Electronic Machinery Will Be Used In City Postal Mail Sorting

30,000 Letters Per Hr. Can Be Processed Now

The tremendous expansion of Canada's Cities since the Second World War, has placed an enormous burden on the Canadian Postal Service. The ability of men to sort mail quickly and efficiently, and their memories, are being strained to the utmost.

In an effort to find an answer to this situation, the Canadian Postal Service is turning to electronic machinery to aid in the handling of the mass of letter mail handled daily in the major cities across the country.

The electronics industry has made great strides in recent years, and therefore the Post Office Department in conjunction with the National Research Council decided to approach and explore the possibility of applying electronic machinery. A small research group was formed, and their findings were made available to the manufacturing specialists who, under contract, produced prototype machines.

The first mechanical mail sorter was tested at Post office headquarters in 1953. This machine used a code placed on the back of the envelope, employing a phosphor substance. The electronic "Reader" could read the codes at a fairly fast rate. Major difficulties were found to be of a mechanical nature, rather than electronic, and the initial machine was slow and damaged the letters on occasion.

In 1954 the Post Office entered into a contract with a precision Manufacturing Company to bring to the Post Office Department engineers, technicians, and mechanics, to carry out experimental work along with the Post Office laboratory staff.

In 1956 trials proved that the basic principles of automatic sortation were sound. However, machinery developed up to this date was not completely satisfactory as it still damaged a portion of the mail.

A new machine was evolved which grasped each letter in a trap-like device, and through 1956 to 1958 further modifications and improvements were made on this equipment.

In February, 1959, the machine was turned over to Canadair, Ltd. at Montreal, who were asked to design the coding apparatus, refurbish the sorter and computer (memory) developed by the post office laboratory. Canadair was also asked to maintain and evaluate the equipment over a six-month period, and to report on the various aspects of the performance of the equipment.

The post office in turn, were responsible for the selection and training of personnel to operate the machine, building facilities, and a directory of codes and distribution.

They were also responsible for the operational, and system evaluation of the equipment and the principles involved.

The experimental electronic letter sorting machine is being placed in the Montreal Post office during the fall of 1960. Montreal was chosen because of its large volume of mail, the fact that it is a foreign mail despatch point, and its mail has bilingual characteristics which present interesting problems to the electronic sorting operation. It is also a convenient location to both Canadair Ltd. and the Post Office headquarters at Ottawa.

The experimental electronic sorting machine consists of one sorter, and six coding desks, and it will be tested over a six month period for cost, service, speed, efficiency, operator fatigue and other factors.

In operation, faced up and stamp-cancelled letters are fed into the coding machines, the operator reads the address, and imprints a code on the letters by pressing keys on a keyboard in front of him. The letters then go to a stacker and when this is full they are taken to the sorting machine. This machine makes thirty-one separations for the sortation of out of town mail. These separations consist of nine provincial, two foreign, and twenty large Canadian towns.

For each province there is a secondary and a final sortation. During this operation the largest remaining towns are again given individual sortation, and the smaller towns are put in groups of thirty-one to the remaining stackers.

Letter mail coming into a city, plus local mail, can be sorted down to the individual Letter Carrier's route. The basic concept of this coding and multi-sort principle is that a letter destined for Montreal, mailed in Vancouver, would be coded in Vancouver for Montreal with the appropriate street and street number and then automatically sorted with outgoing mail for despatch to Montreal. On receipt in Montreal, it would be fed through the sorter and automatically go to the individual letter carrier. It follows, that the best results in machine sorting can only be attained if every matter is sure to address letters fully and clearly, street and street number, city or town and province.

Some details of the equipment are as follows the code consists of two separate units, one above the other, each with its own independent stacker viewing window, printer and output stacker. The operator codes letters from each unit alternately, that is he codes letters alternately from the top and bottom viewing windows. Each of the two coder units can be operated independently so that in the event of a mechanical or electronic failure only one unit would be out of action, resulting in the coder being operated but at reduced efficiency.

The sorters will sort mail at approximately 8½ letters per second or 30,000 per hour. The mail is transferred from the feeder through a synchronization device to the letter trap where it is securely held. Each letter is carried by its own individual letter trap to the appropriate stacker. Mail may be re-sorted as many times as desirable that is to the small-est practical bundle for despatch.

The letter is then transported past a photo-electric reader which reads the code and gives this information to the computer. The code, as read on the letter, is then compared with the codes in the memory drum. Distribution information on that particular code is transmitted to the gate selector. It then operates the appropriate gate at just the right instant to deflect the letter into the correct stacker.

The memory drum or computer consists of 160 tracks.

About 110 of these tracks are allocated for forward or out of town sortation. Each Post Office in Canada has a four letter code and each track has 150 of these four letter codes showing the appropriate stacker number for both primary and secondary sortation.

As regards training, special training equipment has been developed in order that operators and supervisors can be properly trained to operate the equipment in time for its installation this fall. The operator uses a special 13 key keyboard, on which a multiple number of keys are depressed simultaneously, which action converts the alphabetical character into the binary code pattern. At the present time fully selected personnel from the Montreal Post Office staff are being trained in the code using the special training equipment developed by the Post Office Department Engineering Staff.

BALLINAFAD

Flies to Winnipeg For Brother's Funeral

Mr. J. W. Scott flew to Winnipeg on Wednesday to attend the funeral of his brother Mr. Robert Scott, a former resident and well known in this district.

Mr. and Mrs. Donald McLean and Mr. Bruce McCordeur visited on Thursday from Mono, where they have been in care for a week with Mr. and Mrs. Thomas Allan and family.

Miss James Eayrs and daughter Bonita visited for the weekend with her father, Mr. Tom Mack.

Mr. and Mrs. Tom Gibson entertained friends and relatives at a dance in the hall at Stewarttown following their daughter's wedding last Saturday. During the evening the enjoyed dancing to Dee's Hollow orchestra and lunch was served by the hostess.

Mr. and Mrs. Elmer McLean and Mr. and Mrs. Lloyd McEvers attended the wedding of Calvin Sproule and Marjorie Mallon in Hamilton on Saturday.

More Donations Coming in to Georgetown Hospital

Donations received for the Georgetown Memorial Hospital Fund were from the Georgetown Band, Mr. June Dickson, Kingston.

It is gratifying to the Hospital Board to see contributions still coming in.

LEGION NOTES
by Leslie Clark