STATE AFFAIRS COMMITTEE
March 9, 1967

The meeting was called to order by the Chairman, with all
members present except Mr. Unruh who was excused. Mr. Mikesic
introduced Mr. Harry Butler to discuss H.B. 1330. Mr. Butler
stated that he and his colleagues have extreme difficulty in
securing embalmers; that it couldn't be the salary because he
has one man who earns an average of $978.90 per month and
another who earns $804.00; that the young men who come out
of embalming school still can't embalm and you have to pay them
$125.00 a week to start; that there is an embalming school at
K.U. Medical Center but that he doesn't believe they turn out
as many as 35 embalmers a year; that if they go to school in
other places they are not accepted by the Kansas Board; and this
bill to permit embalming technicians would be helpful to them.
Mr. Dave Newcomer with D. W. Newcomer & Sons in Kansas City,
Kansas, displayed an ad that had run throughout the state and
that they had only one reply from a man 57 years of age. He
stated that the embalming school at KU costs the taxpayer at
least $2,000 per student per year; that now they have only four
students; that seven times what is being produced could be used.

Mr. Bunten inquired if all graduates of the Kansas Embalm-
ing School receive licenses and Mr. Newcomer stated that eight
took the test this year and the Board passed three. Mr. Buchele
inquired what assurance they had that this bill would attract
more to the profession; and Mr. Newcomer stated that when some-
one goes to school two years, they are more apt to go ahead and
get a degree than to go on to embalming school and serve as an
intern for a year, and then still not have a degree; that if they
could have high school graduates go to a trade school that they
could offer good money without so much training and that it should
be attractive; that it is a work of the heart anyway. Mr. Lindahl
inquired if other states have passed similar legislation and Mr.
Newcomer explained that there are other states that do not have as
high qualifications as Kansas.

Mr. Gary Kershner of the Kansas Funeral Directors Ass'n.
introduced Bill Schmidt, President of the KU Alumni Association
and a licensed funeral director, spoke in opposition of the pro-
posal, stating that there are valid reasons for the 60 college
credit hours, the year of embalming school and year of intern-
ship; that when they come out of embalming school they probably
couldn't embalm, but they have the theory and that is the purpose
of the intership period; combining theory with practice. He
stated that it is his opinion that there is no shortage; that

there are approximately 300 active licensed embalmers in the state;
that there are about 900 licensed embalmers and the reason the 600
are engaged in other fields is that there was not enough work for
them; that Kansas has always been a leader in educational require-
ments and the regression should not occur. He stated that 52%
of high school graduates continue in college and that the people
in this field should be equipped to work with better educated
people, instead of having just a high school graduate providing
a service of this kind of well educated people.

He states that this proposal is supported only by about
two funeral directors and about 1600 oppose it; that no other
state has considered this type of legislation; that 19 states
require more than a high school education; that the national
trend is toward higher education; that there is truly no major
shortage of qualified embalmers. Mr. Andrews inquired if they
were saying that a man should be an embalmer and a public rela-
tions man? and Mr. Schmidt replied that this is the case in the
smaller funeral homes.

Mr. Lawrence Gable stated that there are no problems ex-
cept with the "chain" funeral homes; that the established businesses
who operate truly a community service, seldom loses a man and that
they have no difficulty filling vacancies that do occur. Mr. Mikesic
inquired if it was felt that a person with a high school education
would not have the capacity to absorb the training to embalm, and
Mr. Ferris stated that he would not have; that the aspects of public
health and other ramifications make it necessary for him to have
some very complex training--chemistry, pharmacy, etc.

House Bills 1231 and 1255 were then brought up for discussion.
Mr. Noble Drake of the Chamber of Commerce stated that the Chamber
felt that there was sufficient legislation in the statutes now; that
true, there are a few unscrupulous business people trying to take
advantage of customers, but that most of them want everything open
and above-board anyway for their own protection; that most of them
already reveal just what the bill asks for.

Mr. Stanley Lind, Executive Secretary of the Kansas Associa-
tion of Finance Companies, displayed loan applications and forms
and pointed out that there is a place for all this information
that is requested in this bill (see separate file). He states that
finance companies and other business people were behind the Consumer
Loan Act; that they are anxious to be fair and honest in their deal-
ings, and that it is his opinion that the present laws are adequate
to protect the people. Dr. Edward McAllister, a professor in
Economics at the North Texas University, stated that he has made
a study of the Consumer Loan laws throughout the country and in
fact did his doctorate thesis on this subject; that Kansas has a
good law and that it is one of the best and is adequate. He pointed
out how formulas could "lie" (see exhibits) and that he would have
only one suggestion about the Kansas law; and that would be dealing
with Revolving accounts, but that this too would vary on the basis
of how much was bought.

Because the Committee room needed to be vacated, the meeting
was adjourned.

MARGARET GENTRY, Secretary

EXHIBIT IV

CALCULATION OF SIMPLE ANNUAL RATE ON A REVOLVING CHARGE ACCOUNT

Transaction Date	Amount	Balance	Number of Days	Dollar Days	Average Daily Balance	Service Charge	Rate Per Month	Simple Annual Rate
January 1	--	$100	1	$100.00		$1.50		
January 2	$10	110	8	880.00				
January 10	5	115	10	1150.00				
January 20	20	135	11	1485.00				
January 31	10cr	125	1	125.00				
			31	$3740.00	÷ $120.64		1.24%[a]	14.88%[b]

[a]Rate per month computed by dollar service charge divided by the average daily balance as follows:
$$\frac{\$1.50}{\$120.64} = 1.24\%$$

[b]Simple annual rate computed by multiplying the rate per month by twelve as follows:
$$1.24\% \times 12 = 14.88\%$$

COMPARISON OF FINANCE CHARGES ON AN INSTALMENT PURCHASE

Facts: A customer needs $2,000 to finance the purchase of a new car.

Bank offers to loan him the $2,000 on terms of 36 payments of $63.56 each.

The credit union offers to finance the loan of $2,000 at a simple annual rate

of 9%.

Which is cheaper?

Bank Terms: 36 payments of $63.56 each----total cost of $2,288
amt. of loan   2,000
finance charge $ 288

$228 for 36 months is equal to $96 a year--this equals an add-on rate of 4.8%.

Using the constant-ratio formula for converting these charges to a simple annual rate:

S.A.R. equals $\dfrac{2 \times 12 \times 288}{2,000 \times 36 + 1}$ equals $\dfrac{6912}{74,000}$ equals   9.34% simple annual rate

Since the credit union is offering to finance this amount at a rate of 9% simple, it would appear that the credit union is the cheapest in this instance. Such is not the case, however. The total amount paid to the credit union would be $2,289.60 (that is, 36 payments of $63.60 each). The interest cost would be $289.60, not $288.

The reason for the error in this instance is that the 9% rate quoted by the credit union is an actuarial or "true" rate whereas the constant-ratio formula for computing the rate charged by the bank is only an approximation of the true rate. In this instance, there is enough of an error to cause an individual to choose incorrectly. If the disclosure of the cost had been in dollars and cents, however, the correct choice could have been made.

EXHIBIT III

CALCULATION OF SIMPLE ANNUAL RATE THROUGH THE USE OF A "CONSTANT-RATIO" FORMULA

FACTS: $500 loan; 11 payments of $43.73 each plus a final payment of $43.69
         Total interest paid: $24.72; simple annual rate determined by actuarial
         method to be 9.0%.

Payment Number	Amount of Payment	Interest	Applied to Principal	Balance Owed--beginning of month	
1	$43.73	$3.75	$39.98	$500.00	
2	43.73	3.45	40.28	460.02	
3	43.73	3.15	40.58	419.75	
4	43.73	2.84	40.89	379.16	$\frac{24.72}{274.52} = 9\%$
5	43.73	2.54	41.19	338.27	
6	43.73	2.23	41.50	297.08	
7	43.73	1.92	41.81	255.58	
8	43.73	1.60	42.13	213.77	
9	43.73	1.29	42.44	171.64	
10	43.73	0.97	42.76	129.20	
11	43.73	0.65	43.08	86.44	
12	43.69	0.33	43.36	43.36	
Total	$524.72	$24.72	$500.00	$3,294.26 ÷ 12 = 274.52	

Add-on or "nominal" rate = $\dfrac{\text{finance charge or interest}}{\text{original balance}}$ = $\dfrac{\$24.72}{\$500.00}$ = 4.944%

Constant-ratio formula for converting charges into simple annual rate = $\dfrac{r(2n)}{(n+1)}$ where

    "r" equal add-on or nominal rate per year
    "n" equals the total number of instalments to be paid

According to this formula, an add-on charge of 4.944% per year yields a simple
annual rate of 9.127% as follows:

$$\text{S.A.R.} = \frac{4.944 \times 2 \times 12}{12 + 1} = \frac{188.656}{13} = 9.127\%$$

Using an alternative statement of the same formula, S.A.R. equals $\dfrac{2 \times N \times F}{B(n+1)}$ where

    "N" equals the number of payments to be made in a year
    "F" equals the total finance charge or interest
    "B" equals the original balance or the amount to be financed
    "n" equals the total number of payments to be made

This alternative statement of the formula yields the same simple annual rate of
9.127% as follows: S.A.R. equals $\dfrac{2 \times 12 \times \$24.72}{\$500(12+1)} = \dfrac{593.28}{6500} = 9.127\%$

The "true" rate determined by the actuarial method is 9.0%; the simple annual
rate determined through the use of the "constant-ratio" formula is 9.127%--an
error of 0.127 percentage points or 1.415%.

EXHIBIT II

CONVERSION OF ADD-ON OR NOMINAL RATES INTO SIMPLE ANNUAL RATES BY MEANS OF THE
CONSTANT-RATIO FORMULA FOR VARYING LENGTH OF TERMS

Basic formula: S.A.R. equals $\dfrac{r\,(2n)}{n+1}$ where "r" equals the add-on rate per
year and "n" equals the total number
of instalments.

<u>Term:</u>

6 payments $\dfrac{10 \times 2 \times 6}{6+1}$ equals 17.1%

12 payments $\dfrac{10 \times 2 \times 12}{12+1}$ equals 18.46%

18 payments $\dfrac{10 \times 2 \times 18}{18+1}$ equals 18.95%

24 payments $\dfrac{10 \times 2 \times 24}{24+1}$ equals 19.2%

30 payments $\dfrac{10 \times 2 \times 30}{30+1}$ equals 19.35%

36 payments $\dfrac{10 \times 2 \times 36}{36+1}$ equals 19.46%

60 payments $\dfrac{10 \times 2 \times 60}{60+1}$ equals 19.67%

EXHIBIT I

CONSTANT-RATIO FORMULA FOR CALCULATING SIMPLE ANNUAL RATES

This formula may be stated in one of two ways:

(1) S.A.R. equals $\dfrac{2 \times N \times F}{B\,(n+1)}$ where "N" equal the number of payments to be made in one year

     "F" equals the total finance or service charge

     "B" equals the original balance or the amount to be financed

     "n" equals the total number of payments to be made

(2) S.A.R. equals $\dfrac{r(2n)}{n+1}$ where "r" equals the nominal or add-on rate per year

     "n" equals the total number of payments to be made

Actually these two formulas are identical except for the method of expressing; each will yield the same result when applied to a given situation.

Example: cash price of an item is $500; terms are 36 months; finance charge is $120.

Method (1):   S.A.R. equals $\dfrac{2 \times 12 \times 120}{500\,(36+1)}$ equals $\dfrac{2880}{18,500}$ equals <u>15.6%</u>

Method (2):   S.A.R. equals $\dfrac{8(2 \times 36)}{36+1}$ equals $\dfrac{576}{37}$ equals <u>15.6%</u>

Add-on rate per year (r) calculated as follows: $\dfrac{120}{500}$ equals 24% for 36 months

                 24% divided by 3 years equals

                     8% per year