Insurance Accounting

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In this note we develop an insurance statement blank and a chart of accounts that can be used – with minimal modifications – worldwide, by life and non life insurers, for statutory, tax and GAAP accounting systems.

The goals of this paper are:

- (1) To give careful definitions of insurance accounting terms.
- (2) To present an annual statement form.
- (3) To list the accounts needed by insurance companies.
- (4) To provide simplified instructions for completing the cash flow statement
- (5) To show how **walling off** accruals and deferrals simplifies the preparation and analysis of the annual statement blank.

Insurance companies are different from other corporations. About 95% of insurance company assets are either invested assets or accruals and deferrals. About 95% of the liabilities of insurance companies are either policyholder deposits or accruals and deferrals (including long term reserves). For manufactures or retailers most of the assets are property, plant and equipment, inventory and accounts receivable and there are few invested assets while their principal liabilities are debt and accounts payable and the accruals and deferrals are minimal. Therefore, insurance companies need a different statement than other companies.

The author believes that every insurance department should have a "blanks" committee (to design the annual statement "blank" or form), and the blanks committee should have high priority. Without a good statement blank, it is hard to compute reserves – because claim liabilities are usually reported on the blank. Without a good blank, the work of the examination and liquidation bureau is hindered because there is no standard to monitor performance. Without a good blank, it is hard for insurance departments, industry experts, and consumers to analyze results.

The statement blank proposed in this note is patterned after the United States Life & Health Insurance and Property & Casualty Insurance blanks developed by the NAIC (National Association of Insurance Commissioners). The NAIC was formed about 1871 and has had annual statement blanks since that year. This paper is based on the author's experience in: (1) designing two "fund" systems which were used to allocate assets and capital by line of business; (2) designing chart of accounts for reinsurance assumed business; (3) analyzing the NAIC data base for all the life-health and property-casualty insurance companies in order to audit the mutual life equity tax; (4) passing actuarial exams on the annual statement; and (5) analyzing annual statement formats for developing countries. The walling off of accruals and deferrals has been used in the United States and Canada for over a century and facilitates annual statement preparation and analysis of the results.

Section 1 – Accounting Definitions.

In this section the author defines accounting terms useful for insurance companies. The author uses recent material from FASB (www.fasb.org); Kieso Intermediate Accounting (11th ed., 1993, John Wiley); Noback, Life Insurance Accounting (1967, Irwin); van House & Hammond, Accounting for Life Insurance Companies (1969, Loma); and Wightman, Insurance Accounts (1952, Loma) as source material to develop his own definitions.

In general, there are (at least) four types of definitions (see Robert Paul Churchill, Logic (St Martins, 1990) pages 122-130:

- (1) Ostensive definitions
- (2a) Synonyms
- (2b) Contextual phrase definitions
- (3) Mathematical "axiomatic" definitions.
- (4) Aristotle's genus-differentia definitions.

With ostensive definitions one defines terms by examples. This is the typical technique used to teach someone a new language. Examples of ostensive definitions are:

"Assets" include cash, invested assets, furniture, plant, equipment, accounts receivable. "Liabilities" include borrowed money, accounts payable, and policyholder reserves

The problem with ostensive definitions is that they rarely are all inclusive With synonyms or contextual phrase definitions one defines one word in terms of another, or one phrase in terms of another. Thus, the phrase "revenue is earned" is shorthand for "the company has substantially performed its duties required to earn the revenue." (see FASB, Concepts 7). Synonyms or contextual definitions are helpful if one understands the synonyms but do not explain the underlying concept.

With mathematical definitions one takes certain concepts as "primitive" or undefined" – except for giving certain axioms that they satisfy. Thus in set theory "set" and "membership" are primitive. In the real world likewise certain concepts are "undefined" – but these are not usually specified.

The author's favorite type of definition is Aristotle's "genus-differentia." Thus the ancient Greeks and some later scholars defined:

A "human" is an animal which is rational and a featherless biped.

The genus is "animal" and the differentia (which defines the "species") is "rational and a featherless biped." (See Churchill Logic page 128.) A problem with many accounting definitions is that the genus is not clearly specified.

Primitive Accounting Terms.

The concepts below are taken as given or "primitive". We give definitions from the Oxford English Dictionary (OED) and some law dictionaries – but the definitions are basically synonyms.

- (a) **Event** (OED) 1a. The (actual or contemplated) fact of anything happening;
- (b) **Value** (OED) 2a. The material or **monetary worth** of a thing, the amount at which it may be estimated in terms of some medium of exchange or other standard of a similar nature.
- (c1) Ability. (OED) 2c. Power to do a thing of legal validity; capacity in law. 3. Bodily power; strength. 4. Pecuniary power; wealth, estate, means. 5. Mental power or capacity, talent, cleverness.
- (c2) **Property** (Balentines Law dictionary) is any valuable **interest** in which a person may possess.

- (c3) Interests (Black's Law Dictionary and Restatement of Property) are the aggregates of [demand] rights, privileges, powers and immunities. {In another paper -- following Hohfeld and others --the author defines: (1) A demand right is an ability to obtain a legal remedy if another party doesn't perform a duty or performs a forbidden act. (2) A privilege is an ability to prevent another from obtaining a legal remedy. (3) A power is the ability to change the legal relation of another. (4) An immunity is an ability to prevent another from changing a legal relation.}
- (d) **Transfer** (OED) 1. *Law.* **Conveyance** from one person to another of property, spec. of shares of stock. ["Outflows" and "inflows" are types of transfers.]
- (e) **List** (OED) a. A **catalogue** or roll consisting of a row or series of names, figures, words, or the like. In early use, *esp.* a catalogue of the names of persons engages in the same duties or connected with the same object.
- (f) **Process** (OED) 5a Something that goes on or is carried on; a **continuous action**, a series of actions or events; a course or method of action, proceeding, procedure.
- (g) **Cause** (OED) 1. That which produces an effect, that which gives rise to any action, phenomenon, or condition. Cause and effect are correlative terms.
- (h) Thing [or item] (OED) 8. That which is signified, as distinguished from a word, symbol, or idea by which it is represented: the actual being or entity as opposed to a symbol of it.

Definition of Accounting Terms.

Using the above general terms the author defines various accounting terms – in 7 groups.

- (1) Financial Events and Transactions
- (2) Financial Elements (assets, liabilities, equity, revenue, expense, etc.)
- (3) Account, Ledger, Journal
- (4) Financial Statements
- (5) Comprehensive Basis of Accounting
- (6) Valuation Accounts
- (7) Adjusting Entries, Accruals and Deferrals.

The last category is very important for insurance companies since nearly all liabilities are related to accruals and deferrals.

#1. Financial Events and Transactions.

The following definitions are used in #2 and #3.

1a. A "financial event" is the source or cause of changes in assets, liabilities and equity. It can be external or internal to the entity (Fasb, Concepts 6 #135).

1b. Financial Transaction. (Kieso, p.69) A financial transaction is an external event involving a transfer or exchange between two or more parties.

#2. Financial elements

Financial Elements are one of the 10 items described below (see FASB Concepts 6 and Kieso page 40), plus the term "earnings". We follow FASB and use the terms "assets" and "liabilities" to refer to items that comprise assets and liabilities, to the names of the items, and

to the value of the items. We follow FASB (concepts 6 #7) and use the terms "revenue" and "expenses" to refer to transfers, the names of the transfers, and to the value of the transfers. (The definitions below, however, distinguish the items from their value.)

(a) **Asset items** are future economic benefits obtained by the corporation. Author examples: For an insurance company assets include cash, invested assets, furniture, and accounts receivable, and due and accrued premium. **Assets** equal the value of the asset items.

(b) **Liability items** are future sacrifices of economic benefits that are attributed to the corporation. **Liabilities** equal the value of the liability items. Author's Examples: For an insurance company liabilities include future claims; due and accrued expenses, taxes and commissions; and accounts payable.

(c) **Equity items** are the residual interests in assets after satisfying the liabilities. **Equity** is the value of equity items or the value of assets over the value of liabilities.

(d). **Investments by owner transfers** are transfers of something of value by the owners. The value of the transfer is also called the **investment by owners**.

(e) **Distributions to owner transfers** are transfers of something of value to the owners. The value of the transfer is also called the **distribution to owners**.

(f) **Revenue items** are inflows or other enhancements of assets from delivering goods or rendering services that constitute the entity's ongoing or major operations. Premiums and investment income and fee income are examples of revenues for an insurance company. **Revenues** are the value of the revenue items.

(g). **Expense items** are outflows or using up assets or incurring liabilities from delivering goods or rendering services that constitute the entity's ongoing or major operations. Benefit payments, administrative expenses are examples of insurance company expenses. **Expenses** are the value of the expense items.

(h). **Incidental gain items** (or "gains") are inflows or other enhancements of assets of any entity from transactions or events that are not the result of the entity's major operations. The **incidental gain** is the value of the gain items.

(i). **Incidental loss items** (or "losses") are outflows or decreases in equity from transactions or events that are not the result of the entity's major operations. The **incidental loss** is the value of the loss items.

(j). **Comprehensive income** equals the value of all items which affect equity except contributions from and distributions to owners. It equals Revenues + Incidental gains - Expenses - Incidental Losses.

(k) **Earnings** (or "gain from operations") equals the value of a portion of the revenue and gains less the value of a portion of the expenses and losses. FASB Concepts 5 page 6 and Concepts 6 n.1 indicates that "earnings" can be defined as comprehensive income excluding (a) effects of prior period adjustments, (b) foreign currency translations, and (c) changes in the market value of invested assets (and other items as well).

#3. Definitions of Account, Ledger and Journal.

a. (Author) An **account** is a list which shows the effect of transactions and events on a specific asset, liability, equity, revenue, expense, etc. Each record (or row) of the list shows a date of a transaction, a description, the monetary amount of the transaction with the label

"debit" or "credit" plus the total debit or credit balance. The various rows are sometimes called "accounting entries."

The value of assets, expenses, incidental losses, and shareholder distributions are increased by debits and decreased by credits. The value of liabilities, equity, revenues, incidental gains and shareholder contributions are increased by credits and decreased by debits.

b. **Real Accounts** are asset, liability, and equity accounts. An asset account is a list which records the value of a certain class of assets. A liability account is a list which records the value of a certain class of liabilities. An equity account is a list which records the value of total equity or a subclass of equity.

c. Nominal (or temporary) accounts are revenue, expense, gain, loss, owner contributions and owner distributions accounts.

d.(Noback) **Increase accounts** are revenue, incidental gains and paid in capital. **Decrease accounts** are expense, incidental losses and shareholder distributions.

e. **A journal** (van House, 484) is a list which records financial transactions in chronological order in terms of debit and credit amounts. An entry (or "record") in the journal gives a date, description, the list of accounts to be debited and the amount of each debit, and the list of accounts to be credited and the amounts of the credit.

f. A **ledger** is a combined list of many accounts. Entries from the journal are posted to the ledger.

g. A **trial balance** is a list as of a certain point of time of account names, and their credit and debit balances. It is used to make sure the sum of the debit balances equal the sum of the credit balances.

The "unadjusted Trial balance" is the trial balance before "adjusting entries" (defined below) are posted to the journal and ledger. The "adjusted trial balance" is the trial balance after the "adjusting entries" are posed to the journal and ledger. (cf. Kieso page 90).

#4. Financial statements

The principal financial statements are the four statements (a), (b), (c), and (d) described below (cf. Kieso, page 69 and 188).

(a) A Balance Sheet is list of assets, liabilities and equity and their values at a specific date.

(b) An **Income statement** is a list of revenues, expenses and some of the incidental gains and incidental losses and their values.

(c) A Statement of Retained Earnings (or Capital and Surplus Account) is a list which shows beginning capital and ending capital, all the items of comprehensive income not shown in the income statement, plus investment by owners and distribution to owners.

In the NAIC blank the Capital and Surplus Account shows unrealized gains on invested assets, changes in non admitted furniture and equipment, prior year profit tax adjustments, foreign exchange gains, and gains due to changes in accounting, plus shareholder dividends and paid in capital.

(d) A Cash Flow Statement is a list which reconciles the increase in cash to its sources such as (1) cash from operations, (2) cash from financing, and (3) cash from investments. The NAIC has defined a "miscellaneous" category of cash flow -- see NAIC instructions for Life-Health and Property-Casual ty insurance companies. The miscellaneous category includes increases in fixed assets and accounts receivable and is combined with category (3) to give the appearance that there are just three categories.

Comment on insurance company statements. For U.S. insurance companies the "income statement" is called the "summary of operations," and the "statement of retained earnings" is called the "Capital and Surplus account." The American Institute of Certified Public Accountants (AICPA) has decreed that "income statement" and "balance sheet" should only refer to GAAP statements, and that statements prepared under "other comprehensive basis of accounting" (such as cash, tax, statutory) should have a different label.

Other Financial Statements. Statements (e) -(g) are useful for all corporations and (h) and (i) are useful for insurance companies.

(e) **Expenses by nature and function**. The rows of the statement lists expenses by "nature" (salaries, payroll taxes, rent, supplies, and payments to independent contractors) and the columns show their allocation to "function" (loss adjustment, acquisition, investment, and general administration)

(f). **Verification of Assets between Years**. For various categories of invested assets this statement provides a reconciliation of beginning book value to ending book value. For bonds: Beg. Book Value + accrual discount – amortization premium + realized & unrealized gains & losses + Purchases - Sales = Ending Book Value. This reconciliation is used to produce the cash flow statement and is included with the list of invested assets in the NAIC blank. It should get more respect.

(g) **Lists of invested assets**. This list shows each security held with its identification number, plus the book value, interest received and capital gains/losses.

(h) **Schedule of Investment Income and Capital Gains**. This listing shows investment income and capital and losses by type of invested asset.

(i) **Reserve Triangles**. This listing shows paid losses, case reserves, bulk (or IBNR) reserves and incurred losses by accident year and by valuation date. (Sometimes accident year is replaced by report year or policy year.)

Definition 5. Comprehensive Basis of Accounting and Recognition Rules.

(5a) A **Comprehensive Basis of Accounting** (CBOA) is a set of detailed rules -- on when revenues and expenses are "recognized" and on the carrying value of assets and liabilities.

(5b) An "**Accrual accounting**" method is an accounting method that attempts to recognize noncash events and circumstances as they occur. (FASB Concepts 6 #141-142.)

(5c) **Realization** is the accounting and legal processes of converting noncash resources and legal rights into money (See Fasb Concepts 5 #83 and concepts 6 #143.)

(5d) **Recognition** is the accounting process of formally recording or incorporation an item in the financial statements of an entity. Thus an asset, liability, revenue, expense, gain or loss may be recognized (recorded) or unrecognized (unrecorded). (see Fasb Concepts 5 and 6.)

FASB Recognition Rules. The following are some revenue and expense recognition rules from FASB. (See Fasb concept paper 5 #83 and Fasb concept paper 6#143 and Kieso page 45.).

(5d1) **Revenues are recognized** when the entity has substantially accomplished what it must do to be entitled to the benefits represented by the revenues. (Kieso p. 45, Fasb concept 5, Par. 83(a))

(5d2) The recognition of expenses depends on the type of expense. Expenses for the cost of goods sold are **recognized** when the revenues are recognized. Selling expenses and administrative salaries are recognized during the period in which the cash is spent. Depreciation and insurance costs are recognized over the time period when the assets to which they relate are expected to provide benefit. (Fasb concept 5, Par. 86, 87)

Examples of accounting systems.

Most general corporations have two accrual accounting systems – GAAP (Generally Accepted accounting Principles) and Tax. Most individual tax payers use the cash basis, and professional service firms might use the modified cash system – which means the cash system except that certain large purchases are deferred and amortized. For U.S. insurance companies there are four comprehensive bases of accounting:

(a) Cash(b) GAAP(c) Statutory(d) Tax.

The latter three are accrual systems – meaning that expenses and revenue are "recognized" when they are deemed to be "earned" by the accounting system rather than when the cash is received. The detailed rules for tax accounting are contained in the Internal Revenue Code - "subchapter L." The detailed rules for statutory accounting are contained in the NAIC Practice and Procedure Manuals [several hundred pages long]. The detailed rules for GAAP accounting are contained in statements by the AICPA (American Institute of Certified Public Accountants) and FASB (Financial Account Standards Board) and SEC (Securities and Exchange Commission) pronouncements.

Definition 6. Valuation Accounts.

General corporations and insurance companies frequently use "valuation accounts" for assets and

liabilities. These are defined (see Fasb Concepts 6 #34) as follows:

a. An **Asset Valuation Account** is a separate asset item that reduces or increases the carrying amount of an asset. For example, an estimate of uncollectible amounts reduces receivables to the amount expected to be collected, or a premium on a bond receivable increases the receivable to its cost or present value. Those "valuation accounts" are part of the related assets and are neither assets in their own right nor liabilities. Fasb Concepts 6 #34.

b. A **Liability Valuation Account** is a separate liability item that reduces or increases the carrying amount of a liability. For example, a bond premium or discount increases or decreases the face value of a bond payable to its proceeds or present value. Those "valuation accounts" are part of the related liability and are neither liabilities in their own right nor assets. Fasb Concepts 6 #43.

Sometimes "asset valuation accounts" refer to reductions in the asset value and "adjunct account" is used to refer to additions to the asset account. (See Kieso, Intermediate Accounting, vol. 1. at 722.) In place of "valuation accounts" one can use the term "allowance accounts." The increase in the valuation account is shown either in the Income Statement or the Capital and Surplus (i.e. Equity) Statement. For an insurance company this is shown below:

Valuation Item	Increase shown in
Allowance for uncollectible account receivable	Income
Allowance for uncollectible Due & Accrued revenue	Income
Non admitted furniture and equipment	Equity
Market less cost of common stock	Equity
Uncollectible reinsurance	Equity

Definition 7. Adjusting Entries

Adjusting Entries are journal entries -- used to meet the requirements of a specified "accrual accounting system." They are typically made at the end of the fiscal period. They include:

- (1) Accruals and Deferrals
- (2) Market Valuation
- (2a) Market Valuation of invested assets.
- (2b) Write offs of furniture and equipment.
- (3) Bad Debt
- (4) Depreciation (based on cost)
 - (4a) Depreciation of fixed assets and real estate
- (4b) Accrual of discount and amortization of premium for assets:
- (4c) Accrual of discount and amortization of premium for borrowed money.(4d) Amortization of intangibles
- (5) Inventory valuation entries

We will show that items (1) and (2) give rise to "timing differences" while the others do not. We give detailed descriptions of the first four categories.

(1) "Accruals and Deferrals" are journal entries – used when cash is received/paid out before/after the associated revenue/expense is "recognized" by the accounting system.

(2a) "Market Valuation journal entries" are journal entries with

credits or debits to asset valuation accounts to record increases or decreases in market value of invested assets, and

an offsetting debit or credit to unrealized capital gains and losses.

(2b) "Non admitted asset adjustments journal entries" are journal entries used to remove asset credit for furniture and equipment (and certain other assets). There is a credit/debit to a "non admitted" asset equal to the book value of the asset, and an offsetting debit/credit to the "increase in non admitted assets"

(3) "Bad debt journal entries" are journal entries with

a credit/debit to a valuation account for accounts receivable, and an offsetting debit/credit for "bad debt" expense

(4a) "Depreciation journal entries" are journal entries with

a credit to a contra asset for cumulative depreciation, and a debit to expense for current year depreciation.

(4b & 4c) "Accrual of discount / amortization of premium journal entries" are journal entries with

a credit/debit an asset or liability valuation account, and an offsetting debit/credit to interest income or to interest outgo

(4d) "Amortization of intangibles journal entries" are journal entries with a credit to an asset valuation account, and a debit to an expense account.

(5) **Inventory journal entries** are journal entries -- used to adjust the value of inventory. (Insurance companies typically do not have product or raw materials inventory.)

Some of the assets and virtually all of the liabilities of an insurance company are accruals and deferrals so that accruals and deferrals are a very important category. There are four types of accruals and deferrals:

(1a) **Asset Accrual journal entries** are journal entries -- used when cash is received AFTER the associated REVENUE is recognized. (Dr to an asset account, Cr to revenue)

(1b) **Liability Accrual journal entries** are journal entries – used when cash is paid out AFTER the associated EXPENSE is recognized (Dr to expense, Cr to liability)

(1c) **Asset Deferral journal entries** are journal entries – used when cash is paid BEFORE the associated EXPENSE is recognized. (Dr asset, Cr reduction of expense)

(1d) **Liability Deferral journal entries** are journal entries – used when cash is received BEFORE the associated REVENUE is recognized. (Cr liability, Dr reduction of revenue)

Definitions of Deferrals and accruals -- Different Genus.

In the above definitions the genus of "deferrals and accruals" is "journal entry" and the differentia is the *statement A* below:

Statement A= used when cash is received/paid out before/after the associated revenue/expense is "recognized" by the accounting system.

We can also define "accruals and deferrals" as "accounting processes" or as "accounts" or as "balance sheet accounts" or as "income statement accounts" -- and use the same "differentia." Thus

- (1) "Accruals and Deferrals" are journal entries statement A
- (2) "Accruals and Deferrals" are accounting processes statement A
- (3) "Accruals and Deferrals" are balance sheet accounts -- statement A
- (4) "Accruals and Deferrals" are income statement accounts -- statement A
- (5) "Accruals and Deferrals" are accounts -- statement A.

FASB in Concepts 6 #141-142. uses (2). Some books use both (3), (4) or (5). The definitions (2)-(5) are not "wrong" but the use of a variety of different genus can be confusing.

The names for the accounts used in the journal entries are also confusing. Thus the *asset* accounts used in accruals and deferrals (1a) and (1c) are often called "accrued revenue" and

"deferred expense," while one might expect that they should be revenue and expense accounts. Also the *liability* accounts used in journal entries (1b) and (1d) are often called "accrued expense" and "deferred revenue." The following are some names that insurance companies might use – where "incr" means "increase" (meaning if the debits to the asset account increase then the credits to the revenue account increase).

	Balance S Account	heet Name	and Type of	Income Statement Name and Type of Account
(1a)	Accrued (Dr)	Revenue	Asset	Incr in accrued revenue Revenue (Cr)
(1b)	Deferred (Dr)	Expense	Asset	Incr in deferred expense Negative (Cr) Expense
(1c)	Accrued (Cr)	Expense	Liability	Incr in accrued expense Expense (Dr)
(1d)	Deferred (Cr)	Revenue	Liability	Incr in deferred revenue Negative (Dr) Revenue

Adjusting Entries versus Accruals and Deferrals

Some Life Insurance texts like Noback and Hammond and some general accounting texts equate adjusting entries with accruals and deferrals – but there are other types of adjusting entries as we have noted above.

SECTION 2. DISCUSSION of ADJUSTING ENTRIES

2.1 Examples of accruals and deferrals.

For a both general corporation and insurers the following are examples of accrual and deferral journal entries made at year end (plus some related journal entries made on other dates). We use "#2" to refer to the income statement accounts that are used with the year end adjusting entries and "#1" for the income statement accounts used with cash transactions. We are recommending that the "#2" accounts be kept separate from the #1 accounts – even though they are included in the same annual statement line.

(a) Asset Accrual. The company owns a one year \$1000 bond with 6% interest payable semi-annually on November 1, 2005 and on May 1, 2006. On Dec. 31, 2005 we have the following adjusting entry for 2 months of earned interest

Nov 1, 2005	Dr Asset: Cash \$30	
	Cr Revenue: Interest#1 \$30	
Dec. 31, 2005	Dr Asset: Interest income accrued \$10 Cr Revenue: Interest#2 \$10	

(b) Liability Accrual The company borrowed \$1200 on June 1, 2005 with 6% interest payable semi-annually on December 1, 2005 and June 1, 2006. On 12/31/05 the company accrues \$6 in interest outgo.

Dec 1, 2005 Dr Expense: Interest outgo#1 \$36 Cr Asset: Cash \$36 Dec. 31, 2005 Dr Expense: Interest outgo#2 \$6 Cr Liability: Interest outgo accrued \$6

(c) Asset Deferral. The company pays \$1200 insurance premium for 12 months on April 1, 2005 and books the entire \$1200 as an expense on April 1. On 12/31/05 the company has an asset of \$400 and the insurance expense totals to \$800.

April 1, 2005Dr Expense: Insurance#1 \$1200
Cr: Asset: Cash \$1200Dec. 31, 2005Dr Asset: Prepaid insurance.\$400
Cr. Negative Expense: Insurance#2 \$400

(d) Liability Deferral. The company owns real estate and on December 20, 2005 receives \$100 for the January 2006 rent. The rental income is backed out of the income statement, as noted below:

Dec 20, 2005	Dr Asset: Cash \$100 Cr. Revenue: Rental income#1 \$100
Dec 31. 2005	Dr. Negative revenue: Rental income#2\$100 Cr. Liability: Prepaid rent \$100.

2.2 Use of Reversing Entries with Deferrals and Accruals.

After 31st December 2005 the debits to assets and credit to liability reverse with a corresponding reversal to expense and revenue. There are three paths for handing the reversals – which we illustrate for the asset accrual. [See Marilyn Hunt, Study Guide to Kieso, Intermediate Accounting.]

(A) Reversals are made on January 2, 2006 in both the revenue and asset accounts (January 1 is a holiday):

Dec 31, 2005	Dr Asset: Interest income accrued \$10,	
	Cr Revenue: Interest#2 \$10	
Jan. 2, 2006	Dr Revenue: Interest#2 \$10	
	Cr Asset: Interest income accrued \$10	
May 1, 2006	Dr Cash \$30	
•	Cr Revenue: Interest#1 \$20	

(B) No reversal is made in the revenue account. The balance sheet account is reversed when cash is received:

Dec 31, 2005	Dr Asset: Interest income accrued \$10,	
	Cr Revenue: Interest#2 \$10	
May 1, 2006	Dr Asset: Cash \$30	
-	Cr: Asset: Interest income accrued \$10	
	Cr Revenue: Interest#1 \$20	

(C) Reversals in the balance sheet and revenue accounts are made at the end of the next reporting period:

Dec 31, 2005Dr Asset: Interest income accrued \$10,
Cr Interest#2 \$10May 1, 2006Dr Asset: Cash \$30

Cr Revenue: Interest#1 \$30 Dec. 31, 2006 Cr Asset: Interest income accrued \$10, Dr Revenue: Interest#2 \$10

In all cases \$10 of interest is reported in 2005 and \$50 in 2006. If quarterly statements are filed, then the Dec. 31, 2006 entry would be made on March 31, 2006. In Paths A and C the "interest#2" account is a timing difference.

2.3 Accrued vs. Due vs. Accounts Receivable.

Invested Income "due" is investment income earned and legally due to be paid to the insurance company as of the reporting date. Investment income "accrued" is investment income earned but not legally due as of the reporting date. (See SSAP 34 par. 2 of the NAIC Statement Statutory Account Principles). Suppose a bond with \$30 annual coupons is payable on the 28th of December, but is not paid until January 2, The \$30 December 28th coupon is "due" and 3 days of the next coupon is "accrued." The "due" investment income might be included in "accounts receivable" but it is more convenient to include it with the "accrued." Some insurance companies have separate accounts for "due" and for "accrued" interest.

"Due Premiums" are premiums not received by the contractual due date agreed to by the parties. (see NAIC SSAP 51). Unlike sales for a manufacturer or retail corporation, the "due premiums" usually are not legally due – rather the insurer can cancel the policy once the grace period expires. Since premiums are payable in advance of the policy period, there are no "accrued" premiums (except for audit premiums and retrospective premiums). The "due" premiums are usually called "due and unpaid" premiums.

Many life insurance policies are written for a multi-year policy period and many non-life policies are written for a 6 month to 12 month policy period, but the premiums are collected monthly or quarterly. Sometimes the insurer sets up an "unearned premium reserve" or a "mathematical reserve," assuming that an annual premium is collected. The company sets up a "deferred premium" to account for the fact that the full annual premium was not collected. On life insurance the mathematical reserve is based on "net premiums," and the "deferred premium" is reduced by "loading." The loading is the excess of gross premiums over "net premiums." For life insurers the "deferred" premium less loading is usually shown on the asset page, but it would be more logical to show it as an offset to mathematical reserves.

2.4 Examples of Unrealized Capital Gains.

Unrealized gains and losses are also handled by "adjusting entries." For GAAP accounting and for Statutory accounting some assets are reported at market values. For these assets the increase/decrease in market over cost is included in a valuation account and the change in the valuation account is reported as an unrealized capital gain. If the asset is sold, then the unrealized gain is reversed and a realized gain is reported.

Suppose a common stock is owned in 2004 & 2005 and is sold on February 25, 2006 for \$1040, and has the following book and market values:

	Book	Market
31 st Dec. 2004	1000	1000
31 st Dec. 2005	1000	1060
31 st Dec 2006	0	0

31st Dec. 2005 Dr Asset: Valuation Account \$60

	Cr Increase: Unrealized Capital Gain \$60
25 th Feb 2006	Dr Asset: Cash \$1040
	Cr. Realized Gain \$40
	Cr. Common Stock \$1000
25 th Feb 2005	Dr. Unrealized Capital Gains \$60
	Cr. Common stock valuation account \$40

The unrealized capital gain account is a timing difference.

2.5 Examples of the Treatment of Furniture and Equipment.

The NAIC non-admits or eliminates the value of most furniture and equipment. This is done by setting up a non-admitted (contra) asset for the remaining amortized cost of the furniture and equipment. The change in the non-admitted asset is run through the Capital and Surplus Account and is analogous to unrealized gains and losses.

Suppose furniture is purchased on 30th December 2004 for \$1000 and is sold for \$300 on 2nd January 2006. The book values and cumulative depreciation are shown below:

Date	Book Value	Cumulative	Net value
		Depreciation	
31 st Dec 2004	1000	0	1000
31 st Dec 2005	1000	100	900
31 st Dec 2006	0	0	0

The accounting is as follows:

31 st Dec 2005	Dr Expense: Current Year Depreciation \$100
	Cr Asset: Cumulative Depreciation \$100
31 st Dec 2005	Dr Decrease: Increase in Non admitted asset \$900
	Cr Asset: Non admitted Asset \$900
1 st March 2006	Dr Asset: Cash \$300
	Dr Asset: Cumulative Depreciation \$100
	Dr Expense: Loss on Sale \$600
	Cr Asset: Furniture \$1000
31 st Dec 2006	Dr Non admitted Asset \$900
	Cr Decrease: Increase in Non admitted asset \$900

In this example the current year depreciation is not a timing difference since it affects the loss on sale. The "increase in non admitted asset" is a timing difference. (The account is listed in the Capital and Surplus Account.)

2.6 Example of Accrual of Discount or Amortization of Premium.

Investments in fixed assets (bonds, mortgages, preferred stock) generate investment income and the investment gains might be increased by "accrual of discount" or reduced by "amortization of premium." These amounts are sometimes booked through year end adjusting entries.

Suppose a \$900 zero coupon bond is purchased at a premium on 1st July 2005 and matures for \$1000 on 1st July 2006. The effective rate is 11.11% and the accrued interest is \$48.68 in 2005 and \$51.32 in 2006. The following are the accounting entries:

1 st July 2005	Dr Asset: bond \$900
	Cr Asset: Cash \$900
31 st Dec 2005	Dr Asset: Cumulative discount \$48.68
	Cr Income: accrual of discount \$48.68
1 st July 2006	Dr Asset: Cumulative discount \$51.32
	Cr Income: accrual of discount \$51.32
1 st July 2006	Dr Asset: Cash \$1000
-	Cr Asset: Bond \$900
	Cr Asset: Cumulative Discount \$100

Here the \$48.68 and \$51.32 do not reverse since they increase the total book value of the bond.

2.7 Walling off Accruals and Deferrals and other timing differences

For the adjusting entries, items (1), (2a) and (2b) involve timing differences. The others involve permanent differences. Many U.S. and Canadian insurance companies "wall off" the income statement accounts used for these timing differences. In the past the income and balance sheet items were called "non ledger" and handled in the adjusted trial balance worksheet – rather than setting up separate accounts for them. (See Noback and van House for details.)

SECTION 3. INSURANCE COMPANY ACCOUNTS.

In this section we discuss the various accounts used by insurance companies.

3.1 Regular Accounts

The following are a fairly complete list of the "regular" Asset and Liability accounts. (The "aa" and "bb" refer to sub accounts.)

Regular Assets	Regular Liabilities
Cash (aa)	Borrowed Money
Invested (aa)	Policy Deposits (bb)
Cum Depreciation (aa)	Dividend accumulations (bb)
Cum. Accrual Discount (aa)	Deposits (ff)
Cum. Amortization Premium (aa)	Accounts Payable (cc)
Policy Loans (bb)	Capital (gg)
Deposits (ff)	Foreign Exchange
Accounts Receivable. (cc)	
Allowance Accts Receivable (cc)	
Fixed Assets (dd)	
Cum Depreciation Fixed (dd)	
Intangibles (ee)	
Cum Depreciation Intangibles	
(ee)	
Foreign Exchange	

Regular Increase and Decrease accounts are listed below:

Regular Increase Accounts	Regular Decrease Accounts
	55

Premium (bb)	Claims (bb)
Return on cancelled policies (bb)	Salvage (bb)
Deposit Fees (bb)	Subrogation (bb)
Miscellaneous income	Installment Payments (bb)
Interest Policy Loans (bb)	Matured Endowments (life) (bb)
Interest received (aa)	Surrender Payments (life) (bb)
Interest paid for on purchase (aa)	Interest on Claims (bb)
Accrual of Discount (aa)	Interest on policy deposits (bb)
Amortization of Premium (aa)	Interest on dividend accums (life) (bb)
Depreciation on invested assets (aa)	Dividends to policyholders (bb)
	Commissions (bb)
	Interest on Borrowed money
	Accrual of Discount on Borrowed
	money
	Amortization of Premium Borrowed
	money
Regular realized gains	Regular realized Losses
Realized Capital Gains on	Realized Capital Loss on sale/maturity
sale/maturity (aa)	(22)
Other Realized gains (aa)	Other Realized Loss (aa)
Other Realized gains (aa) Gains on Policy Loans	Other Realized Loss (aa) Loss on Policy Loans
Other Realized gains (aa) Gains on Policy Loans Gains on fixed assets (dd)	Other Realized Loss (aa) Loss on Policy Loans Loss on fixed assets (dd)
Other Realized gains (aa) Gains on Policy Loans Gains on fixed assets (dd) Gains on Intangibles (ee)	Other Realized Loss (aa) Loss on Policy Loans Loss on fixed assets (dd) Loss on Intangibles (ee)
Other Realized gains (aa) Gains on Policy Loans Gains on fixed assets (dd) Gains on Intangibles (ee)	Other Realized Loss (aa) Loss on Policy Loans Loss on fixed assets (dd) Loss on Intangibles (ee)
Other Realized gains (aa) Gains on Policy Loans Gains on fixed assets (dd) Gains on Intangibles (ee) Regular increases - from sub ledgers	Other Realized Loss (aa) Loss on Policy Loans Loss on fixed assets (dd) Loss on Intangibles (ee) Regular decreases from sub ledgers
Other Realized gains (aa) Gains on Policy Loans Gains on fixed assets (dd) Gains on Intangibles (ee) Regular increases - from sub ledgers Gain/Loss on reinsurance assumed	Other Realized Loss (aa) Loss on Policy Loans Loss on fixed assets (dd) Loss on Intangibles (ee) Regular decreases from sub ledgers Expense Administration (bb)
Other Realized gains (aa) Gains on Policy Loans Gains on fixed assets (dd) Gains on Intangibles (ee) Regular increases - from sub ledgers Gain/Loss on reinsurance assumed Gain/Loss on reinsurance ceded	Other Realized Loss (aa) Loss on Policy Loans Loss on fixed assets (dd) Loss on Intangibles (ee) Regular decreases from sub ledgers Expense Administration (bb) Expense investment
Other Realized gains (aa) Gains on Policy Loans Gains on fixed assets (dd) Gains on Intangibles (ee) Regular increases - from sub ledgers Gain/Loss on reinsurance assumed Gain/Loss on reinsurance ceded	Other Realized Loss (aa) Loss on Policy Loans Loss on fixed assets (dd) Loss on Intangibles (ee) Regular decreases from sub ledgers Expense Administration (bb) Expense investment Expense Acquisition (bb)
Other Realized gains (aa) Gains on Policy Loans Gains on fixed assets (dd) Gains on Intangibles (ee) Regular increases - from sub ledgers Gain/Loss on reinsurance assumed Gain/Loss on reinsurance ceded Other increases	Other Realized Loss (aa) Loss on Policy Loans Loss on fixed assets (dd) Loss on Intangibles (ee) Regular decreases from sub ledgers Expense Administration (bb) Expense investment Expense Acquisition (bb) Exp. Defense Cost Containment (bb)
Other Realized gains (aa) Gains on Policy Loans Gains on fixed assets (dd) Gains on Intangibles (ee) Regular increases - from sub ledgers Gain/Loss on reinsurance assumed Gain/Loss on reinsurance ceded Other increases Paid in Capital	Other Realized Loss (aa) Loss on Policy Loans Loss on fixed assets (dd) Loss on Intangibles (ee) Regular decreases from sub ledgers Expense Administration (bb) Expense Acquisition (bb) Exp. Defense Cost Containment (bb) Expense Adjusting & Other (bb)
Other Realized gains (aa) Gains on Policy Loans Gains on fixed assets (dd) Gains on Intangibles (ee) Regular increases - from sub ledgers Gain/Loss on reinsurance assumed Gain/Loss on reinsurance ceded Other increases Paid in Capital Foreign Exchange Net Gain	Other Realized Loss (aa) Loss on Policy Loans Loss on fixed assets (dd) Loss on Intangibles (ee) Regular decreases from sub ledgers Expense Administration (bb) Expense investment Expense Acquisition (bb) Exp. Defense Cost Containment (bb) Expense Adjusting & Other (bb)
Other Realized gains (aa) Gains on Policy Loans Gains on fixed assets (dd) Gains on Intangibles (ee) Regular increases - from sub ledgers Gain/Loss on reinsurance assumed Gain/Loss on reinsurance ceded Other increases Paid in Capital Foreign Exchange Net Gain Gain / Loss from change in	Other Realized Loss (aa) Loss on Policy Loans Loss on fixed assets (dd) Loss on Intangibles (ee) Regular decreases from sub ledgers Expense Administration (bb) Expense investment Expense Acquisition (bb) Exp. Defense Cost Containment (bb) Expense Adjusting & Other (bb)
Other Realized gains (aa) Gains on Policy Loans Gains on fixed assets (dd) Gains on Intangibles (ee) Regular increases - from sub ledgers Gain/Loss on reinsurance assumed Gain/Loss on reinsurance ceded Other increases Paid in Capital Foreign Exchange Net Gain Gain / Loss from change in accounting	Other Realized Loss (aa) Loss on Policy Loans Loss on fixed assets (dd) Loss on Intangibles (ee) Regular decreases from sub ledgers Expense Administration (bb) Expense investment Expense Acquisition (bb) Exp. Defense Cost Containment (bb) Expense Adjusting & Other (bb) Other decreases

Possible Invested asset and lines of business codes are listed below, together with the NAIC rows from recent Life-Health and Property-Casualty Statements:

LINES of BUSINESS Codes (bb)					
Life & Annuity (6 lines)	00- 09	naic- LH	Property(6+4 lines)	30- 44	naic
Individual Life	00	3	Fire	30	1
Group Life	01	7	Allied Lines	31	2
Credit Life	02	6	Inland Marine	32	9
Individual Annuities	03	4	Auto Physical Damage	33	21
Supplementary Contracts	04	5	Burglary and Theft	34	26
Group Annuities	05	8	Warranty insurance	35	33

Health (4 lines)	10-	naic-	Property Catastrophe		
	19	LH	Covers		
Medical	10	9	Crop Insurance (usually gov.)	36	
Disability Income	11	11	Flood Insurance (usually gov.)	37	
Long Term Care	12	11	Hurricane, Earthquake (often gov.)	38	12
Credit Disability	13	10	Terrorism (perhaps government)	39	
Financial (5 lines)	20- 29	naic	Multi peril (6 lines)	60- 69	naic
Mortgage Guaranty	20	6	Farmowners multiple peril	60	3
Financial Guaranty	21	10	Homeowners multiple peril	61	4
Fidelity	22	23	Commercial multiple Peril	62	5
Surety	23	24	Ocean Marine	63	8
Credit Risk (export, receivables)	24	28	Aircraft all perils	64	22
			Boiler and Machinery	65	27
Reins. Assumed (non proportional)			Casualty (11 lines)	45- 59	naic
Reins life	70		Medical Malpractice occurrence	45	11
Reins annuities	71		Medical Malpractice - claims made	46	11
Reins health	72		Other Professional occurrence	47	17
Reins property & multiline	73		Other Professional claims made	48	17
Reins casualty	74		Workers Compensation, accident	49	16
Reins financial	75		Other Liability occurrence	50	17
			Other Liability claims made	51	17
			Products Liability occurrence	52	18
			Products Liability claim made	53	18
			Private passenger Auto	54	19
			Commercial auto liability	55	19

Possible codes for invested assets are:

Cash and Invested Asset Codes (aa)			
Cash & Short Term		Common Stock	030
Checking accounts	001	Real Estate – Home office	040
Money market accounts	002	(-) RE Home office – encumbrance	041
Short term bonds	003	Real Estate – investment	042

Petty Cash	004	(-) RE Investment – encumbrance	043
		Other invested assets	050
Bonds			
State & Local	010	Amounts due from security brokers	060
National government	011	(-) Amounts due to security brokers	061
Corporate	012		
Mortgage Loans	020		
Preferred Stock	022		

Possible other codes are:

Accounts Rec. and		Furniture and Equipment (dd)	
Payable (cc)			
Agents	00	Furniture	00
Parents	01	Motor Vehicles	01
Subsidiaries	02	Bullion	02
Affiliates	03	Computer Hardware	03
Reinsurance assumed	04	Computer Software	04
Reinsurance Ceded	05		
Intangibles (ee)		Borrowed Money	
Value of Inforce	00	Short Ter m	00
Good will	01	Long Term	01
Project development	02		
Trademarks, etc.	03		
Deposits – Assets		Deposit – Liabilities	
Funds Held By Reinsurers	00	Funds Held FOR Reinsurers	00
Funds Held BY Cedents	01	Funds Held FOR Cedents	01
		Amounts held for others	02
Capital		Not Yet allocated	03
Common Stock	00		
Preferred Stock	01		
Surplus Notes	02		

The data for expenses comes from an Exhibit which shows expenses by type (salaries, rent, supplies, payment to outside contractors, taxes & fees) and allocated them by function (Administration, Loss adjustment -Defense Costs, Loss Adjusting -Adjusting costs and investment.).

3.2 Accruals and Deferrals

The following are accounts used for the short term and long term accruals and deferrals:

Short Term		Long Term	reactived offer revenue
recognized	received aller revenue	recognized	received aller revenue
Asset	Revenue	Asset	Revenue
Premium Due	Incr. Premium Due	Audit Premium Asset	Incr. Audit Premium Asset
Interest D&A	Incr. Interest D&A	Retrospective Premium Asset	Incr. Retrospective Prem. Asset
Reins. Assumed Gains D&A	Incr. Reins Asmd Gain D&A		
Reins. Ceded Gains D&A	Incr. Reins Ceded Gains D&A		
Asset Defemales aset		Accet Defemales cool	
Asset Deferrals: cash recognized	n paid before expense	Asset Deferrals: cash recognized	n på before expense
Asset	Negative Expense	Asset	Negative Expense
Prepaid Pol. Dividends	Incr. Prepaid Pol. Dividends	Deterred Acquisition	Incr. DAC (Gaap only)
Prepaid Endowments	Incr. Prepaid Endowments	Deferred Profits Tax	Incr. Deferred Profits Tax
			h naid after ann an
recognized	ash paid after expense	recognized	sn paid after expense
Expense	Liability	Expense	Liability
Incr. Claims D&A	Claims D&A	Incr. Mathematical Res	Mathematical Reserve
Incr. Installments D&A	Installments D&A	Incr. Loss Reserve, case	Loss Reserve, case
Incr. Surrenders D&A	Surrenders D&A	Incr. Loss Reserve, IBNR	Loss Reserve, IBNR
Incr. Endowments D&A	Endowments D&A	Incr. Policyholder Div Reserve	Policyholder Dividend Reserve
Incr. Policyholder Div. D&A	Policyholder Dividends D&A	Incr. Defense Cost Exp. Res.	Defense Cost Exp. Reserve
Incr. Commissions D&A	Commissions D&A	Incr. Adjusting Exp. Res.	Adjusting Expense Reserve
Incr. Defense Cost D&A	Defense Cost Expense D&A	Incr. Maintenance Exp Res.	Maintenance Exp Reserve (Gaap)
Incr Adjusting Exp. D&A	Adjusting Expense D&A	Incr. Future Profits Tax	Future Profits Tax
Incr. General Expense D&A	General Expense D&A	Incr. Audit Premium Res.	Audit Premium Reserve
Incr. Interest outgo D&A	Interest outgo D&A	Incr. Retros. Premium Res.	Retrospective Premium Reserve
Incr. Profits Tax D&A	Profits Tax D&A		
Incr. Shareholder Div. D&A	Shareholder Dividends D&A		
Liability Deferrals. C revenue recognized	Cash received before	Liability Deferrals: C revenue recognized	Cash received before

Negative F	Revenue	Liability	Negative Revenue	Liability
Incr.	Prepaid	Prenaid Premiums	Incr. LIPR	Unearned Premium
Premiums		r ropaia r romianto		Reserve
Incr. Interest	Prepaid	Prepaid Interest	(-) Incr. DeferredPremium(+) Incr. Loading on def. prem.	(-) Deferred Premium (+) Loading on deferred prem.

The "short term" accruals and deferrals are generally paid out or received within a few months. The "long term" provisions are usually computed by actuaries and may involve payments made years into the future.

3.3 Unrealized Gains and Losses

Unrealized capital gains and losses and non admitted accounts for furniture and equipment are also timing differences.

Asset	Increase/Decrease
Market Value valuation account	Unrealized gains
Market Value revaluation account	Unrealized losses
Non admitted Furniture	Incr. Non admitted Furniture

3.4 Discussion of Long Term Accruals and Deferrals.

We will discuss some of the long term reserves (accruals and deferrals) held by insurance companies.

1. Mathematical Reserves - Life. Life insurance contracts are non cancelable (mean the insurance company cannot cancel nor raise rates) and long term (greater than 13 months duration). Life insurance companies compute a mathematical reserve using one of the following methods:

- (a) Prospective (or retrospective) net premium
- (b) Prospective gross premium reserve
- (c) Retrospective accumulation.

Under the net premium method the insurer first computes a net premium equal to the present value (at issue) of future benefits (and maybe expenses and policyholder dividends) divided by the present value of an annuity. The net premium reserve is the same whether computed using either the prospective or retrospective method. Under the prospective method, the reserve equals the present value of future benefits (and maybe expenses and policyholder dividends) less the present value of future net premiums. With the net premium method the net premium and present value of benefits are computed using the same assumptions. Small changes in assumptions usually produce small changes in reserves.

Under the prospective gross premium method, the reserve equals the present value of future benefits (and maybe expenses and policyholder dividends) less the present value of gross premiums. The method can produce huge profits (or losses) at issue if the present value factors used by the pricing actuary and the reserve actuary are different. Under the retrospective accumulation method the reserve equals the accumulation of past premiums less past insurance charges. Cash values on "universal life" policies might be computed using a retrospective accumulation.

1b. Mathematical Reserves – Property and Casualty

Certain property and casualty insurance policies also give rise to mathematical reserves. These include warranty policies ("life insurance" for cars or toasters) and certain "tail coverages" on claims made professional liability policies. The "tail coverage" provides "claim occurrence" coverage after the professional retires.

2. Unearned Premium Reserve

The unearned premium reserve is part of the mathematical reserve for life insurance. Most property and casualty insurance policies are for 6-12 months and the premium is typically earned prorata by time.

2b. Deferre d premiums.

The mathematical reserve on life insurance policies is computed assuming premiums are collected annually, but the insurer sometimes collected premiums quarterly, monthly or semiannually. To allow for the overstatement the company might hold a deferred premium asset (or reduce the reserve by the deferred premium). If the mathematical reserve is based on net premiums the deferred premium is computed on a "net basis" by subtracting the "loading."

Many property and casualty insurance policies are issued for 6 months or 12 months but the premium is collected in installments. This also generated deferred premiums. The practice also creates a significant credit risk. In the United States only highly rated companies are allowed to pay in installments, and then perhaps 30% of the premium is collected at issue, with 10% in 7 monthly installments. If the installment is not paid the policy is cancelled at 3-4 days. Overseas many insurance companies offer credit and not keep track of installment payments.

3a. Loss Reserves.

Loss reserves are for losses that have already occurred. The reserve can be split into three parts:

- (a) Reserve for liquidated claims
- (b) Case reserves
- (c) Bulk reserves (also called IBNR reserves).

The reserve for liquidated claims are for claims where the company has agreed to pay the claim but has not yet sent out the payment. Case reserves are the provision for known claims. The case reserves might be set by formula (so much for each auto liability claim) or by examination on a case by case basis. The Bulk reserve includes two pieces (a) Pure IBNR – for losses that have been incurred but not reported to the insurer, and IBNER (incurred but not enough reported) – which is an additional provision for development of case reserves.

Bulk reserves are usually computed by claims triangles.

3b. Installment Payment Loss Reserves.

Workers compensation, disability income and certain property and casualty insurance products involve claims that are paid in installments. These reserves are usually computed using tables (or tabular factors). They are sometimes called "disabled life reserves" and are sometimes included with case reserves. As the discount unwinds, however, the total incurred claims (paid plus reserves) will show "development" and therefore might cause distortions in reserve adequacy tests.

4. Loss Adjustment Expense Reserves.

There are two types of Loss adjustment expenses: (1) Defense and Cost Containment (DCC) and Adjusting and Other (AO). The DCC expenses include costs of hiring lawyers (inhouse and independent contracts) to defense against claims, cost of expert witnesses and costs of rehabilitation. The AO costs include the cost of hiring adjusters (inhouse and independent contracts) plus the costs of "declaratory judgments" plus claims department overhead. AO reserves are often a percentage of 50% of case reserves plus 100% of Bulk reserves. The DCC reserves might be computed by their own triangles or by taking ratios of Loss reserves.

The reserve is in addition to any due and unpaid loss adjustment expense. The NAIC adopted the above definitions of DCC and AO around 1997. Before that the DCC expenses were called "allocated loss adjustment expenses" and the AO expenses were called "unallocated loss adjustment expenses." Some companies included outside adjuster and outside legal costs as "allocated" while others that did the same work inhouse called the expenses "unallocated." The new definitions emphasize the function of the expense not the method of paying for it.

5. Reserves / Asset for Audit Premiums.

Some commercial policies are based on payroll or sales. An estimated premium might be charges subject to a later audit. The Audit Premium might generate an asset (additional premium) or a liability (refund)

6. Reserves / Asset for Retrospective Premiums.

Some commercial policies are "loss sensitive." The premium might be a standard premium plus 120% of losses with exclusion of certain catastrophic losses subject to a minimum and maximum premium. The standard premium covers per policy expenses, a charge for not excluding certain losses and a charge for having a maximum premium. The 20% covers loss adjustment expenses. The techniques for computing the reserve are complex – see references to the U.S. Casualty Actuarial study notes.

7. Reserve for Dividends and Experience Refunds.

Life insurance policies provide for dividends and bonuses to policyholders. Many commercial property and casualty insurance policies also provide for dividends. For life insurance the reserve is often defined as next year's estimated dividend. The long term dividend reserve is in addition to any due and accrued policyholder dividends.

8. Deferred Profits Tax and Reserve for future Profits Tax.

Sometimes the tax accounting requires insurers to report income for tax purposes before they report the income for statutory purposes. This gives rise to a deferred tax asset – which might be subject to certain limits and certain recoverability tests. Unrealized capital gains are sometimes included in statutory results before they are included in the tax return. This gives rise to future tax liability.

9. Deferred Acquisition Costs and Reserve for Maintenance Expense (GAAP)

Generally Accepted Accounting Principles in the U.S. and other corporate reporting systems in other countries specify that "acquisition" costs should be capitalized as an asset. The asset is called "DAC" or deferred acquisition cost.

On certain paid up policies there might be an expense maintenance reserve. The reserve is typically computed as the present value of acquisition costs less the present value of an "acquisition" net premium.

3.5 Other issues.

Trade Date.

Invested assets are purchased or sold on a "trade date" with settlement a short time later on the "settlement date." Some insurers recognize the trade on the trade date on the rationale that they are required to carry out the trade. When (say) a bond is sold the "bond asset" is reduced (Cr) and an asset for "amounts due from security brokers) is increased (Dr). When a bond is purchased the bond asset is increased (Dr) and an "amount due to security broker" is credited. The author believes the later account should be a contra asset and not a liability. The purchase is subject to "recoupment" – which is a much stronger right than "setoff". If the broker does not deliver the bond, the sale is just cancelled – and the insurer does not really owe debt to the security broker until the delivery is consummated. Using the liability approach can cause artificial fluctuations in the assets of the insurer.

SECTION 4. TRIAL BALANCES - THEORY

A trial balances reconciles the debits and credits of various entries in the journal – or various accounts in the ledger. We will give formulas for "unadjusted" and "adjusted" trial balances.

We use the following notation:

A =assets; L =liabilities; S =surplus (or equity)

I = increase accounts (revenue, gains, paid-in capital);

D = decrease accounts (expenses, losses, shareholder distirbutions)

We use subscript "1" for the current year end and subscript "0" for the prior year end. We have the following two accounting equations.

From the Balance Sheet: (1) A = L + S

From the transactions Journal: (2) $S_1 - S_0 = I - D$

Since every account can have both a credit a debit balance we define

X = A, L, S, I or D

Dr(X) = sum of debit balances of category X

Cr(X) = sum of credit balances of category X

NetDr(X) = Dr(X) - Cr(X) = -NetCr(X)

The more correct versions of (1) and (2) are:

(1a) $NetDr(A_0 + L_0 + S_0) = 0$ (1b) $NetDr(A_1 + L_1 + S_1) = 0$

(2) $NetDr(S_1 - S_0) = NetDr(I + D)$

Using (1a), (1b) and (2) we have:

(3) $NetDr(A_1 - A_0 + L_1 - L_0 + I + D) = 0$

Equation (3) describes the "**adjusted trial balance**" which is the trial balance after the adjusting entries have been posted to the journal and then transferred from the journal to the ledger.

Let us use the subscript "u" (unadjusted) for the results of the journal before the adjusting entries and "a" for the effect of the adjusting entries on the journal and ledger and no subscript for the sum of the unadjusted data and the adjusting entries. From last year's balance sheet we have (4a). Using the current year's journal we have (4b) and (4c)

- (4a) $NetDr(A_{0u} + A_{0a} + L_{0u} + L_{0a} + S_0) = 0$
- (4b) $NetDr(A_{1u} A_{0u} + L_{1u} L_{0u} + I_{u} + D_{u}) = 0$
- (4c) $NetDr(A_{1a} A_{0a} + L_{1a} L_{0a} + I_{a} + D_{a}) = 0$

Summing (4a) and (4b) we have the "**unadjusted trial balance**" (5), below, which is the trial balance before the current year adjusting entries have been included in the journal.

(5)
$$NetDr(A_{1u} + A_{0a} + L_{1u} + L_{0a} + S_0 + I_u + D_u) = 0$$

Adding (4c) to (5) we have (6)

(6) $NetDr(A_1 + L_1 + S_0 + I + D) = 0$.

Adding (1b) to (6) and we are back to (3), the adjusted trial balance. The subscripts "u" and "a" refer not to specific accounts but to the unadjusted and adjusted journal entries.

Using the adjusted trial balance, one essentially reads off the three financial statements: (a) Balance Sheet, (b) Income Statement and (c) Capital and Surplus Account. In fact, statements (a), (b) and (c) together are essentially the adjusted trial balance in summary form.

4.1 Trial Balance of Insurance Companies.

For insurance companies we assume that "timing" accounts have been walled off from the other accounts – which we will call the "regular" accounts. The "timing" and "regular" accounts have their own ledger and their own journal. Under the "walling off" approach, it is as if the "timing" and "regular" accounts refer to different entities which are combined to form a consolidated entity. We use "r" to refer to the regular account and "t" for the timing accounts. The fundamental accounting equations: are

(7r) $NetDr(A_{1r} - A_{0r} + L_{1r} - L_{0r} + I_r + D_r) = 0$

(7t) $NetDr(A_{1t} - A_{0t} + L_{1t} - L_{0t} + I_{t} + D_{t}) = 0$

Combining them we have again the adjusted trial balance - equation (3).

4.2 Walling Off Timing Differences and the Cash Flow Statement.

The timing differences do not affect cash outlays. Therefore to do the cash flow statement we simply refer to (7r). Equation (7r) is the basis of the old cash flow statement used by insurance companies from 1874 to 1999 – called the reconciliation of ledger assets. (See Noback Life Insurance Accounting, 1967.) The "ledger assets" are what we have called A_{c} .

4.3 Balance Sheet, Income Statement, Capital & Surplus Account.

The trial balance contains almost all the data needed to complete the three most important annual statement schedules:

- (1) Balance Sheet (Assets and Liabilities)
- (2) Income Statement
- (3) Capital and Surplus Account.

The Capital and Surplus Account starts with the gains and includes certain other items that make up comprehensive income – such as unrealized capital gains, foreign exchange gains, and effects of changes in accounting. It also includes an increase account for "paid in capital" and a decrease account for "shareholder dividends."

SECTION 5 CASH FLOW STATEMENTS.

64

The international accounting standard board (www.isab.org) developed a cash flow statement around 1994 (see IAS 76 at page 644) and FASB required a cash flow statement in 1987 (see FAS 95 #27, 28 and page 12). United States life insurers, however, have had a cash flow statement since 1874. Using the balance sheet, income statements and the Capital & Surplus statements can be expressed in the following form:

Increase in Cash

+ Increase in other assets

= Increase in liabilities + Increase in Capital

Increase in Capital =

+ Revenue - Expenses + Gains - Losses

+ Paid in Capital - Shareholder Dividends

Then

Increase in Cash =

- = Increase in Liabilities
- Increase in other assets
- + Revenue Expenses + Gains Losses
- + Paid in Capital Shareholder Dividends.

Thus, the basic financial statements already provide a cash reconciliation. The cash flow statement does little more than rearrange the above equation.

5.1 Example for a General Corporation.

We illustrate the above by the following example, based on the example in Kieso, Intermediate Accounting, volume 2 study guide, page 23-15 to 23-16 and 23-34 to 23-35. We are given the following balance sheet, income and equity statement, plus the Verification of Assets Between Years. The "class" shows the classification of the item on the cash flow statement.

Balance Sheet Item Dr are +	Beg	End	End-Beg	Class
Cash	180,000	230,000	50,000	
Accounts Receivable	360,000	520,000	160,000	Operating
Merchandize Inventory	420,000	650,000	230,000	Operating
Prepaid Expense	105,000	117,000	12,000	Operating
Long Term Investments	0	75,000	75,000	Investing
Property, Plant, Equipment	480,000	730,000	250,000	Investing
Accumulated depr. On PPE	(90,000)	(150,000)	(60,000)	Operating
Accounts Payable	(365,000)	(425,000)	(60,000)	Operating
Accrued Expense	(94,000)	(103,000)	(9,000)	Operating
Shareholder dividends payable	0	(67,000)	(67,000)	Financing
Long term notes owed	0	(275,000)	(275,000)	Financing
Capital = Assets - Liabilities	996,000	1,302,000	306,000	

INCOME and Equity (Capita STATEMENTS	l & Surplus	Account)
Cr are positive	Current Year	Class
Net Credit Sales	2,340,000	Operating
Cost of goods sold	(1,305,000)	Operating
Investment income	10,000	Operating
Accrual discount LT investment	2,000	Investing
Current Year Depreciation	(60,000)	Investing
Administrative Expenses	(814,000)	Operating
=NET INCOME	173,000	
Preferred stock dividend	(67,000)	Financing
+ Paid in Capital	200,000	Financing
=Increase in equity	306,000	

Verification of Assets Between Years		LT Invest	PPE	PPE Deprec.	Total
Sales-Purchases		(73,000)	(250,000)	0	(325,000)
Beg Assets	dr-cr	0	480,000	-90,000	390,000
+ Realized Capital gains less losses	cr-dr	0	0	0	0
+ Accrual discount-amortization	cr-dr	2,000	0	0	0
premium					
- Depreciation current year	cr-dr	0	0	(60,000)	(60,000)
-Ending Assets	cr-dr	75,000	730,000	(150,000)	655,000
Net		(73,000)	(250,000)	0	(325,000)

Using the Balance Sheets and Income and Equity Statements we solve for the increase in cash which gives us the first cut of the cash flow statement:

CASH FLOW STATEMENT – First Cut	Amount	Class
Increase cash	50,000	Asset
Operations		
Net Credit Sales	2,340,000	Income
Cost Goods Sold	(1,305,000)	Income
Investment income	10,000	Income
Administrative Expenses	(814,000)	Income
Accounts Receivable	(160,000)	Asset
Merchandize inventory	(230,000)	Asset
Prepaid Expense	(12,000)	Asset
Accounts Payable	60,000	Liability
Accrued Expense	9,000	Liability
Subtotal Operations	(102,000)	
Investing Activities		

66

Decr (Incr) in Long Term Investments	(75,000)	Asset
Decr (Incr) in Property, Plant, Equipment	(250,000)	Asset
Incr (Decr) in Accumulated Depreciation	60,000	Asset
Accrual of discount on LT investment	2,000	Income
Current Year Depreciation	(60,000)	Income
Subtotal Investing	(323,000)	
Financing Activities		
Shareholder dividends payable	67,000	Liability
Increase in Long Term notes owed	275,000	Liability
Increase in Shareholder Dividend payable	(67,000)	Equity
Capital Paid in	200,000	Equity
Subtotal financing	475,000	
Grand Total	50,000	

The investing activities section lists decreases in various assets. The FASB cash flow statement, however, uses "sales less purchases." Using the "Verification Between Years" we can convert the "investing" section to the FASB format. (The NAIC includes the verifications with the various exhibits of invested assets.)

5.2 Insurance Company Cash Flow Statement

We assume that the insurer has separated its accounts into two discount groups:

- (1) Regular accounts
- (2) Timing accounts (for accruals, deferrals and unrealized capital gains)

The insurer can run trial balances for each group. The sum of the two trial balances is the adjusted trial balance. From the adjusted trial balance one can prepare the three major financial statements (a) Balance Sheet, (b) Income Statement, and (c) Capital & Surplus Account.

Since the timing accounts do not affect cash flow one merely does an algebraic reformulation of the "regular accounts trial balance" to do the first cut of the cash flow statement. We illustrat e with the following example.

Model Insurance Co.					
Accounting Worksheet					
	Regular		Timing	Adjusted	Cash
	Accounts		Accounts	Trail Bal.	Flow
Beginning Assets Dr - Cr					
Cash	34,000		0	34,000	cash
Bonds	3,950,00		0	3 950 000	investing
Bondo	0		Ũ	0,000,000	invooting
Common Stock	120,000		0	120,000	investing
Common Stock Valuation	0	(1)	36,000	36,000	ignore
Real Estate	350,000		0	350,000	investing
Real Estate Cum Deprec	(100,000)		0	(100,000)	investing
Furniture	20,000		0	20,000	investing
Furniture Cum Deprec	(8,000)		0	(8,000)	investing

Accounts Receivable 2,400 0 2,400 Misc. Premium Due &Def 0 (3) 57,000 57,000 ignore Expenses pd in adv 0 (5) 10 10 ignore Total Beg. Assets 4,368,40 122,010 4,490,410 Ignore Beginning Liabilities 1 122,010 4,490,410 Ignore Premium In Advance 0 (6) (3,700,000) ignore Ignore Premium In Advance 0 (7) (25) (25) ignore Premium Deposit funds (350,000) 0 (350,000) Ignore Ignore Expenses Due & Acc 0 (8) (5,300) (10,000) Ignore Expenses Due & Acc 0 (8) (5,300) Ignore Ignore Total Beg. Liab (360,120) (3,706,325) (4,066,445) Ignore Cash 47,910 0 47,910 cash Ignore Cash 47,910 0 131,500	Furniture non admitted	0	(2)	(12,000)	(12,000)	ignore
Premium Due & Bef Investment Due & Accc 0 (3) 57,000 ignore ignore Investment Due & Accc 0 (4) 41,000 41,000 ignore Expenses pd in adv 0 (5) 10 10 ignore Total Beg. Assets $\frac{4}{3}368,40$ 0 122,010 $\frac{4}{490,410}$ - Beginning Liabilities - - - - - Premium Deposit funds (350,000) 0 (3700,000) jgnore Premium Deposit funds (350,000) 0 (350,000) ignore Borrowed Money (10,000) 0 (120) ignore Total Beg. Liab (360,120) $\frac{6}{3},706,325$ $\frac{4}{4},066,445$ Total Beg. Capital - - 423,965 Cash 47,910 0 4,175,000 investing Common Stock 131,500 0 131,500 investing Common Stock 131,500 0 131,000 investing Furniture Cum Deprec (10,000)	Accounts Receivable	2,400		0	2,400	Misc
Investment Due &Acc 0 (4) 41,000 ignore Expenses pd in adv 0 (5) 10 10 ignore Total Beg. Assets 4,368,40 0 122,010 4,490,410 Image Beginning Liabilities - - - - - Policy Reserves 0 (6) (3,700,000) (3,700,000) ignore Premium in Advance 0 (7) (25) (25) ignore Premium Deposit funds (350,000) 0 (350,000) ignore Accounts Payable (120) 0 (10,000) Financin Borrowed Money (10,000) 0 (10,000) Financin Total Beg. Liab (360,120) (3,706,325 (4,066,445 - Total Beg. Capital - 423,965 - - Cash 47,910 0 47,910 cash - Gash 47,910 0 131,500 investing - Cash 4,1750	Premium Due &Def	0	(3)	57,000	57,000	ignore
Expenses pd in adv 0 (5) 10 10 ignore Total Beg. Assets 4,368,40 0 122,010 4,490,410	Investment Due &Acc	0	(4)	41,000	41,000	ignore
Total Beg. Assets 4,368,40 0 122,010 4,490,410 Beginning Liabilities - - - - Policy Reserves 0 (6) (3,700,000) ignore Premium in Advance 0 (7) (25) (25) ignore Premium Deposit funds (350,000) 0 (350,000) ignore Expenses Due & Acc 0 (8) (6,300) ignore Borrowed Money (10,000) 0 (10,000) Ignore Total Beg. Liab (360,120) (3,706,325) (4,066,445) Total Beg. Capital - 423,965 - Ending Assets - - - Cash 4,175,00 0 4,175,000 investing Common Stock 131,500 0 131,500 investing Common Stock Valuation 0 (10,000) investing - Furniture Cum Deprec (10,000) 0 (110,000) investing Furniture Cum Deprec (10,000) <td>Expenses pd in adv</td> <td>0</td> <td>(5)</td> <td>10</td> <td>10</td> <td>ignore</td>	Expenses pd in adv	0	(5)	10	10	ignore
No. Dog. Notice 0 1.1., 1.0 1.1., 1.0 Beginning Liabilities - - - Premium In Advance 0 (6) (3,700,000) (3,700,000) Premium Deposit funds (350,000) 0 (350,000) Misc Expenses Due & Acc 0 (8) (6,300) (6,300) ignore Accounts Payable (120) 0 (120) ignore ignore Borrowed Money (10,000) 0 (10,000) Financin g Total Beg. Liab (360,120) (3,706,325 (4,066,445) - - Total Beg. Capital - 423,965 - - - - Ending Assets - - 47,910 cash - <t< td=""><td>Total Beg. Assets</td><td>4,368,40</td><td></td><td>122 010</td><td>4 490 410</td><td></td></t<>	Total Beg. Assets	4,368,40		122 010	4 490 410	
Beginning Liabilities Image: Constraint of the second		0			1,100,110	
Beginning Liabilities 0 6 3,700,000 3,700,000 ignore Premium in Advance 0 (7) (25) (25) ignore Premium Deposit funds (350,000) 0 (350,000) Misc Expenses Due & Acc 0 (8) (6,300) (6,300) ignore Accounts Payable (120) 0 (120) ignore Financin Borrowed Money (10,000) 0 (10,000) Financin gg Total Beg. Liab (360,120) (3,706,325) (4,066,445) Total Beg. Capital 423,965 Ending Assets 423,965 Cash 47,910 0 47,910 cash Bonds 4,175,00 0 131,500 investing Common Stock Valuation 0 (1) 31,000 investing Furniture Cum Deprec (110,000)						
Policy Reserves 0 (6) (3,700,000) (3,700,000) ignore Premium In Advance 0 (7) (25) (25) ignore Premium Deposit funds (350,000) 0 (350,000) Misc Expenses Due & Acc 0 (8) (6,300) (6,300) ignore Accounts Payable (120) 0 (120) ignore Borrowed Money (10,000) 0 (10,000) Financin Total Beg. Liab (360,120) (3,706,325 (4,066,445) Total Beg. Capital 423,965 Ending Assets Cash 47,910 0 4,175,000 investing Common Stock Valuation 0 (1) 31,000 investing Common Stock Valuation 0 (1) 31,000 investing Furniture Cum Deprec (10,000) 0 (10,000) investing Furniture Cum Deprec <	Beginning Liabilities			((0	
Premium in Advance 0 (7) (25) (25) ignore Premium Deposit funds (350,000) 0 (350,000) Misc Expenses Due & Acc 0 (6,300) (6,300) ignore Accounts Payable (120) 0 (120) ignore Borrowed Money (10,000) 0 (10,000) Financin Total Beg. Liab (360,120) (3,706,325) (4,066,445)	Policy Reserves	0	(6)	(3,700,000)	(3,700,000)	ignore
Premium Deposit funds (350,000) 0 (350,000) Misc Expenses Due & Acc 0 (8) (6,300) (6,300) ignore Accounts Payable (120) 0 (120) ignore Borrowed Money (10,000) 0 (10,000) Financin Total Beg. Liab (360,120)) (3,706,325) (4,066,445) Total Beg. Capital 423,965	Premium in Advance	0	(7)	(25)	(25)	ignore
Expenses Due & Acc 0 (8) (6,300) (6,300) ignore Accounts Payable (120) 0 (120) ignore Borrowed Money (10,000) 0 (120) ignore Total Beg. Liab (360,120) (3,706,325) (4,066,445)) Total Beg. Capital 423,965 - - - Ending Assets - - - - - Cash 47,910 0 47,910 cash - - Bonds 4,175,00 0 131,500 investing - - Common Stock Valuation 0 (1) 31,000 31,000 investing Furniture 21,000 0 21,000 investing Furniture 2,900 0<	Premium Deposit funds	(350,000)		0	(350,000)	Misc
Accounts Payable (120) 0 (120) ignore Borrowed Money (10,000) 0 (10,000) Financin g Total Beg. Liab (360,120) (3706,325) (4,066,445) Financin g Total Beg. Capital 423,965 423,965 Financin g Ending Assets 7 0 47,910 cash Bonds 4,175,000 0 4,175,000 investing Common Stock 131,500 0 131,500 investing Common Stock Valuation 0 (110,000) investing investing Real Estate 361,000 0 361,000 investing Furniture 21,000 0 21,000 investing Furniture non admitted 0 (2) (10,000) investing Furniture non admitted 0 (2) (10,000) ignore Real Estate 0 (3) 53,400 53,400 ignore Puriture non admitted 0 (5) 14 14	Expenses Due & Acc	0	(8)	(6,300)	(6,300)	ignore
Borrowed Money (10,000) 0 (10,000) Financin g Total Beg. Liab (360,120) (3,706,325) (4,066,445) · Total Beg. Capital ////////////////////////////////////	Accounts Payable	(120)		0	(120)	ignore
Total Beg. Liab (360,120) (3,706,325 (4,066,445) Total Beg. Capital 423,965 423,965 423,965 423,965 4110 423,965 41100 4110 4110	Borrowed Money	(10,000)		0	(10,000)	Financin g
Total Beg. Capital 423,965 Ending Assets - - Cash 47,910 0 47,910 cash Bonds 4,175,00 0 0 4,175,000 investing Common Stock 131,500 0 131,500 investing Common Stock Valuation 0 (1) 31,000 investing Real Estate 361,000 0 21,000 investing Furniture 21,000 0 (10,000) investing Furniture Cum Deprec (10,000) 0 (10,000) investing Furniture Cum Deprec (10,000) 0 2,900 Misc Premium Due &Def 0 (3) 53,400 53,400 ignore Expenses pd in adv 0 (5) 14 14 ignore Policy Reserves 0 (7) (30) (30) ignore Premium Due &Acc 0 (7) (30) (30) ignore Premium Advance 0 (7)	Total Beg. Liab	(360,120)		(3,706,325)	(4,066,445)	
Ending Assets Image: Mark Section of the sectin of the section of the sectin of the section of the se	Total Beg. Capital				423,965	
Ending Assets						
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Real Estate 361,000 0 361,000 investing Real Estate Cum Deprec (110,000) 0 (110,000) investing Furniture 21,000 0 (110,000) investing Furniture Cum Deprec (10,000) 0 (10,000) investing Furniture non admitted 0 (2) (10,000) (10,000) investing Accounts receivable 2,900 0 2,900 Misc 353,400 53,400 ignore Investment Due &Def 0 (3) 53,400 42,600 ignore ignore Expenses pd in adv 0 (5) 14 14 ignore Total Ending Assets 0 (6) (3,755,000) (3,755,000) ignore Premium in Advance 0 (7) (30) (30) ignore Accounts Payable (130) 0 (130) ignore Accounts Payable (130) 0 (130) ignore Premium In Advance 0 <	Common Stock Valuation	0	(1)	31,000	31,000	ignore
Real Estate Cum Deprec (110,000) 0 (110,000) investing Furniture 21,000 0 21,000 investing Furniture Cum Deprec (10,000) 0 (10,000) investing Furniture non admitted 0 (2) (10,000) (10,000) ignore Accounts receivable 2,900 0 2,900 Misc Premium Due &Def 0 (3) 53,400 53,400 ignore Investment Due &Acc 0 (4) 42,600 42,600 ignore Expenses pd in adv 0 (5) 14 14 ignore Total Ending Assets 4,619,31 117,014 4,736,324 Premium in Advance 0 (6) (3,755,000) ignore Premium Deposit funds (361,840) 0 (361,840) Misc Expenses Due & Acc 0 (8) (6,500) ignore Accounts Payable (130) 0 (12,000) g Borrowed Money	Real Estate	361,000		0	361,000	investing
Furniture 21,000 0 21,000 investing Furniture Cum Deprec (10,000) 0 (10,000) investing Furniture non admitted 0 (2) (10,000) (10,000) ignore Accounts receivable 2,900 0 2,900 Misc Premium Due &Def 0 (3) 53,400 53,400 ignore Investment Due &Acc 0 (4) 42,600 42,600 ignore Expenses pd in adv 0 (5) 14 14 ignore Total Ending Assets 4,619,31 0 117,014 4,736,324	Real Estate Cum Deprec	(110,000)		0	(110,000)	investing
Furniture Cum Deprec (10,000) 0 (10,000) investing Furniture non admitted 0 (2) (10,000) (10,000) ignore Accounts receivable 2,900 0 2,900 Misc Premium Due &Def 0 (3) 53,400 53,400 ignore Investment Due &Acc 0 (4) 42,600 42,600 ignore Expenses pd in adv 0 (5) 14 14 ignore Total Ending Assets 4,619,31 0 117,014 4,736,324 - Policy Reserves 0 (6) (3,755,000)) ignore ignore Premium in Advance 0 (7) (30) ignore ignore Premium Deposit funds (361,840) 0 (361,840) Misc Expenses Due & Acc 0 (8) (6,500) ignore Accounts Payable (130) 0 (12,000) g Borrowed Money (12,000) 0 (12,000) g Financin G (373,970) (3,761,530) (4,135,500) j </td <td>Furniture</td> <td>21,000</td> <td></td> <td>0</td> <td>21,000</td> <td>investing</td>	Furniture	21,000		0	21,000	investing
Furniture non admitted 0 (2) (10,000) (10,000) ignore Accounts receivable 2,900 0 2,900 Misc Premium Due &Def 0 (3) 53,400 53,400 ignore Investment Due &Acc 0 (4) 42,600 42,600 ignore Expenses pd in adv 0 (5) 14 14 ignore Total Ending Assets 4,619,31 0 117,014 4,736,324 Ending Liabilities - - - - - Policy Reserves 0 (6) (3,755,000) ignore ignore Premium in Advance 0 (7) (30) (30) ignore Premium Deposit funds (361,840) 0 (361,840) Misc Expenses Due & Acc 0 (8) (6,500) (6,500) ignore Accounts Payable (130) 0 (12,000) 0 financin g Borrowed Money (12,000) (373,970) <td>Furniture Cum Deprec</td> <td>(10,000)</td> <td></td> <td>0</td> <td>(10,000)</td> <td>investing</td>	Furniture Cum Deprec	(10,000)		0	(10,000)	investing
Accounts receivable 2,900 0 2,900 Misc Premium Due &Def 0 (3) 53,400 ignore Investment Due &Acc 0 (4) 42,600 42,600 ignore Expenses pd in adv 0 (5) 14 14 ignore Total Ending Assets 4,619,31 0 117,014 4,736,324 - Ending Liabilities - - - - - Policy Reserves 0 (6) (3,755,000)) (3,755,000) ignore Premium in Advance 0 (7) (30) (30) ignore Premium Deposit funds (361,840) 0 (361,840) Misc Expenses Due & Acc 0 (8) (6,500) ignore Accounts Payable (130) 0 (12,000) g Financin g - - - - - Borrowed Money (12,000) 0 (12,000) g - Total Ending	Furniture non admitted	0	(2)	(10,000)	(10,000)	ignore
Premium Due &Def 0 (3) 53,400 53,400 ignore Investment Due &Acc 0 (4) 42,600 42,600 ignore Expenses pd in adv 0 (5) 14 14 ignore Total Ending Assets 4,619,31 0 117,014 4,736,324	Accounts receivable	2,900	(-)	0	2,900	Misc
Investment Due &Acc 0 (4) 42,600 42,600 ignore Expenses pd in adv 0 (5) 14 14 ignore Total Ending Assets 4,619,31 0 117,014 4,736,324	Premium Due &Def	0	(3)	53,400	53,400	ignore
Expenses pd in adv 0 (5) 14 14 ignore Total Ending Assets 4,619,31 0 117,014 4,736,324 Image: constraint of the system Ending Liabilities Image: constraint of the system 0 (6) 117,014 4,736,324 Image: constraint of the system Policy Reserves 0 (6) (3,755,000) (1,000) (3,755,000) (1,000) ignore Premium in Advance 0 (7) (30) (30) ignore Premium Deposit funds (361,840) 0 (361,840) Misc Expenses Due & Acc 0 (8) (6,500) (6,500) ignore Accounts Payable (130) 0 (130) ignore Borrowed Money (12,000) 0 (12,000) Financin g Total Ending Liab (373,970) (3,761,530) (4,135,500) Image: constant of the system Total Ending Capital Image: constant of the system	Investment Due &Acc	0	(4)	42,600	42,600	ignore
Total Ending Assets 4,619,31 0 117,014 4,736,324 Ending Liabilities Image: constraint of the symbol constraint of the sym	Expenses pd in adv	0	(5)	14	14	ignore
Ending Liabilities Image: Marcine Serves Image: Marcine Serves <t< td=""><td>Total Ending Assets</td><td>4,619,31 0</td><td></td><td>117,014</td><td>4,736,324</td><td></td></t<>	Total Ending Assets	4,619,31 0		117,014	4,736,324	
Policy Reserves 0 (6) (3,755,000) (3,755,000) ignore Premium in Advance 0 (7) (30) (30) ignore Premium Deposit funds (361,840) 0 (361,840) Misc Expenses Due & Acc 0 (8) (6,500) (6,500) ignore Accounts Payable (130) 0 (130) ignore g Borrowed Money (12,000) 0 (12,000) g Financin g Total Ending Liab (373,970) (373,970) 600,824 600,824 Image: Colored state	Ending Liabilities					
Premium in Advance 0 (7) (30) (30) ignore Premium Deposit funds (361,840) 0 (361,840) Misc Expenses Due & Acc 0 (8) (6,500) (6,500) ignore Accounts Payable (130) 0 (130) ignore Borrowed Money (12,000) 0 (12,000) Financin Total Ending Liab (373,970) (3,761,530) (4,135,500) 9 Total Ending Capital 600,824 600,824 600,824 600,824	Policy Reserves	0	(6)	(3,755,000)	(3,755,000)	ignore
Premium Deposit funds (361,840) 0 (361,840) Misc Expenses Due & Acc 0 (8) (6,500) ignore Accounts Payable (130) 0 (130) ignore Borrowed Money (12,000) 0 (12,000) Financin Total Ending Liab (373,970) (3,761,530) (4,135,500) g Total Ending Capital 600,824 600,824 600,824 600,824	Premium in Advance	0	(7)	(30)	(30)	ignore
Expenses Due & Acc 0 (8) (6,500) ignore Accounts Payable (130) 0 (130) ignore Borrowed Money (12,000) 0 (12,000) Financin g Total Ending Liab (373,970)) (3,761,530) (4,135,500) Total Ending Capital 600,824 600,824	Premium Deposit funds	(361,840)		0	(361,840)	Misc
Accounts Payable (130) 0 (130) ignore Borrowed Money (12,000) 0 (12,000) Financin g Total Ending Liab (373,970) (3,761,530) (4,135,500) Financin g Total Ending Capital 600,824 600,824 600,824 600,824 600,824	Expenses Due & Acc	0	(8)	(6,500)	(6,500)	ignore
Borrowed Money (12,000) 0 (12,000) Financin Financin g Total Ending Liab (373,970) (3,761,530) (4,135,500) Financin g Total Ending Capital 600,824 600,824 600,824 600,824	Accounts Payable	(130)		0	(130)	ignore
Total Ending Liab (373,970) (3,761,530) (4,135,500)) Total Ending Capital 600,824 60	Borrowed Money	(12,000)		0	(12,000)	Financin g
Total Ending Capital 600,824	Total Ending Liab	(373,970)		(3,761,530)	(4,135,500)	
	Total Ending Capital				600,824	

A. Increase in Assets	250,910		(4,996)	245,914	
B. Increase in Liability	(13,850)		(55,205)	(69,055)	
A+B Increase in Capital	237,060		(60,201)	176,859	
Income Statement Cr-Dr					
Premium	280,000		0	280,000	Oper
Bond Interest	236,500		0	236,500	Oper
Real Estate Rental Income	28,000		0	28,000	Oper
Common stock dividends	2,400		0	2,400	Oper
Bond: Accrual Discount (Amort Prem)	2,000		0	2,000	Investing
Bonds: Other Realized Gain (Loss)	1,225		0	1,225	Investing
Bonds: Realized Gain (loss) on Sale	6,035		0	6,035	Investing
Real Estate: CY Depreciation.	(10,000)		0	(10,000)	Investing
Benefits	(240,500)		0	(240,500)	Oper
Interest Premium Deposits	(2,100)		0	(2,100)	Oper
Expenses	(56,000)		0	(56,000)	Oper
Furniture CY Depreciation	(2,000)		0	(2,000)	Oper
Interest on Borrowed money	(700)		0	(700)	Oper
Incr Prem Due & Acc	0	(3)	(3,600)	(3,600)	Oper
Incr Interest Due & Acc	0	(4)	1,600	1,600	Oper
Expenses pd in adv	0	(5)	4	4	Oper
Incr Policy reserves	0	(6)	(55,000)	(55,000)	Oper
Incr Prem advance	0	(7)	(5)	(5)	Oper
Incr Exp Due & acc	0	(8)	(200)	(200)	Oper
C Total Gain	244,860		(57,201)	187,659	
Capital Statement					
Change in CS valuation acct	0	(1)	(5,000)	(5,000)	Ignore
Change in FE valuation acct	0	(2)	2,000	2,000	Ignore
Shareholder dividends	(8,400)		0	(8,400)	Financin g
Current Yr Paid in Capital	600		0	600	Financin g
D. Increase in above	(7,800)		(3,000)	(10,800)	
C+D = Increase Capital	237,060		(60,201)	176,859	
Check A+B-C-D	0		0	0	

Using simple algebra and the "regular accounts trial balance" we have the first cut at the cash flow statement.

Cash Flow Statement - First Cut		
	Dr-Cr	Source
Beg Cash	34,000	Assets
End Cash	47,910	Assets
Increase in Cash	13,910	
	Cr-Dr	Source
Premium	280,000	Income
Bond Interest	236,500	Income
Real Estate Rental Income	28,000	Income
Common Stock Dividends	2,400	Income
Benefits	(240,500)	Income
Furniture CY Depreciation	(2,000)	income (net)
Expenses	(56,000)	Income
- Interest on borrowed	(700)	Income
+ Decr. (Incr.) Furniture Cum Deprec.	2,000	Assets (net)
Cash from Operations	249,700	
+ Decr. (Incr.) Bonds	(225,000)	Assets
+ Decr. (Incr.) Common	(11,500)	Assets
+ Decr. (Incr.) Real Estate	(11,000)	Assets
+ Decr. (Incr.) RE Cum Depreciation	10,000	Assets (net)
Bond: Accrual Discount (Amort Prem.)	2,000	Income
Bonds: Other Realized Gain (Loss)	1,225	Income
Bonds: Realized Gain (loss) on Sale	6,035	Income
Real Estate: CY Depreciation.	(10,000)	income (net)
Cash from Investments	(238,240)	
+ Decr. (Incr.) Furniture	(1,000)	Assets
+ Decr. (Incr.) Accounts Receivable	(500)	Assets
+ Incr. (Decr.) Accounts Payable	10	Liabilities
+ Incr. (Decr.) Deposit Funds	11,840	Liabilities
- Interest Paid on Deposits	(2,100)	Income
Cash from Misc.	8,250	
+ Incr. in Borrowed Money	2,000	Liabilities
+ Current Year Paid in Capital	600	Equity
- Shareholder dividends	(8,400)	Equity
Cash Financing	(5,800)	
Total sources	13,910	

Using the Verification of Assets Between Years one reformats the cash from investments.

Verification of Assets Between Years					
		Bonds	Common	Real Estate	RE Deprec
+ Beg. Assets	dr- cr	3,950,000	120,000	350,000	(100,000)

+ Accrual Discount - Amort. Premium	cr- dr	2,000	0	0	0
+ Other RCG less RCL	cr- dr	1,225	0	0	0
+ Realized gains less loss	cr- dr	6,035	0	0	0
- CY Depreciation	cr- dr	0	0		(10,000)
+ End Assets	cr- dr	(4,175,000)	(131,500)	(361,000)	110,000
Net		(215,740)	(11,500)	(11,000)	0
Sale proceeds		84,260	1,500	29,000	0
Purchases		300,000	13,000	40,000	0
Net		(215,740)	(11,500)	(11,000)	0

The reformatted investment section is:

Cash Flow from Investments	
Sales of Bonds	84,260
Sales of Common	1,500
Sales of Real Estate	29,000
Purchases of Bonds	(300,000)
Purchases of Common	(13,000)
Purchases of Real Estate	(40,000)
Cash from Investments	(238,240)

5.3 An Alternative Cash Flow Statement for Insurance Companies

The FASB version of the cash flow statement was designed for manufacturers and retailers. These concerns have few invested assets and lots of property plant and equipment, account receivable and inventory. Almost all of an insurer's assets, however, are marketable securities, and there is arguably little difference between "cash" and marketable bonds and stocks. In the following statement we reconcile all "regular" invested assets to the cash version of the income and the Capital and Surplus Account statements.

Alternative Cash Flow Statement				
	Increase		Beg	End
Cash	13,910		34,000	47,910
Bonds	225,000		3,950,000	4,175,000
Common Stock	11,500		120,000	131,500
Real Estate	11,000		350,000	361,000
Real Estate Cum Deprec	(10,000)		(100,000)	(110,000)
Total Invested	251,410	dr-cr	4,354,000	4,605,410
Furniture	(1,000)	cr-dr	20,000	21,000
Furniture Cum Deprec	2,000	cr-dr	(8,000)	(10,000)
Accounts Receivable	(500)	cr-dr	2,400	2,900
Decr (Incr) Regular Assets	500	cr-dr	14,400	13,900
Premium Deposit funds	11,840	cr-dr	(350,000)	(361,840)

Accounts Payable	10	cr-dr	(120)	(130)
Borrowed Money	2,000	cr-dr	(10,000)	(12,000)
Incr (Decr) Regular Liabilities	13,850	cr-dr	(360,120)	(373,970)
Premium	280,000	cr-dr		
Bond Interest	236,500	cr-dr		
Real Estate Rental Income	28,000	cr-dr		
Common stock dividends	2,400	cr-dr		
Bond: Accrual Discount (Amort Prem)	2,000	cr-dr		
Bonds: Other Realized Gain (Loss)	1,225	cr-dr		
Bonds: Realized Gain (loss) on Sale	6,035	cr-dr		
Real Estate: CY Depreciation.	(10,000)	cr-dr		
Benefits	(240,500)	cr-dr		
Interest Premium Deposits	(2,100)	cr-dr		
Expenses	(56,000)	cr-dr		
Furniture CY Depreciation	(2,000)	cr-dr		
Interest on Borrowed money	(700)	cr-dr		
Shareholder dividends	(8,400)	cr-dr		
Current Yr Paid in Capital	600	cr-dr		
Income & Equity Statement	237,060			
Total	251,410			

SECTION 6. EXPENSE EXHIBIT

An insurance statement should contain an exhibit which shows the allocation of expense from "nature" (salaries, payroll taxes, rent, supplies, independent contractor costs, taxes & fees) to "function" (administration, investment, Loss Adjustment Expenses – including defense costs and adjusting costs.) The following example is based on the expense exhibit of two large American Companies.

	EXPENSE EXHIBIT				
	Expenses by Type	Loss Adjustment Expense	Other Underwriting Expense	Investment Expense	Total
1	Commissions	581	6.595	0	7.176
2	Claim adjustment services	2.215	0	0	2.215
3	Allowances to managers and agents	4	1,409	0	1,413
4	Advertising	0	406	0	406
5	Boards, bureaus and associations	44	65	0	109
6	Surveys and underwriting reports	0	209	0	209
7	Audit of assureds' records	0	4	0	4
8	Salary related items				
8.1	Salaries	3,381	2,389	53	5,823
8.2	Payroll taxes	256	169	3	428
9	Employee relations and welfare	706	477	12	1,195
10	Insurance	10	8	0	18
11	Directors' fee	0	0	0	1
12	Travel and travel items	209	141	1	351
13	Rent and rent items	471	397	6	873
14	Equipment	105	244	45	395
15	Cost or depreciation of EDP. Software	263	813	5	1,082
16	Printing and stationary	69	113	2	185
17	Postage, telephone and telegraph	250	539	17	807
18	Legal and auditing	27	140	8	174
19	Totals (Lines 3 to 18)	5,796	7,523	153	13,473
20	Taxes, Licenses and Fees				
20.1	State and local insurance taxes	0	1,352	0	1,352
20.2	Insurance department licenses and fees	0	14	0	14
20.3	Gross guaranty association assessments	0	99	0	99
20.4	All other (excluding profits tax)	0	69	0	69
20.5	Total taxes, licenses and fees	5,796	9,058	153	15,008
21	Real estate expenses	0	0	196	196
22	Real estate taxes	0	0	60	60
24	Aggregate write-ins for expenses	415	618	47	1,080
25	Total expenses incurred	9,007	16,109	456	25,572
26	Add unpaid expenses - current year	8,446	7,437	83	15,966
27	Less unpaid expenses - prior year	8,879	7,517	90	16,486
30	Paid	8,739	14,604	451	23,795

The Exhibit shows (1) commissions, (2) general expenses, and (3) taxes, licenses and fees. One of the two large companies allocated some of the commission costs to loss adjustment while the other did not. (In the statement the author prepared for this paper commissions were excluded from the Expense Exhibit.) The author recommends that the long term reserves for loss adjustment expenses be excluded from the Exhibit. Then the total incurred

loss adjustment expenses would be the "incurred" from the Expense Exhibit plus the algebraic increase in the loss expense reserves.

For actuarial purposes, the Loss Adjustment Expense should be split into two columns – (1) Defense and Cost Containment (DCC) and (2) Adjusting and Other (AO) – since we need separate reserves for each. The DCC category includes the cost of hiring lawyers (both inhouse and independent contractors) and expert witnesses to defend claims and the cost of rehabilitation. The AO category includes adjustment expenses (both inhouse and independent contractors), plus "declaratory judgment" costs, plus the overhead of the claims department. Schedule P indicates that AO costs are about 2-3 times the DCC costs, but DCC costs will give rise to large reserves because claims that are litigated settle later. The DCC costs used to be called "allocated" and the AO costs were called "unallocated." Prior to 1997 a few U.S. insurers included outside adjuster and legal costs in "allocated" and inside adjuster and legal costs as "unallocated." This situation created inconsistencies among companies.

For Generally Accepted Accounting Principles (GAAP) one needs to split the "underwriting" column into "acquisition" and "administration."

The incurred expenses are allocated by function using time studies or by direct allocation. For certain purposes one also needs the split of paid and unpaid expenses. The current year unpaid can be split by function by using the incurred split. Last year's unpaid is split using the last year's incurred split. The paid split is then computed using: Paid = Incurred + Last Year Unpaid – Current year Unpaid. The "unpaid" includes the "due and accrued" expenses less any expenses paid in advance.

SECTION 7. REINSURANCE.

Reinsurance includes inbound (reinsurance assumed) and outbound (reinsurance ceded) agreements. There are two ways of accounting for reinsurance:

- (1) Have separate income statements for reinsurance assumed and reinsurance ceded
- (2) Add / subtract reinsurance accounts from the corresponding" direct" or "primary" business accounts.

For non life insurers the NAIC uses (2) but has some exhibits that show "direct" only results. For Life insurers various NAIC exhibits show the claims and premiums for reinsurance versus the direct business but there are no exhibits that show the reinsurance portion of surrenders, matured endowments and policyholder dividends.

We recommend the first alternative. The reinsurance assumed and ceded gains would be expressed in two lines in the total company income statement -- – called "reinsurance assumed net gain" and "reinsurance ceded net gain."

The chart below shows a set of accounts for the Reinsurance Income Statement and Balance Sheet. The "line" column refers to the line number in the Income Statement.

	Cash Column (1)	Accruals & Deferrals Column (2)	Accruals & Deferrals Column (3)
Line	Revenue/Expense	Asset /Liabilities	Revenue/Expense
1	Premium	A: Premium D&A	Incr D&A Premium
1	Return on cancelled policies		Incr D&A
2	Miscellaneous Interest		

3	Deposit Fees	A: Deposit Fees D&A	Incr D&A Deposit Fees	
4	Miscellaneous income	A: Misc. income D&A	Incr D&A Misc Income	
5	Modco Interest	A: Modco Interest D&A	Incr D&A Modco Interest	
5	Modco reserve decr	A: Modco Res D&A	Incr D&A Modco Reserve	
6	Claims	L: Claims D&A	Incr D&A Claims	
6	Salvage			
6	Subrogation			
7	Installment claims	L: Installments D&A	Incr D&A Installments	
7	Maturity	L: Matured Endowments Due	Incr D Matured Endow.	
7	Surrender	L: Surrenders Due	Incr Due Surrenders	
7	Interest on Claims	L: Int on Claims D&A	Incr D&A Interest on Claims	
8	Interest on policy deposits	L: Int on policy Deposits D&A	Incr D&A Int on Policy Deposits	
8	Interest on dividend accums	L: Int on dividend accums D&A	Incr D&A Int of Dividend Accums.	
9	Dividends to policyholders	L: Dividends to policyh. D&A	Incr D&A Dividends to Policyh	
10	Administration Allowance	L: Reinsurance Allow. D&A	Incr D&A Reinsurance Allow	
11	Allow. Defense Cost	L: Defense Cost Allow. D&A	Incr D&A Defense Cost Allow.	
12	Allowance Adjusting Cost	L Adjusting Cost Allow. D&A	Incr D&A Adjusting Cost Allow.	
10	Treaty - experience refund	L Treaty Experience refund D&A	Incr D&A Experience Refund	
13	Reinsurance Brokerage	L: Reinsurance Brokerage Incr D&A Reins. Brokerage		
		Long Term Accruals & Deferrals		
1		A. Audit Premium Asset	Incr. Audit Premium Asset	
1		A. Retrospective Premium Asset	Incr. Retrospective Premium Asset	
14		A: DAC Allowance	Incr DAC	
15				
6		L: Mathematical Reserve	Incr. Mathematical Reserve	
1 -		L: Mathematical Reserve L: Loss, case reserve	Incr. Mathematical Reserve Incr Case Reserve	
6		L: Mathematical Reserve L: Loss, case reserve L Loss, IBNR reserve	Incr. Mathematical Reserve Incr Case Reserve Incr IBNR Reserve	
6 7		L: Mathematical Reserve L: Loss, case reserve L Loss, IBNR reserve L: Installment payments	Incr. Mathematical Reserve Incr Case Reserve Incr IBNR Reserve Incr. Installment Reserve	
6 7 11		L: Mathematical Reserve L: Loss, case reserve L Loss, IBNR reserve L: Installment payments L: Defense Cost Containment Res.	Incr. Mathematical Reserve Incr Case Reserve Incr IBNR Reserve Incr. Installment Reserve Incr LAE Reserve – DC	
6 7 11 12		L: Mathematical Reserve L: Loss, case reserve L Loss, IBNR reserve L: Installment payments L: Defense Cost Containment Res. L Adjusting Cost Reserve	Incr. Mathematical Reserve Incr Case Reserve Incr IBNR Reserve Incr. Installment Reserve Incr LAE Reserve – DC Incr. LAE Adjusting Cost Reserve	
6 7 11 12 9		L: Mathematical Reserve L: Loss, case reserve L Loss, IBNR reserve L: Installment payments L: Defense Cost Containment Res. L Adjusting Cost Reserve L Policyholder Dividends Res.	Incr. Mathematical Reserve Incr Case Reserve Incr IBNR Reserve Incr. Installment Reserve Incr LAE Reserve – DC Incr. LAE Adjusting Cost Reserve Incr. Policyholder Dividends Res.	
6 7 11 12 9 14		L: Mathematical Reserve L: Loss, case reserve L Loss, IBNR reserve L: Installment payments L: Defense Cost Containment Res. L Adjusting Cost Reserve L Policyholder Dividends Res. L Future Maintenance Expense	Incr. Mathematical Reserve Incr Case Reserve Incr IBNR Reserve Incr. Installment Reserve Incr LAE Reserve – DC Incr. LAE Adjusting Cost Reserve Incr. Policyholder Dividends Res. Incr. Maintenance Expense Res.	
6 7 11 12 9 14 1		L: Mathematical Reserve L: Loss, case reserve L Loss, IBNR reserve L: Installment payments L: Defense Cost Containment Res. L Adjusting Cost Reserve L Policyholder Dividends Res. L Future Maintenance Expense L Unearned Premium Reserve	Incr. Mathematical Reserve Incr Case Reserve Incr IBNR Reserve Incr. Installment Reserve Incr. LAE Reserve – DC Incr. LAE Adjusting Cost Reserve Incr. Policyholder Dividends Res. Incr. Maintenance Expense Res. Incr. Unearned Premium Reserve	
6 7 11 12 9 14 1	Reallocated	L: Mathematical Reserve L: Loss, case reserve L Loss, IBNR reserve L: Installment payments L: Defense Cost Containment Res. L Adjusting Cost Reserve L Policyholder Dividends Res. L Future Maintenance Expense L Unearned Premium Reserve	Incr. Mathematical Reserve Incr Case Reserve Incr IBNR Reserve Incr. Installment Reserve Incr LAE Reserve – DC Incr. LAE Adjusting Cost Reserve Incr. Policyholder Dividends Res. Incr. Maintenance Expense Res. Incr. Unearned Premium Reserve	
6 7 11 12 9 14 1	Reallocated Reinsurance Assumed net gain	L: Mathematical Reserve L: Loss, case reserve L Loss, IBNR reserve L: Installment payments L: Defense Cost Containment Res. L Adjusting Cost Reserve L Policyholder Dividends Res. L Future Maintenance Expense L Unearned Premium Reserve	Incr. Mathematical Reserve Incr Case Reserve Incr IBNR Reserve Incr. Installment Reserve Incr LAE Reserve – DC Incr. LAE Adjusting Cost Reserve Incr. Policyholder Dividends Res. Incr. Maintenance Expense Res. Incr. Unearned Premium Reserve Reins assumed net gain D&A	

After combining the "cash" items plus the increase in the accruals and deferrals the reinsurance assumed income statement looks like the following:

	Reinsurance Assumed - Income Statement					
1	Premium					
2	Miscellaneous Interest					
3	Deposit Fees					
4	Miscellaneous Benefits					
5	Modco adjustments					
6	Claims					
7	Miscellaneous Benefits					
8	Interest on Deposits					
9	Dividends to Policyholders					
10	Allowances and Experience Refund					
11	Defense & Cost Containment Allowance					
12	Adjusting Expense Allowance					
13	Reinsurance Brokerage					
14	Provision for DAC, Maintenance Exp					
15	Increase in Mathematical Reserve					

The reinsurance assumed balance sheet has the accounts shown below. The accounts payable and receivable are sometimes used in place of the due and accrued. The Funds Held accounts are deposits retained by the company (liability) or by the other part (asset).

Assets	Liabilities
Funds Held by Reinsurer	Funds Held from Reinsurers
Reins. Assumed gains D&A	Reins Assumed Losses D&A
Accounts Receivable Reins. Assumed	Accounts Payable Reins. Assumed

SECTION 8. LISTS of ASSETS

The NAIC statement and the Canadian statement include lists of invested assets. The lists provide support for the roughly 95% of assets, and for investment income and capital gains.

SECTION 9. SCHEDULE P – RESERVE TRIANGLES.

The NAIC and the Canadian Statement include reserve triangles which are useful for computing reserves. The Reserve triangles in the NAIC statement are called "Schedule P" and a schedule P has been included in the NAIC statement for about 100 years.

The triangles provide a one year and a two year test of reserve adequacy for loss reserves and reserves for the Defense and Cost Containment Expenses. By requiring the triangles the NAIC makes sure that the insurance companies devote resource to computing the triangles and ensures that the actuary has enough source material to compute reserves. **APPENDIX.** A Sample Annual Statement is enclosed. The NAIC has many more exhibits but the ones listed here will provide significant data.

Schedule P (Reserve Triangles) is about 60-70 pages long. The various asset schedules can be hundreds of pages long. The NAIC statement also has exhibits which reconcile cash to incurred. These are useful but not shown here.

	ASSETS, PAGE 2	(1)	(2)
		Current Year	Prior Year
1.1	Cash (Schedule E)		
1.2	Short Term Assets (Schedule DA)		
2	Bonds (Schedule D)		
3.1	Preferred Stocks (Schedule D, part 2)		
3.2	Common Stocks (Schedule D, part 2)		
4	Mortgage loans on real estate (Schedule B)		
	Real Estate occupied by the company		
5.1	(Schedule A)		
5.2	Investment real estate (Schedule A)		
6	Contract Loans		
7	Other invested assets (Schedule BA)		
8	Aggregate Write Ins for Investments		
9	Receivable less offset for security brokers		
10	SUBTOTAL Cash and Invested Assets		
a 11	Interest, dividends, and rent due and accrued		
a 12.1	Audit and Retrospective Premium [cf p3 L9.2]		
a 12.2	Reinsurance Assumed Due & Accrued [cf p3]		
a 12.3	Reinsurance Ceded Due & Accrued [cf. p3]		
	Profits Tax and foreign tax Due & Accrued [cf p		
a <u>12.4</u>	3]		
a <u>12.5</u>	Write in for adjusting entries		
13.1	Receivable for Agent Debit Balances [cf p2]		
13.2	Receivable from affiliates [cf p3]		
13.3	Receivable – other		
14.1	Funds Held by Reinsurers		
14.2	Fund Held by cedents [cf p3]		
14.3	Guaranty funds on deposit		
	Net adjustments due to foreign exchange [cf		
15	[p3]		
1.0.1	Electronic data processing equipment and		
16.1	software	 	
16.2	Fixed Assets excluding motor vehicles	 	
16.3	Motor Vehicles	 	
17.	Intangible Assets	 	
18	Aggregate writes ins for other assets		
19	SUBIDIAL lines 11 to 18		
20	ITOTAL ASSETS lines 10 and 19		
	"a" refers to "adjusting entries" (accruals &		

BALANCE SHEET

BALANCE SHEET

deferrals)

	LIABILITIES, PAGE 3	(1)	(2)
		Current	
		Year	Prior Year
a1	Unearned Premium Reserve		
a2	Mathematical Reserve		
a3	Claims (D&A, case, IBNR)		
a4	Installment and Annuity Reserves		
a5	Surrenders & Matured Endowments D&A		
a6	Loss adjustment expense (D&A, reserves)		
a7	Audit and Retrospective Premium reserve [see p2]		
a8	Reserve for Policyholder Dividends and Refunds		
a9	Advance Premium		
a10	Write in - Other Reserves and adjusting entries		
11	Deposits Held for Policyholders		
12	LIABILITIES for Policyholders = lines 1 to 11		
a13.1	Investment income paid in advance		
a13.2	Interest Due & Accrued on Borrowed Money		
a13.3	Commissions Due & Accrued		
a13.4	General & Investment Expenses Due & Accrued		
a13.5	Reinsurance Assumed Due & Accrued Liabilities		
a13.6	Reinsurance Ceded Due & Accrued Liabilities		
a13.7	Profits Tax Due & Accrued [cf p2]		
a13.8	Deferred Profits Tax Liability		
a 13 9	Stockholders dividends Due & Accrued [to surplus]		
13 1			
a0	Write in for adjusting entries		
14	Borrowed Money		
15	Provisions for Uncollectible Reinsurance Ito surplus		
15.1	Accounts Payable to agents [cf. p2]		
15.2	Accounts Payable to parent subsidiaries affiliate [cf_p2]		
15.2	Accounts Payable to others $[cf, p2]$		
16.0	Funds Held From Cedents		
16.2	Funds Held From Reinsurers		
16.2	Deposite held for others		
16.0	Remittance and not vet allocated		
17	Adjustments due to foreign exchange [cf. p2]		
18	Adjustitients due to foleight exchange [cl. p2]		
10	SUBTOTAL OTHER LIARILITIES lines 11 to 28		
19	TOTAL LIADULTIES Line 12 + 10		
20	TOTAL LIABILITIES LINE 12 + 19		
	Canital Funda		
21	Capital Fullus		
20	District capital stock		
ა∠ იე	Crease poid is and contributed contributed		
33 24	Gross paid in and contributed capital		
34			
35	CAPITAL REGARDS PULICY HULDERS SUM 31 to 34		
31	CAPITAL PIUS LIABILITIES = 20+35		
	INCOME STATEMENT PAGE 4	(1)	(2)
		Current	Prior Year

		Year	
1.1	Premium Written		
1.2	- Return on cancelled Policies		
1.3	- Increase in Unearned Premium Reserve		
1.4	- Increase in Audit and Retrospective Premium Reserve		
1.	= Premiums Earned (Part 1 L34, col 4)		
2.1	Losses Paid		
2.2	+ Increase in Case Reserve		
2.3	+ Increase in Bulk (IBNR+IBNER) Reserve		
2	= Losses Incurred (part 2, line 34, col 7)		
3	Installment & Annuity benefits		
4	Surrenders. Matured Endowments. etc.		
5.1	Defense and Cost Containment Expenses		
5.2	Adjusting and Other Loss adjustment expense		
5.3	+ Increase in DCC reserve		
5.4	+ Increase in AAO reserve		
55	= Loss Adjustment Expense Incurred		
0.0			
61	Experience Refunds and Policyholder Dividends paid		
62	+ Increase in Reserve for Dividends & Refunds		
6.3	= Experience refunds and policyholder dividends		
0.0			
7	Increase in Mathematical Reserves		
8	Commissions		
9	Expenses		
10	Bad Debt deductions		
11	Write ins for underwriting deductions (income)		
12	NET UNDERWRITING INCOME sum (1) to (11)		
9.1	Investment income earned		
9.2	Investment Deductions		
10	Net realized capital gains (losses)		
11	NET INVESTMENT GAIN or LOSS 191+191-192		
12	Gain (Loss) from Agents debit balances charged off		
13	Aggregate write ins for miscellaneous income.		
14 1	Gain (Loss) on Reinsurance Assumed		
14.2	Gain (Loss) on Reinsurance Ceded		
14.1	Gain (Loss) on Reinsurance Assumed		
16	SUBTOTAL OTHER = Lines 11 to 15		1
17	Net Income before tax = $L7 + L10 + L16$		
			1
18	Profits Tax		
			1
19	Net income = $17 - 18$		1
			1
20	CAFITAL and SUTKPLUS ACCOUNT. PAGE 4		
20	Capital as regards policynolders - prior year		
<u> </u>			

22	Net unrealized capital gains or (losses)		
23	Change in net unrealized foreign exchange gain (loss)		
24	Change in provision for reinsurance recoverable		
25	Cumulative effect of changes in accounting principles		
26	Capital Paid In		
27	Decrease (Increase) in Non admitted assets		
28	Dividends to stockholders		
29	Aggregate write ins for gains & losses in surplus		
30	Change in Capital as regards policyholders		
31	Capital as regards policyholders current yr = L20 + L30		

CASH FLOW STATEMENT, PAGE 5

		(1)	(2)
		Current Year	Prior Year
	Cash from Operations		
1	Premium collected		
2.1	Loss paid		
2.2	Loss adjustment paid		
3	Underwriting Commissions, expense, fees paid		
4	Other underwriting income		
5	SUBTOTAL Cash from underwriting = L1-L2,3,4		
6.1	Gross investment income (cash basis)		
6.2	- Interest Paid on Borrowed Money		
7	- Commissions, Expenses, Taxes (paid)		
8	- Dividends and experience refunds to policyholders		
8.1	Gain (Loss) from reinsurance ceded		
8.2	Gain (Loss) from reinsurance assumed		
9	Profits tax paid		
10	SUBTOTAL Cash from Operations = lines 1 to 9		
	Cash from Investments		
11	Proceeds from investments, sold, matured or repaid		
11.1	Bonds		
11.2	Preferred and Common Stock		
11.3	Mortgage Loans		
11.4	Real Estate		
11.5	Short Term Investments		
11.6	Other Invested Assets		
11.7	Net Gains or Losses on cash		
11.8	Miscellaneous proceeds		
11.9	Total Investment Proceeds sum lines 11.1 to 11.8		
12	Cost of Investments acquired		
12.1	Bonds		
12.2	Preferred and Common Stock		
12.3	Mortgage Loans		
12.4	Real Estate		
12.5	Short Term Investments		
	.		

12.6 Other Invested Assets

12.7 Miscellaneous applications	
12.8 Total investments Acquired sum lines 12.1 to 12.7	
SUBTOTAL Investment Proceeds sum 11.8 minut	s
13 12.7	
Cash from Financing	
14 Cash Provided	
14.1 Capital Paid in	
14.2 Net Transferred from affiliates	
14.3 Borrowed funds received	
14.5 SUBTOTAL Cash Provided = sum 14.1 to14.4	
15. Cash applied	
15.1 Dividends to stockholders paid	
15.2 Net transfers to affiliates	
15.3 Borrowed funds repaid	
15.5 SUBTOTAL CASH Applied sum 15.1 to 15.4	
16 SUBTOTAL Net cash from financing	
Cash from Miscellaneous Sources	
Increase in Ledger Liabilities other than borrowed	
17 money	
18. Decrease in Ledger assets other than invested assets	
19 SUBTOTAL Cash from Miscellaneous	
Reconciliation	
20.1	
. Net Change in Cash = L10+ L13 + L16 + L19	
20.2 Cash beginning of year	
20.3 Cash end of year	

Verification of Assets Between	Yea	ars					
		Bond	Preferre	Commo	Mortgag	Real	Real
		S	d Stock	n Stock	e Loans	Estat	Estate
						е	Cumulati
							ve
							Deprec.
Proceeds on Sale							
Purchases							
Net							
Beginning Asset							
+ Accrual Discount less Amort.						XXX	
Prem						Х	
+ Realized gains less losses on							
sale							
+ Other Realized gains less							
losses							
+ Unrealized gains less losses							
- Current Yr Depreciation		XXX	XXXX	XXXX	XXXX	XXX	
		Х				Х	

- Ending Asset				
Net				

REINSURANCE ASSUMED, INCOME STATEMENT and BALANCE SHEET

		(1)	(2)
		Current Year	Prior Year
	REINSURANCE ASSUMED INCOME STATEMENT		
1.	Premium written		
2	Miscellaneous Interest		
3	Other amounts due Reinsurer		
4	- Increase in Unearned Premium Reserve		
5	- Increase in Audit and Retrospective Premium Reserve		
10	SUBTOTAL sum 1+2+3+4+5		
11	Losses		
12	Loss Adjustment Expense Allowances		
13	Policyholder dividends and experience refunds		
14	+ Increase Loss Reserve		
15	+ Increase in Loss Adjustment Reserve		
16	+ Increase in reserve for dividends & refunds		
17	+ Increase in Mathematical Reserves		
18	Other Expense Reimbursement Allowances		
19	Other reimbursements to cedents		
20	SUBTOTAL Lines 11 to 19		
21	= Net Gain (Loss) = Lines 10 – 20		
	ASSETS REINSURANCE ASSUMED		
1	Funds Held by Cedents		
2	Due & Accrued amounts owing Cedent		
5	TOTAL ASSETS = 1 to 4		
	LIABILITIES REINSURANCE ASSUMED		
1	Funds Held for Cedents		
2	Due & Accrued Amount owed to Cedent		
3	Loss Reserve (Case + Bulk)		
4	Loss Adjustment Reserve		
5	Unearned Premium Reserve (UPR)		
6	Reserve for Dividends and refunds		
7	Mathematical Reserve		
11	TOTAL LIABILITIES = 1 to 10		

The statement for reinsurance ceded is similar.

STATEMENT -	2005						
Exhibit of Inve	estment Income						
		(1)	(2)	(3)	(4)	(5)	

			Orak	Accrual Discount less Amortizati	Collected	Due & Accrued less Non	Earned
			Casn Paoia	on Dromium	During	adm &	During
1 1	Cash	ľ	Da515	Flemium	real	auvance	Teal
1.1	Short Term Investments						
2	Bonds						
- 3.1	Preferred Stock						
3.2	Common Stock						
4	Mortgage Loans						
5.1	Real Estate - Home Office						
5.2	Real Estate – Other						
6	Contract Loans						
7	Other Invested Assets						
8	Write in, Invested Assets						
9	GROSS INVESTMENT INCOME						
11	Interest on Borrowed Money						
12	Investment Expenses			XXXX	XXXX	XXXX	
13	Depreciation			XXXX	XXXX	XXXX	
14.	Write in for Deductions						
	TOTAL EXPENSES sum 11 to						
15	14						
	NET INVESTMENT INCOME						
	=10 - 15						
(a) (Cash Basis equals interest received	les	ss intere	st paid for o	n purchase	•	
(b) I	nterest Collected equals cash basis	s pl	us accru	al of discour	nt less amo	ortization of p	premium.
(c) E adva	Earned = Collected + Increase in D ance	ue	& Accru	ed less non	admitted -	Increase ir	n interest in

	EXHIBIT of CAPITAL GAINS (LO	EXHIBIT of CAPITAL GAINS (LOSSES)						
			(1)		(2)		(3)	(5)
			Realized Gains le Losses Sale Maturity	ess on or	Other Realized Gains Loss)	(or	Unrealized gains less Losses	Total
1.1	Cash							
1.2 2	Short Term Investments Bonds							
3.1	Preferred Stock							
3.2	Common Stock							
4	Mortgage Loans							
5.1	Real Estate - Home Office							
5.2 6	Real Estate – Other Contract Loans							
7	Other invested Assets							

8	Write in, Invested Assets			
9	TOTAL CAPITAL GAINS			

	EXPENSE EXHIBIT					
						(5)=sum
		(1)	(2)	(3)	(4)	(1) to(4)
			Adjustmen			
		Defense	t and			
		and Cost	Other,			
		Containmen	Loss	Other		
		t, Loss	Adjustmen	Underwriti		
		Adjustment	t	ng	Investment	-
4	Coloriao	Expense	Expenses	Expenses	Expenses	lotal
1.						
2.	Payroll taxes					
2	Employee Relations and					
3						
4	Agent Allowances					
5	Agent Relations and Welfare					
6	Claims Adjustment Services					
7	Outside Legal Contractors					
	Medical & Underwriting					
8.	Reports					
9.	Director Fees					
	Boards, Bureaus &					
10	Associations					
11	Auditing & Actuarial Services					
12	Advertising					
13	Travel & Entertainment					
14.	Furniture & Equipment					
	Computer Hardware &					
15.	Software					
16	Printing & Stationary					
17	Postage, Phone, Internet					
18	Insurance					
19	Real Estate Expense					
20.1	Real Estate Tax					
20.2	Premium Taxes					
20.3	Insurance Department Fees					
20.4	Guaranty Fund Charges					
	TOTAL Expenses = Lines 1					
28	to 27					
29	Less: Current Year Unpaid					
30	Add: Prior Year Unpaid					
31	Current Year Paid =					

L28+L29-L30										
Allocate CY Incurred study	and C	' Unpa	id by tin	ne stu	dies,	Last Ye	ear's u	inpaid k	oy last yea	
Outside Adjusters are	e allocate	ed 1009	% to "Adı	minist	rative	and Oth	ner"			
"Claims Department"	Salaries	and P	ayroll tax	kes are	e allo	cated to	"Adju	sting ar	nd Other"	
"Legal Salaries" of employees or contractors hired to defend claims are allocated 100% to Defense & Cost Containment										
Schedule P LOSS SCHED	ULE - C	URRE	NT YEA	R and	I PRI	OR YEA	R DA	TA		
Claim Counts										
	(1)		(2)	(3)		(4)	(5)=(1)+(2) (3)-(4)	
	Outst	anding		Ć	Close	d and	Denie	d		
	Begin	ning of	Reporte	d F	Paid	During	Durin	g (Dutstandin	
	Year	-	During `	Year N	<i>l</i> ear		Year	<u> </u>	Year End	
Auto Third Party Liability										
Auto Physical Damage										
Other Property										
Other Liability										
Other Lines of business										
TOTAL										
Notes. Reopened closed a column 3.	and paid	cases	are sho	wn as	neg	atives in				
Reopened Denied cases column 4	are sho	own as	negativ	/es in	1					

LOSS SCHEDULE						
Losses and Loss Expenses Paid	Adj					
						(6)=(4)+(5
	(1)	(2)	(3)	(4)	(5))
				Defense &		
		Salvage		Cost		Total Loss
		-	Subrogatio	Containme	Administra	Adjustme
	Losses	include	n - include	nt	-tive and	nt
	Paid	in (1)	in (1)	Expenses	Other	Expenses
Auto Third Party Liability						
Auto Physical Damage						
Other Property						
Other Liability						
Other Lines of business						
TOTAL						

LOSS SCHEDULE

Loss Reserves and Loss Adjustment Reserves											
				(3)=(1)+(2			(6)=(4)+(
		(1)	(2))	(4)	(5)	5)				
							Total				
					Defense	&Administra	Loss				
			Bulk		Cost	tive and	Adjustm				
		Case	(IBNR)	Total Loss	Containme	n Other	ent				
		Reserve	Reserve	Reserve	t Reserve	Unpaid	Reserve				
Auto Third Party Liability											
Auto Physical Damage											
Other Property											
Other Liability											
Other Lines of business											
TOTAL											

LOSS TRIANGLES – for third Party Liability - Claim Counts REPORTED CLAIM COUNTS during 31-Dec-2004

	Calendar	Calendar	Calendar	Calen dar	Calendar	Calendar
Accident Year	Year 1999	Year 2000	Year 2001	Year 2002	Year 2003	Year 2004
1999						
2000	XXXX					
2001	XXXX	XXXX				
2002	XXXX	XXXX	XXXX			
2003	XXXX	XXXX	XXXX	XXXX		
2004	XXXX	XXXX	XXXX	XXXX	XXXX	
TOTAL all accid	lent					
years						

CLOSED and PAID CLAIM COUNTS during various periods										
•	Calendar	Calendar	Calendar		Calendar	Calendar				
	Year	Year	Year	Calendar	Year	Year				
Accident Year	1999	2000	2001	Year 2002	2003	2004				
1999										
2000	XXXX									
2001	XXXX	XXXX								
2002	XXXX	XXXX	XXXX							
2003	XXXX	XXXX	XXXX	XXXX						
2004	XXXX	XXXX	XXXX	XXXX	XXXX					
TOTAL all accident years										

OUTSTANDING CLAIM COUNT as of various valuation												
dates												
	31-Dec-	31-Dec-	31-Dec-		31-Dec-	31-Dec-						
Accident Year	99	00	01	31-Dec-02	03	04						

1999						
2000	XXXX					
2001	XXXX	XXXX				
2002	XXXX	XXXX	XXXX			
2003	XXXX	XXXX	XXXX	XXXX		
2004	XXXX	XXXX	XXXX	XXXX	XXXX	
TOTAL all accident years						

LOSS TRIAN CASE RE valuation da	NGLES - for th ESERVES a ates	ird Party Lia t various	bility - Mon	etary Amou	nts	
Accident						
Year	31-Dec-99	31-Dec-00	31-Dec-01	31-Dec-02	31-Dec-03	31-Dec-04
1999						
2000	XXXX					
2001	XXXX	XXXX				
2002	XXXX	XXXX	XXXX			
2003	XXXX	XXXX	XXXX	XXXX		
2004	XXXX	XXXX	XXXX	XXXX	XXXX	
TOTAL						

BULK (IBNR) RESERVES at various Valuation dates											
Accident											
Year	31-Dec-99	31-Dec-00	31-Dec-01	31-Dec-02	31-Dec-03	31-Dec-04					
1999											
2000	XXXX										
2001	XXXX	XXXX									
2002	XXXX	XXXX	XXXX								
2003	XXXX	XXXX	XXXX	XXXX							
2004	XXXX	XXXX	XXXX	XXXX	XXXX						
TOTAL											

PAID During	Year	r for	various					
periods								
							Calendar	Calendar
		Calen	dar Year	Calendar	Calendar	Calendar	Year	Year
Accident Year		1999		Year 2000	Year 2001	Year 2002	2003	2004
1999								
2000		XXXX						
2001		XXXX		XXXX				
2002		XXXX		XXXX	XXXX			
2003		XXXX		XXXX	XXXX	XXXX		
2004		XXXX		XXXX	XXXX	XXXX	XXXX	
TOTAL								

INCURRED CLAIMS at various valuation dates												
Accident Year 1999	Calendar Year 1999	Calendar Year 2000	Calendar Year 2001	Calendar Year 2002	Calendar Calendar Year 2003 Year 2004	2004 less 2002						
2000	XXXX											
2001	XXXX	XXXX										
2002	XXXX	XXXX	XXXX									
2003	XXXX	XXXX	XXXX	XXXX								
2004	XXXX	XXXX	XXXX	XXXX	XXXX							
TOTAL												

ASSET EXHIBITS

The exhibits show the list of bonds, preferred stock and common stock by an identification code assigned by the insurance department. There are also exhibits for real estate, mortgage loans, short term bonds and cash.

SCHEDULE D-Bonds, Part 1, BONDS Owned at Year End

	(1)	(2)	(3)	(4)	(5)	(6)
	Date of	Purchase	Beginning	Ending	Interest	Interest
Propert y Description	Purchase	Price	Book	Book	Collected	Earned
Total Purchased Prior Years						
Total Purchased Current Year			XXXX			
Total Part 1						

SCHEDULE D-Bonds, Part 2, BONDS SOLD, MATURED by Year End

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
					Realized		
				Sale	Capital		Interes
	Date	of		Price or	Gain	Interest	t
	Purcha	s Purchas	Beginnin	Mature	(Loss) a	t Collecte	Earne
Property Description	е	e Price	g Book	d Value	Sale	d	d
Total Purchased Prior Years							
Total Purchased Current							
Year			XXXX				
Total Part 2							
Grand Total Parts 1 & 2							

SCHEDULE D-Preferred Stock, Part 1, PREFERRED STOCK Owned at Year End										
	(1)		(2)	(3)	(4)	(5)	(6)			
	Date	of	Purchase	Beginning	Ending	Interest	Interest			
Property Description	Purc	hase	Price	Book	Book	Collected	Eamed			
Total Purchased Prior Years										
Total Purchased Current Year				XXXX						
Total Part 1										

SCHEDULE DPreferred Stock, Part 2, PREFERRED STOCK SOLD, MATURED by Year End

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
					Realize d		
				Sale	Capital	• • •	Interes
	Date of		.	Price or	Gain	Interest	t
	Purchas	Purchas	Beginnin	Mature	(Loss)	Collecte	Earne
Property Description	е	e Price	g Book	d Value	at Sale	d	d
Total Purchased Prior Years							
Total Purchased Current							
Year			XXXX				
Total Part 2							
Grand Total Parts 1 & 2							

About the Author:

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Author is a Ph.D. in Mathematics from Northwestern University in Evanston, Illinois and is a fellow of the Scoiety of Actuaries. He has 30 years of experience in the insurance industry. He was Sr. Vice President in charge of reinsurance and taxation at Guardian Life. The reinsurance profit center made over \$200 millin of profits. On the taxside Mr. Kabele was responsible for lobbying, compliance and tax planning. Since 2001 Mr. Kabele has been consulitng actuary and done work in merger and aquistions and international consulting assignemnts in Kosovo, Armenia, Serbia (wice) and India (3rd time). He has written nuerous papers on taxation and reinsurance and accounting issues. He has written chapters on Life Reinsurance for Strain text on reinsurance and on reinsurance accounting (IASA text).