THE WORKERS' COMPENSATION
RATING AND INSPECTION BUREAU OF MASSACHUSETTS
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CIRCULAR LETTER NO. 1757

To All Members and Subscribers of the Bureau:

ANNIVERSARY DATE RATING

This Circular Letter is intended to answer questions about how to handle Rate Deviations, Premium Discounts and Expense Constants for policies subject to the Anniversary Date Rating Rule.[1]

Exhibit 1 shows an example of a calculation of a rate deviation. As shown, the manual rates (at Bureau rate level) and corresponding rate deviation (if any) applicable on the normal anniversary rating date apply to the portion of the policy prior to the next normal anniversary rating date. The manual rates (at Bureau rate level) and corresponding rate deviation (if any) applicable on the next normal anniversary date apply to the portion of the policy subsequent to this same date.

Exhibit 2 shows an example of a calculation of premium discounts.[2] Each layer of premium is split into two parts in proportion to the policy standard premium prior to and the policy standard premium on or after the normal anniversary date. Then the premium discounts applicable on the normal anniversary date are applied to the portion of premium prior to the next normal anniversary date, while the premium discounts applicable on the next anniversary date are applied to the portion of premium on or after this same date.

Exhibit 3 shows examples of the calculation of expense constants.[3] In each case one calculates two expense constants and weights them together. The first

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[1] For your convenience the Anniversary Date Rating Rule is attached as Exhibit 4.

[2] Note that the premium discount tables changed as of 5/1/96 in Massachusetts, as described in Circular Letter No. 1750.

[3] Note that expense constants changed as of 5/1/96 in Massachusetts, as described in Circular Letter No. 1749.

expense constant is that which applied on the normal anniversary date, based on the standard premium for the entire policy.[4] The second expense constant is that which applied on the next normal anniversary date, based on the standard premium for the entire policy. These two expense constants are weighted together in proportion to the amount of time prior to the normal anniversary date and on or after the normal anniversary date.

All of these examples only apply when the anniversary date rating rule applies. If you have any further questions, contact Neil Gibbons, Actuarial Assistant, at the Bureau.

HOWARD C. MAHLER
Vice President and Actuary

HCM/dc 2983
Enclosure

[4] The size of the expense constant in Massachusetts is less for the smallest policies.

How to Calculate Rate Deviations for Anniversary Rated Risks

If a policy commences **MORE THAN** three months after the normal anniversary rating date, the following procedure shall apply for calculating rate deviations:

Rate Deviations

(1) The Rate Deviation applicable on the normal anniversary rating date shall apply to the new policy until the next anniversary rating date.

(2) The Rate Deviation applicable on the next normal anniversary rating date shall apply to the new policy from this same date until the policy expires.

Example 1:

Manual Premium (at Bureau Rate Level):			$20,000
Anniversary Rating Date:			10/1/95
10/1/95	Mod: 1.05	ARAP: 1.05	
10/1/96	Mod: 1.15	ARAP: 1.10	
Policy Effective Date:			6/1/96
10% Rate Deviation :			9/1/95
5% Rate Deviation:			7/1/96
Manual Rate Change:			5/1/96
Assume Class Manual Rate:			Prior to 5/1/96: $5.00
			After 5/1/96: $4.00

The 10% deviation (as well as rates, experience modification and ARAP applicable on 10/1/95) will apply to the portion of the policy running from 6/1/96 to 10/1/96 (4 mos.) and the 5% deviation (as well as rates, experience modification and ARAP applicable on 10/1/96) will apply to the remaining portion of the policy running from 10/1/96 to 6/1/97 (8 mos.)

Application:

	6/1/96 to 10/1/96	10/1/96 to 6/1/97	Total
Bureau Level Manual Rate for Class	$5.00	$4.00	
Class Payroll	130,000	337,500	
Bureau Level Manual Premium	6,500	13,500	
Rate Deviation	.90	.95	
Deviated Manual Premium	5,850	12,825	
Mod	1.05	1.15	
Standard Premium (@ Deviated Rate)	6,143	14,749	
ARAP Factor	1.05	1.10	
Standard + ARAP (@ Deviated Rate)	6,450	16,224	**22,674**

(Note: This example assumes a risk with only one classification for convenience only, risks with more than one classification are done the same way.)

Example 2:

Manual Premium (at Bureau Rate Level):			$20,000
Anniversary Rating Date:			10/1/95
10/1/95	Mod: 1.05	ARAP: 1.05	
10/1/96	Mod: 1.15	ARAP: 1.10	
Policy Effective Date:			6/1/96
No Rate Deviation:			Prior to 1/1/96
10% Rate Deviation :			1/1/96
5% Rate Deviation:			7/1/96
Manual Rate Change:			5/1/96
Assume Class Manual Rate:			Prior to 5/1/96: $5.00 After 5/1/96: $4.00

No deviation (although rates, experience modification and ARAP applicable on 10/1/95) will apply to the portion of the policy running from 6/1/96 to 10/1/96 (4 mos.) and the 5% deviation (as well as rates, experience modification and ARAP applicable on 10/1/96) will apply to the remaining portion of the policy running from 10/1/96 to 6/1/97 (8 mos.)

Application:

	6/1/96 to 10/1/96	10/1/96 to 6/1/97	Total
Bureau Level Manual Rate for class	$5.00	$4.00	
Class Payroll	130,000	337,500	
Bureau Level Manual Premium	6,500	13,500	
Rate Deviation	1.00	.95	
Deviated Manual Premium	6,500	12,825	
Mod	1.05	1.15	
Standard Premium (@ Deviated Rate)	6,825	14,749	
ARAP Factor	1.05	1.10	
Standard + ARAP (@ Deviated Rate)	7,166	16,224	**23,390**

(Note: This example assumes a risk with only one classification for convenience only, risks with more than one classification are done the same way.)

How to Calculate Premium Discounts for Anniversary Rated Risks

If a policy commences **MORE THAN** three months after the normal anniversary rating date, the following procedure shall apply for calculating premium discounts:

Premium Discounts

(1) Split the total policy Standard Premium into as many layers as possible based on the Premium Discount Tables applicable for this policy.

(2) The Premium Discount Table applicable on the normal anniversary rating date shall apply to the new policy until the next normal anniversary rating date.

(3) The Premium Discount Table applicable on the next anniversary rating date shall apply to the new policy from this same date until the policy expires.

(4) Divide each layer from (1) above such that the Standard Premium as determined from (2) and (3) above are appropriately applied to the applicable premium discount tables.

(5) Once the appropriate portions of Standard Premium in each layer and premium discount tables have been determined, calculate the premium discount for each portion. Combine each of these calculated premium discounts into a total premium discount for the policy.

Example: Assume Stock Discount in effect prior to 5/1/96 and
Type A Discount in effect on and after 5/1/96.

Standard Premium of Policy:	$20,000
Anniversary Rating Date:	10/1/95
Policy Effective Date:	2/1/96

Assume for this example that 2/3 of the Standard Premium is from prior to the anniversary date while 1/3 is from subsequent to the anniversary date.

Premium Discount Calculation

Graduation of Premium		Stock Discount	Stock Premium in Layer	Stock Premium Discount	Type A Discount	Type A Premium in Layer	Type A Premium Discount	Total Premium In Layer
First	5,000	0.0%	3,333	0	0.0%	1,667	0	5,000
Next	5,000	10.9%	3,333	363	0.0%	1,667	0	5,000
Next	90,000	10.9%	6,667	727	9.1%	3,333	303	10,000
Next	100,000	12.6%	0	0	9.1%	0	0	0
Next	300,000	12.6%	0	0	11.3%	0	0	0
Next	1,250,000	14.4%	0	0	11.3%	0	0	0
Over	1,750,000	14.4%	0	0	12.3%	0	0	0
Total			13,333	1,090		6,667	303	20,000

Total Premium Discount:

= (portion from 2/1/96 to 10/1/96) + (portion from 10/1/96 to 2/1/97)

= $1,090 + $303

= $1,393

The correct Premium Discount for this risk is $1,393.

How to Calculate Expense Constants for Anniversary Rated Risks

If a policy commences **MORE THAN** three months after the normal anniversary rating date, the following procedure shall apply for calculating expense constants:

Expense Constants

(1) The Expense Constant applicable on the normal anniversary rating date shall apply to the new policy until the next normal anniversary rating date. The Standard Premium for the **entire** policy is used to determine which expense constant applies.

(2) The Expense Constant applicable on the next normal anniversary rating date shall apply to the new policy from this same date until the policy expires. Again, the Standard Premium for the **entire** policy is used to determine which expense constant applies.

(3) The two Expense Constants are weighted together based on the time periods as determined from (1) and (2) above.

Given:

Expense Constants effective prior to 5/1/96	
For risks developing at least $150 in Standard Premium:	$160
For risks developing less than $150 in Standard Premium:	$80

Expense Constants effective on and after 5/1/96	
For risks developing at least $200 in Standard Premium:	$190
For risks developing less than $200 in Standard Premium:	$95

Example 1:

Standard Premium of Policy:	$175
Anniversary Rating Date:	2/1/96
Policy Effective Date:	8/1/96

For the portion of the policy represented by (1) above the Expense Constant would be $160 because the prior to 5/1/96 values would apply and $175 is greater than or equal to the $150 threshold of developing Standard Premium. For the portion represented by (2) above the Expense Constant would be $95 because the on and after 5/1/96 values would apply and $175 is less than the $200 threshold of developing Standard Premium. For this example 1/2 of the policy period is prior to the anniversary date while the remaining 1/2 of the policy period is subsequent to the anniversary date.

Weighted Average: = (portion from 8/1/96 to 2/1/97) + (portion from 2/1/97 to 8/1/97)
= (50.0% X $160) + (50.0% X $95) = $128

The correct Expense Constant for this risk is $128.

Example 2:

Standard Premium of Policy:	$250
Anniversary Rating Date:	1/1/96
Policy Effective Date:	8/1/96

For the portion of the policy represented by (1) above the Expense Constant would be $160 because the prior to 5/1/96 values would apply and $250 is greater than or equal to the $150 threshold of developing Standard Premium. For the portion represented by (2) above the Expense Constant would be $190 because the on and after 5/1/96 values would apply and $250 is greater than or equal to the $200 threshold of developing Standard Premium.

For this example 41.67% of the policy period is prior to the anniversary date while the remaining 58.33% of the policy period is subsequent to the anniversary date.

Weighted Average: = (portion from 8/1/96 to 1/1/97) + (portion from 1/1/97 to 8/1/97)
= (41.67% X $160) + (58.33% X $190) = $177

The correct Expense Constant for this risk is $177.

G. ANNIVERSARY RATING DATE

1. **Definition**
   The anniversary rating date is the effective month and day of the policy in effect and each annual anniversary thereafter unless a different date has been established by The Workers' Compensation Rating and Inspection Bureau of Massachusetts (MA Bureau) or other licensed rating organization.

2. **Rewritten Policies**
   If a policy is canceled and rewritten by the same or another carrier, all rules, classifications and rates of the rewriting carrier which were in effect as of the anniversary rating date shall apply to the rewritten policy until the next anniversary rating date, as established by the rating organization, has been reached. When necessary, use the Standard Anniversary Rating Date Endorsement (WC 00 04 02).

3. **For Single Policy Risks**

   a. The rates effective on the normal anniversary rating date shall apply for the full term of:

      (1) the policy commencing on that date, or

      (2) any other policy commencing up to three months after that date.

   For example, the rates effective 7-1-97 will apply to the policy effective 7-1-97 or to any policy with an effective date up to 10-1-97.

   b. If a policy commences more than three months after the normal anniversary rating date, the following procedure shall apply:

      (1) The rates in effect as of the normal anniversary rating date shall apply to the new policy until the next normal anniversary rating date.

      (2) The rates in effect as of the next normal anniversary rating date shall apply to the new policy until the date the policy expires.

      (3) The rates in effect as of the new anniversary rating date shall apply annually thereafter as of the new normal anniversary rating date. This will be the date twelve months after the effective date of the new policy.

Example of 3.b. above:
Assume --
Rates effective 7-1-97/98
New policy commences...................1-1-98/99

The 7-1-97 rates apply until 7-1-98. The rates in effect as of 7-1-98 apply from 7-1-98 until 1-1-99. The new normal anniversary rating date is 1-1-99.