

INS 2

Filed Sept 3, 1968  
1:30 P.M.

STATE OF WISCONSIN )  
OFFICE OF THE COMMISSIONER OF INSURANCE ) SS.

STATE OF WISCONSIN SS  
DEPARTMENT OF STATE  
**RECEIVED AND FILED**  
SEP 3 1968  
ROBERT C. ZIMMERMAN  
SECRETARY OF STATE

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, S. C. Du Rose, Deputy Commissioner of Insurance, and custodian of the official records of said office, do hereby certify that the annexed order adopting a rule relating to separate accounts and variable contracts was issued by this office on September 3, 1968.

I further certify that said copy has been compared by me with the original on file in this office and that the same is a true copy thereof, and of the whole of such original.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the official seal of the Office of the Commissioner of Insurance in the City of Madison, State of Wisconsin, this 3d day of September, 1968.



S. C. Du Rose  
Deputy Commissioner of Insurance

ORDER OF THE OFFICE OF THE COMMISSIONER OF INSURANCE

Adopting Rules

Pursuant to authority vested in the Commissioner of Insurance by section 200.03 (2), Wis. Stats., the Commissioner of Insurance hereby adopts a rule as follows:

Section Ins 2.13 of the Wisconsin Administrative Code is adopted to read:

Ins 2.13 Separate accounts and variable contracts. (1) PURPOSE. This rule creates standards for establishing separate accounts and for issuing contracts on a variable basis, both as provided by section 206.385, Wis. Stats.

(2) DEFINITION. (a) The term "contract on a variable basis" or "variable contract," when used in this rule, shall mean any policy or contract which provides for insurance or annuity benefits which may vary according to the investment experience of any separate account or accounts maintained by the insurer as to such policy or contract, as provided for in section 206.385, Wis. Stats.

(b) "Agent," when used in this rule, shall mean any person licensed as a life insurance agent under the laws of this state.

(c) "Variable contract agent," when used in this rule, shall mean an agent who shall sell or offer to sell any contract on a variable basis.

(d) A "satisfactory alternative examination" to Part I of the written examination called for by paragraph (c) of subsection (9) of this rule shall include any securities examination which is declared by

the commissioner to be an equivalent examination on the basis of content and administration. The following examinations are deemed to be a satisfactory alternative examination;

1. The State Securities Sales Examination;
2. The National Association of Securities Dealers, Inc. Examination for Principals, or Examination for Qualification as a Registered Representative;
3. The various securities examinations required by the New York Stock Exchange, the American Stock Exchange, Pacific Stock Exchange, or any other registered national securities exchange;
4. The Securities and Exchange Commission test given pursuant to Section 15(b) (8) of the Securities Exchange Act of 1934 (15 U.S.C. sec. 78o (8));
5. The examination recommended for the testing of variable contract agents by the National Association of Insurance Commissioners, when adopted by the Insurance Department of any state or territory of the United States and approved for use by such Department by the Securities and Exchange Commission.

(3) QUALIFICATION OF INSURANCE COMPANIES TO ISSUE VARIABLE CONTRACTS.

(a) No company shall deliver or issue for delivery variable contracts within this state unless:

1. it is licensed or organized to do a life insurance or annuity business in this state; and
2. the commissioner is satisfied that its condition or method of operation in connection with the issuance of such contracts will not render its operation hazardous to the public or its policyholders in this state. In determining the qualification of a company requesting authority

to deliver such contracts within this state, the commissioner shall consider among other things:

- a. The history and financial condition of the company;
- b. The character, responsibility and fitness of the officers and directors of the company, and
- c. The law and regulation under which the company is authorized in the state of domicile to issue variable contracts.

(b) If the company is a subsidiary of an admitted life insurance company, or affiliated with such company by common management or ownership, it may be deemed by the commissioner to have satisfied the provisions of subsection (3) (a) 2. of this rule if either it or such admitted life company satisfies the aforementioned provisions; provided, further, that companies licensed and having a satisfactory record of doing business in this state for a period at least 3 years may be deemed to have satisfied the commissioner with respect to subsection (3) (a) 2. of this rule.

(c) Before any company shall deliver or issue for delivery variable contracts within this state it shall submit to the commissioner:

1. A general description of the kinds of variable contracts it intends to issue;

2. If requested by the commissioner, a copy of the statutes and regulations of its state of domicile under which it is authorized to issue variable contracts and

3. If requested by the commissioner, biographical data with respect to officers and directors of the company.

(4) SEPARATE ACCOUNTS. (a) A domestic company issuing variable contracts shall establish one or more separate accounts pursuant to section 206.385, Wis. Stats., subject to the following provisions:

1. Except as hereinafter provided, amounts allocated to any separate account and accumulation thereon may be invested and reinvested without regard to any requirements or limitations prescribed by the laws of this state governing the investments of life insurance companies; provided, that to the extent that the company's reserve liability with regard to a. benefits guaranteed as to dollar amount and duration, and b. funds guaranteed as to principal amount or stated rate of interest is maintained in any separate account, a portion of the assets of such separate account at least equal to such reserve liability shall be, except as the commissioner may otherwise approve, invested in accordance with the laws of this state governing the investments of life insurance companies. The investments in such separate account or accounts shall not be taken into account in applying the investment limitations applicable to the investments of the company.

2. With respect to 75% of the market value of the total assets in a separate account, no company shall purchase or otherwise acquire the securities of any issuer, other than securities issued or guaranteed as to principal or interest by the United States, if immediately after such purchase or acquisition the market value of such investment, together with prior investments of such separate account in such security taken at market, would exceed 10% of the market value of the assets of said separate account; provided, however, that the commissioner may waive such limitation if, in his opinion, such waiver will not render the operation of such separate account hazardous to the public or the policyholders in this state.

3. No company shall, whether for its separate accounts or otherwise, invest in the voting securities of a single issuer in an amount in excess

of 10% of the total issued and outstanding voting securities of such issuer provided that the foregoing shall not apply with respect to securities held in separate accounts, the voting rights in which are exercisable only in accordance with instructions from persons having interests in such accounts.

4. The limitations provided in subsection (4) (a) 2. and 3. of this rule shall not apply to the investment with respect to a separate account in the securities of an investment company registered under the Investment Company Act of 1940, as amended, provided that the investments of such investment company comply in substance with subsection (4) (a) 2. and 3. of this rule.

(b) Unless otherwise approved by the commissioner, assets allocated to a separate account shall be valued at their market value on the date of valuation, or if there is no readily available market, then as provided under the terms of the contract or the rules or other written agreement applicable to such separate account; provided, that the portion of the assets of such separate account equal to the company's reserve liability with regard to the benefits guaranteed and funds guaranteed referred to in subsection (4) (a) 1. a. and b. of this rule, if any, shall be valued in accordance with the rules otherwise applicable to the company's assets.

(c) If and to the extent so provided under the applicable contracts, that portion of the assets of any such separate account equal to the reserves and other contract liabilities with respect to such account shall not be chargeable with liabilities arising out of any other business the company may conduct.

(d) Notwithstanding any other provision of law, a company may:

1. with respect to any separate account registered with the Securities and Exchange Commission as a unit investment trust exercise voting rights

in connection with any securities of a regulated investment company registered under the Investment Company Act of 1940, as amended, and held in such separate accounts in accordance with instructions from persons having interests in such accounts ratably as determined by the company, or

2. with respect to any separate account registered with the Securities and Exchange Commission as a management investment company, establish for such account a committee, board, or other body, the members of which may or may not be otherwise affiliated with such company and may be elected to such membership by the vote of persons having interests in such account ratably as determined by the company. Such committee, board, or other body may have the power, exercisable alone or in conjunction with others, to manage such separate account and the investment of its assets.

A company, committee, board, or other body may make such other provisions in respect to any such separate account as may be deemed appropriate to facilitate compliance with requirements of any federal or state law now or hereafter in effect; provided that the commissioner approves such provisions as not hazardous to the public or the company's policyholders in this state.

(e) No sale, exchange, or other transfer of assets may be made by a company between any of its separate accounts or between any other investment account and one or more of its separate accounts unless, in case of a transfer into a separate account, such transfer is made solely to establish the account or to support the operation of the contracts with respect to the separate account to which the transfer is made, and unless such transfer, whether into or from a separate account, is made

1. by a transfer of cash, or
2. by a transfer of securities having a valuation which could be readily determined in the marketplace, provided that such transfer of securities is approved by the commissioner. The commissioner may authorize other transfers among such accounts if, in his opinion, such transfers would not be inequitable.

(f) The company shall maintain in each such separate account assets with a value at least equal to the reserves and other contract liabilities with respect to such account, except as may otherwise be approved by the commissioner.

(g) Section 201.24 (4) (b), Wis. Stats., shall apply to the members of any separate account's committee, board, or other similar body. No officer or director of such company nor any member of the committee, board, or body of a separate account shall receive directly or indirectly any commission or any other compensation with respect to the purchase or sale of assets of such separate account.

(5) FILING OF CONTRACT FORMS. (a) No variable contract may be issued or delivered in this state until the commissioner has approved the form or until the form and rates have been filed with the commissioner for 30 days.

(b) The filing letter shall be in duplicate and shall contain the following information:

1. An identifying form number and title for each form submitted.
2. A general description of the form(s).
3. A listing of the types of policies to which rider or endorsement forms will be attached.
4. The form number and date of approval by the commissioner of any form to be superseded.



(c) One copy of all forms or rates submitted for approval shall be submitted with a copy of the application attached if the application is to be a part of the contract. If the application was previously approved, the form number and date of approval will suffice.

(d) All forms should be completed with hypothetical data to show their use and should include a correct table of values. Variable information in forms should be explained.

(e) An actuarial statement of methods used to calculate values in the contract should be included.

(6) CONTRACTS PROVIDING FOR VARIABLE BENEFITS. (a) Any variable contract providing benefits payable in variable amounts delivered or issued for delivery in this state shall contain a statement of the essential features of the procedures to be followed by the insurance company in determining the dollar amount of such variable benefits. Any such contract, including a group contract and any certificate issued thereunder, shall state that such dollar amount will vary to reflect investment experience and shall contain on its first page, in a prominent position, a clear statement to the effect that the benefits thereunder are on a variable basis.

(b) Illustrations of benefits payable under any contract providing benefits payable in variable amounts shall not include projections of past investment experience into the future or attempted predictions of future investment experience; provided that nothing contained herein is intended to prohibit use of hypothetical assumed rates of return to illustrate possible levels of annuity payments.

(c) No individual variable annuity contract calling for the payment of periodic stipulated payments shall be delivered or issued for delivery

in this state unless it contains in substance the following provisions or provisions which in the opinion of the commissioner are more favorable to the holders of such contracts:

1. a provision that there shall be a period of grace of 30 days or of one month, within which any stipulated payment to the insurer falling due after the first may be made, during which period of grace the contract shall continue in force. The contract may include a statement of the basis for determining the date as of which any such payment received during the period of grace shall be applied to produce the values under the contract arising therefrom;

2. a provision that, at any time within 3 years from the date of default, in making periodic stipulated payments to the insurer during the life of the annuitant and unless the cash surrender value has been paid, the contract may be reinstated upon payment to the insurer of such overdue payments as required by the contract, and of all indebtedness to the insurer on the contract, including interest. The contract may include a statement of the basis for determining the date as of which the amount to cover such overdue payments and indebtedness shall be applied to produce the values under the contract arising therefrom;

3. a provision specifying the options available in the event of default in a periodic stipulated payment. Such options may include an option to surrender the contract for a cash value as determined by the contract, and shall include an option to receive a paid-up annuity if the contract is not surrendered for cash, the amount of such paid-up annuity being determined by applying the value of the contract at the annuity commencement date in accordance with the terms of the contract.

(d) Any individual variable annuity contract delivered or issued for delivery in this state shall stipulate the expense, mortality, and

investment increment factors to be used in computing the dollar amount of variable benefits or other contractual payments or values thereunder, and may guarantee that expense and/or mortality results shall not adversely affect such dollar amounts. "Expense," as used in this paragraph, may exclude some or all taxes, as stipulated in the contract. In computing the dollar amount of variable benefits or other contractual payments or values under an individual variable annuity contract:

1. The annual net investment increment assumption shall not exceed 5%, except with the approval of the commissioner;

2. To the extent that the level of benefits may be affected by mortality results, the mortality factor shall be determined from the Annuity Mortality Table for 1949, Ultimate, or any modification of that table not having a higher mortality rate at any age.

(e) The reserve liability for variable annuities shall be established pursuant to the requirements of section 206.201, Wis. Stats., in accordance with actuarial procedures that recognize the variable nature of the benefits provided.

(7) REQUIRED REPORTS. (a) Any company issuing individual variable contracts providing benefits in variable amounts shall mail to the contractholder at least once in each contract year after the first at his last address known to the company, a statement or statements reporting the investments held in the separate account and, in the case of contracts under which payments have not yet commenced, a statement reporting as of a date not more than 4 months previous to the date of mailing:

1. the number of accumulation units credited to such contracts and the dollar value of a unit, or

2. the value of the contractholder's account.

(b) The company shall submit annually to the commissioner a statement of the business of its separate account(s) in such form as required by the annual statement form designated as Life and Accident and Health - Separate Account Business (22-46). (See Wis. Adm. Code section Ins 7.01 (5) (e)).

(8) FOREIGN COMPANIES. If the law or regulation in the place of domicile of a foreign company provides a degree of protection to the policyholders and the public which is substantially equal to that provided by this rule, the commissioner, to the extent deemed appropriate by him in his discretion, may consider compliance with such law or regulation as compliance with this rule.

(9) EXAMINATION OF AGENTS AND OTHER PERSONS. (a) 1. No agent shall be eligible to sell or offer for sale a contract on a variable basis unless prior to making any solicitation or sale of such a contract, he also be licensed as a variable contract agent.

2. Any agent who participates only in the sale or offering for sale of variable contracts that are not registered under the federal Securities Act of 1933, as amended, need not be licensed as a variable contract agent.

(b) Any agent applying for a license as a variable contract agent shall do so by filing with the commissioner:

1. Request for Agent Qualification Examination, Notice to Report for Examination, Notice of Examination Grades (11-4, 11-4A, and 11-4B). (See Wis. Adm. Code section Ins 7.01 (4) (m)).

2. Application for Resident Insurance Agent License (11-1). (See Wis. Adm. Code section Ins 7.01 (4) (c)).

3. Resident Insurance Agent License (11-2). (See Wis. Adm. Code section Ins 7.01 (4) (d)).

(c) The licensing as a variable contract agent of any agent complying with paragraph (b) of this subsection shall not become effective until such agent shall have satisfactorily passed a written examination upon securities and variable contracts. Such examination shall be divided into 2 parts. Part I shall be on securities generally. Part II shall deal with variable contracts, and shall be composed of at least 15 questions, but not more than 50 questions, concerning the history, purpose, regulation, and sale of contracts on a variable basis.

(d) The examination will be given in such places and at such times as the commissioner shall from time to time designate. Upon application for license as a variable contract agent, the applicant shall be notified of the date of the next examination.

(e) Any applicant for license as a variable contract agent shall not be required to take Part I of the NAIC examination if, at the time of application, evidence is presented that the applicant

1. has previously passed a satisfactory alternative examination as defined in subsection (2) (d) of this rule or

2. is currently registered with the federal Securities and Exchange Commission as a broker-dealer, or is currently associated with a broker-dealer and has met qualification requirements with respect to such association.

(f) Every applicant applying for license as a variable contract agent shall satisfactorily complete Part II of the examination required by paragraph (c) of this subsection, with a grade of at least 70%, or shall present evidence of successful completion, prior to July 1, 1968, of either a variable contract examination given under the supervision of an insurance department of any state or territory of the United States which has adopted Part II of the examination recommended

for the testing of variable contract agents by the National Association of Insurance Commissioners or has been examined and licensed by any such department prior to its adoption of the National Association of Insurance Commissioners Model Regulation approved by that association at its June, 1968, meeting.

(g) 1. Any applicant who fails to pass Part I of the examination required by paragraph (c) of this subsection may not take Part I of the examination again until 30 days after initially taking it. After a second such failure, such applicant may not take the examination again until 60 days after taking the second examination. After a third and any subsequent such failure, such applicant may not take the examination again until 90 days after the third and any subsequent examinations.

2. Any applicant failing to pass Part II of the examination may take Part II again 20 days after the first and any subsequent examinations.

(h) Every request to take a variable contract examination (see subsection (9) (b) 1. of this rule) shall be accompanied by an examination fee of \$5. A fee of \$5 will be charged for each re-examination administered to an applicant.

(i) Report of the results of any examination given pursuant to this rule shall be made on Notice of Examination Grades Form 11-4B. (See Wis. Adm. Code section Ins 7.01 (4) (m)). Notice will also be given to the Securities and Exchange Commission on forms supplied.

(j) Except as modified by this rule, the rules of the commissioner of insurance governing the licensing of life insurance agents, including examinations therefor, shall apply to subsection (9).

(k) Part I of the written examination provided for in paragraph (c) of this subsection shall also be administered to other persons who are not required to be licensed to sell life insurance in this state upon their

(o) The commissioner may reject any application or suspend or revoke or refuse to renew any variable contract agent's license upon any ground that would bar such applicant or such agent from being licensed to sell life insurance contracts in this state. The rules governing any proceeding relating to the suspension or revocation of a life insurance agent's license shall also govern any proceeding for suspension or revocation of a variable contract agent's license.

(p) Renewal of a variable contract agent's license shall follow the same procedure established for renewal of an agent's license to sell life insurance contracts in this state.

Note: Copies of the Securities Act of 1933, May 27, 1933, 48 Stat. 74, Pub. L. 22, ch. 38, Title 15, U.S.C., as amended; Section 15(b)(8) Securities Exchange Act of 1934, as amended August 20, 1964, Pub. L. 88-467, sec. 6, 78 Stat. 570, 15 U.S.C., sec. 78o (8); and the Investment Company Act of 1940, August 22, 1940, Pub. L. 768, ch. 686, Title 15, U.S.C., as amended, are available for inspection at the Office of the Commissioner of Insurance, the offices of the Secretary of State, and the offices of the Revisor of Statutes Bureau, or the enactments may be procured for personal use from the U. S. Government Printing Office, Washington, D. C.

Copies of the Annuity Mortality Table for 1949, Ultimate are available for inspection at the same offices or may be procured for personal use from the Society of Actuaries, 208 South La Salle Street, Chicago, Illinois 60604.

The examination given to meet the requirements of subsection (9) (c) will be based upon the examination recommended for testing of variable contract agents by the National Association of Insurance Commissioners in its present form or as it may be amended.

The rule herein contained shall take effect on October 1, 1968, as provided in section 227.026 (1), Wis. Stats.

Office of the Commissioner of Insurance



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S. C. Du Rose  
Deputy Commissioner of Insurance

Dated September 3, 1968



State of Wisconsin \ OFFICE OF THE COMMISSIONER OF INSURANCE

Warren P. Knowles  
Governor

ROBERT D. HAASE  
COMMISSIONER

September 3, 1968

4802 SHEBOYGAN AVENUE  
MADISON, WISCONSIN 53702

The Honorable Bronson C. La Follette  
Attorney General  
114 East - State Capitol  
Madison, Wisconsin 53702

Mr. James J. Burke  
Revisor of Statutes  
321 N.E. - State Capitol  
Madison, Wisconsin 53702

Gentlemen:

Wisconsin Administrative Code section Ins 2.13  
Separate accounts and variable contracts

I intend to adopt the captioned administrative rule, which will regulate life insurance companies establishing separate accounts and issuing variable contracts, establish standards for variable contracts and policies, and provide for the examination of agents who will sell the variable contracts.

The authority for life insurance companies to establish separate accounts and to issue variable contracts and for life insurance agents to sell such contracts is included in section 206.385, Wisconsin Statutes. This rule is based on the Model Variable Contract Regulation adopted by the National Association of Insurance Commissioners at its June, 1968, meeting, with changes made to fit it into the Wisconsin Administrative Code and to recognize Wisconsin statutes and procedures.

Subsection (6) (d) 2. of the rule refers to the Annuity Mortality Table for 1949, Ultimate. This table is included in various actuarial publications and copies may be procured from the Society of Actuaries.

It is requested that you consent, under the authority granted by section 227.025, Wisconsin Statutes, to the proposed incorporation by reference of the Annuity Mortality Table for 1949, Ultimate. Copies of this table will be on file with this office, with the Secretary of State, and with the Revisor of Statutes.

Very truly yours,

S. C. Du Rose  
Deputy Commissioner of Insurance

SCD:ecm



THE STATE OF WISCONSIN

OFFICE OF ATTORNEY GENERAL

MADISON 53702

September 6, 1968

Mr. Robert D. Haase  
Commissioner of Insurance  
Office of Commissioner of Insurance  
4802 Sheboygan Avenue  
Madison, Wisconsin 53702

Dear Mr. Haase: Re: Wisconsin Administrative Code  
section Ins 2.13 - Separate  
Accounts and Variable Contracts.

Pursuant to the request contained in your letter of September 3, 1968, and it appearing that the rules which you propose to adopt are of limited public interest and the proposed incorporated standards are readily available in published form, consent is hereby given, under the authority granted in section 227.025, Wis. Stats., for the incorporation by reference into the proposed Wisconsin Administrative Code, Section INS 2.13, of the Annuity Mortality Table for 1949, Ultimate, copies of which you will place on file in your office and with the Secretary of State and with the Revisor of Statutes.

Yours very truly,

*15/ BRONSON C. La Follette*  
BRONSON C. LA FOLLETTE  
Attorney General

*James J. Burke*  
JAMES J. BURKE  
Revisor of Statutes

TABLE 9  
 ANNUITY TABLE FOR 1949 (WITHOUT PROJECTION)  
 ELEMENTARY FUNCTIONS AND ANNUITY VALUES

AGE $x$	MALES					
	Ultimate			First Year $1000q_{(x)}$	$a_x$ at 2½% Interest	$a_{(x)}$ at 2½% Interest
	$l_x$	$d_x$	$1000q_x$			
10.....	1000.0000	.4830	.483	.362	31.028	31.033
11.....	999.5170	.4918	.492	.369	30.820	30.824
12.....	999.0252	.5015	.502	.376	30.606	30.609
13.....	998.5237	.5112	.512	.384	30.386	30.390
14.....	998.0125	.5230	.524	.393	30.162	30.166
15.....	997.4895	.5357	.537	.403	29.932	29.936
16.....	996.9538	.5493	.551	.413	29.697	29.701
17.....	996.4045	.5650	.567	.425	29.456	29.461
18.....	995.8395	.5816	.584	.438	29.210	29.215
19.....	995.2579	.6001	.603	.452	28.958	28.963
20.....	994.6578	.6207	.624	.468	28.700	28.704
21.....	994.0371	.6441	.648	.486	28.435	28.440
22.....	993.3930	.6695	.674	.506	28.165	28.170
23.....	992.7235	.6969	.702	.526	27.889	27.894
24.....	992.0266	.7272	.733	.550	27.606	27.611
25.....	991.2994	.7613	.768	.576	27.317	27.322
26.....	990.5381	.7984	.806	.604	27.021	27.027
27.....	989.7397	.8403	.849	.637	26.719	26.725
28.....	988.8994	.8861	.896	.672	26.411	26.416
29.....	988.0133	.9356	.947	.710	26.095	26.101
30.....	987.0777	.9910	1.004	.753	25.773	25.780
31.....	986.0867	1.0522	1.067	.800	25.444	25.451
32.....	985.0345	1.1190	1.136	.852	25.108	25.115
33.....	983.9155	1.1935	1.213	.910	24.765	24.773
34.....	982.7220	1.2746	1.297	.973	24.415	24.422
35.....	981.4474	1.3652	1.391	1.043	24.057	24.066
36.....	980.0822	1.4642	1.494	1.120	23.693	23.702
37.....	978.6180	1.5726	1.607	1.205	23.322	23.331
38.....	977.0454	1.6932	1.733	1.300	22.943	22.954
39.....	975.3522	1.8259	1.872	1.404	22.558	22.568
40.....	973.5263	1.9714	2.025	1.519	22.165	22.176
41.....	971.5549	2.1569	2.220	1.665	21.765	21.777
42.....	969.3980	2.4051	2.481	1.861	21.359	21.372
43.....	966.9929	2.7114	2.804	2.103	20.947	20.963
44.....	964.2815	3.0732	3.187	2.390	20.532	20.548
45.....	961.2083	3.4844	3.625	2.719	20.112	20.130
46.....	957.7239	3.9420	4.116	3.087	19.690	19.711
47.....	953.7819	4.4418	4.657	3.493	19.266	19.288
48.....	949.3401	4.9802	5.246	3.934	18.840	18.864
49.....	944.3599	5.5528	5.880	4.410	18.412	18.439
50.....	938.8071	6.1558	6.557	4.918	17.984	18.014
51.....	932.6513	6.7869	7.277	5.458	17.556	17.587
52.....	925.8644	7.4421	8.038	6.028	17.126	17.161
53.....	918.4223	8.1189	8.840	6.630	16.697	16.734
54.....	910.3034	8.8136	9.682	7.262	16.267	16.307
55.....	901.4898	9.5242	10.565	7.924	15.837	15.879
56.....	891.9656	10.2496	11.491	8.618	15.406	15.451
57.....	881.7160	10.9862	12.460	9.345	14.975	15.022
58.....	870.7298	11.7340	13.476	10.107	14.543	14.592

TABLE 9—Continued

AGE <i>x</i>	MALES					
	Ultimate			First Year 1000 <i>q<sub>x</sub></i>	<i>a<sub>x</sub></i> at 2½% Interest	<i>a<sub>(x)</sub></i> at 2½% Interest
	<i>l<sub>x</sub></i>	<i>d<sub>x</sub></i>	1000 <i>q<sub>x</sub></i>			
59.....	858.9958	12.4915	14.542	10.906	14.110	14.162
60.....	846.5043	13.2580	15.662	11.746	13.676	13.730
61.....	833.2463	14.0560	16.869	12.652	13.241	13.298
62.....	819.1903	14.9084	18.199	13.649	12.805	12.864
63.....	804.2819	15.8170	19.666	14.750	12.368	12.430
64.....	788.4649	16.7809	21.283	15.962	11.932	11.997
65.....	771.6840	17.7997	23.066	17.300	11.496	11.564
66.....	753.8843	18.8697	25.030	18.772	11.062	11.132
67.....	735.0146	19.9873	27.193	20.395	10.629	10.703
68.....	715.0273	21.1484	29.577	22.183	10.199	10.277
69.....	693.8789	22.3443	32.202	24.152	9.773	9.855
70.....	671.5346	23.5655	35.092	26.319	9.351	9.436
71.....	647.9691	24.7991	38.272	28.704	8.933	9.022
72.....	623.1700	26.0304	41.771	31.328	8.521	8.614
73.....	597.1396	27.2415	45.620	34.215	8.115	8.212
74.....	569.8981	28.4106	49.852	37.389	7.715	7.816
75.....	541.4875	29.5116	54.501	40.876	7.323	7.428
76.....	511.9759	30.5184	59.609	44.707	6.938	7.049
77.....	481.4575	31.3987	65.216	48.912	6.563	6.677
78.....	450.0588	32.1198	71.368	53.526	6.196	6.315
79.....	417.9390	32.6465	78.113	58.585	5.839	5.963
80.....	385.2925	32.9437	85.503	64.127	5.492	5.621
81.....	352.3488	32.9774	93.593	70.195	5.156	5.289
82.....	319.3714	32.7174	102.443	76.832	4.830	4.968
83.....	286.6540	32.1376	112.113	84.085	4.516	4.659
84.....	254.5164	31.2213	122.669	92.002	4.214	4.361
85.....	223.2951	29.9613	134.178	100.634	3.923	4.075
86.....	193.3338	28.3638	146.709	.....	3.644	.....
87.....	164.9700	26.4501	160.333	.....	3.378	.....
88.....	138.5199	24.2582	175.124	.....	3.123	.....
89.....	114.2617	21.8412	191.151	.....	2.881	.....
90.....	92.42050	19.26829	208.485	.....	2.651	.....
91.....	73.15221	16.61960	227.192	.....	2.433	.....
92.....	56.53261	13.98232	247.332	.....	2.226	.....
93.....	42.55029	11.44433	268.960	.....	2.032	.....
94.....	31.10596	9.08661	292.118	.....	1.849	.....
95.....	22.01935	6.97648	316.834	.....	1.677	.....
96.....	15.04287	5.16154	343.122	.....	1.517	.....
97.....	9.881330	3.665707	370.973	.....	1.366	.....
98.....	6.215623	2.488437	400.352	.....	1.227	.....
99.....	3.727186	1.607159	431.199	.....	1.097	.....
100.....	2.120027	.982452	463.415	.....	.977	.....
101.....	1.137575	.565227	496.870	.....	.865	.....
102.....	.5723480	.3041394	531.389	.....	.763	.....
103.....	.2682086	.1520091	566.757	.....	.669	.....
104.....	.1161995	.0700351	602.714	.....	.583	.....
105.....	.04616440	.02949702	638.956	.....	.503	.....
106.....	.01666738	.01125286	675.143	.....	.428	.....
107.....	.00541452	.00384917	710.898	.....	.352	.....
108.....	.00156535	.00116747	745.822	.....	.248	.....
109.....	.00039788	.00039788	1000.000	.....	0	.....

TABLE 9—Continued  
 ANNUITY TABLE FOR 1949 (WITHOUT PROJECTION)  
 ELEMENTARY FUNCTIONS AND ANNUITY VALUES

Age $x$	FEMALES					
	Ultimate			First Year 1000 $q_x$	$a_x$ at 2½% Interest	$a_{\overline{x} }$ at 2½% Interest
	$l_x$	$d_x$	1000 $q_x$			
10.....	1000.0000	.1910	.191	.096	32.208	32.211
11.....	999.8090	.2080	.208	.104	32.019	32.022
12.....	999.6010	.2249	.225	.112	31.826	31.830
13.....	999.3761	.2418	.242	.121	31.629	31.633
14.....	999.1343	.2598	.260	.130	31.428	31.432
15.....	998.8745	.2777	.278	.139	31.222	31.227
16.....	998.5968	.2956	.296	.148	31.012	31.016
17.....	998.3012	.3145	.315	.158	30.796	30.801
18.....	997.9867	.3333	.334	.167	30.576	30.581
19.....	997.6534	.3532	.354	.177	30.351	30.357
20.....	997.3002	.3750	.376	.188	30.121	30.126
21.....	996.9252	.3968	.398	.199	29.885	29.892
22.....	996.5284	.4195	.421	.210	29.645	29.651
23.....	996.1089	.4443	.446	.223	29.399	29.405
24.....	995.6646	.4709	.473	.236	29.147	29.154
25.....	995.1937	.4986	.501	.250	28.890	28.897
26.....	994.6951	.5282	.531	.266	28.627	28.634
27.....	994.1669	.5597	.563	.282	28.358	28.367
28.....	993.6072	.5942	.598	.299	28.084	28.092
29.....	993.0130	.6316	.636	.318	27.803	27.812
30.....	992.3814	.6718	.677	.338	27.516	27.525
31.....	991.7096	.7150	.721	.360	27.223	27.233
32.....	990.9946	.7631	.770	.385	26.924	26.934
33.....	990.2315	.8140	.822	.411	26.618	26.629
34.....	989.4175	.8697	.879	.440	26.306	26.318
35.....	988.5478	.9312	.942	.471	25.988	25.999
36.....	987.6166	.9975	1.010	.505	25.662	25.675
37.....	986.6191	1.0705	1.085	.542	25.330	25.344
38.....	985.5486	1.1501	1.167	.584	24.992	25.007
39.....	984.3985	1.2364	1.256	.628	24.647	24.663
40.....	983.1621	1.3322	1.355	.678	24.295	24.311
41.....	981.8299	1.4374	1.464	.732	23.936	23.953
42.....	980.3925	1.5520	1.583	.792	23.570	23.589
43.....	978.8405	1.6787	1.715	.858	23.198	23.217
44.....	977.1618	1.8165	1.859	.930	22.818	22.840
45.....	975.3453	1.9692	2.019	1.010	22.433	22.455
46.....	973.3761	2.1375	2.196	1.098	22.040	22.065
47.....	971.2386	2.3222	2.391	1.196	21.641	21.667
48.....	968.9164	2.5250	2.606	1.303	21.235	21.262
49.....	966.3914	2.7494	2.845	1.422	20.822	20.852
50.....	963.6420	2.9960	3.109	1.554	20.404	20.436
51.....	960.6460	3.2287	3.361	1.680	19.979	20.013
52.....	957.4173	3.4869	3.642	1.821	19.548	19.584
53.....	953.9304	3.7747	3.957	1.978	19.110	19.147
54.....	950.1557	4.0952	4.310	2.155	18.665	18.706
55.....	946.0605	4.4512	4.705	2.352	18.215	18.257
56.....	941.6093	4.8455	5.146	2.573	17.758	17.804
57.....	936.7638	5.2833	5.640	2.820	17.296	17.345
58.....	931.4805	5.7687	6.193	3.096	16.829	16.882

TABLE 9—Continued

AGE <i>x</i>	FEMALES					
	Ultimate			First Year 1000 <i>q<sub>x</sub></i>	<i>a<sub>x</sub></i> at 2½% Interest	<i>a<sub>(x)</sub></i> at 2½% Interest
	<i>l<sub>x</sub></i>	<i>d<sub>x</sub></i>	1000 <i>q<sub>x</sub></i>			
59.....	925.7118	6.3059	6.812	3.406	16.358	16.414
60.....	919.4059	6.8992	7.504	3.752	15.882	15.942
61.....	912.5067	7.5537	8.278	4.139	15.402	15.466
62.....	904.9530	8.2749	9.144	4.572	14.919	14.988
63.....	896.6781	9.0672	10.112	5.056	14.433	14.507
64.....	887.6109	9.9368	11.195	5.598	13.945	14.023
65.....	877.6741	10.8884	12.406	6.203	13.455	13.540
66.....	866.7857	11.9261	13.759	6.880	12.965	13.055
67.....	854.8596	13.0554	15.272	7.636	12.474	12.571
68.....	841.8042	14.2795	16.963	8.482	11.984	12.088
69.....	827.5247	15.6013	18.853	9.426	11.496	11.607
70.....	811.9234	17.0212	20.964	10.482	11.010	11.128
71.....	794.9022	18.5379	23.321	11.660	10.527	10.652
72.....	776.3643	20.1498	25.954	12.977	10.047	10.181
73.....	756.2145	21.8485	28.892	14.446	9.573	9.715
74.....	734.3660	23.6253	32.171	16.086	9.104	9.256
75.....	710.7407	25.4651	35.829	17.914	8.642	8.802
76.....	685.2756	27.3473	39.907	19.954	8.187	8.358
77.....	657.9283	29.2456	44.451	22.226	7.741	7.920
78.....	628.6827	31.1280	49.513	24.756	7.303	7.494
79.....	597.5547	32.9533	55.147	27.574	6.876	7.076
80.....	564.6014	34.6750	61.415	30.708	6.459	6.671
81.....	529.9264	36.2380	68.383	34.192	6.054	6.276
82.....	493.6884	37.5801	76.121	38.060	5.661	5.894
83.....	456.1083	38.6356	84.707	42.354	5.280	5.524
84.....	417.4727	39.3359	94.224	47.112	4.913	5.169
85.....	378.1368	39.6136	104.760	52.380	4.560	4.827
86.....	338.5232	39.4071	116.409	.....	4.221	.....
87.....	299.1161	38.6667	129.270	.....	3.896	.....
88.....	260.4494	37.3602	143.445	.....	3.586	.....
89.....	223.0892	35.4801	159.040	.....	3.292	.....
90.....	187.6091	33.0494	176.161	.....	3.012	.....
91.....	154.5597	30.1257	194.913	.....	2.747	.....
92.....	124.4340	26.8030	215.399	.....	2.498	.....
93.....	97.63100	23.20826	237.714	.....	2.263	.....
94.....	74.42274	19.49452	261.943	.....	2.043	.....
95.....	54.92822	15.82773	288.153	.....	1.838	.....
96.....	39.10049	12.37104	316.391	.....	1.646	.....
97.....	26.72945	9.26641	346.674	.....	1.468	.....
98.....	17.46304	6.61825	378.986	.....	1.304	.....
99.....	10.84479	4.48178	413.266	.....	1.152	.....
100.....	6.363010	2.859537	449.400	.....	1.012	.....
101.....	3.503473	1.706948	487.216	.....	.884	.....
102.....	1.796525	.945829	526.477	.....	.768	.....
103.....	.8506960	.4822357	566.872	.....	.661	.....
104.....	.3684603	.2240301	608.017	.....	.565	.....
105.....	.1444302	.0938015	649.459	.....	.478	.....
106.....	.05062870	.03496793	690.674	.....	.399	.....
107.....	.01566077	.01144946	731.092	.....	.321	.....
108.....	.00421131	.00324315	770.105	.....	.224	.....
109.....	.00096816	.00096816	1000.000	.....	0	.....