenses to the station for they bear a direct relation to the revenue which the station derives. The fees are paid to the organizations at the end of the business year, once the gross income has been determined.

Broadcast rights are assets giving the station privileges to a program or some other copyrighted performance.

The cost of the broadcast rights must be reduced periodically if the rights have been purchased for more than one year. This process is known as <u>amortization</u>. It simultaneously reduces the asset and charges part of the cost off as an expense. The amortization appears on the balance sheet as a deduction from the value of the asset. No entry is made which actually decreases the asset until the rights expire. At that point, the asset is eliminated along with the balance of the accumulated amortization account.

CHAPTER V

ACCOUNTING FOR THE MANAGER

In this chapter, the accountant's involvement with certain financial affairs of direct interest to the general of station manager will be investigated. These topics are:

- 5.10 Depreciation
- 5.20 Matters Relating to Payrolls
- 5.30 The Income Statement

5.10 Depreciation

The Committee on Terminology of the American Institute of Certified Public Accountants defines depreciation as follows:

Depreciation Accounting is a system of accounting which aims to distribute the cost . . . of tangible fixed assets, less salvage (if any), over the estimated useful life of the unit (which may be a group of assets) in a systematic or rational manner. It is a process of allocation, not of valuation.

In more succinct terms:

The accounting technique of apportioning the cost of fixed assets as a part of the expense of each period is called depreciation.²

Finney and Miller, <u>Principles of Accounting:</u>
Intermediate, p. 355.

²Myer, p. 78.

In the preceding chapter it was stated that one of the primary goals of an accountant is to match revenues with those expenses which generate the revenues. what depreciation helps to do. Imagine a company which manufactures bottle caps. This company has one machine which makes the bottle caps. The sheets of aluminum go in one end of the machine and the finished bottle caps come out the other end. The machine cost \$500,000, and the company has annual sales of \$75,000. If the sublime is allowed to intermingle with the ridiculous for a moment, assume that there are no other expenses involved with this opera-In the first year of operation, the company sold tion. \$75,000 worth of bottle caps, but it also spent \$500,000 on the machine--which is the only reason that there were any bottle caps at all. If no depreciation is considered, then the company must have suffered a net loss of \$425,000 during the first year:

\$75,000 - \$500,000 = (\$425,000)

The next year, since there were no other expenses, the company would make a profit of \$75,000 and it would make the same amount every year until it had to buy a new bottle-cap-making machine. In that year, the company would suffer a net loss of \$425,000 again.

The situation is ludicrous, not because the facts are fantastic, but because the machine would be just as important in every year of manufacturing as it was in that

first year. Yet, no year, other than that first one, was charged for the operation of the machine. If the machine would last for 25 years, would it not make sense to charge each of those 25 years with a part of the original \$500,000 cost? It certainly would. If the machine lasts 25 years, then 1/25 of the cost of that machine generates \$75,000 of income each year. The cost of that machine must be allocated to those years in which the machine helped produce income. As the committee on terminology said, depreciation "is a process of allocation. . . ."

One problem with the comprehension of depreciation comes when one realizes that the company charges to expense an amount of money which is not paid out in cash. The depreciation expense of the machine in the above example is \$20,000 (\$500,000 cost divided by 25 years of use) in every year in which the company uses it but in every year except the first, no money is paid out. Therefore, in subsequent years, income is reduced by an amount which the company does not really spend. If the company were to rent the machine for 25 years at \$20,000 a year, it would also be spending the money and this outlay would be considered as an expense. The whole situation is very similar to accrual accounting. The outlay of cash does not exist as the sole

³Finney and Miller, <u>Principles of Accounting:</u> <u>Intermediate</u>, p. 355.

criterion for expense determination. If a cost outlay, past, present or future, can logically be associated with current revenues, then that outlay should be expensed in the current business period. Depreciation is such an expense—nothing more, nor nothing less.

5.11 Terminology

The consideration of depreciation brings several new terms into one's vocabulary. These are: salvage value, depreciation base and estimated life.

Salvage value is the amount of money that a company can expect to receive for an asset when it sells that asset after it has outlived its economic usefulness to the company. It must be emphasized that this value has to be estimated. It is easy to find out how much a given piece of machinery can be scrapped for today but how much it will bring 25 years from now is an almost unanswerable question.

Depreciation base is composed of the cost of the asset. This cost consists of the purchase price, the cost of installation of the piece of equipment and various other incidental costs associated with the piece of equipment prior to its actual use by the company.

Estimated life is that which was termed <u>use-life</u> in the preceding chapter. The estimated life is just as much a well-calculated guess as is salvage value. Technical data exist which can aid in making this estimate, and there are such factors as the Internal Revenue Service

(IRS) guidelines on depreciation, about which more will be said later. One must also consider the fact that technical improvements are bound to be made in the future, improvements which an accountant will have no way of foreseeing, and these improvements will affect the economic usefulness of the asset. Thus, estimated life might be considered to be about three-fourths guess, based on one-quarter factual information.

5.12 Depreciation: the Methods and the Example

The four methods which will be considered in this section are: the straight-line method, the working hours method, the declining balance method and the sum-of-the-year's-digits method. In considering these methods, the following example will be used:

In 1954 WXXX bought a 10,000 watt RCA-AM transmitter for \$27,500. Estimates on the part of the station engineers and the RCA representatives brought about the conclusion that the transmitter had a life of 15 years, and that it would have a scrap value of \$500 at the end of that time.

The transmitter had to be shipped to WXXX from the RCA plant in New Jersey at a cost of \$1,500, and it cost an additional \$1,500 to install and adjust it. The station went on the air, and the transmitter went into use on January 1, 1955.

Sales Price	•	•	•	•	•	•	•	•	\$ 27 , 500
Shipping Costs									
Installation Costs.	•	•	•	•	•	•	•	•	+ 1,500
DEPRECIATION BASE .	•	•	•	•	•	•	•	•	\$ 30,500
SALVAGE VALUE	•	•	•	•	•	•	•	•	\$ 500
ESTIMATED LIFE				_					15 yrs.

5.121 Depreciation Methods: Straight-line

The straight-line method of depreciation is the simplest of the methods in use today. It assumes that the cost of an asset will be equally spread over the life of the asset. In the above example:

$$\frac{30,500-500}{15}=\$2,000$$

Two thousand dollars is the amount that will be charged to depreciation expense each of the fifteen years that the asset is in use by the company. The salvage value is deducted from the depreciation base because the station estimates that it will be able to get back \$500 when it sells the transmitter for scrap in 15 years. If this estimate is correct the station will have paid \$500 less for the transmitter.

5.122 Depreciation Methods: Working Hours

This method of determining depreciation goes on the assumption that an asset depreciates only if it is used. Assume that the transmitter above had an operating life of 75,000 hours. This means that, regardless of how many years the station has the transmitter it will only run for 75,000 hours with the desired degree of efficiency. The depreciation rate under this method is determined in the following way:

$$\frac{30,000}{75,000} = .40/hr$$
.

By dividing the hours of useful service that the

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asset has into its depreciation base reduced by the salvage value, one arrives at the depreciation expense per operating hour. In this case, every hour that the transmitter operates, it depreciates by 40 cents. If the transmitter operated 5,000 hours during 1955, the depreciation charge would be .40 X 5,000, or \$2,000. If the transmitter were used only a total of 2,000 hours, the charge would be \$800. This method of depreciation is particularly useful with television equipment, e.g., cameras, camera chains, monitors, etc. Needless to say, some type of timing device must be installed on the equipment to log the hours during which it is in use.

5.123 Depreciation Methods: Declining Balance

The declining balance method of determining depreciation sets a percentage of the cost that will be applied against the cost of the asset reduced by the previous years' depreciation. The formula for the theoretical percentage is complex but one need not concern himself with it because the Internal Revenue Service has stated that the rate used in the declining balance method cannot exceed twice that used in the straight-line method. When the straight-line method was used above the rate was:

$$\frac{2,000}{30,000}$$
 X 100 = 6 2/3%

⁴¹⁹⁶⁵ U.S. Master Tax Guide (Chicago: Commerce Clearing House, 1965), p. 400.

If the declining balance method were used, the rate could not exceed 2 X 6 2/3%, or 13 1/3%.

In the first year of operation the depreciation charge would be:

$$30,000 \times 13 \frac{1}{3}\% = 4,000$$

In the first year, the entire depreciation base is used to compute the depreciation. In the second year, the depreciation base is reduced by the first year's depreciation before the percentage is applied:

$$30,000 - 4,000 = 26,000$$

 $26,000 \times 13 \frac{1}{3}\% = 3,433.33$

In the third year, the depreciation base is reduced by the depreciation for the first and second year: 30,000 - 4,000 - 3,433.33 = \$22,566.67. The charge for the third year would be:

$$22,566.67 \times 13 \frac{1}{3}\% = 2,982.23$$

Notice the trend in the depreciation charges:

First year.	•	•	•	•	•	•	•	•	•	•	•	•	\$4,000.00
Second year	•	•	•	•	•	•	•	•	•	•	•	•	\$3,433.33
Third year.	•	•	•	•	•	•	•	•		•	•	•	\$2,982.23

The charge to depreciation expense is, obviously, highest in the early years of an asset's life. As the asset grows older the charge decreases. The declining balance

⁵13 1/3% is set as the maximum for this method. The station could choose any rate below that, but it is most probable that it would choose the highest rate so as to get the maximum tax benefits from the method. Thus, 13 1/3% is used in the example.

method does not have a very solid theoretical base but it is used extensively in business because of its pragmatic advantages, e.g., that it lets one decrease his profits (by increasing expenses) in the early years of the asset's life. A decrease in profits means a decrease in taxes. According to the theoreticians, depreciation charges should be larger in those years when the asset is relatively free from expenses due to repairs. In later years, when the expenses for repairs will theoretically be larger, the depreciation charges should be smaller. Regardless of theoretical arguments involved, one should be aware of the fact that the total charge to expense will be the same when the entire life of the asset is considered: once can never charge off to depreciation any more than the cost of the asset.

5.124 Depreciation Methods: Sum-of-the-Year's-Digits

The effect of this method of depreciation is virtually the same as the declining balance method. The initial charge is large, and it decreases each successive year. The method involved here, however, differs slightly. First of all, the digits in the life of the asset are added:

1+2+3+4+5+6+7+8+9+10+11+12+13+14+15 = 120

In the first year, the charge would be determined

Finney and Miller, <u>Principles of Accounting</u>: Intermediate, pp. 360-361.

by taking the highest number, using it as the numerator of a fraction of which 120 is the denominator and multiplying this by the depreciation base:

$$\frac{15}{120}$$
 X 30,000 = \$3,750

In the second year the number 14 is used, instead of 15:

$$\frac{14}{120}$$
 X 30,000 = \$3,500

In the third year the number 13 is used:

$$\frac{13}{120} \times 30,000 = \$3,250$$

And so forth, to the 15th year when the charge would be:

$$\frac{1}{120} \times 30,000 = \$250$$

Again, the same theory applies here as before:

The cost of the use of a fixed asset includes depreciation and repairs; the sum of these charges should be a fairly uniform amount year after year; since repairs tend to increase with the age of the asset, the depreciation charge should decrease, so that the increasing repair charges and the decreasing depreciation charges will tend to equalize each other and produce a uniform total charge. 7

5.13 The Internal Revenue Service and Depreciation

Straight-line, working hours, declining balance and sum-of-the-year's-digits are the four most prominent depreciation methods. Why should a company choose one of

^{7&}lt;sub>Ibid</sub>.

these over the others? The answer lies in the fact that depreciation expenses are usually rather large, and, as a result, they can have a profound effect on net income. The company must pay taxes on net income and, therefore, whatever has an effect on income also has an effect on taxes. Thus, the company's concern—and thus the Internal Revenue Service's concern.

A company is even more concerned with depreciation and its effect on income because depreciation is one of the few factors which compose income which can be altered without touching the dollar-amount of sales. Depreciation is a "non-cash" expense and, therefore, a company can, with proper choice of method, bring a good deal of money in without paying very much tax on it. The company, under these circumstances, is in excellent operating position, even though the income statement says that net income is rather low. Juggling of this sort is not ethical and, at times, not legal as far as the Internal Revenue Service is concerned. By juggling depreciation, a company can cheat the government out of its due revenue. That is the reason for the IRS's concern over depreciation.

Depreciation with all of its ramifications has been, and still is, one place where the government can have a good deal of control over the general economy. By tightening or loosening its regulations concerning depreciation, the Federal Government, through the IRS, can have a profound

effect on earnings. This effect is reflected in a corporation's investments in new plants and equipment. Liberal depreciation guidelines—those which permit accelerated depreciation methods or those which permit liberal interpretations of asset use—life—will encourage business to make such investments. Increases in business investment lead to increased production. Increased production leads to more jobs. More jobs lead to more buying power. More buying power gives growth to the economy. Depreciation, then, is a very definite factor in the rate of economic growth of the country.

Depreciation is one place in business where the government has the first say and where accountants must follow suit:

It would be unrealistic not to concede that income tax considerations are an important factor in the selection of depreciation methods. In view of the high level of income tax rates, the amount and pattern of depreciation deductions have an important effect on the cash position of a business.

5.14 Accounting for Depreciation

It is important to know that <u>regardless of the</u>

<u>method which is used</u>, the entries to record the depreciation expense are the <u>same</u>. For the purpose of illustration, assume that WXXX uses the straight-line method of depreciation. Depreciation is an expense and, therefore,

⁸¹⁹⁶⁵ U.S. Master Tax Guide, p. 36.

the debit of the journal entry will be to "depreciation expense--transmitter." The credit will be to "accumulated depreciation -- transmitter. This account functions precisely as the "accumulated amortization--broadcast rights" It acts as a deduction from the cost of the account does. asset. The account will have a credit balance, but it will appear on the debit side of the balance sheet. Accounts which have this trait are called contra accounts. In the case of "accumulated depreciation -- transmitter," the contra account is deducted from the asset account. The asset account, it will be remembered, has as its balance the full cost of the asset. Therefore, when the asset account appears on the balance sheet accompanied by its associated contra account, the full facts surrounding this particular asset (or group of assets) are disclosed. The entry to record depreciation expense would be:

12/31/65 Depreciation Expense--transmitter 2000.00
Accumulated Depreciation--transmitter 2000.00
To record depreciation
expense for 1965 on transmitter

If the straight-line method is used, as it is in this example, each year the entry will be the same as it was the preceding year.

As far as presentation on the balance sheet is

concerned, at the end of the first year the asset and its contra account would be presented in the following way:

Property, Plant and Equipment
Transmitter \$30,500
Accumulated Depreciation-transmitter 2,000 \$28,500

The "accumulated depreciation—transmitter" account will grow by \$2,000 every year until at the end of the fifteenth year it will have a balance of \$30,000. The asset account will still have a balance of \$30,500. The difference is \$500, which is the scrap value which was estimated when the asset was originally purchased. At the end of the 15th year the asset will have, theoretically, no value left to the station and, therefore, it will be disposed of. At the time of disposal the following entry would be made:

12/31 Cash 500.00
Transmitter 500.00
To record the income received from the sale of the transmitter as scrap

The asset account now has a balance of \$30,000. However, the station no longer has that particular asset and, because it has disposed of that asset, the "accumulated depreciation" account has no meaning any longer. Therefore, at the time of disposal the following entry must also be made in addition to the one above:

12/31 Accumulated Depreciation-transmitter 30000.00
Transmitter 30000.00
To remove asset and associated depreciation account

ated depreciation account from the books after disposal of the asset

In reality these two entries would probably be combined into one:

12/31 Cash 500.00
Accumulated Depreciation—
transmitter 30000.00
Transmitter 30500.00
To record sale of trans—
mitter as scrap and to
remove asset and associated
depreciation account from
books

This one entry:

- (1) Removes the asset from the books;
- (2) Removes the associated accumulated depreciation account; and
- (3) Records the amount of money received from the disposal.

Of course, it should be painfully obvious that the chances are slight that a salvage value which was estimated 15 years ago would be accurate today. It would be much more probable that the asset would be sold for more or less than the estimated scrap value. If the asset had been scrapped for \$750 instead of \$500, the one entry would have an additional account in it:

12/31	Cash Accumulated Depreciation	750.00	
	transmitter	30000.00	
	Transmitter		30500.00
	Gain on Disposal of		
	Fixed Assets		250.00
	To record sale of trans-		
	mitter as scrap and to		
	remove asset and deprecia-		
	tion accounts from books		

The extra \$250 is, in effect, income to the station and, therefore, the "gain on disposal of fixed assets" account is an income account. If the disposal of the asset had resulted in only \$250 instead of the estimated \$500 the entry would be:

12/31	Cash	250.00	
	Accumulated Depreciation transmitter	30000.00	
	Loss on Disposal of Fixed	050 00	
	Assets Transmitter	250.00	20500 00
	iransmitter		30500.00
	To record sale of trans-		
	mitter as scrap and to		
	remove asset and deprecia-		
	tion accounts from the books		

The "loss on disposal of fixed assets" account is not an expense account, but rather a negative income account—a loss account. It results in a deduction from the station's income and, therefore, it is an account which will have a debit balance.

5.20 Matters Relating to Payrolls

If there were no such thing as taxes of any sort,

the accountant would have nothing more to do than to make the following journal entry at the end of every pay period:

> Payroll Expense Accounts Payable

xxx

xxx

However, there are taxes along with a variety of other items which affect the payroll of a station. The three most common payroll items will be discussed in this section:

- 5.21 Federal Withholding Tax
- 5.22 Social Security
- 5.23 Federal and State Unemployment Compensation

5.21 Federal Withholding Tax

Withholding taxes are a pay-as-you-go plan for handling one's federal income tax. The withholding tax is graduated so that as one's income increases, the amount of the tax that he is obligated to pay also increases. The withholding tax is also affected by legal exemptions.

At the present time the base rate for the withholding tax is 14%; however, it is possible that, with the current national and international situation, the rate might
be raised to provide speedier collection of taxes due the
government. For the purposes of this section, the 14% rate
will be used.

Exemptions are the amounts of one's gross income

upon which there is no tax. Originally the \$600 exemption figure was computed to be the amount that it would cost an individual to feed and clothe one member of his family for one year. This figure has not been changed in the recent decade. For federal income tax purposes, an individual is allowed one \$600 exemption for himself and one for each member of his family for whom he supplies more than 50% of that person's living expenses during the year. For withholding tax purposes, an individual may choose to claim NO exemptions. This would mean that his tax would be figured at the base rate of 14% on his gross earnings, UNRE-DUCED BY ANY EXEMPTIONS. The reason that some people choose to do this is that there is a discrepancy between the withholding tax rate, 14%, and the base income tax rate, 16%. This means that if an individual should claim all the exemptions for which he is entitled during one year, when it came time for him to fill out his yearly tax in April, he would still owe the government an additional amount of money equal to 2% of his adjusted gross income. By NOT claiming any exemptions for withholding tax purposes, the individual counteracts this differential of about 2% by paying more tax, and when he fills out his return in April he will either not owe the government or get a refund-other things being equal. For the purposes of this section, however, the above type of situation will not be considered. It is sufficient to know that there are individuals who will exercise such an option.

The amount of the tax that an employer withholds for his employees each pay period becomes a liability to the employees because the employer has in his possession an amount of money which is legally owed to the Federal Government. The liability is eliminated <u>quarterly</u> when the employer transfers the amount of the tax to the government.

5.22 Social Security Tax

The Social Security Tax is a two-part tax. The first part is paid by the employee, through payroll deductions and the second part is made up of an equivalent payment on the part of the employer. The rates are as follows:

From 1/1/66 through 12/31/66 . . . 4.2% . . . on the first \$6600 of earnings.

From 1/1/67 through 12/31/67 . . . 4.4% . . . on the first \$6600 of earnings.

This means that if, in 1966, an employee earned \$5,000, his portion of the tax would have been:

 $4.2\% \times $5000 = 210

If the employee earned \$6600 in 1966 his tax would have been:

 $4.2\% \times \$6600 = \277.20

If the employee earned \$7,000 in 1966 his tax would have remained at \$277.20. In other words, the tax applies only to earnings up to the specified amount. Everything above that is exempt as far as Social Security is concerned.

However, the Social Security Tax is a two-part tax. The employee's contribution is the first part, and the second part is a contribution by the employer, a contribution which is equal to that which the employee made. In the case above, if the employee contributed \$277.20, the employer would also have to contribute \$277.20. Both of these amounts are payable to the Federal Government, and, therefore, they are liabilities to the business. As is the case with the withholding tax the total Social Security Tax, composed of the deductions for all employees of the business PLUS an equivalent employer contribution, is payable to the government on a quarterly basis.

5.23 Federal and State Unemployment Compensation

The unemployment compensation taxes are, in effect, insurance premiums. The Federal Government levies a 3% tax on the wages of any employee who has an income in excess of \$3,000. Likewise, the states also levy an unemployment compensation tax. Because of an involved system of credits the tax ends up being a total of 3%--2.7% paid to the state and .3% paid to the Federal Government. This tax is a flat rate and, even though it is computed on the basis of employee salaries it is not paid by the employees. It is a tax on the employer. To illustrate, assume that

Finney and Miller, <u>Principles of Accounting:</u> <u>Introductory</u>, p. 96.

the janitor of WXXX makes a salary of \$4,500 during the year. WXXX is obligated to pay a tax which is 3% of \$1,500, \$4,500 - \$3,000, or \$45. The same would apply to all employees who are covered by the law. Again, this is a tax on the employer, not on the employee, and it is a liability to the employer until he has paid it to the Federal and State Governments.

5.24 Accounting for Payrolls

The above three classifications are rather common to all types of businesses and are applicable to all states. However, one should be aware of the fact that there are many other possible items which could possibly come into play when the payroll is computed. The <u>Accounting Manual for Broadcasters</u> lists the following possibilities in addition to those covered in detail above:

State Income Tax
Local Income Tax
Group Life Insurance
Hospitalization
U.S. Savings Bonds
Pension Plans
Donations
Union Dues
Garnishees¹⁰

All of these items would be treated as deductions from the employee's pay and as liabilities of the employer. They would be handled just as those which compose the

¹⁰ The Accounting Manual for Broadcasters, p. 27.

examples which follow.

Assume that WXXX's weekly payroll is \$1,000--all of which is subject to each of the taxes described above. The following would be the breakdown of the various deductions:

The <u>Federal Withholding Tax</u> would be computed for each employee using a chart similar to the one in Figure 7. For our purposes, we will assume the total to be \$140. This is the total weekly payroll of \$1,000 multiplied by 14% which is the base rate for the withholding tax:

WITHHOLDING TAX: \$140

The <u>Social Security Tax</u> would be arrived at by multiplying the payroll of \$1,000 by the 4.2% rate, giving the sum of \$42. This would be the amount which would be deducted from the employees' pay. The employer would have to match this amount. It has been assumed here that the pay period has not yet been reached for the \$6,600 maximal deduction.

SOCIAL SECURITY TAX, employees: \$42 SOCIAL SECURITY TAX, employer: 42 TOTAL SOCIAL SECURITY TAX: \$84

The <u>State Unemployment Tax</u> is arrived at by taking 2.7% of the total payroll of \$1,000. The Federal Unemployment Tax is arrived at by taking 0.3% of the \$1,000. It has been assumed that the \$3,000 limit has not yet been reached.

STATE UNEMPLOYMENT TAX: \$27
FEDERAL UNEMPLOYMENT TAX: \$3

The withholding tax and the social security tax are both deductions from the employee's pay. Therefore, the following entry would be made to record WXXX's weekly payroll:

Payroll Expense	1000.00
Withholding Tax Liability	140.00
Social Security Tax Lia-	
bility	42.00
Accrued Payroll	818.00
To record weekly payroll and	
associated employee taxes	

This entry would take care of the employee portion of the payroll problem. As far as the employer is concerned, this journal entry would have to be made to record the unemployment taxes and the employer's portion of the social security tax:

Payroll Tax Expense	72.00
Social Security Tax Lia- bility	42.00
State Unemployment Tax Liability	27.00
Federal Unemployment Tax Liability	3.00
To record employer taxes associated with the weekly payroll for week of	

In the first of these two entries the "accrued payroll" is the amount that the station is obligated to pay its employees. The station will pay out a total of \$1,000,

however, even though only \$818 goes directly to the employees. Therefore, the total payroll expense is \$1,000, and
a debit is recorded for that amount. In the second entry
the debit is to an expense account for the total of the
extra taxes which the employer must pay and the credits
are to the various tax liability accounts.

5.25 Payroll Computations for the Individual

Assume that one of WXXX's salesmen, Stanley Marlowe, earned \$100 during the week under discussion. His various deductions would be computed as follows:

Federal Withholding Tax: Marlowe has a wife and two children. Therefore, for Federal Income Tax purposes he can and does claim four exemptions. According to the table in Figure 7, Marlowe's withholding tax would be \$6.50.

Social Security Tax: As of this pay period Marlowe's income has not exceeded the \$6,600 limit. Therefore, his pay would be further reduced by 4.2% of \$100, or \$4.20.

Other deductions: Marlowe has asked that 5% of his paycheck be donated to the United Fund, and that 10% be put into the payroll savings plan for U.S. Savings Bonds. Therefore, he would have \$5 deducted for his United Fund contribution and \$10 deducted for savings bonds.

When Marlowe receives his paycheck a stub is attached to it which itemizes his deductions in a way similar to this: Gross Pay
Deductions:
Withholding Tax \$6.50
F.I.C.A. Tax 4.20
United Fund 5.00
Savings Bonds 10.00
Total 25.70

NET PAY \$ 74.30

5.30 The Income Statement

In the initial chapter of this handbook, reference was made to the fact that the balance sheet has one rather profound limitation. Preparation of the balance sheet forces an arbitrary and unnatural halt to the normal business cycle. The balance sheet says that "as of such-and-such a date the company's financial composition is so-and-so." The fact is that it is almost impossible to make such a statement due to the dynamic nature of modern business operations. However, if this shortcoming is given proper consideration, the balance sheet does serve many useful purposes for the executive and for the stockholder.

The income statement does not have such a shortcoming. It is an historical document which says that for
the period of time ending such-and-such a date the company's
business operations yielded the results which are presented
in the statement. Because a single glance at the income
statement tells the reader what the company accomplished
during a year's operation as far as income and expenses
are concerned, it has a very important place in the hierarchy of modern accounting.

The income statement is composed of two sections:

the first deals with income, or the amount of revenue which

the company brought in. The second deals with expenses

of the company, or the amount of capital which the company

had to pay out to generate the revenues. The relationship

between these two components can be expressed in the fol
lowing formula:

Net Income = Total Revenues - Total Expenses

The physical layout of the income statement gives
reflection to this formula:

Income Statement

Income	XXX•XX
Expenses	<u>xx.xx</u>
Net Income	\$xxx.xx

As is the case with the balance sheet, the accountant strives for accuracy, consistency and full disclosure. To achieve these ends a number of supplementary statements are usually prepared, statements which do not always find their ways into the published reports of a corporation. For instance, on the published income statement of WXXX the following items might appear:

National Sales (Net)	\$22,300.00
Local Sales (Net)	50,200.00
Network Sales	15,000.00
Talent and Facility Sales (Net)	2,500.00
Net Revenues	\$90,000.00

However, a supplementary statement giving the details of that \$90,000 would also be prepared and it would

look similar to Figure 8. The expenses of a station would be handled similarly. On the published income statement, expenses might appear as follows:

Cost and expenses:	
Program and Production	\$32,000.00
Transmitter	6,000.00
Studio	2,000.00
Total operating	\$40,000.00
•	•
Sales Department	\$ 6,000.00
Advertising	10,000.00
Total selling	\$16,000.00
General and Administrative	\$ 9,000.00

Total Costs and Expenses \$65,000.00

When these two sections are combined, they yield a figure which is labelled operating profit (loss). The operating profit or loss should not be confused with net income. Two other factors must be considered first.

Earlier mention was made of an account labelled "gain on disposal of fixed assets." This account represents revenues that have come to the station but which have not arisen from the normal course of business operations. For instance, if the News Department were to sell a citizens band radio that it had used for \$350 when it only cost \$300, the difference would be considered as a "gain on disposal of fixed assets." Because these revenues, and others of a similar nature, are "abnormal" income they should not be included within the section which deals with operating

¹¹_Ibid., "Financial Statement Forms," p. 2.

Figure 8¹²

WXXX BROADCASTING COMPANY

NET REVENUES

LOCAL SALES Sponsorship Participations Announcements Political Trade Frequency discounts	\$ 8,000.00 40,000.00 2,000.00 3,000.00 2,000.00 (2,500.00) \$52,500.00
NATIONAL SALES Sponsorship Participations Announcements Political Trade Frequency Discounts	\$ 5,000.00 25,000.00 2,000.00 -0- 3,000.00 (8,000.00) \$27,000.00
NATIONAL AND LOCAL SALES AFTER DISCOUNTS	\$79,500.00
AGENCY COMMISSIONS Local National	\$(2,300.00) (4,700.00) \$(7,000.00)
NATIONAL AND LOCAL SALESNET	\$72,500.00
NETWORK SALES Time Other	\$15,000.00 -0- \$15,000.00
TALENT AND FACILITY SALESNET Recording and transcriptions Tape facilities Merchandise income Talent	\$ -0- 1,500.00 -0- 1,000.00 \$ 2,500.00
NET REVENUES	\$90,000.00

^{12&}lt;u>Ibid</u>., p. 1.

profit and loss. A special section labelled other income and expense is created to handle special situations such as these.

When "other income and expense" is combined with "operating profit (loss)" the result is <u>income before federal income taxes</u>. Federal Income Taxes are the last factors to be considered in arriving at net income.

When all of these factors are put together they appear as shown in Figure 9.

In Summary

The concern of this chapter has been with those accounting topics which are of primary concern to manage-

Depreciation

Depreciation may be defined as a process of allocating the cost of a fixed asset over that asset's useful life.

A consideration of depreciation brings several new terms into one's accounting vocabulary. Salvage value is an estimate of the amount of money that will be received when the asset is disposed of as scrap. The depreciation base is the cost of the asset including not only purchase price but also all costs and expenses associated with putting the asset into operation for the company. Estimated life is the same as use-life: the amount of time during

Figure 9

WXXX BROADCASTING COMPANY 13

STATEMENT OF NET INCOME

FOR YEAR ENDING DECEMBER 31, 1965

National Sales (Net) Local Sales (Net) Network Sales Talent and Facility Sales (Net) NET REVENUES	\$22,300.00 50,200.00 15,000.00 2,500.00 \$90,000.00
Cost and Expenses Program and Production Transmitter Studio Total Operating Sales Department Advertising Total Selling General and Administrative TOTAL COSTS AND EXPENSES	\$32,000.00 6,000.00 2,000.00 \$40,000.00 6,000.00 10,000.00 \$16,000.00 9,000.00
Operating Profit (Loss) Other Income and Expenses (Net) INCOME BEFORE FEDERAL INCOME TAXES Federal Income Taxes	\$25,000.00 5,000.00 \$30,000.00 \$15,000.00
NET INCOME	\$15,000.00 \$15,000.00

^{13&}lt;u>Ibid</u>., p. 1.

which the asset will be of efficient use to the company.

In dealing with these terms one must keep in mind that,

at very best, they are estimates which are just as apt to

be in error as to be correct.

Four methods of depreciation were considered in this chapter: straight-line, working hours, declining balance and sum-of-the-year's-digits. The straight-line method spreads the depreciation base, less salvage value, over the estimated life of the asset in an equal amount for every year. The working hours method considers that an asset depreciates only during the actual time in which it is in In this case the estimated life has to be figured use. in terms of hours. A per-hour depreciation rate is then computed by dividing the depreciation base by the estimated life in terms of hours. Depreciation for the year is arrived at by multiplying the per-hour rate by the number of hours which the asset was used. For all practical purposes, the declining balance method uses a rate which is twice the straight-line depreciation rate. This rate is then applied to the depreciation base reduced by (1) the salvage value and (2) the sum of the previous year's depreciation charges. Under this method, and the sum-of-theyear's-digits method, depreciation charges are high in the early years of an asset's life and lower in later years. With the sum-of-the-year's-digits method the digits in the estimated life of the asset are added. This figure forms

the denominator of a fraction, the numerator of which for the first year is the highest number in the estimated life. In the second year the second highest number is used as the numerator. In the third year the third highest number is used and so forth until the last year of the estimated life when the numerator is 1. This fraction multiplied by the depreciation base yields the depreciation charge.

The choice of method is generally up to the company but the choice is not entirely a free one. Because depreciation is a "non-cash" expense and because depreciation can have such profound effect on the earnings of a company which are taxable, the government, in the form of the Internal Revenue Service, has a great deal to say about acceptable depreciation methods. The area of depreciation is one where the accounting theorists must take somewhat of a back seat to the dictates of pragmatists.

The process of accounting for depreciation is a rather elementary one. Depreciation is an expense and, therefore, whenever a journal entry is made to record depreciation, the debit is to an expense account. The credit is to a contra-account called "accumulated depreciation." The contra-account is so named because, even though it has a credit balance, it appears on the debit side of the balance sheet as a deduction from the total cost of the asset.

When an asset is disposed of, the cost of that asset and the accumulated depreciation associated with that asset must be removed from the books of the company. Two journal entries are necessary to accomplish this. One records the cash received from the disposal sale, and the other removes the accumulated depreciation and the remainder of the original asset cost from the books. In reality, these two entries might be combined into one.

If an asset is disposed of for an amount which is equal to the estimated salvage value, then the elementary entry summarized above is used. If, however, the asset is disposed of for an amount that is greater than or less than the estimated salvage value, the difference between the sale price and the estimate must be entered in either of two accounts: "gain on disposal of fixed assets" or "loss on disposal of fixed assets." If the sale is for more than the estimate, the credit for the excess will be to the gain account. If the sale is for less than the estimate, the difference will be debited to the loss account.

Matters Relating to Payrolls

when a station payroll is made up, there are several types of deductions and taxes which must be figured: those which are deducted from the employee's pay with no associated obligation on the part of the employer; those which are deducted from the employee's pay and which carry an associated obligation on the part of the employer; and those which do not affect the employee's pay but which are an obligation to the employer. The number of different

Figure 7 WITHHOLDING TAX SCHEDULE

U.S. Treasury Department Internal Revenue Service

NEW WITHHOLDING SYSTEM

Document 5642 (April 1966)

EXAMPLES OF WEEKLY WITHHOLDING UNDER OLD AND NEW SYSTEMS

If your	If you are SINGLE or an UNMARRIED HEAD OF HOUSEHOLD and claim:						\D	if your weekly	If you are SINGLE or an UNMARRIED HEAD OF HOUSEHOLD and claim:					
earnings	0 exemptions 1 exemption				2 e			earnings are:	0 exemptions		1 exemption		2 exemptions	
are: -	Old	New	Old	New	Old No		Old New		Old	New	Old	New	Old	New
\$50 60 70 80	\$7.10 8.50 9.90 11.30	\$7.50 9.20 10.90 12.60	\$5.30 6.70 8.10 9.50	6.9	0 5.0 0 6.4	00 40	2.90 4.70 6.40 8.10	\$160 170 180 190	\$23.10 24.50 25.90 27.30	\$29.30 31.60 34.10 36.60	\$21.30 22.70 24.10 25.50	\$26.60 28.60 30.80 33.30	\$19.50 20.90 22.30 23.70	\$23.90 25.90 27.90 29.90
90	12.70	14.50	10.90	12.0	0 9.:	20	9.80	200	28.00	39.10	26.20	3 5. 80	24.40	32.40
100 110 120 130 140 150	14.40 15.80 17.20 18.60 20.00 21.70	16.80 18.80 20.80 22.80 24.80 27.30	12.60 14.00 15.40 16.80 18.20 19.90	16.1 18.1 20.1 22.1	0 12.3 0 13.6 0 15.6 0 16.4	20 1 60 1 00 1 40 1	1.70 3.40 5.40 7.40 9.40 1.90	210 220 230 240 250 260	29.40 30.80 32.20 33.60 35.00 36.40	41.80 44.80 47.80 50.80 53.80 56.80	27,60 29.00 30.40 31.80 33.20 34.60	38.30 40.80 43.80 46.80 49.80 52.80	25.80 27.20 28.60 30.00 31.40 32.80	34.90 37.40 39.90 42.70 45.70 48.70
If your weekly	If you are MARRIED and claim:													
earnings		0 exemptions 1 exemption				 	mptions			5 exemptions		6 exemptions		
are:	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New
\$50 60 70 80 90	\$7.10 8.50 9.90 11.30 12.70		\$5.30 6.70 8.10 9.50 10.90	\$4.80 6.40 7.90 9.40 10.90	\$3.50 5.00 6.40 7.80 9.20	\$2.80 4.30 5.80 7.30 8.80	\$1.70 3.20 4.60 6.00 7.40	2.30 3.80 5.30	\$1.40 2.80 4.20 5.60	\$0.50 1.90 3.30 4.80	none none \$1.00 2.40 3.80	none none none \$1.40 2.80	none none none \$0.60 2.00	none none none none \$0.90
.100 110 120 130 140	14.40 15.80 17.20 18.60 20.00	15.00 16.70 18.40 20.10 21.80	12.60 14.00 15.40 16.80 18.20	12.70 14.40 16.10 17.80 19.50	10.80 12.20 13.60 15.00 16.40	10.60 12.10 13.80 15.50 17.20	9.00 10.40 11.80 13.20 14.60	10.00 11.50 13.20	7.20 8.60 10.00 11.40 12.80	6.50 8.00 9.50 11.00 12.60	5.40 6.80 8.20 9.60 11.00	4.50 6.00 7.50 9.00 10.50	3.60 5.00 6.40 7.80 9.20	2.50 4.00 5.50 7.00 8.50
150 160 170 180 190 200	21.70 23.10 24.50 25.90 27.30 28.00	23.90 25.60 27.50 29.50 31.50 33.50	19.90 21.30 22.70 24.10 25.50 26.20	21.60 .23.30 25.00 26.80 28.80 30.80	18.10 19.50 20.90 22.30 23.70 24.40	19.30 21.00 22.70 24.40 26.10 28.10	16.30 17.70 19.10 20.50 21.90 22.60	18.70 20.40 22.10 23.80	14.50 15.90 17.30 18.70 20.10 20.80	14.70 16.40 18.10 19.80 21.50 23.20	12.70 14.10 15.50 16.90 18.30 19.00	12.40 14.10 15.80 17.50 19.20 20.90	10.90 12.30 13.70 15.10 16.50 17.20	10.40 11.90 13.60 15.30 17.00 18.70
210 220 230 240 250 260	29.40 30.80 32.20 33.60 35.00 36.40	35.50 37.50 39.50 41.50 43.50 45.50	27.60 29.00 30.40 31.80 33.20 34.60	32.80 34.80 36.80 38.80 40.80 42.80	25.80 27.20 28.60 30.00 31.40 32.80	30.10 32.10 34.10 36.10 38.10 40.10	24.00 25.40 26.80 28.20 29.60 31.00	29.40 31.40 33.40 35.40	22.20 23.60 25.00 26.40 27.80 29.20	24.90 26.70 28.70 30.70 32.70 34.70	20.40 21.80 23.20 24.60 26.00 27.40	22.60 24.30 26.00 28.00 30.00 32.00	18.60 20.00 21.40 22.80 24.20 25.60	20.40 22.10 23.80 25.50 27.30 29.30

types of deductions vary greatly from business to business and from state to state. Generally, however, there are three deductions, all of them taxes, which are fairly common to all industries and to all states: Federal Withholding Taxes, Social Security Taxes and Federal and State Unemployment Compensation Taxes.

Federal Withholding Taxes are deductions from the employee's pay which carry no associated obligation on the part of the employer aside from the liability that he incurs to pay the government the amount which he deducts from the employees. The amount that is withheld is based on a withholding tax table which considers the amount of the employee's gross pay, his exemptions and the current tax rate on his income bracket.

Social Security Taxes are deductions from the employee's pay which carry a corresponding obligation on the part of the employer. Until December 31, 1966, the rate was 4.2% on the first \$6,600 of earnings of an employee. From January 1, 1967, through December 31, 1967, the rate is 4.4% on the first \$6,600 of earnings of an employee. The employer must match whatever amount is withheld from the employee.

Federal and State Unemployment Taxes are taxes which do not affect the pay of the employee at all. The tax is based on the amount earned by the employees but it is payable by the employer alone. The rate is, generally, 3%

overall, the state portion being 2.7% and the federal portion being .3%.

To record these various deductions on the books, two journal entries are necessary at the conclusion of each pay-period. The first entry records the amount of pay due the employees and those taxes and other items which are deducted from the employee's pay. The second entry records as expense those taxes which affect the employer, such as unemployment taxes and social security taxes. All of the tax deductions from an employee's pay are <u>liabilities of</u> the employer.

When an employee receives his paycheck, he also receives a statement which itemizes the deductions which have been subtracted from his gross pay for the period.

The Income Statement

The income statement eliminates one of the great shortcomings of the balance sheet. It does not force an hypothetical halt to the business cycle. The income statement is an historical document which says that for the period ended on such-and-such a date, this is what the results of the company's operations were.

The income statement is based on a formula, just as is the balance sheet:

Net Income = Total Revenues - Total Expenses

The published income statement of a broadcasting

company will present a group of totals under each of the

categories above. However, a group of very detailed statements will also be prepared to support each of the summary totals. For instance, a summary statement will be prepared which will give the total figures for national sales, local sales, network sales and talent and facility sales. A detailed statement, or series of statements, will also be prepared, but not for public consumption which will present all of the various components of each of these separate sales classifications.

The published income statement will have several breakdowns which will lead to the Net Revenues, all sales less the various deductions from sales; Total Costs and Expenses, the total of operating, selling and general and administrative expenses; Operating Profit or Loss, the difference between net revenues and total costs and expenses; Other Income and Expenses, income and expenses which do not arise from the normal course of business; Income Before Federal Income Taxes, the difference between, or sum of, operating profit and loss and other income and expenses; Federal Income Taxes, and, lastly, Net Income, the difference between income before federal income taxes and federal income taxes.

CHAPTER VI

RECOMMENDATIONS AND OBSERVATIONS

Since the creation of the handbook was an experimental study, it was advisable to test it. A graduate seminar in broadcast management at Michigan State University was selected for this purpose. The seminar contained ten graduate students: nine who were majors in television-radio and one in speech. Three two-hour meetings of the seminar were devoted to the analysis of the handbook materials. Members of the seminar were asked to read the handbook and to discuss and comment upon it in class. Only one of the members of the seminar had had any formal training in accounting but all were interested in broadcast management as evidenced by their enrollment in the course.

encouraging. All of the students found the material in the handbook easy to read and to understand. They were able to project the material beyond the basically simple examples presented in the handbook to more complex and involved situations. Questions which were asked were intelligent and probing and they demonstrated that the handbook was able to stimulate thought about accounting and its place in management. In respect to the handbook's

shortcomings, virtually all members of the seminar were of the opinion that comprehension of the material might be greatly increased if appropriate problems and detailed answers were presented at the end of each chapter. On the basis of this test, it was determined that the hand-book could be a workable instrument.

Education's concept of the field of television and radio has broadened greatly in recent years. With this broadened outlook has come an increased realization of what students of these media should study in other disciplines. The field of business administration is one that has vast application to commercial television and radio. This thesis has been an attempt to apply some of the basic principles of accounting, one aspect of that field, to the field of commercial broadcasting.

Other aspects of business administration which have applicability in the modern commercial broadcasting system and which could be the basis for further study of a nature similar to the present experimental project in accounting are: business law, the principles of management, federal and state taxation, marketing, personnel, and sales.

It should be reiterated that the intended value of such experimental studies should be realized if and when the adapted materials might motivate some students of broadcasting toward a considerable amount of study in the field of adaptation. Under no circumstances should

the experimental work lead toward a substitution for that study.

Whether any hoped-for motivation occurs in the students, the discipline involved in the application of information from one field of study to another different but related field is an educational experience of consequence for the experimental researcher.

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