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THE AIA'S *SPECIAL BULLETIN SERIES* AND ITS EARLY GUIDANCE ON TAX ISSUES RELATED TO DEPRECIATION, 1920 -1929

ABSTRACT: When the final state ratified the 16th Amendment to the U.S. Constitution in 1913, levying taxes directly on individual incomes became a reality and opened up expanded taxation on businesses. For example, the supporting legislation allowed for the deduction of wear and tear on equipment as a business expense based on the service lives. Unfortunately for the tax preparer, there was no clear meaning of wear and tear and the interpretation of the of service lives in the legislation. With little or no guidance to CPA tax preparers and their clients, it was inevitable that Bureau of Internal Revenue examiners would question returns with such deductions. To help its members to understand better, the new law and the ever-increasing complexity of accounting issues related to it, the American Institute of Accountants began to publish the *Special Bulletin Series* in January 1920. Many of the answers present in the *Bulletins* between 1920 and 1929 solved accounting and tax problems in ways still used nearly a century later.

INTRODUCTION

Following the ratification of the 16th amendment, Congress passed the Revenue Act of 1913 providing for the taxation of individual income earned from a wide variety of sources.[1]

[1] This included "gains, profits, and income derived from salaries, wages, or compensation for personal service of …from professions, vocations, businesses, trade, commerce, or sales, or dealings in property, whether real or personal, growing out of the ownership or use of or interest in real or personal property, also from interest, rent, dividends, and securities."

In addition, the Act noted that the income for tax purposes was "subject only to such exemptions and deductions as are hereinafter allowed." Similar to the 1909 Tariff Act that taxed corporate income, the Revenue Act of 1913 allowed a deduction for an, "[a]mount representing a reasonable allowance for the exhaustion, wear, and tear of property arising out of its use or employment in the business," for the determination of taxable income. Although common in the 21st century, the basic concept of depreciation was new to most accountants of that day.

As America's fledgling accounting profession began completing tax returns for clients, many questions arose as to the law's application, especially in the areas of asset lives, valuation, and allowable deductions. Accountants looked to their primary professional organization, the American Institute of Accountants (AIA),[2] for guidance. In 1920, the Institute's library began to publish a series of *Special Bulletins* to answer questions about the new tax law, depreciation, and other accounting issues of the day.

This paper will discuss issues related to the application of depreciation after the ratification of the 16th amendment and the guidance provided by the *Bulletins* that helped the accounting profession to interpret the increasingly complex tax policy.[3] In addition to the application of the law in the early 1920s, the paper will use modern tax law to compare practices from the 1920s and help identify the origin of current practice. The paper will concentrate on three issues related to the application of depreciation. First, there were questions related to the appropriate amount or rate of depreciation allowed for various types or classifications of types of assets and their service lives. The second area related to the recognition of asset obsolescence versus asset depreciation. Finally, AIA members asked how to handle allowed and allowable depreciation as it dealt with Bureau of Internal Revenue rulings and audits.

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[2] The AIA was the predecessor organization to American Institute of Certified Public Accountants (AICPA).

[3] After the passage of the 16th Amendment, the Bureau of Internal Revenue (the predecessor of the Internal Revenue Service) published Regulation 33, which was similar to the writing style of the modern IRS publications, but did not include examples of how to apply the law. As a result, accounting practitioners began to publish tax guides. One of the first was a 1913 pamphlet written by Robert Montgomery and issued by the firm of Lybrand Ross Brothers and Montgomery. Walter Staub (also of Lybrand) wrote a very readable tax guide in 1913 that most people used as a guide for tax return preparation. The guide included a narrative for each section of the tax return along with examples and tips to keep records for businesses and individuals.

REVIEW OF LITERATURE

Although there are many economic articles in the genre,[4] since the early 1970s there has been a dearth of research published on the history of income tax in the United States and its relationship to financial accounting. Within this limited literature review, there appears to be two streams of research. The first stream of research concentrates more on tax law and its nature. Foran and Gray [1988], discussed the development of unitary tax laws just prior to the 16th Amendment where a state enacted laws to tax businesses that did not reside within the state, but owned property or did business within the state's jurisdiction. In 1989, Roberts and Samson dealt with the history, and nature, of progressive taxation in the United States. Next, Barney and Flesher [2008] discussed how special interest groups like American farmers helped to frame the tax laws after the ratification of the 16th Amendment. In 2009, Nurnberg examined the "long-standing controversy about the conceptual nature of the corporate income tax: whether it is an expense, a loss, a distribution of income, or some anomalous item. That controversy reflects in part different theories of the accounting entity."

The other stream of research relates to combined tax and accounting issues. An article by Elmore [1987] reflects this stream when he presented research on the effect of the 16th amendment on accounting policies in the lumber industries, especially those related to depreciation, depletion, and valuation. Next, Johnson [1989] reviewed accounting pronouncements and the changes in requirements for deferred tax reporting over the years. The best match with the present paper is Kern [2000] where the author discussed the impact of depreciation and the investment tax credit on changes in tax policy. Kern [2000, 148] noted,

> The early rationale for the depreciation deduction is contained in *the Bureau of Internal Revenue's* Regulation 74, Article 202 in which it posited that the necessity for a depreciation deduction arises from the fact that certain business property is subject to exhaustion. Depreciation's role was primarily that of income determination.

In her conclusion, Kern [2000, p. 148] expanded on this by pointing out,

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[4] A good example of this is from Mehrotra [2004] *More Mighty than the Waves of the Sea': Toilers, Tariffs, and the Income Tax Movement, 1880–1913*.

> In the 90 years since the inception of the modern income tax, tax policy and depreciation have come nearly full circle. Until 1954, depreciation's role was primarily one of proper income determination. In 1954, Congress first entertained the notion that depreciation could be used to further other tax policy goals, specifically encouraging capital formation.

This paper contributes to the second stream of research, and explores how accountants at the turn of the 20th century identified, questioned, and solved the reporting challenges brought about with the inception of income taxes and related accounting concepts such as depreciation. The paper also highlights how early associations in the accounting profession provided help to accountants to understand the logic of rules that sometimes seemed illogical. The influences of the early profession are still evident in continued AICPA involvement in training accountants in new tax law and procedures as well as influencing the development of those laws through consultation with lawmakers. Finally, the paper shows how early tax laws continue to influence modern tax policy and procedures nearly a century later.

BACKGROUND TO THE TAX AND ACCOUNTING ISSUES

Development of the Income Tax Law: According to Wallace [1980] the first attempt to institute an income tax in the United States came during the American Civil War when the northern Congress passed the Revenue Act of 1861[5] which levied a flat tax to pay war expenses. Congress replaced the original tax with a graduated tax in 1862 that remained in effect until the end of the war.

Progressive political groups pressured Congress to pass the *Revenue Act of 1894*[6] to help fund the government and pull the country out of recession. This legislation targeting income derived from interest, dividends, and rents, but also included a flat income tax on salaries. Many organizations refused to pay the new tax, and in 1895 the Supreme Court concluded the tax *was not apportioned*[7] between the states and was therefore unconstitutional.

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[5] Act of August 5, 1861, Chap. XLV, 12 Stat. 292

[6] Also called the *Wilson-Gorman Tariff*

[7] U.S. Constitution Online reported, "In the context of the Constitution, apportionment means that each state gets a number appropriate to its population. … Direct taxes …were to be charged to the states in this manner as well."

According to *U.S. Constitution Online,* between 1895 and 1909, the court, "…began to back down on its position, as it became clear not only to accountants but to everyone that the solvency of the nation was in jeopardy. In a series of cases, the definition of "direct tax" was modified, bent, twisted, and coaxed to allow more taxation efforts that approached an income tax."

As part of a new foreign tariff bill designed to lower tariffs and spur international trade, in 1909 President Howard Taft asked for the introduction of a corporate income tax. The new tax would make up the revenues lost by lowering tariffs. Supporters of the tariff bill also passed accompanying legislation amending the U. S. Constitution to eliminate the apportionment tax language. According to Roberts [1993], most accountants felt that the pending law was unconstitutional and paid little attention to it. The profession also felt that the wording of the bill would make compliance difficult because it required net income to be determined by deducting from gross income: "expenses actually paid, losses actually sustained, and interest actually paid. This would lead to a combination of accrual and cash accounting in the determination of taxable income [Roberts 1993, p.11]." One example of this new combination was the Act's *reasonable allowance for the exhaustion, wear, and tear* (depreciation) on fixed assets in determining taxable income.

After the ratification of the tariff bill's constitutional amendment in 1913, Congress passed facilitating legislation through the Revenue Act of 1913 that created personal income taxation. The legislation also provided opportunities and responsibilities for the accounting profession to help people and companies prepare and file tax returns. Roberts [1993, p.11] reports the early accounting theorist and CPA, Robert Montgomery wrote in 1916,

> …income tax has come to stay. Its importance from the point of view of the professional auditor cannot be overestimated. Special skill, study, and experience are necessary to prepare the returns, and this means that in the future those most conversant with the law and the procedures there-under will be [entrusted] with the preparation and supervision of returns. [8]

Depreciation: In 1906, Teichmann [p.101] wrote, "Depreciation may properly be considered a branch of the accounting science which, as yet, is not sufficiently appreciated." He went on to

[8] The Sarbanes-Oxley Act of 2002 barred the auditor from completing both the client's audit and tax return.

outline four methods to compute depreciation; he wrote [p.103]:

> (1) The fixed proportion method distributes the depreciation by equal installments over the period. (2) The fixed percentage method throws the greater part of the depreciation on the first few years. (3) By the annuity system, the gross charge in respect of depreciation is constant, but the credits to revenue, in the shape of interest, diminish from year to year as the value of the asset decreases. (4) The sinking fund method is, perhaps the most scientifically correct.

According to Teichmann, a company may employ any of these methods. He continued [p.104]:

> …in the case of the first two, instead of crediting the asset with depreciation directly, thereby reducing the amount on the particular account, it has been found advisable to leave the purchase value intact during the whole life of the asset and to create a depreciation reserve account that is credited and revenue debited with the amount of depreciation, with the net amount shown on the balance sheet.

Teichmann's guidance set the foundation for our current depreciation methods. His "fixed proportion method" is similar to the current straight-line method and the "fixed percentage method" is similar to declining balance method. The depreciation reserve account is the modern contra asset called accumulated depreciation.

Ironically, if a company used the depreciation method outlined by Teichmann, there was a risk that the Bureau of Internal Revenue (Bureau) would disallow a depreciation deduction if a reserve or allowance were used instead of decreasing the asset account. Although the 1913 Revenue Act permitted "a reasonable allowance for exhaustion, wear, and tear", the Bureau did not support recording depreciation using a reserve account. This contradiction is apparent in a 1912 letter written by the Commissioner of the Bureau to the editor of *The Journal of Accountancy*. The Commissioner wrote, "It appears inconsistent with the claim of a decline in value by reason of depreciation that the property account should be carried year after year at the same figure, while a fund is being set aside to keep up a value, which, according to the books, has suffered no decline [Commissioner, 1912, p.221]."

In an attempt to clarify these depreciation issues, the Bureau issued *Regulation F in 1918.* The introduction to the pam-

phlet explained that, "income tax is based on the net income of a specified period [United States Treasury, 1928]." According to the Bureau, net income came from the deduction of allowable expenses and included a charge for the "consumption of capital." The document went on to state,

> …the production of net income usually involves the use of capital assets [that] wear out, become exhausted, or are consumed in such use. [This] is ordinarily called depreciation and the period over which it extents is usually its useful life.

This concept of useful life, as simple as that may sound, turned out for many accountants to be a difficult thing to determine because no standard model existed with which to compare results.

EXHIBIT I

Question About the Concept of Depreciation

American Institute of Accountants

Bulletin No. 10 ***Library and Bureau of Information*** **January, 1924**

DEPRECIATION

Q. Corporation X has been engaged in manufacturing a specialty for ten years, during which period it has had an average investment in plant and equipment of $500,000. During the first five years it consistently incurred losses which ultimately aggregated $200,000, but during the latter five years it made profits aggregating $250,000. No provision for depreciation was made during the first-mentioned period on the theory, which the corporation insists is sound, that since no profits were made there was no available source from which to provide a reserve for depreciation. During the latter period since profits were actually earned depreciation was written off at an annual rate based upon cost and probable life from date of purchase without in any way reflecting the failure to provide for depreciation in the earlier period.

Query 1. Is it sound accounting to disregard depreciation of plant and equipment in use as a charge to profit-and-loss account in periods when no profits are earned?

2. Is is proper to determine a net loss on profit-and-loss account without making provision for depreciation?

3. Is a balance-sheet prepared during years of deficits properly and correctly prepared if no provision has been made for depreciation?

A. It seems to me clear that depreciation goes on whether a company is making money or losing money. As long as the plant is being operated depreciation takes place. My answers to your inquiries would therefore be as follows:

Query 1. It is not sound accounting to disregard depreciation of plant and equipment in periods when no profits are earned.

2. It is not proper to determine profits without making provision for depreciation.

3. A balance-sheet is not properly prepared if provision is not made for depreciation.

By 1932, Paton was able to report, "Depreciation accounting has by no means attained an ideal state, but there is now almost universal agreement as to the general significance of depreciation and the importance of recognizing the phenomenon in some appropriate manner [Paton, 1932, p. 578]." However, before this consensus on the issues emerged, it was clear in the early 1920's from the AIA's *Special Bulletin* #10 (Exhibit I) that the concept still left some people asking questions – and apparently devising ways to manipulate the system. The question in *Bulletin* #10 was whether to record depreciation in unprofitable years. The AIA attempted to fill the need for guidance about this and other accounting issues through the *Special Bulletin Series*.

CREATION OF THE AIA'S *SPECIAL BULLETIN SERIES*

According to Moonitz [1970], the AIA, under the auspices of the Special Committee on Administration and Endowment, opened a library and bureau of information in April 1918 to facilitate members' inquires about accounting applications. Soon the AIA approved publication of the *Special Bulletin Series* to inform its members of answers given to questions submitted by the membership. In January 1920, the AIA issued the first *Special Bulletin*. Chief Librarian of the AIA, L. S. Miltimore, explained that the purpose of this series was three fold. The first was to "give the members an idea of the value and importance of the services rendered through [the AIA]. Second, serve to encourage members to ask questions and otherwise avail themselves of [the bureau]. [And] third, it will give members an opportunity to criticize the answers sent in response to inquiries." Miltimore noted that the last purpose was the most important outlined by the committee because "the Bureau of Information does not claim to be presenting the last word on any subject." The opinions published in answer to inquiries were "purely advisory."[9] This disclaimer was loud and clear and repeated in each published bulletin. Over the course of ten years, the library issued thirty-one bulletins through 1929 covering about 250 topics.

The *Bulletins* are evidence of the exploding complexity of accounting as a result of the 16th Amendment and the expanding economy of the 1920s driven by corporations with absentee owner shareholders. Additionally, there seemed to be no clear authoritative source providing guidance about these new ac-

[9] In modern terminology, the answers are not considered GAAP for accounting or a basis for arguing before IRS.

counting principles that all businesses could uniformly apply in most circumstances.[10] Many of the questions tackled by the *Bulletins* related to accounting and tax issues that had not existed before the advent of large corporations and the widespread ownership of stocks in the 1920s.

For example, how do you properly account for stock dividends? *Bulletin* #18 [July 1923] dealt with deducting dividends as expenses. The definitive answer from the *Bulletin* still in use today was as follows: "Dividends, whether from earnings or from capital, are never deductible in determining taxable income. The federal income tax is levied on net gains or profits. Dividends are a distribution of gains and profits or a return of capital, and hence cannot be considered in any calculation of profits." In a related question about Stock Dividends [*Bulletin* #33, December 1929] the response was as follows: "Stock dividends from the companies mentioned are supposed to be paid from current income. If not sold, they are not taxable." Modern accounting has established clear procedures for this, but in the 1920s, this was new territory. In another case [*Bulletin* #26, March 1926, p. 4], the problem focused on the issue of interest charges related to bond discounts. In an answer reminiscent of a modern intermediate accounting book, the *Bulletin's* answer directed that,

> Discount being interest, collected in advance it is an expense chargeable ultimately to surplus. It should be amortized over the period between the date the liability is incurred and the date when it is liquidated. In the interim, the unamortized portion of the discount is a deferred charge. The treasury department therefore rightly holds that bond interest as it is amortized is a deductible expense [that] reduces invested capital.

There were numerous requests for guidance on accounting issues related to specific industries, some of which no longer exist, like tanneries. The *Bulletins* also tackled such arcane topics as the nature of oil and gas accounting procedures (a continuing problem ninety years later). Several *Bulletins* debated topics that are still on the agendas of modern standards setting bodies, such as securities accounting and accounting for employee benefits. The *Bulletins,* as intended, started a professional dialog on issues that confronted auditors and accountants daily.

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[10] Harry Wolk, James Dodd and John Rozycki (2008, p.273-278) use this concept to help define uniformity in accounting practice, both generally and in a finite sense.

COVERAGE OF TAX ISSUES RELATED TO DEPRECIATION

An early focus of this dialog resulted from the continuing confusion over depreciation allowances and the appropriate percentage to use for calculating depreciation of various assets. For example, in *Bulletin* #1, (Exhibit II) the writer asked for help related to the depreciation of machine shop equipment. In a comprehensive answer that showed such questions piqued the interest of readers, the *Bulletin* provided a list of the assets and guidance on the appropriate depreciation rates.

EXHIBIT II

Question About Rates & Service Lives

American Institute of Accountants

Bulletin No. 1 ***Library and Bureau of Information*** **January, 1920**

A. Subject to variations which may be called for by particular conditions of which we have no knowledge, we suggest depreciation rates as follows:

1. Boilers. If water tube boilers, use a rate of 5%, and if fire tube boilers a rate of 7½% per annum.
2. Engines. If low speed engines, use a rate of 5%, and if high speed engines 7½%.
3. Motors. Inasmuch as the motors are stated to be largely from one-half to one horse-power, a rate of 10% is recommended. For large motors, a rate of 5% is probably sufficient and for motors of medium horse-power a rate of 7½%, but for small motors such as those indicated a rate of 10% is advisable.

4. Lathes.
5. Automatic screw machines and other automatic machines of similar nature.

We note that these are Browne & Sharpe machines and therefore of good construction. Nevertheless a rate of 5% is recommended for the lathes and 7½% for the automatic screw machines and other automatics.

6. Shafting and power transmission. 7½%.
7. Special tools, including patterns. Write off any expenditure on these as it is incurred unless their future use is practically assured. In the latter case, write off at least in the proportion which the present use bears to the assured future use.

All the above rates are intended to be computed on the original cost and not on the decreasing values from year to year. They also call for the charging of all repairs and renewals to expense and not to depreciation reserves.

Two points of interest came to fore in this answer. The first

was a presentation style that used a percentage depreciation rate rather than the more modern practice of depreciating based on asset class. Current tax law categorizes assets into classes and each asset class has a specified cost recovery period, which is comparable to the estimated useful life. The table in Exhibit III provides the approximate conversion of depreciation percentages to the asset's useful life. Second, at the end of the answer in Exhibit II, the writer makes the modern distinction between capital charges and current period charges when dealing with smaller assets and repairs.

EXHIBIT III

Depreciation Percentage	**Approx. Years Calculation** $^{100}/_{\%}$
2%	50
5%	20
$7^{1}/_{2}$	15
10%	10
15%	7
20%	5
25%	4
30%	3

Some of the questions about depreciation did not concern direct tax deductions, but rather the new accounting issues raised by implementation of Bureau procedures. For example, in *Bulletin* #21 [p. 7] in December 1923 a member asked,

> Q. We are interested in ascertaining the practice … in regard to the placing, upon the books of clients, entries adjusting values due to disallowance of depreciation or in some cases additional allowance for depreciation. The point is, that settlements are made in the matter of federal income taxes … Are entries made on the books at once upon the receipt of such settlement or are members … withholding the making of such entries until they have received notification of the government's audit of more of the subsequent years? Our belief is, that if one were to wait until the government 'caught up' in the checking of the current year, … adjustments might be forgotten, so that the books would not show the proper results of settlements already made.

Another member [*Bulletin* #21, December 1923, p. 7] answers this question as follows:

> It does not follow that because the treasury department adjusts depreciation for income tax purposes, the taxpayer is bound to follow them in the rates and calculations adopted for book purposes. There are cases where the taxpayer adheres to his own rates and must, therefore, maintain a running difference between the depreciation calculations for book purposes and those for income tax purposes.

Such comments begin the long and tortuous road towards deferred income tax allocations based on "book" and tax differences.

Over the period from 1920 – 1929 the AIA published ten questions regarding depreciation in its *Special Bulletins*. Members sought guidance in four areas related to depreciation. Most of the questions related to the appropriate amount or rate of depreciation allowed for various types or classifications of types of assets and their service lives. The second area related to the recognition of asset obsolescence versus asset depreciation. In the third area, AIA members asked how to handle allowed and allowable depreciation as it dealt with Bureau rulings and audits. The fourth area included questions related to confusion over the influence of depreciation accruals on the excess profits tax. This fourth area is not discussed due to the arcane nature of the subject.

Asset Lives for Determining Depreciation: In relationship to the membership's concern over determining depreciation rates, *Bulletin #1* was discussed above. *Bulletin #2* (Exhibit IV), in March of 1920 addressed a series of questions related to proper depreciation charges in America's brewery industry. As Exhibit IV shows, the AIA agreed with the Bureau inspector's recommended rates with few exceptions. For example, AIA advised an allowance of 25% (4 years) on office furniture, while the Bureau advocated 10% or ten years. Another exception went the other way, with the AIA suggesting a lower percent, 25% (four years), on vehicles, while the Bureau suggested 30% (three-years) instead.

During 1913 and 1914 the U.S. economy suffered a severe recession. Starting in early 1915 the economy began to boom and in 1916, Congress doubled the tax rates in anticipation of entering WWI. Finally, in November of 1918 took steps to redirect grain usage from alcohol production to the war effort. These changes affecting the brewery industry between 1913 and 1920 probably influence the facts described in *Bulletin* #2. For example, the purchase date of the office furniture and automobiles may have influenced the inspector's depreciation rates. Here, if the brewery purchased the automobiles and trucks prior to the increased need

for taxes, higher depreciation rates would have applied. However, in order to increase taxes before the war, increased tax rates coupled with lower depreciation rates on the office equipment would have accomplished the congressional intent.

EXHIBIT IV

Industry Specific Depreciation Question

American Institute of Accountants

Bulletin No. 2 ***Library and Bureau of Information*** **March, 1920**

BREWERIES

I write to ask if you can secure for me figures applicable to the rate of depreciation chargeable on brewery machinery and which have been, or are likely to be, approved by the income tax inspector. They are needed in a case concerning which the conditions are as follows:

A brewery began operations in 1913 and prepared its annual statements so far as we know, without any expert assistance until the end of 1917, when they engaged us to prepare their balance sheet and income tax return, work which has remained in our hands since that date.

When we closed the books for 1917 we found that depreciation had not been written off to an extent which we thought proper and we, therefore, set up a depreciation reserve, accretions to which have since been made from year to year.

The returns of the brewery have recently been inspected by the Treasury Department and the inspector insists, not without reason, that the depreciation should have been written off from the beginning and has prepared a fresh set of statements on this basis. The result is that while the brewery could obtain additional credits and return of taxes for the years 1914-15 and 1916, the effect is to reduce the value of their brewery plant and therefore of their invested capital, so that in 1917-18 and 1919 their taxes will be increased by a good many thousands of dollars.

The following schedule sets forth the classification which our clients have adopted and shows the rate of depreciation suggested by the income tax inspector.

	Inspectors	(-----)
Building brick and concrete.....	2½	2½
Boiler and furnace.....	10	10
Machinery	10	10
Piping	10	10
Tools	25	25
Brewhouse equipment.....	10	10
Cellar equipment.....	10	10
General equipment.....	10	10
Saloon equipment.....	20	00
Office furniture and fixtures.....	10	25
Autos and trucks.....	30	10
Bottling plant.....	15	33⅓
Floating cooperage.....	15	33⅓
Warehouse	50	—

In addition to this depreciation, we charged off rather heavily for obsolescence for 1918 in accordance with the special instructions issued in connection with breweries.

A. We have received the following answer to your question.

Replying to the query regarding depreciation allowed by the Treasury Department in connection with accounts of breweries, I beg to advise that in one instance the rates of depreciation as allowed to your correspondent practically agreed with those which we in our regular practice have set up as depreciation reserve, but which were in three cases lower than those allowed by the inspector in the case stated, namely, tools set up by us at 20 per cent. allowed 25 per cent. in the question submitted, autos and trucks 25 per cent. allowed 30 per cent. The floating cooperage stood very low on the books of this company, so that we had deemed 5 per cent. ample depreciation on the values appearing by the books. It has been our practice, however, to write off 15 per cent. on quarters and 40 per cent. on half barrels, but so far we have not had any examination made where this depreciation has been provided.

In the main we think the rates of depreciation allowed by the department are well within or above depreciation rates which would be used in the ordinary way of business.

Near the end of the bulletin series, the AIA dealt with a similar issue in, *Bulletin* #29 [January 1928, p. 6]. The question focused on the depreciation of green houses where the company took 7½% (15 years) and the Bureau specified 5% (20 years) based on the normal construction methods used on such structures. The answer from the Bureau seemed to contradict the questions regarding automobile depreciation and base its answer not on the service life, but rather focused on decreasing the amount of depreciation taken by the taxpayer.

Another dimension of the service life debate comes from *Bulletin* #3 from May 1920 that related to depreciation rates for America's new industry: Moving Pictures. The member requested rates for assets such as studio buildings, theatrical properties, scenery, wardrobe, and film manufacturing equipment. AIA responded,

> We feel that we are not in a position to give you a definite reply as to depreciation rates on moving picture properties…allowed by the treasury department for tax purposes, without being in possession of further facts …As you are aware, the activities of different moving picture producers vary considerably. …the properties might be of temporary construction, and that such items as costumes, etc., would have a useful life extending only over the life of the picture or pictures produced. …a studio of permanent construction and have properties, scenery, wardrobe, etc., might possibly be used for a considerable number of the productions.

AIA's response put forward a depreciation rate between 2% and 15% depending on the permanent or temporary nature of the asset and its intended use. The writer added:

> On the other hand, for example, a company or a particular branch of a company that devotes its entire time to the production of, let us say, comedies, would undoubtedly have a studio of permanent construction and have properties, scenery, wardrobe, etc., that might possibly be used for a considerable number of the productions.[11]

Factors such as intended use have been a mainstay of both modern tax laws and Generally Accepted Accounting Principles (GAAP). For example, intended use has been the the central basis for many accounting and reporting decision. For example,

[11] The permanency issue is also shown in *Bulletin* #19 with the depreciation of billboards leased to advertisers. based on length of leasehold, not the use of the asset because they are torn down after the lease is completed.

accounting for investment accounts held to maturity securities are, "Investments in debt securities shall be classified as held-to-maturity only if the reporting entity has the positive intent and ability to hold those securities to maturity [FASB Section 320, 10, 25-1]." That developed reporting for investment accounts. The standard differentiates between those securities held to maturity, trading securities, and securities available for sale. Under the current tax code, the Modified Accelerated Cost Recovery System (MACRS) is the accepted method of depreciation; however, the law allows management to change the asset's intended use before full depreciation is recognized. According to Reg. §1.168(i)-4(d) (2), if the property remains MACRS property after the change in use, it is treated as if the change occurred on the first day of the change year. There is a write-off of the remaining adjusted basis *as if* the asset were placed in service the first day of the change year. At this point, the taxpayer may elect to continue to use the original recovery period if that is more advantageous, however, this election only applies when the change is not a change in accounting method.[12] Over time, and as the Bureau became known as the Internal Revenue Service, issues related to changes in asset use were clarified.

In *Bulletin #4*, [July 1920], a writer comments on the AIA's original answer to the Moving Picture question and provides some further guidance. Much of this comment deals with short-term use of props, costumes, and sets. According to the writer, the studios should match these costs against the overall cost of the film because even though they are often stored for other use, they have served their intended purpose by the end of the film and are essentially obsolete. The writer also proposed that in lieu of depreciation charges, any residual value from such moving picture items should be determined, and used to reduce the cost of the current picture and charged to the next picture. In light of numerous modern lawsuits over film costs, profits and income paid to writers and actors, the proper accounting for motion picture cost is unsettled.[13]

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[12] If a change in depreciation is considered a change in method of accounting, the taxpayer must amend prior returns to reflect the change. If the change is related to a tax year that is closed (amendment period has passed), the taxpayer must request permission to change the accounting method as outlined in *Code Section 481(a)*.

[13] As an example, TV producer Glen Larson, creator of TV series such as "The Six Million Dollar Man",.," and "Battlestar Galactica," filed suit against Universal City Studios Productions, claiming the company's accounting methods reduced him to the equivalent of a "sharecropper" [Cohn, 2011].

Next, *Bulletin #23* from April 1924 involved depreciation life in an unexpected industry- a marble quarry. The question was simply, "What depreciation rates should a marble company use?" The *Bulletin's* response was equally straightforward as follows:

> The rates should be governed, as in all other industries, to a great extent by the policy adopted as to maintenance of the equipment.…It is the practice of two marble companies that have come under our observation to charge to operations such items as gang saws, … cutoff saws, and water pipes in the mill building, after the initial investment therein has been capitalized. On the initial investment, the water pipes are depreciated at the rate of 2½% per annum and the remaining items on the basis of a ten-year life. It is our opinion that such bases are conservative. All water pipes used in the quarry are charged to operations.

AIA's response continues,

> Such items as electric motors, compressors, marble lathes, tanks and pumps do not necessarily call for special treatment by reason of the fact that they are used by marble companies. In the case referred to, a rate of 8% is used for electrical equipment and shafting. All shafting after the initial equipment has been capitalized is charged to operations.

This *Bulletin's* answer addresses the concept of capital expenditures versus ordinary expenditures. A large amount of the marble quarry equipment has potentially long service lives (thus the 2½% rate or about forty years) if properly maintained, as opposed to the theatrical costuming that has a much shorter life even with maintenance.

Two other bulletins later in the series showed that questions about the appropriate amount of depreciation to take continued into the late 1920s. For example, *Bulletin #25*, February 1925 had two requests for depreciation information – depreciation percentages for storage sheds of a lumber company and, of all things, professional ballparks. In the case of the parks, depreciation rates were set at about 50 years (2%).

Spectator capacity of a stadium or the success of the team influences the effective life of the structure and potential for obsolescence. On the other hand, depreciation on sheds of a lumber company depended on their location, estimated usage, and construction as follows: "In a well-established community

the depreciation on a lumber shed of good construction, with concrete foundations, should be from 3% to 5%. In a new town, or a shed of ordinary construction, the rate should range up to 10%. In a "boom" town—oil or other basis— more than 10% (ten years) could probably be justified." In this case, there is an attempt to match service life with that of the corresponding business similar to modern mining operations where the depletion rate of the natural resources is used to depreciate long-term assets.

Next, *Bulletin #27* (Exhibit V) requested depreciation rates for musical records. This was an interesting matter because the writer's suggestion moved the model from the traditional straight-line depreciation to a measure similar to modern amortization of patents that will only last seven years, or until made obsolete by a competing product. As the answer noted, if the record is no longer popular, the press mold becomes almost worthless, a write-off of the asset becomes necessary, and there is no more depreciation allowed.

EXHIBIT V

Question About Limited Use Assets

American Institute of Accountants

Bulletin No.27 ***Library and Bureau of Information*** **May, 1926**

Q. We are interested in securing some authoritative opinion on possible depreciation rates on matrices used in the manufacturing of musical records. These matrices, of course, last a considerable length of time but we find nothing in the tax regulations which might assist us in determining upon specific rates.

A. The depreciation of records, by which we imagine the questioner means the depreciation of the matrices from which phonograph records are molded, is not at all governed by physical deterioration but by the number that can be sold and the price that can be obtained for them. There is no uniformity in the rate at which demand falls off and some of the largest manufacturers write off the entire cost against the first profit made from the sale of the records, and also write off all records that have not made a profit within a very short term. This seems to be the best plan; specific rates are inapplicable.

Gold matrices, of course, are written down only to the amount represented by the gold value.

A final area of concern for the AIA membership appeared in 1929, when *Bulletin #32* (Appendix A) emphasized some differences of opinion regarding tax applications. First, these entries showed that there are many concepts that modern accounting would consider settled policy today, but were far from that in the 1920s. For example, in modern financial accounting, plumbing, electrical and floor coverings are classified as attachments

to the depreciable building that need to be repaired or replaced periodically but not separately depreciated. This seemed to be the direction taken by Answer A in *Bulletin #32*. The current tax code depreciates such assets based on classification. For instance, MACRS requires depreciation of residential buildings over 27.5 years and nonresidential buildings over 39 years. However, current tax planning encourages cost segregation by separating purchased or constructed assets such as buildings into smaller, shorter asset classes. This can accelerate depreciation deductions by separately depreciating carpeting; for instance, which qualifies for a shorter asset life than the rest of the building. This seems to the tack taken by Answer B in *Bulletin #32*. This answer makes it seem that current tax planning policy may have evolved, in part, to reflect a solution that the AIA worked through so long ago.[14] In addition to the above controversies, there was a question about the influence an asset's location would have on service life. Here it appears the Bureau was saying that a standard fifty years (2%) was required for depreciation recognition, but both the questioner and one respondent disputed this because of the impact of Miami's heat and tropical environment on the longevity and usefulness of the building regardless of its construction date.[15]

The 1918 Revenue Act outlined the Bureau's policy toward depreciable lives with the publication of *Bulletin F: Depreciation and Obsolescence,* issued in 1920. However, the publication did not list specific useful lives, but instead encouraged taxpayers to choose depreciation rates based on their own experience. So the need for guidance in determining depreciable lives continued as evidenced by AIA *Bulletins*. However, the Bureau did not issue a revised *Bulletin F: Income Tax Depreciation and Obsolescence* until 1931 along with a document called *Depreciation Studies*. This document included a schedule of "probable" useful lives and annual depreciation rates for 44 different industries and about 2,700 types of depreciable assets. The Bureau predicated the estimated useful lives on a "reasonable expense policy as to the cost of repairs and maintenance." Taxpayers were to give due consideration to company maintenance and replacement poli-

[14] Under modern GAAP, only repairs that extend the life of a building impact on depreciation charges. *Bulletin* #14 discussed a similar situation at a tanning company looking at the difference between capital and current repairs.

[15] Finally, there seemed to be continued confusion between the concept of depreciation for matching income and expenses, and that of accumulating a cash fund for eventual replacement.

cies and the accounting practices regarding the same,[16] however much was dependent on the preparer's opinion and experience.

Some fifty years later, the Economic Recovery Act of 1981 established the Accelerated Cost Recovery System (ACRS) that was amended in 1986 as MACRS (Modified Accelerated Cost Recovery System). This current depreciation system uses recovery periods instead of estimated useful lives or annual percentages as outlined in the AIA *Bulletins*, and allows two methods for depreciation. The first is a standard straight-line method using IRS recovery periods. Second is the modified double-declining-balance method that switches to straight line at the point where there is an optimized depreciation deduction. The IRS sets the cost recovery periods based on asset class. As a comparison, MACRS schedules the write-off of office furniture over 7 years, while *Bulletin #2* suggested writing office furniture off at 10% per year or ten years. These different rates illustrate the political nature of the tax policy. The government in the over-heated economy of the 1920s wanted slower depreciation and higher tax collections, whereas the 1986 tax act accelerated the rates to motivate businesses to invest and spur a weak economy.

Asset Lives, Obsolescence, Abandonments, and Excess Depreciation: The Revenue Act of 1918 introduced a deduction for losses due to obsolescence. It interpreted deductions for obsolescence as separate from depreciation. By definition, obsolescence is not anticipated when an asset is placed in service, but is a reduction in the useful life of an asset brought about by some radical change in circumstances [Brazell et al., 1989]. The Bureau defined obsolescence as "the gradual reduction in the value of property due to the normal progress of the art in which the property is used, or to the property becoming inadequate to the needs of the trade or business [p. 5]."

As noted previously, *Bulletin #25*, February 1925 related to a member's question about "…what depreciation accountants are taking on ball parks." The AIA responded that 1.5 to 2 percent (fifty years) was appropriate for income tax purposes, but added the following comment,

> The factor of obsolescence should receive consideration when so long an expected life is used as a basis for the depreciation rate as in the above case. The treasury de-

[16] The annual assessment of mileage deduction costs probably is the closest modern action to keeping track of depreciation rates by the IRS in the 1920s and 1930s.

> partment, however, would not under its present rulings make any allowance for obsolescence until it was more definitely in sight than is probably the case today with ballparks.[17]

These complicated issues related to obsolescence were addressed specifically in Paragraph 478 of Regulation 33 [1918] published by the Bureau of Internal Revenue, "Depreciation as here used must be differentiated from depletion, obsolescence, and other losses elsewhere provided for in these regulations." The Bureau [1918, p.81] goes on to mention that:

> … the deduction [for depreciation] to be allowed relates solely to loss due to use, wear and tear, and the matter of obsolescence is not relevant, inasmuch as when the property becomes obsolete a deduction for the loss sustained thereby, representing the difference between the cost and the amount of depreciation previously charged-off or which should have been charged off in prior years, will be allowed.

Bulletin #5 from September 1920, continued with the concept of asset life and added the issue of what to do when an asset is abandoned. The member wrote:

> A corporation was organized in 1913 for the purpose of taking over and consolidating five small independent breweries. A new plant was constructed which commenced operations in 1914, at which time three of the small breweries were shut down; two of which were subsequently wrecked and the buildings and machinery sold.…The rates of depreciation on these abandoned plants and the amortization of certain of the properties have been disallowed by the internal revenue department in connection with an income tax investigation.

The *Bulletin* goes on to note that the information needed to make depreciation judgments include:

1. the rates of depreciation which are ordinarily used in connection with the buildings and equipment of breweries;
2. the rates of depreciation which should be used in

[17] This issue was mitigated by the advent of large sports venues owned by municipalities. The problem of obsolescence still arises with teams like the New York Yankees that gave up its historic Yankee Stadium in the Bronx for a new and more modern venue. By contrast, the Chicago Cub's Wrigley Field is an old stadium that may need improvement in the near future to remain a viable sports venue.

> connection with the plants which have been abandoned and which in some instances were subsequently wrecked and the property sold;
>
> 3. the effect which the passage of prohibition laws would have upon the amortization of the old properties used as storehouses.

The AIA responded by outlining normal depreciation with rates similar to the previous *Bulletins*, 2-3% for brick buildings, 10% for plant and machinery, livestock, and office furniture fixtures, 20% for trucks, and 33.33% for small cars used by sales representatives. They write:

> Regarding the depreciation in connection with plants, which have been abandoned …, it would seem that the salvage value should be worked out, and the difference between the original cost of the property less the depreciation to date and the salvage value ought to be written off as a loss. There is really no question of rate of depreciation in this case, but rather the determining of the value of the equipment at the time it was abandoned. Where the property has been sold there should be no difficulty in determining this…because scrap or salvage value is definitely determined by selling price.

Today, obsolescence can be the result of technology changes, economic changes, or the normal progress of the arts and sciences. Similar events occurred in the 1920s including the onset of prohibition. Just as the economics during and after WWI resulted in abnormal depreciation and the introduction of obsolescence of assets, business cycles and world events continue to make these concepts relevant in the current tax code, and modern GAAP.

Depreciation Allowed and Allowable: According to modern tax rules,[18] the basis of depreciable property must be reduced by the amount of allowable depreciation regardless of whether or not the taxpayer claims the full deduction. The allowable depreciation is the amount the taxpayer is entitled to deduct under the laws and regulations in effect for the tax year. Further, Code Section 1016(a) (2) specifies that taxpayers should not benefit in later years from claiming inadequate depreciation deductions under the known facts in prior years. This treatment can penalize taxpayers upon disposition of the related asset because the asset's basis is decreased for depreciation deductions for which

[18] Section 1016(a)(2) and Regulation 1.1016-3(a)(1)(i),

the taxpayer never received a benefit. Additionally, there is no relief if the statute of limitations has run for the earlier return. Essentially, the origin of this tax treatment is traced to the period reviewed in this article.

Although the terminology has changed, early tax guidance outlined that an asset's basis is to be adjusted for "any depreciation sustained" regardless whether or not the depreciation had been deducted and lowered taxes on a prior return. The *Revenue Act of 1924* changed the term to "allowed" and the *Revenue Act of 1926* referred to the adjustments as "allowable" amounts. Finally, the Bureau established the rules to prevent taxpayers from reducing claimed depreciation in loss years in order to increase depreciation in profitable years. Hatfield wrote:

> Present practice unfortunately does not always correspond to current principle. Corporations are still apt to look upon the charge for depreciation as being an act of grace rather than of necessity, and the allowance is frequently less in the lean than in the prosperous years. [However] the improvement since…1908 has been very marked.

Hatfield [1927, p. 140] goes on to say,

> At that time [1908], any recognition of depreciation was relatively uncommon in the accounts of American corporations, and the relatively few companies that showed depreciation in prosperous years grew faint-hearted when business was poor. But an examination of the balance sheets during the trying period after the Great War shows that many of them made charges for depreciation even though that resulted in a net deficit. This closer adherence to correct accounting principles was doubtless stimulated by the provisions of the income-tax law.

Many of the previously reviewed *Bulletins* questioned the amounts of depreciation to take related to the rules about depreciation allowed and allowable. For example, if the taxpayer took too little depreciation in one period, they would not be able to take additional depreciation in a later period to compensate for taking less in the earlier period. This process would further penalize the taxpayer upon disposition of the asset because of a larger recognized gain. If they took too much depreciation, the Bureau might restate the tax return as in the cases described in *Bulletins #2 and #5*. In both *Bulletins*, the Bureau disallowed depreciation previously taken.

The Bureau's disallowance or allowance of previous tax deductions created both tax and financial accounting problems, and as today, the delay between the time the return is filed, and the audit adjustments are known, can be years. These adjustments can then affect subsequent years' records both for tax and for financial accounting purposes. If accountants were conservative and underestimated the amount of depreciation, there were additional taxes in the current year with lost future deductions if their calculations were later found to be incorrect. The Bureau's position was that companies were recognizing more or less depreciation depending on the profitability of the company. This was contrary to the purpose of depreciation, so the Bureau adopted the "allowed versus allowable rules." Now that the depreciation laws are better defined, these rules most frequently penalize taxpayers that have made calculation errors, instead of the original intent of discouraging tax manipulation.

SUMMARY AND CONCLUSIONS

With the passage of the 16th Amendment, the public accounting profession swiftly became aware of its new responsibilities to help both individuals and businesses complete required tax returns. Most of the requirements of the new tax laws regarding both revenue and expenses were familiar to contemporary accountants trained in the early part of the 20th century. However, a lack of governmental guidance and Bureau audit rulings left preparers with many unanswered questions. Journals like the AIA's *Journal of Accountancy* provided general guidance about tax issues, but the professional accountant still had very specific application questions. To help fill this void the AIA library began to issue its *Special Bulletins Series* in 1920 to answer questions about taxes and other accounting issues. This paper highlights the accounting profession's early efforts to help accountants understand the logic of the new tax rules, particularly related to depreciation.

Accountants of the time were challenged to determine depreciation deductions and methodologies acceptable to the new taxing authority. More specifically, there were three areas of the tax law related to depreciation that needed special guidance for the preparers of tax returns. First, there were the questions related to the appropriate amount or rate of depreciation allowed for various types or classifications of types of assets and their related service lives. The second area related to the recognition of asset obsolescence versus asset depreciation. Finally, AIA

members asked how to handle allowed and allowable depreciation as it dealt with Bureau rulings and audits.

The guidance offered in the *Special Bulletins* outlined annual depreciation deductions based on a percentage of the asset cost and was specific to asset type; however, the asset types or classification were not well defined nor readily available. The influence of this early methodology is reflected in the depreciation system (MACRS) used today, and reviewing the early questions gives today's accountant a better appreciation for the level of detail included in today's system.

The identification of the issue of obsolescence versus depreciation and the guidance developed to account for the two is still relevant today. This is a testament to the conceptual abilities of our predecessors and their influence on the profession even now.

Finally, the allowed and allowable depreciation laws are still in effect today, and frequently seem illogical to accounting students and some tax preparers. After reviewing the early problems with consistent application of depreciation in both good and bad times, the necessity for the law and the logic of this concept are easier to understand.

A review of the Series in relationship to the tax issues related to deprecation gives modern accountants a better understanding of the origins and development of some of the longstanding tax rules and regulations still in force nearly a century later. It also gives continued relevance to the *Special Bulletins Series* and is tribute to the early profession and the taxing authorities who developed these insightful and time-tested standards.

REFERENCES

Barney, Douglas and Flesher, T. (2008), "A Study of the Impact of Special Interest Groups on Major Tax Reform: Agriculture and the 1913 Income Tax Law," *Accounting Historian Journal,* Vol.35, No.2: 71–100.

Brazell, David W., Dworin, Lowell, and Walsh, Michael (1989), "A History of Federal Tax Depreciation Policy". Office of Tax Analysis, OTA Paper 64, May 1989.

Cohn, Michael, (2011), "Quincy Producer Sues Universal over Accounting," *Accounting Today On-Line.* July 15, 2011.

Commissioner, (1912), "The treatment of depreciation in connection with the Federal corporation tax," *Journal of Accountancy*, Mar. 1912; 13:218-222.

Elmore, Robert C. (1987), "The Influence of Tax Legislation on Financial Accounting: A Study of the Timber Industry, 1905-1925," The *Accounting Historian Journal***,** Vol. 35, No.2: 41-57.

Foran, Nancy and Dahli, Gray (1988), "The Evolution of the Unitary Tax Apportionment Method," *Accounting Historians Journal,* Vol.15,No.1: 65-87.

Hatfield, H.R. (1927), *Accounting: Its Principles and Problems* (New York: D. Appleton and Company).

Johnson, Roxanne (1989), "The History of Accounting for Income Taxes: The Major Issues and the Actions—An Overview," *Accounting Historians Notebook,* Spring 1989: 29-32.

Kern, Beth (2000), "The Role of Depreciation and the Investment Tax Credit in Tax Policy and Their Influence on Financial Reporting During The 20th Century," *Accounting Historian Journal,* Vol. 27, No. 2: 145-164.

Mehrotra, Ajay, K. (2004), "More Mighty than the Waves of the Sea': Toilers, Tariffs, and the Income Tax Movement, 1880–1913," *Labor History,* Vol. 45, No. 2: 165-198.

Moonitz, M. (1970), "Three Contributions to the Development of Accounting Principles Prior to 1930," *Journal of Accounting Research*, VIII; 145–155.

Nurnberg, Hugo (2009), "Conceptual Nature of Corporate Income Tax," *Accounting Historian Journal,* Vol.36, No. 2: 31-74.

Paton, W.A. (ed.) (1932), *Accountant's Handbook,* 2nd ed. (New York: Ronald Press Company).

Regulations 33 (1918), "Income Tax," Treasury Department, United States Internal Revenue, Washington D.C.: Government Printing Office.

Roberts, Alfred (1993), "Montgomery on Income Tax," *Accounting Historians Notebook,* Spring 1993: 11-13.

Roberts, Michael and William Samson (1989), "The History of Accounting for Income Taxes: The Major Issues and the Actions—An Overview," *Accounting Historians Notebook,* Spring 1989: 11-13.

Teichmann, Max, (1906), "Depreciation," *Journal of Accountancy*, December 1906; 3:101-105.

United States Treasury, Bureau of Internal Revenues (1928), "*Bulletin* F: Income Tax Depreciation and Obsolescence, Revenue Act of 1928", Washington D.C.: Government Printing Office. Accessed 3/10/2012 from http://american-business.org/2812-world-war-i.html

Wallace, William D. (1980), "The Income Tax in the United States Prior to the Sixteenth Amendment" The *Accounting Historians Notebook,* Fall 1980: 3-5.

Wolk, Harry I., Dodd, James L., Rozycki, John J., (2008), *Accounting Theory Conceptual Issues in a Political and Economic Environment Seventh Edition.* (Thousand Oaks, CA: SAGE Publishing).

APPENDIX

Facsimile – Question About the Partial Depreciation & Geographical Location

American Institute of Accountants
March, 1929 Library of Bureau & Information Bulletin No. 32

DEPRECIATION OF OFFICE BUILDING AND EQUIPMENT

Q. A client of mine is having some difficulty with the internal revenue bureau on the question of proper depreciation of office buildings, accessories, and equipment. It is requested that if possible you secure information regarding what is considered reasonable depreciation on such office buildings. The accounts of the client are well kept and are segregated into the following items:

- Building, ten story, light steel and concrete, first-floor stores, balance offices, erected 1925-1926.
- Plumbing in building.
- Electric wiring and fixtures (not including elevators).
- Elevators, five, all passenger, 3000 pounds capacity, including motors and

cables.
- Refrigerating system (for circulating ice water, not including water piping and outlets).
- Water system, for circulating ice water only.
- Linoleum floor covering. Practically all halls and all offices have floors covered with high-grade heavy linoleum. (Due to climatic conditions, the item of dry rot must be considered. This linoleum laid direct on concrete floor.

- Venetian blinds. Signs and directories. (All of most modern type.)
- Office partitions. (Frame and glass, removable.)

For the purpose of an answer, we will assume that what is meant is a ten-story building with a light steel framework, and let us say poured concrete walls. It is noted further that the building was erected in 1925-1926, during which years not only was the cost of construction about 50% higher than the replacement cost today, but also many buildings (among which may be numbered the office building from which this is written) were hastily and indifferently built, and the specifications certainly did not provide either architecturally or from an engineer's viewpoint for perfect buildings of their respective class.

Considering depreciation, not so much in its relation to the amount which a taxpayer may possibly be allowed to deduct from gross income in respect thereof, but as the gradual reduction in the value of property due to physical deterioration, exhaustion, wear and tear through use in trade or business, … that there is any office building in Miami with a prospective lifetime of over 25 years from the time of construction. By this I mean that any conservative owner (quite apart from its effect on deductions from gross income for income tax) in setting up a replacement fund would consider that there should be added to reserve for depreciation each year 4% of the cost of the building.

In the case of most buildings of this class in Miami, however, the greatest difficulty would be encountered in obtaining from the bureau … an allowance in respect of depreciation exceeding 2% to 2½% of the cost of the building. My experience, however, as stated, is that no general rule can be applied and that the depreciation on each building should be considered on its merits irrespective of and without relation to the fact that the building is of a type of construction similar to other buildings in Miami. Assuming, however, that the building is of perfect construction of the type indicated, viz.: 10-story light steel frame concrete with proper provision for wind bracing and of the best material obtainable with proper regard for the action of the weather, there is little doubt that such a structure would have a lifetime of at least 50 years. This statement, of course, presupposes that the peculiar local conditions such as high winds and the erosive action of the salt water can be provided for. I do not believe, however, that with the exception of the two office buildings mentioned and the Court House (which is a public building) there is any office building in Miami that would qualify under the specifications outlined in the preceding paragraph.

Answer A

- For the other office buildings in Miami, while I am reluctant to express an opinion which would indicate the possibility of a rule applicable to any particular type of construction, I do not believe there is one with a prospective lifetime exceeding 25 to 30 years.
- **Plumbing: With reference to plumbing… there seems to be no reason why this should not endure as long as the structure.**
- **Electric Wiring and Fixtures: The fixtures should last as long as the structure. With reference to connections, however, the action of the**

air of Miami on all rubber insulations and coverings is very corrosive. With proper protection, however, the wiring should be good for 20 years.

- Elevators: Elevators' deteriorate very rapidly in this climate. It is believed, however, that it is customary for manufacturers to keep these in repair for an annual service charge, so that assuming that this periodic overhaul is adopted, the lifetime of an elevator of the class indicated should be at least 15 years.
- Refrigerating System: Probable lifetime 10 years. Action of acid and weather abnormal.
- Water System: For circulating ice, water only. Excessive lime in the water. Probable lifetime ten years.
- Linoleum: Probable lifetime not in excess of 5 years under most favorable conditions.
- Venetian Blinds The action of the air on tape very erosive. Blinds should be rebuilt every five years.
- Signs and Directories: 20 years' life.
- Office Partitions: 10 years. Speculation as to the probable lifetime of a depreciable asset is more a subject for a professional engineer than for an accountant, and in setting up a reserve for depreciation

Answer B

- Building, ten stories, light steel, and concrete, first floor stores, balance offices, erected 1925-26—estimated useful life—40 years.
- **Plumbing in building—20 years.**
- **Electric wiring and fixtures (not including elevators)—-10 years.**
- Elevators, five, all passenger, 3000 pounds capacity, including motors and cables—cars, tracks, 15 years; motors, pulleys—7 years.
- Refrigerating system (for circulating ice water, not including water piping and outlets)—7 years.
- Water system, for circulating ice water only—20 years.
- Linoleum floor covering. Practically all halls and all offices have floors covered with high-grade heavy linoleum. (Due to climatic conditions, the item of dry rot must be considered. This linoleum laid direct on concrete floor.)
- If cemented and shellacked—8 years; if not both—5 years. Venetian blinds—4 years.
- Office partitions (frame and glass, removable)—10 years.
- Signs and directories all of most modern type—10 years.