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# UNITED STATES GENERAL ACCOUNTING OFFICE WASHINGTON, D C 20548

GENERAL GOVERNMENT DIVISION JUN 28 1974

The Honorable Edward V Dorsey Senior Assistant Postmaster

General for Operations

U S Postal Service

Senior asset Pormaster

DLR05629

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Dear Mr Dorsey

The General Accounting Office has completed a survey of letter-sorting machine (LSM) operations at the Detroit Post Office. Our observations at that post office were not included in our proposed report to the Congress on missent mail, which, as you know, discusses mail sorting operations in the Dallas, Houston and New Orleans offices, because of differing conditions between Detroit and the other locations.

The Detroit office operated a large number of LSMs which used a different sorting technique (binary code) than that used at the other locations. Also, the engineering data isolation technique (EDIT) used to check sorting accuracy was not installed at the Detroit office until near the end of our survey.

After we briefed you on the results of our survey at the three offices in the Southern Region you expressed concern over the quality of LSM operations at other post offices. The purpose of this letter is to summarize our observations on letter-sorting operations at Detroit Since our proposed report to the Congress on missent mail contains a number of recommendations for improving LSM operations, we are not making any specific recommendations in this letter

At the Detroit office, the extent of missorted and missent mail has been significantly understated. To help correct this situation, a quality control function was established. One attempted means was a 100 percent review of all letters in the LSM bins. Obviously, a 100 percent check of the machine-sorted letters negates much of the machine's advantages.

# DELIVERY STANDARDS NOT MET

Since its reorganization, the Service has established standards for mail going to overnight, 2- and 3-day delivery areas. Its goal is to achieve these standards 95 percent of the time. During fiscal year 1973, with the exception of the Christmas season, the

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Detroit office generally achieved its standard an average of 92 percent for overnight delivery, 76 percent for mail destined for 2-day delivery areas, and 89 percent for mail being delivered to 3-day areas. To some extent, delivery delays can be attributed to missent mail

## EXTENT OF MISSENT MAIL

Quality control checks by Detroit office personnel in April and May 1973 of over 500,000 pieces of mail disclosed that 3 8 percent of the mail ready for dispatch to Michigan cities was destined to be missent because of LSM and manual sorting errors. With this error percentage and the current mail volume, we estimate the Detroit office would annually missend about 29 6 million first-class outgoing letters.

Detroit's quality control checks made in September 1973 showed a reduction in the amount of missent mail to 1.3 percent. Detroit postal officials stated that the decrease was attributable to processing more mail on ZIP mail translator (ZMT) machines which have a lower error rate than binary machines, and to a thorough review of all letters not receiving a secondary sort.

Upon examination of the September quality control reports, however, we found that certain types of errors included in the April and May reports were not included in the September report. For example, letters with incorrect facing slips were not considered as errors if sent to the proper state, but to the wrong distribution center.

In addition, although the September quality control tests covered 102,087 pieces, detailed information was available on only 3,379. The test reports covering those pieces showed 132 errors -- an error rate of 3.9 percent In reviewing those reports we found an additional 221 errors which the Detroit quality control office agreed should have been included. A recomputation showed an error rate of 10 4 percent.

### Missorted Mail

Detroit office performance reports showed that 37.6 percent of all mail had to be sorted more than once. While a small portion of the mail must necessarily be resorted because of improper facing or unreadable letters, most resorting at Detroit results from improper initial sorting. This rehandling results in additional labor costs and delays in deliveries

Detroit office performance reports on binary and ZMT machines for fiscal year 1973 showed an average missort rate of 3.2 percent. Our tests and those conducted by Detroit's quality control office, however, indicated that the missort rate was substantially higher than indicated in the performance reports. For example, the performance

report for July 1973 showed a consolidated binary/ZMT error rate of 2 4 percent, while the quality control office test for the same month showed a combined error rate of about 10 percent. Our study during the same period showed a combined error rate which exceeded 30 percent. Mail processing officials stated that they believe our results were more reflective of the true error rates because of the biased manner in which error checks are made by the Detroit office

## REASONS FOR MISSENT MAIL

Missent mail at the Detroit office results from machine and manual sorting errors and labeling, traying, and pouching errors

## Machine Sorting Errors

Through our observations and discussions with Detroit postal officials and LSM operators we determined that errors in machine operations result from

- -- the speed of the LSM,
- -- operator fatigue and carelessness,
- --poor supervision,
- --lack of work standards, and
- --machine malfunctions

#### Speed of LSM

Detroit officials told us that several years ago, LSMs were operated at a rate of 50 letters a minute, rather than the current 60 letters a minute. The speed was increased because it was believed that the gain in productivity would more than offset the additional errors that would probably result. However, these officials said there is a greater emphasis on productivity than on proficiency. They believed that 60 letters a minute may be too fast and that fewer errors would result if the machines were operated at a lower speed.

#### Fatigue and carelessness

Because of fatigue and carelessness, some operators "dump" the mail by keying letters to bins not reviewed by sweepers. In Detroit, bins containing mail that receives a secondary sort are not checked by LSM sweepers because they cannot cope with the large volume of mail. Detroit officials told us that the unreviewed bins usually have the highest error rates

# Poor supervision

Detroit postal officials said that LSM supervision was sometimes poor because of a shortage of supervisors and because junior supervisors were usually assigned to LSM operations. We were told that the stronger supervisors were eventually reassigned to hand sorting areas to maintain productivity and discipline in those areas. Comments from machine operators indicate that inadequate supervision and poor working conditions perpetuate carelessness on the machines.

## Lack of work standards

Supervision of LSM employees is hampered because no work standards have been established. There is a lack of agreement among supervisors on an acceptable level of accuracy for LSM operators. As a result, discipline of employees is not uniformly applied by all supervisors. Detroit postal officials agree that with a viable work standard employees would be aware of what is expected of them and supervision would be improved.

### Machine malfunctions

A significant quantity of mail is missorted due to machine malfunctions. An April 1972 study of LSMs by Lester B. Knight and Associates showed that only 6 of Detroit's 13 LSMs were in good condition, with all machines being in excess of 10 years old. In July 1973 Detroit's quality control office conducted a LSM error test which showed binary and ZMT machine error rates of 6 0 and 2.6 percent, respectively. Although machine failure has been a problem in Detroit, conditions should improve because of the recent installation of 10 new ZMTs with EDIT

# Manual Sorting Errors

Detroit relies heavily on LSMs for mail distribution, but manual sorting is still used extensively. At the time of our review, all secondary sorting at the Detroit office was done by hand. Detroit officials said about 60 percent of their letter volume can be sorted by LSMs. During fiscal year 1973 about 47 percent of all letters were sorted by hand because many operators were being retrained from binary code to ZMT keying methods

Manual sorting errors have not been a significant problem. Detroit postal officials stated that the manual sorting error rate was only about one percent. Our review of manual sorting error reports confirmed this figure

## Labeling, Traying and Pouching Errors

Missent mail also results from errors in the labeling, traying and pouching of mail sorted on LSMs. For example, in October 1973 we observed sweepers labeling bundles of mail with improper facing slips. Quality control reports also showed that a number of errors were caused by clerks throwing bundles into the wrong dispatching pouches. These errors cause letters to be sent to wrong destinations and ultimately contribute to mail delays and increased processing costs. Detroit officials stated these errors are caused by carelessness and inexperience of clerks.

#### MISSENT MAIL NOT REMOVED FROM NORMAL MAIL FLOW

The Postal Service requires that post offices remove missent mail from the normal processing system and forward it to the proper destinations by airmail During our review we examined pouches and sacks of first-class letters which had arrived at the Detroit office Of 43,212 pieces examined, we found 652 letters which had been missent to other post offices before being missent to Detroit. If these letters had been removed from the normal mail flow at the sending offices, they would not have been missent to Detroit. This indicates that missent mail is not being forwarded in the most expeditious manner and thus contributes to increased mail delays.

## ACTIONS TO REDUCE MISSENT MAIL

Although quality control checks were performed daily between March and July 1973, the quality control function was not officially established at Detroit until August 1973. Nine existing distribution review clerk positions were transferred from mail processing to industrial engineering and another nine positions were approved for the quality control function. Their duties are as follows.

- --assist supervisors on special assignments such as mail counts, surveys, etc,
- --check hand sorting cases and/or racks for sorting accuracy,
- --perform on the job training for existing and new employees in areas of sorting, labeling, pouching and dispatching,
- --review and dispose of incoming mail which cannot be processed by ordinary means because of illegible, incomplete, or incorrect addresses, and
- --make daily checks of mail being prepared for dispatch to other offices.

In addition, the clerks conduct searches for mail lost in the processing system and determine causes of damaged mail

At the Detroit office a 100 percent review of letters in most LSM bins not receiving a secondary sort was instituted in May 1973 on a temporary basis. Previously these bins were given a cursory review by riffling stacks of letters. In October 1973 the 100 percent review was discontinued for one week, however, it was reinstated because of a significant jump in the error rate. The Acting Director, Mail Processing, stated that an additional sweeper had been assigned to each machine and that if sorting accuracy did not improve, the additional sweeper would be needed on a permanent basis. Obviously, a 100 percent check of the machine-sorted letters negates much of the machine's advantages.

We wish to acknowledge the cooperation extended to our representatives during the review We will, of course, be happy to meet with you or your representatives on any of the matters discussed in this letter.

Sincerely yours,

Associate Director