

# TABLE OF CONTENTS

Foreword .....	i
Preface .....	iii
About the Authors .....	vii
Acknowledgments .....	ix
<b>CHAPTER ONE</b>	<b>1</b>
<b>STATUTORY BASIS RESERVES GENERALLY</b>	
1.1 The Nature and Purpose of Reserves in the Insurance Company Environment.....	1
1.2 The Importance of Reserves in Determination of Earnings and Taxable Income...	2
1.3 Reserves for Future Policy Benefits.....	6
TABLE 1.1 Simple Net Level Reserve Computation	7
TABLE 1.2 Simple CRVM Reserve Computation	8
1.3.1 Mortality Tables .....	9
1.3.2 Assumptions for Timing of Premiums and Benefits .....	9
1.3.3 Mean Reserves for Individual Life Insurance .....	10
1.3.4 Mid-Terminal Reserves.....	11
1.4 Claim Reserves, Loss Reserves, and Claim Liabilities .....	12
1.5 Annuities in Payout Status .....	13
1.6 Individual Deferred Annuities and Other Amounts on Deposit.....	14
1.7 State Regulatory Law and Other State Regulatory Guidance .....	15
1.7.1 Actuarial Guidelines.....	17
1.8 Accident and Health Terminology .....	18
1.9 The Actuarial Opinion and Memorandum Regulation and the Asset Adequacy Analysis Requirement .....	19
<b>Appendix</b>	
Part I Executive Summary of Standard Valuation Law (NAIC, 1996).....	21
Part II The 2001 CSO Table.....	22
<b>Actuarial Breakout</b>	
Part I Demonstration of the Smoothing Effect of Reserves on Earnings on a Whole Life Policy .....	27
Part IIA Further Analysis of Curtate vs. Continuous Functions .....	28
Part IIB Discussion of Commissioners Reserve Valuation Method (CRVM) for Traditional Life Insurance Contracts.....	30

Part III	Discussion of Commissioners Reserve Valuation Method (CRVM) for Flexible Premium Universal Life Insurance Contracts .....	31
Part IV	Claim Reserve Table Calculation.....	32
	TABLE 1.3    PVANYD Disability Income    33	
Part V	Development Table Methodology for Establishing Reserves.....	33
	TABLE 1.4    Illustration of Development Table Method (Part 1)    34	
	TABLE 1.5    Illustration of Development Table Method (Part 2)    35	
Part VI	Discussion of Commissioners Annuity Reserve Valuation Method (CARVM) for Traditional Fixed Annuity Contracts.....	36
Part VII	Numerical Example of CRVM.....	37
	TABLE 1.6 A-F    Five-year Level Term Example    37	

## **CHAPTER TWO    TAX BASIS RESERVES GENERALLY    41**

2.1	General .....	41
2.2	Section 807(c)(1): Life Insurance Reserves .....	44
2.3	Section 807(c)(2): Unearned Premiums and Unpaid Losses.....	45
2.4	Section 807(c)(3): Amounts Discounted at Interest Only, To Satisfy Insurance and Annuity Contract Obligations .....	46
2.5	Section 807(c)(4): Dividend Accumulations and Other Amounts Held at Interest in Connection with Insurance and Annuity Contracts.....	48
2.6	Section 807(c)(5): Premiums Received in Advance and Liabilities for Premium Deposit Funds .....	48
2.7	Section 807(c)(6): Reasonable Special Contingency Reserves.....	48
2.8	Business Purpose for Establishing Reserves .....	49
2.9	Interest Rates to Use for Tax Basis Reserve Computation .....	50
2.10	Rev. Proc. 2011-42: Regarding Use of Statistical Techniques in Establishing Reserve Liabilities.....	51

### **Appendix**

Part I	Major Tax Acts from 1984 Inclusive Pertinent to Tax Reserves and Related Items .....	53
Part II	Table of Equivalent Internal Revenue Code Sections Post-DEFRA84 vs. Pre-DEFRA84 .....	54

## **CHAPTER THREE    QUALIFICATION AS A LIFE INSURANCE COMPANY    55**

3.1	General .....	55
3.2	Reserve Test.....	62
3.3	Section 816(f).....	66
3.4	Other Cases and Rulings .....	67
3.5	Failure to Qualify as an Insurance Company; Change in Status .....	69
	TABLE 3.1    Illustration of Qualification Ratio Calculation    70	

<b>CHAPTER FOUR</b>	<b>LIFE INSURANCE RESERVES GENERALLY</b>	<b>71</b>
4.1	General .....	71
4.2	Life Insurance Reserves Defined .....	73
4.3	Net Surrender Value Defined .....	77
4.3.1	Market-Value Adjustment .....	80
4.3.2	Special Rule for Pension Plan Contracts .....	80
4.3.3	Whether Contingent Surrender Penalties Are Used to Determine Net Surrender Value .....	82
4.3.4	Does the Net Surrender Value Qualify as a Reserve? .....	83
4.4	Deficiency Reserves .....	87
4.5	Recognized Mortality Tables .....	89
4.6	Required by Law .....	90
4.6.1	Reserves Must Be “Held” .....	94
4.7	Future Unaccrued Claims .....	95
4.8	Other Permissible Factors in Computing Reserves .....	96
4.9	Requirement of Proper Calculation under State Law .....	100
4.10	Computation of Life Insurance Reserves .....	101
4.10.1	Tax Reserve Method .....	104
4.10.1.1	Stochastic Reserves .....	113
4.10.1.2	Actuarial Guidelines .....	120
4.10.2	Interest Rates .....	128
4.10.2.1	Use of AFR and PSAR for Other Than Valuation Purposes .....	131
4.10.3	Mortality Tables .....	133
4.10.4	Adjusted as Appropriate .....	137
4.10.5	Year of Issue .....	141
4.11	Reserves under Foreign Law .....	142
4.12	Statutory Limitation on Tax Reserve (Statutory Cap) .....	142
4.12.1	Statutory Cap When Tax Reserves Are Recomputed .....	146
4.13	Life Insurance Contracts Sold with Non-Life Insurance Riders and Benefits ....	147
<b>CHAPTER FIVE</b>	<b>UNEARNED PREMIUMS AND UNPAID LOSSES</b>	<b>151</b>
5.1	Unearned Premiums .....	151
5.2	Unpaid Losses .....	154
	<b>Actuarial Breakout</b>	
	Claim Reserves and Liabilities for Credit Disability .....	157

**CHAPTER SIX            INSURANCE COMPANY RESERVES COMPUTED WITHOUT  
MORTALITY OR MORBIDITY ASSUMPTIONS            159**

6.1	Section 807(c)(3).....	159
6.1.1	Permanent versus Temporary Purchase Rate Guarantees .....	162
6.2	Section 807(c)(4).....	163
6.3	Section 807(c)(5).....	164
6.3.1	Tax Deferred Acquisition Cost (DAC) Issues on Advanced Premiums .....	166
6.4	Policyholder Dividends .....	166
6.4.1	The Statutory Provision for Dividends Payable .....	166
6.4.2	Dividend Additions .....	167

**CHAPTER SEVEN    SECTION 807(f)  
AND CHANGES IN THE COMPUTATION OF RESERVES 169**

7.1	Introduction .....	169
7.2	Section 807(f).....	173
7.3	Correction of an Error .....	177
7.4	Change in Facts .....	178
7.5	Refinements in Calculation .....	180
7.6	Section 807(f)(2) on Loss of Status as Life Insurance Company .....	181
7.7	Section 807(f) and Reserves of Property and Casualty Companies .....	181
7.8	When Does Reserve Strengthening Occur? .....	182
7.9	Can a Company Weaken or Strengthen Reinsured Reserves? .....	183
7.10	Interplay of Section 807(f) and the Statutory Cap in Section 807(d)(1) .....	183
7.11	The Tax Benefit Rule .....	186
7.12	Section 1311 Mitigation .....	188
7.13	Alternative Computations within a Method .....	189

**CHAPTER EIGHT    COMPANY SHARE            191**

8.1	General .....	191
8.2	Company Share Defined Generally.....	193
8.3	Policy Interest Defined Generally .....	198
8.3.1	Required Interest .....	198
8.3.2	Mean Reserves .....	199
8.3.3	When “Another Appropriate Rate” Should Be Used .....	200
8.3.4	Deductible Portion of Excess Interest .....	201
8.4	Gross Investment Income’s Proportionate Share of Policyholder Dividends .....	203
8.5	Reserve Strengthening or Weakening .....	203
8.6	Limitation of Company Share to 100%.....	203
8.7	Dividends from 80% Owned Subsidiaries .....	204
8.8	Separate Accounts .....	205

8.8.1	Interest Rate .....	208
8.8.2	Amount Retained .....	208
8.8.3	Segregated Asset Account Defined.....	209
8.8.4	Seed Money.....	210
8.8.5	Example of Company Share Calculation .....	211

TABLE 8.1 211

**Actuarial Breakout**

Part I	Policyholder Share, General Account .....	213
Part II	Section 264(f).....	214
Part III	Policyholder Share, Separate Account .....	215

**CHAPTER NINE SUPPLEMENTAL BENEFITS AND QUALIFIED SUBSTANDARD RISKS 217**

9.1	Supplemental Benefits Defined.....	217
9.1.1	Qualified Supplemental Benefits (QSBs).....	218
9.1.2	Separately Identified Premium or Charge .....	219
9.1.3	Identifying Separate Charges for QSB Treatment .....	220
9.1.4	Net Surrender Value Available to Fund the Benefit .....	221
9.2	Guaranteed Insurability .....	221
9.3	Accidental Death or Disability .....	222
9.4	Convertibility .....	223
9.5	Waiver of Premiums .....	224
9.6	Proper Calculation under State Law.....	226
9.7	“Post-Election” Reserves .....	226
9.8	Substandard Reserves.....	227

**Actuarial Breakout**

Statutory Reserve Calculation for the Supplemental Benefits Named in Section 807(e)(3)(D) .....	231
Guaranteed Insurability .....	231
Post-Conversion Extra Mortality Reserves .....	232
Accidental Death Benefit .....	232
Convertibility.....	233
Waiver of Premium Benefit.....	233

**CHAPTER TEN INTRODUCTION TO TAX RESERVE PLANNING AND DOCUMENTATION 235**

10.1	General Objectives of Tax Reserve Planning.....	235
10.2	Criteria for Evaluation of Tax Planning Strategies .....	236
10.3	Effect on Statutory Financial Statements .....	241
10.3.1	Risk-Based Capital.....	241

10.3.2	Deferred Taxes .....	242
10.3.3	General Surplus Considerations .....	242
10.4	Effect on GAAP Financial Statements.....	243
10.4.1	Impact on GAAP of Reserve Weakening.....	244
10.5	Returns on Statutory Surplus Strain from Tax Planning Strategies .....	245
10.6	Tax Reserve Aspects of Product Design .....	246
10.7	Documentation Guidelines.....	247
10.7.1	Internal Documentation.....	248

### **Appendix**

Part I	Excerpts from Regulations Section 1.848 Regarding Capitalization of Acquisition Costs.....	251
Part II	Statutory Deferred Taxes .....	254
	Table 10.1 Illustrative Example: DTA Calculation at the End of a Section 807(f) Change in 2012 (Year of Change)    257	
	Table 10.2 DTAs Reconstituted as of 1/1/2013 with 807(f) Spread   258	

### **Actuarial Breakout**

Part I	Derivation of Formula for Internal Rate of Return as a Result of Immediate Increases to Statutory Net Liabilities (SNLs) and Tax Reserves .....	259
Part II	Formula for Generating Internal Rate of Return (IRR) in the Product Pricing Process.....	261

## **CHAPTER ELEVEN INVESTMENT BASIS ACCOUNTING: STATUTORY VS. TAX**

**263**

11.1	Statutory Classification of Assets .....	263
11.1.1	Statutory Accounting for Bonds.....	266
11.1.2	Tax Accounting for Bonds .....	268
11.2	Write-Downs of Securities .....	273
11.2.1	Statutory .....	273
11.2.2	Tax .....	273
11.3	Investments in Partnerships, Limited Liability Companies, and Other Joint Ventures.....	275
11.4.	Investments in Stock .....	276
11.4.1	Statutory .....	276
11.4.2	Tax .....	277
11.5	Sales between Related Parties and Section 267 .....	278
11.5.1	Statutory .....	278
11.5.2	Tax .....	279
11.6	Wash Sales .....	279
11.7	Mortgage-Backed Securities .....	279
11.7.1	Statutory .....	280

11.7.2	Tax .....	281
11.8	Capital Gains and Losses .....	282
11.8.1	Statutory .....	282
11.8.2	Tax .....	283
11.9	Derivatives .....	283
11.9.1	Statutory .....	284
11.9.2	Tax .....	284
11.9.3	Hedges of Aggregate Risk.....	289
11.10	Tax Treatment of Notional Principal Contracts .....	291
11.11	Forward Contracts.....	292
11.12	Hedging Transactions.....	293
11.12.1	Statutory .....	293
11.12.2	Tax .....	294
11.13	Securities Lending Transactions and Repos.....	296

## **Appendix**

### **Derivatives and Hedging Transactions**

General .....	299
Tax Accounting Rules Generally .....	301
Notional Principal Contracts .....	302
Swaps .....	302
TABLE 11.1 Amortizing Upfront Swap	303
TABLE 11.2 Amortizing Back Loaded Swap	304
Caps and Floors.....	306
TABLE 11.3 Amortizing Prepaid Cap	307
TABLE 11.4 Amortizing Level Installment Cap	308
Anticipatory Hedges.....	308
Liability Duration (GAP) Hedge .....	309
Integrated Hedge Transactions .....	311
Variable Annuity and Other Products with Equity Risks.....	311
Differences between Hedge Financial Accounting and Hedge Tax Accounting .....	313

## **CHAPTER TWELVE INDIVIDUAL ACCIDENT AND HEALTH INSURANCE GENERALLY 315**

12.1	Product Line Description .....	315
12.2	Statutory Accounting .....	316
12.3	Statutory Reserves.....	317
12.3.1	Premium Reserves (“Unearned Premium Reserves”).....	318
12.3.2	Contract Reserves.....	319
12.3.3	Claim Reserves and Liabilities.....	321

12.3.4	Premium Deficiency Reserves .....	324
12.3.5	Miscellaneous Reserves .....	325
12.3.6	Claim (Loss) Adjustment Expense (LAE) Reserves .....	325
12.3.7	Specific Mortality and Morbidity Standards .....	326
12.3.8	Termination Rates for Contract Reserves .....	328
12.3.9	Interest Rates .....	328
12.4	Renewability Provisions .....	328
12.5	Tax Treatment .....	329
12.5.1	Character of the Reserve and Reserve Method .....	329
12.5.2	Deemed Acquisition Expenses .....	336
12.5.3	Defining the Terms “Guaranteed Renewable” and “Noncancellable” .....	336
12.5.4	The Reserve Test .....	339
12.5.5	Tax Treatment of Active Life (Contract) Reserve That Fails to Qualify as a Life Insurance Reserve .....	340
12.5.6	Tax Treatment of Loss Adjustment Expenses .....	342

**CHAPTER THIRTEEN      RESERVE ISSUES IN REINSURANCE      345**

13.1	Reinsurance in General .....	345
13.1.1	Distinction between Indemnity and Assumption Reinsurance .....	346
13.1.2	Non-Proportional Reinsurance .....	347
13.1.3	Proportional Reinsurance .....	347
13.1.4	Stop Loss Reinsurance .....	348
13.1.5	Catastrophe Reinsurance .....	348
13.2	Statutory Accounting for Reserves .....	349
13.2.1	Proportional Reinsurance .....	349
13.2.2	Non-Proportional Reinsurance .....	352
13.2.3	Guidance on Reserve Credit Allowable .....	352
13.2.4	Statutory Accounting for Gains and Losses under Assumption Reinsurance of an In-Force Block of Business .....	355
13.2.5	Statutory Accounting for Gains and Losses under Indemnity Reinsurance of an In-Force Block of Business .....	356
13.2.6	Interest Maintenance Reserve .....	357
13.3	Tax Treatment of Reserves .....	358
13.3.1	Sections 803, 805(a)(6), and 805(a)(7) .....	360
13.3.2	The Amount of Reinsurance Premiums and Ceding Commissions .....	361
13.3.3	Is the Imputed Reinsurance Premium and Ceding Commission under Regulations section 1.817-4(d) the Amount of Tax Reserves or Statutory Reserves? .....	362
13.3.4	What Issue Date Is Used to Determine Tax Reserves? .....	364
13.3.5	Reserve Adjustments under a Modco Treaty .....	366

13.3.6	Treatment of Reserves When Reinsurer Holds Reserves Using Different Assumptions.....	366
13.3.7	Treatment of Reserves Reinsured When the Ceding Company Retains the Cash Surrender Value.....	367
13.3.8	Tax Issues with Respect to Funds-Withheld Reinsurance .....	369
13.4	Sales of Companies or Portfolios .....	370
13.4.1	Reinsurance of a Business not Involving Purchase of the Company .....	371
13.4.2	Section 338 Transactions .....	372
13.5	Tax DAC and Amortization of Intangibles in General .....	375
13.5.1	The Issue of Applicability of <i>Colonial American</i> .....	376
13.5.2	Section 848: Treatment of Ongoing Transactions under Reinsurance Treaties ..	380
13.5.3	Section 197 and Ceding Commissions under Assumption Reinsurance.....	381
13.5.4	Capitalization Shortfalls under Section 848.....	381
13.5.5	Reinsurance Treaties with Non-US Taxpayers .....	383
13.5.6	The Small Company Shortened Amortization Period.....	384
	TABLE 13.1 Analysis Based on Treasury Regulation 1.338-11(c)(4)	385

## Appendix

Part I	Life and Health Reinsurance Agreements Model Regulation, Section 4 (The 11 Fact Patterns that Preclude Reserve Credit) .....	387
Part II	Excerpts from Regulations Sections 1.848-2(f) and 1.848-2(g) Regarding Tax DAC on Reinsurance .....	389

## CHAPTER FOURTEEN SEPARATE ACCOUNTS GENERALLY 393

14.1	General .....	393
14.2	Statutory Treatment.....	394
14.3	Tax Treatment .....	396
	TABLE 14.1 401	
	TABLE 14.2 402	
14.4	Tax Issues When a Separate Account Invests in a Mutual Fund .....	402
14.5	Variable Contracts Defined.....	404
14.5.1	Reflection of Investment Return .....	406
	TABLE 14.3 Maximum Percentage of Total Separate Account Assets	407
14.6	Accrual of Dividend Income and Other Issues Affecting Unrealized Appreciation.....	407
14.7	Real Estate Separate Accounts.....	408
14.8	Tax Treatment of Funding Agreements in a Separate Account .....	409
14.9	Transfers of Assets between Separate Accounts and the General Account.....	410

14.10	Separate Accounting Requirements under Section 817 versus Aggregate Reserve Comparison Requirement under Section 807(d)(1) .....	410
-------	--	-----

**CHAPTER FIFTEEN MODIFIED GUARANTEED ANNUITIES 413**

15.1	Description of Product .....	413
15.2	Nature of Statutory Reserves Established for MGA contracts (MGCs) and MVA Fund Options.....	414
15.2.1	General Account Reserves .....	414
15.2.2	Separate Account Reserves .....	415
15.3	Tax Reserve Issues.....	417
15.3.1	Section 817A Generally .....	417
15.3.2	Interest Rate Under Section 817A for Tax Reserves and for Company Share....	418
15.3.3	Proposed and Final Regulations.....	418
15.3.4	Section 811(d).....	420
15.3.5	Net Surrender Value.....	420
15.3.6	Statutory Cap.....	421
15.3.7	Required Interest .....	422
15.4	Tax Treatment of Assets under Section 817A.....	422
15.4.1	Transition Rules under Section 817A .....	423

**Appendix**

**Excerpts from NAIC Modified Guaranteed Annuities**

Table of Contents .....	425
Section 1. Purpose .....	425
Section 3. Applicability and Scope.....	425
Section 4. Definitions .....	425
Section 8. Reserve Liabilities .....	426
Section 9. Separate Accounts .....	426

**Actuarial Breakout 427**

Part I	Example of Typical Market Value Adjustment Formulas and How They Might Operate.....	427
Part II	Tax CARVM Reserve for A Modified Guaranteed Annuity	
	TABLE 15.1 428	

**ADDENDUM NO. I**

Internal Revenue Code Sections 803–807, 811, 812, 817, 817A, 846, 848 .....	429
---	-----

**ADDENDUM NO. II**

Rev. Rul. 87-26, Excerpts from Rev. Rul. 92-19, and Their Successor Rulings Regarding Tax Basis Mortality Tables and Interest Rates .....	457
Interest Rate Tables .....	465

**ADDENDUM NO. III**

Mortality and Morbidity Tables Prescribed,  
Where No Commissioners' Standard Tables Exist ..... 483  
§ 1.807-1(a). Mortality and Morbidity Tables..... 483

**GLOSSARY NO. I**

Glossary of Forms of Terms and Abbreviations Used in Text..... 485  
Glossary of Abbreviations ..... 485

**GLOSSARY NO. II**

Statutory Annual Statement Glossary of Key Pages and Exhibits ..... 495

**GLOSSARY NO. III**

Glossary of Forms of IRS Communication and Authoritative Guidance..... 497

