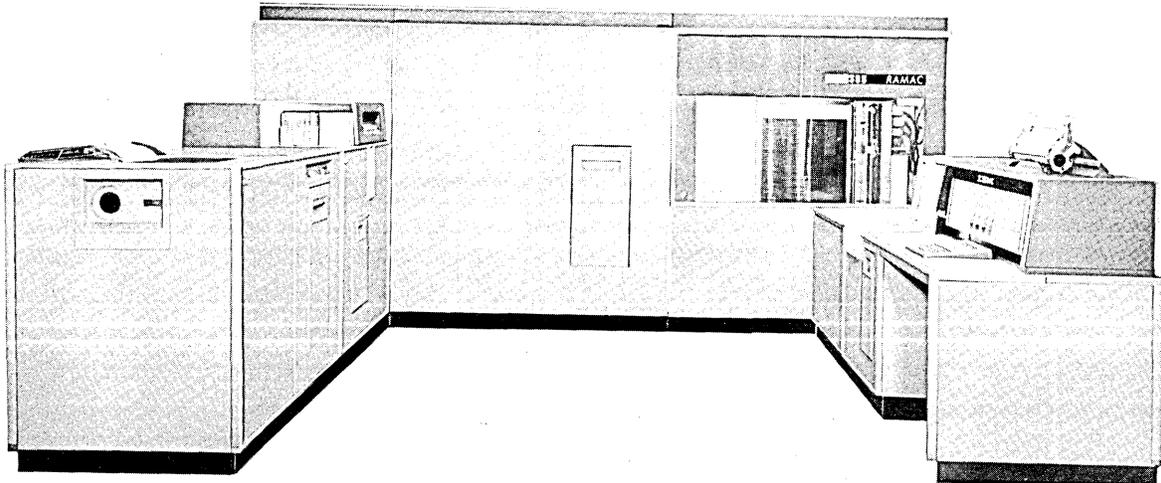


**A**

**IBM**

**General Information Manual**

**The IBM 305 RAMAC® for Fire and Casualty Companies**



IBM 305 RAMAC — the newest concept in data processing for  
Fire and Casualty Insurance companies.

This booklet describes the technique of "In-Line Processing" in the daily flow  
of premium and loss transactions and related entries in the areas of:

Premium and Loss Entry Controls  
Annual Insurance Departments statements  
Management Reports  
Premium Rating and Renewal Policy document writing  
Agents' Accounts Current Checking.

## FEATURES OF THE IBM 305 RAMAC FOR THE FIRE and CASUALTY COMPANY

### Large Scale Memory

RAMAC, with its 50 or 100 magnetic disks, is capable of storing 5,000,000 or 10,000,000 alphabetic and numerical characters. This large memory can be used effectively in many ways. For instance, the daily premium and loss transactions, without any sorting, will update cumulative totals for many separate reports, such as State, Agents', and/or Producers' records, and premiums in force totals by line and class.

### Complete Data Processing System

RAMAC is a self-contained, single-unit data processing system containing its own input and output devices. Its stored program and vast memory enable companies to furnish Management operating and statistical reports and figures, available in seconds, and as up-to-date as the last transaction received. The stored program enables RAMAC to execute, automatically, an entire series of machine instructions. It converts company and association codes to RAMAC address automatically for applicable record updating. This means that premium, loss, and other accounting transactions can be handled with a minimum of human intervention.

### Interrogation

RAMAC may be interrogated when reference to specific information stored within its vast memory is required or requested. This feature is similar in concept to going to a file, selecting a record, extracting the desired information from the record, and then refileing the record. Interrogation, in the case of RAMAC, however, is accomplished while the machine is performing other operations, without disrupting processing for more than the fraction of a second required to select the desired record. The information as called for is automatically typed out.

This feature of RAMAC is of particular importance to Management, as the many requests for up-to-the-minute figures can be rapidly fulfilled through interrogation.

### Input and Output

RAMAC uses the company's regular 80-column punched cards as input. RAMAC output may be a printed document from the 370 Printer, punched cards from the 323 Punch, or a combination of both. Punched card output lends itself to organization and preparation of documents on conventional IBM equipment.

## ACCOUNTING and STATISTICS

The requirements of Management for current data, production and experience reports, premium rating, and the problem of accumulations of statistics and figures for inclusion in the Annual Insurance Departments' statements, represent one of the most challenging areas within the Fire and Casualty Industry.

The use of the IBM 305 RAMAC will:

Provide memory with rating factors and the calculating ability to perform Premium Rating, coding and punching required statistics and collection cards for each entry.

Provide memory for maintaining agents' and/or assured's experience.

Provide memory for other classification experience summary totals.

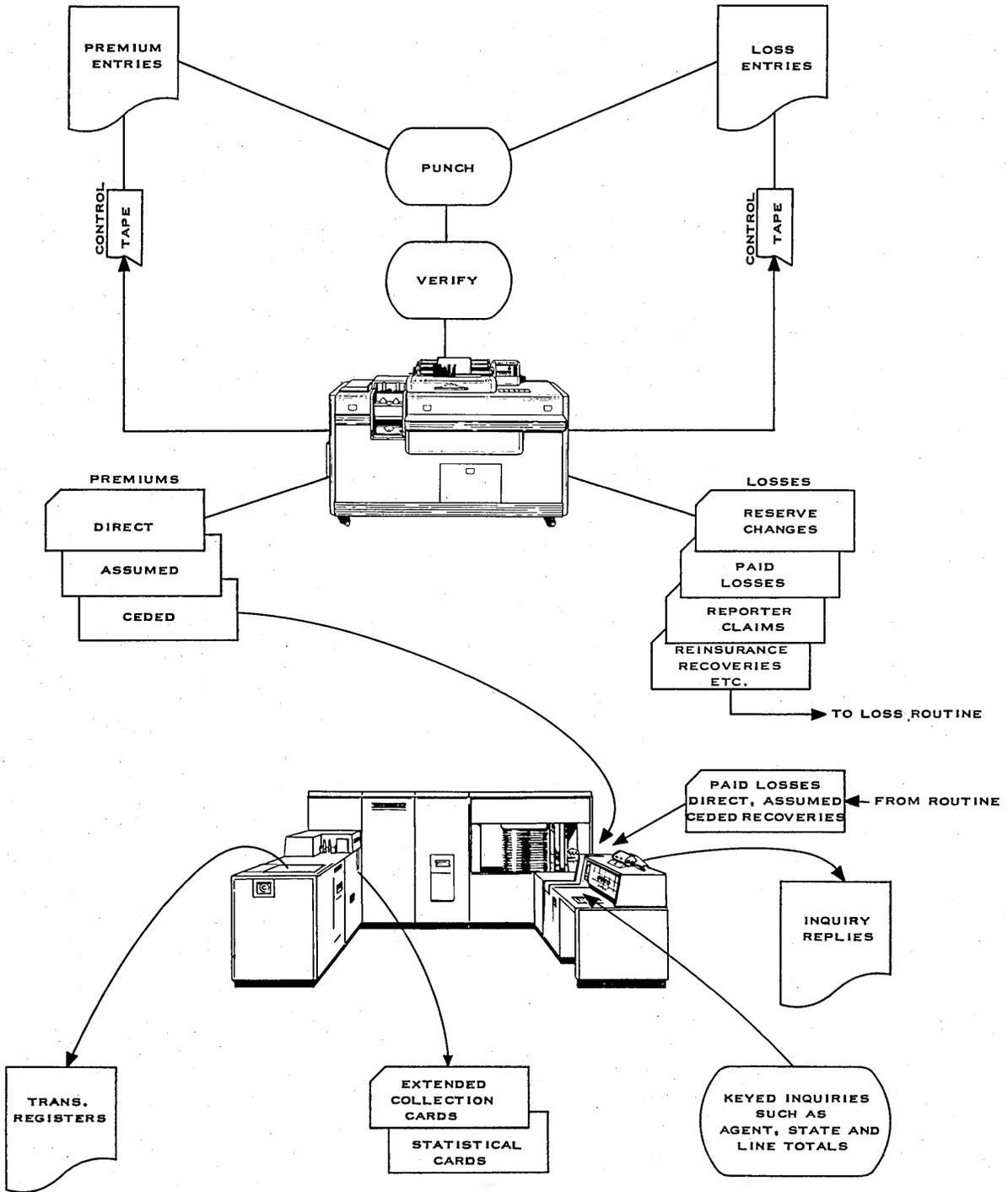
Permit checking agents' accounts current through the machine's logical ability.

### Advantages to Management

1. Current information available in seconds.
2. Better controls over all transactions and accumulated totals.
3. Monthly, Quarterly and Annual Reports compiled earlier.
4. Eliminates many separate job steps and duplications.
5. Releases Accounting and Statistical cards sooner for additional processing.
6. Automatic Premium Rating and Printing Premium Renewal Notices (on-line, or off-line printing).
7. Machine checking of agents' accounts current.
8. The status of a particular distribution or record, such as agency production, may be "interrogated" and the required information furnished in seconds by the typewriter.

# FIRE AND CASUALTY INSURANCE RECORDKEEPING

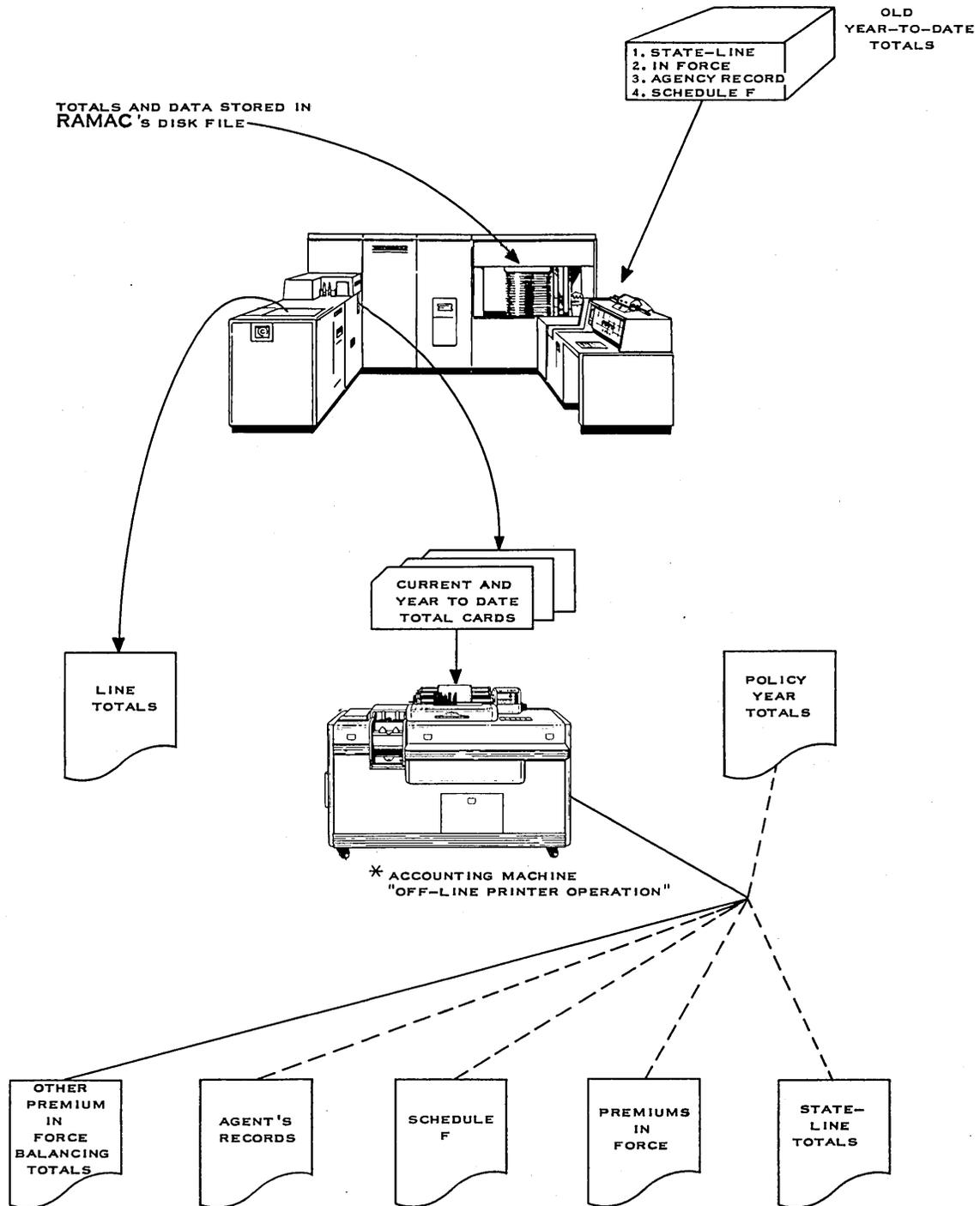
## Daily "In-Line" Processing



**INSIDE RAMAC ON DISK STORAGE:**

STATE-LINE PREMIUMS IN FORCE, AGENTS RECORDS  
 SCHEDULE F TOTALS AND OTHER MANAGEMENT REPORT TOTALS

# PERIOD-END REPORTING PROCEDURE



\* THE 370 PRINTER MAY BE USED TO PREPARE THE REPORTS IF TIME PERMITS

## RECORDS STORED IN DISK FILES

### STATE AND LINE TOTALS

For each line within the state, the following information will be available:

1. State code
  2. Line code
  3. Direct premium (written)
  4. Assumed premium (written)
  5. Ceded premium (written)
  6. Direct losses (paid less salvage)
  7. Assumed losses (paid less salvage)
  8. Recovered losses (paid less salvage)
  9. Direct losses incurred as of Dec. 31st or more often if desired.
- } year-to-date and  
current month

These totals are used in the annual statements for

- Page 14, columns 1, 4, and 5
- Schedule T, columns 1 and 3
- Schedule P, Part 1, Section A, columns 1 and 3
- Schedule P, Part 1, Section B, columns 1 and 3
- Schedule P, Part 2, columns 1 and 3

Note: Schedule P lines will be distributed by policy year.

### LINE TOTALS

This record will contain information on premiums written and losses paid.

The following information will be available:

1. Line code
  2. Direct premium
  3. Assumed premium
  4. Ceded premium
  5. Direct losses paid
  6. Assumed losses paid
  7. Reinsurance recovered
  - \*8. Excess of original premiums over return premiums on cancellations.
- } year-to-date and  
current month

These totals are used in the annual statement for:

- Part 2 - columns 1, 2, 3, and 4
- Part 2A - columns 2 and 4 - (direct and assumed column 2 total)
- Part 3 - columns 1, 2, and 3
- \*\*Part 3A - columns 1 and 2 - also column 7, Part 3, as of Dec. 31st.

The line totals are arrived at by having the 305 RAMAC recap State-Line totals page. (See above)

\* This total will be used with expirations as shown on page 7 to develop totals for column 4, Part 2A.

\*\* Run once a year December 31st from Unpaid Loss Reserve Cards.

## PREMIUMS IN FORCE

This record will contain the following information:

1. Line Code
2. Term
3. Expiry year and month
4. In force premium (direct and assumed) and unearned premium totals
5. In force premium (ceded) and unearned premium totals
6. Net in force and unearned premium totals
7. For Schedule P lines, the premium will be distributed by policy year
- \*8. Expirations

The above totals are used in the annual statement for:

- Part 2 - column 6
- Part 2A - columns 4, 5, 6, and 7
- Part 2B - columns 1, 2, 3, and 4
- Part 2C - columns 3 and 5
- Schedule P - Part 1, Section A, column 2
- Schedule P - Part 1, Section B, column 2
- Schedule P - Part 2, Column 2

Note: Payroll audit will be distributed as written and will appear in force as expired.

\* See footnote on Page 6.

## SCHEDULE F

This record will contain the following information:

1. Reinsurance company code
2. Term
3. Expiry year and month
4. Premium in force totals by company

The above information is used in the annual statement for:

- Schedule F - Part 1A, columns 3 and 4.

## AGENCY RECORD OF PREMIUMS WRITTEN AND LOSSES PAID

This record will contain the following information:

1. Agent's and/or Producer's Code
2. Line code
3. Premiums written by line - current month and year-to-date totals
4. Losses paid by line - current month and year-to-date totals.

Note: Losses incurred for the period may be developed by running the Net losses Unpaid Current period, together with the Net losses Unpaid Previous period, and the Net Payments for period.

**REPRESENTATIVE DAILY REGISTER  
AND MONTHLY REPORTS**

PREMIUM REGISTER											DATE	Dec. 31			
TRANS CODE	POLICY PERIOD				REINS. CO.	AGENT OR PRO- DUCER	LINE	POLICY NUMBER	PROOF SIGNAL	KD. CARD	PREMIUM	COM- MISSION	NET PREMIUM	ASSURED NAME	
	TERM	EFFECT		EXPIRY											
		MO.	YR.	MO.											YR.
1 2 1	1257		1258			1337 04	111414		0	9700					
1 2 1	1257		1258			1337 04	111414		1	9700	1503	8197	R J JONES		
1 2 1	1257		1258			1337 01	1212		0	3900					
1 2 1	1257		1258			1337 02	1212		0	980					
1 2 1	1257		1258			1337 01	1212		1	4880	1098	3782	G G GAMIE		
1 2 1	1157		1158			1326 04	111410		0	89000					
1 2 1	1157		1158			1326 04	111410	ERR	1	19000	3800	15200	W J SMITH		
1 2 1	1057		1058			901 04	111407		0	16800					
1 2 1	1057		1058			901 04	111407		1	16800	2100	14700	ARMON FARRANT		
1 2 1	1257		1258			901 04	111412		0	9800					
1 2 1	1257		1258			901 04	111412		1	9800	1813	7987	JAMES JONES		
1 2 1	1257		1258			901 01	1213		0	3690					
1 2 1	1257		1258			901 02	1213		0	770					
1 2 1	1257		1258			901 02	1213		1	4460	900	3560	W K SCHULTY		
1 2 1	1257		1258			1310 04	111409		0	13600					
1 2 1	1257		1258			1310 04	111409		1	13600	2108	11492	Q X KELLY		
1 2 1	0557		0558			1326 01	111249		0	8900					
1 2 1	0557		0558			1326 01	111249		1	8900	2260	6640	L W SCALLEY		
1 2 1	0557		0558			1326 01	111249		0	8900					
1 2 1	0557		0558			1326 01	111249		1	8900	2091	6809	W MITTY		
										96040					

CURRENT MONTH PREMIUMS AND LOSSES BY LINE, BY STATES							DATE	Dec. 31
LINE	STATE	PREMIUMS			LOSSES PAID AND RECOVERED			
		DIRECT	ASSUMED	CEDED	DIRECT	ASSUMED	CEDED	
01	04	2017800	1144618	926302	996426	44308	108100	
01	06	2999921	2133508	1037313	2107537	1143419	1219210	
01	12	209473C	3042597	228304	3197436	2054310	1208100	
01	31	5892589	604498	1915191	1085315	33206	99210	
		13005040	6925221	4107110	7386714	3275243	2634620	

AGENT OR PRODUCER RECORD						AS OF Dec. 31	
AGENT OR PRODUCER NAME	CODE	LINE	CURRENT MONTH		YEAR TO DATE		
			PREMIUMS	PAID LOSSES	PREMIUMS	PAID LOSSES	
W.B. ROBERTSON	901	01	192879	51111	4316644	909895	
	901	02	17879	11109	149530	67500	
	901	03	1494		10251		
	901	04	135589	88889	1477515	376425	
			347841	151109	5953940	1353821	
R.B. CARTER	1310	01	46018	969894	312954	69890	
	1310	02	32935	16425	48760	37550	
	1310	03	9376		10251		
	1310	04	446683	373901	464515	276400	
			535012	1360220	836480	483840	

PREMIUMS IN FORCE AND UNEARNED						AS OF Dec. 31	
LINE	TERM	EXPIRY		IN FORCE DIRECT AND ASSUMED	REINS. CEDED IN FORCE	NET IN FORCE	UNEARNED PREMIUMS
		MO	YR				
1	1	01	58	7138000	1988100	5149900	214578
1	1	02	58	7099700	1970000	5129700	641211
1	1	03	58	7368000	2166600	5201400	1083624
1	1	04	58	7437000	2180000	5257000	1533291
1	1	05	58	7507500	2379000	5128500	1923186
1	1	06	58	7354700	2255000	5099700	2337362
1	1	07	58	1256000	36100	1219900	660779
1	1	08	58	6947000	2178000	4769000	2980624
1	1	09	58	7189700	2303900	4885800	3460774
1	1	10	58	7346000	2376000	4970000	3934583
1	1	11	58	7279000	2128000	5151000	4507124
1	1	12	58	7433590	2037000	5396590	5171731
				81356190	23997700	57358490	28448867

SCHEDULE "F"						AS OF Dec. 31	
REINSURANCE COMPANY	CODE	TERM	EXPIRY		IN FORCE PREMIUM	UNEARNED PREMIUM	
			MO	YR			
RAMAC INS. CO.	1	1	01	58	1432700	59695	
	1	1	02	58	1428300	178537	
	1	1	03	58	1553800	323708	
	1	1	04	58	1584400	462116	
	1	1	05	58	1697700	636637	
	1	1	06	58	1616900	741079	
	1	1	07	58	1652400	895049	
	1	1	08	58	1547100	966937	
	1	1	09	58	1642500	1163437	
	1	1	10	58	1700700	1346387	
	1	1	11	58	1521400	1331224	
	1	1	12	58	1455000	1394374	
				18832900	9499180		

PREMIUM CHECKING OR ASSIGNMENT AND STATISTICAL CODING FOR  
PRIVATE PASSENGER AUTOMOBILE BUSINESS

This problem has two variations: coding and premium checking for new business, automatic premium rating renewal business and writing the premium renewal notices or policies.

1. For New Business

- a. Check the total policy premium and punch discrepancy indication card if the assured's premium varies from the correct total by more than a set amount.
- b. From the input factor card:  
a statistical card, or cards, will be punched with the required bureau and association codes;  
a collection card will be calculated and punched for each policy.

2. For Renewals

- a. Punch a renewal factor card for each renewal.
- b. Write "on-line" the renewal premium notice or policy if the name and address and other required policy description and information cards are available.
- c. Analyze the policy coverages from the input factor card and punch a statistical card or cards with the required codes for the National Bureau of Casualty Underwriters and the National Automobile Underwriters Association or the National Association of Independent Insurers.
- d. Calculate and punch a collection card for each policy.

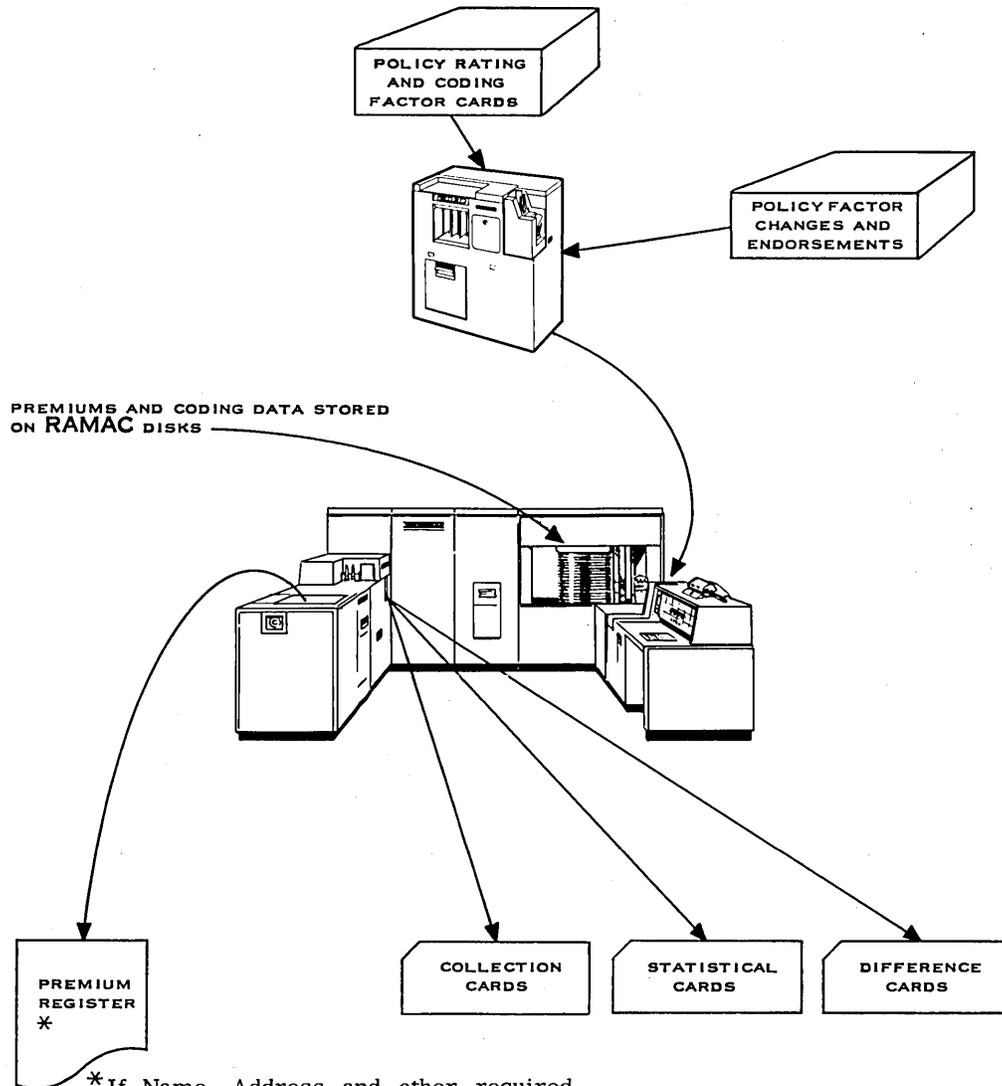
In those instances where percentage relationships are used, they may be secured from the rating bureaus. However, these relationships are subject to change from time to time. Therefore, the values should be approved by the bureaus.

In one passage of the cards in random sequence, the 305 RAMAC will accomplish all the processing and rating of an automobile policy for the basic coverages (Bodily Injury, Property Damage, Medical Comprehensive, Collision, Towing, Fire, Theft, Combined Additional Coverage).

Separate programs will be used for Massachusetts and Texas, and for Property Damage coverage in North Carolina. One program will be used for all other states.

The 305 RAMAC will develop location codes for finding applicable percentages used in calculating B. I. increased limits premiums. This is also true in developing any required medical premiums.

## AUTOMOBILE POLICY PREMIUM RATING AND STATISTICAL CODING FLOW CHART



\*If Name, Address and other required description cards are available the 305 RAMAC will, in an on-line operation, print Renewal Premium Notices or Policies. This printing will take place while rating, coding and card punching are being performed.

### RAMAC:

- analyzes policy rating factor cards
- develops premium for each coverage
- applies statistical codes
- punches statistical cards
- calculates commissions
- punches collection card



## AGENTS' ACCOUNTS CURRENT CHECKING

The manual routine requirements for checking agents' accounts current have posed a challenge to mechanization which has now been met by the IBM Data Processing Systems. The logical ability of the 305 RAMAC, coupled with its arithmetic accuracy, provides a means of setting up processing instructions in accordance with fixed company requirements to treat data in a uniform manner and according to predetermined plan.

Agents' accounts current premium items are checked against the premium transactions that have been recorded on punched cards. This checking is done on an item basis, at the same time providing summary totals (agents' balances) for each agent. Journal totals will be established and balancing to control totals will be provided.

The over-all procedure considers three major phases:

1. Control of all movement, in and out, of Open Item card file.
2. Arithmetic verification of the agents' accounts current.
3. Reconciling the reported items in the accounts current with the recorded items in the open file.

The first phase may follow existing routines insofar as periodically inserting new premium entries to the open-item card file, and providing necessary control of this file. The second phase is accomplished by punching reported items and agents' balances from the accounts current and verifying the arithmetic validity of the accounts by zero balancing on an accounting machine. The third phase of checking the agent's account is accomplished by the 305 RAMAC, which replaces manual functions and decisions in this area.

The third phase is of primary consideration here.

The IBM 305 RAMAC will:

1. Reconcile matched premium items.
2. Create suspense cards for items reported in the accounts current but not previously recorded by the company.
3. Produce difference cards - premium differences, commission differences, and error differences.
4. Provide overdue premium item cards, indicating items recorded by the company but not reported by the agent.

5. Count the number of allowable discrepancies for each agent, and total the premium amount of these discrepancies.
6. Verify the agent's premiums reported, commissions and expenses deducted, to arrive at a reconciled net balance due the company.

An important feature of this application is the machine's ability to handle one or more items pertaining to the same policy. The 305 punches a new card separate from the input card, thereby creating new entries for the balance forward open file. The old cards will be retained for reference and control purposes.

In this operation, only a small portion of the disk file is used for temporary storage of multiple premium items pertaining to the same policy. Consequently, the disk file area maintained for normal premium and loss recording is not affected.

Advantages:

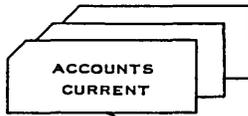
1. Reduces clerical costs.
2. Furnishes more accurate control of premium accounting.
3. Provides uniformity in account checking procedures.
4. Produces management information not previously available.
5. Reduces manual operations to a minimum.

Notes:

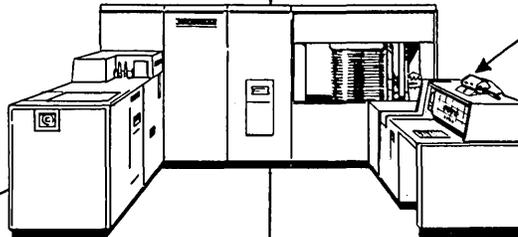
1. By incorporating an additional collating operation prior to entry into the 305, items not due for collection as well as unpaid agents' balance cards may be pulled, thereby reducing card volume to be handled on the 305. This is dependent on volume of cards and requirements of the company.
2. If operating on an item net premium basis, the 305 will calculate new entries and apply proper commission rates by producer and lines of business from tables stored in the disk file.
3. By use of the "Field Compare" feature of the 305, multiple items for one policy can be checked with one program step to select the matching items.

# AGENTS' ACCOUNTS CURRENT CHECKING PROCEDURE CHART

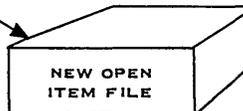
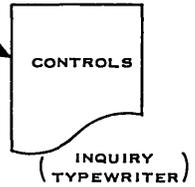
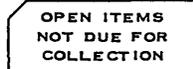
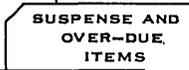
VERIFIED REPORTED ITEMS AND AGENTS' BALANCES FROM THE ACCOUNTS CURRENT. (IN SEQUENCE BY POLICY NUMBER WITHIN AGENT)



OPEN ITEM FILE OF NEW ENTRIES, OVERDUES, SUSPENSE AND PREVIOUSLY CHECKED AGENTS' BALANCES NOT PAID. (IN SEQUENCE BY POLICY NUMBER WITHIN AGENT)



(CARD PUNCH)



(ENTER NEW BUSINESS, ETC., TO BECOME RECORDED OPEN ITEM FILE FOR NEXT MONTH'S CHECKING.)

NOTE:  
CASH-HAND PULL APPROPRIATE AGENTS' BALANCE CARDS

## MEMORY CONSIDERATIONS

The number of records that may be stored on the 50 or 100 magnetic disks of the IBM 305 RAMAC to develop the results outlined here is dependent on five factors that will vary from company to company. They are:

1. Number of states in which company does business.
2. Number of lines written — automobile, fire, extended coverage, etc.
3. Number of terms — six months, one year, two years, etc.
4. Number of agents.
5. Number of reinsuring companies.

Each company's need must be studied individually, since other factors may apply in its particular case. The results described herein fulfill the basic requirements but are subject to "tailoring" for each company.

Many companies will discover that they will have sufficient RAMAC memory storage available for processing other applications, such as Boards and Bureaus Summaries, Risk Experience, General Ledger Accounting.

## SUMMARY OF BASIC 305 RAMAC FEATURES

1. Large Storage  
5,000,000 or 10,000,000 alphabetic or numerical characters may be stored on either 50 or 100 magnetic disks.
2. Access to Data  
Any data anywhere in the system are available at any time through the Inquiry Typewriter.
3. In-Line Processing  
Ability to process transactions in the sequence of their occurrence and update all records affected by each transaction.
4. Logical Ability  
This system combines the best of both the stored and wired program techniques to process all data most efficiently.
5. Input-Output  
Input is in the form of punched cards. Output may be in the form of punched cards, printed reports, or both.

**IBM**

International Business Machines Corporation  
590 Madison Avenue, New York 22, N.Y.