POSTAL RATE AND FEE CHANGES, 2000

Docket No. R2000–1

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS KINGSLEY TO INTERROGATORIES OF THE ASSOCIATION FOR POSTAL COMMERCE, REDIRECTED FROM WITNESS YACOBUCCI (PostCOM/USPS–T25-4(a-d, g-i))

The United States Postal Service hereby provides the response of witness Kingsley to the following PostCom interrogatories: PostCom/USPS–T25-4(a-d, g-i), filed on March 8, 2000, and redirected from witness Yacobucci.
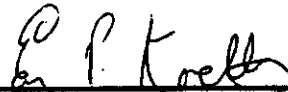
The interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

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March 23, 2000

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS KINGSLEY TO INTERROGATORIES OF POSTCOM REDIRECTED FROM WITNESS YACOBUCCI

PostCom/USPS-T25-4. Please refer to LR-I-90 and your response to MPA/USPS-T25-3(b), where you state: "It is my understanding that the USPS Operations considers the throughput of an FSM 881 in BCR/OCR mode processing barcoded flats to be the same as an FSM 881 in BCR/OCR (sic) mode processing flats." Please refer to LR-I-90. In particular, refer to Worksheet "Scenario Costs" and the tables titled "Standard (A) Regular Cost Averages – Actual" and Standard (A) Regular Cost Averages – Normalized Auto-Related Savings" on Worksheet "Cost Averaging."

(a) How many addresses can a BCR read per hour? If different BCRs have different maximum read rates, please provide the maximum read rate for each and provide a description of each BCR.

(b) How many addresses can an OCR read per hour? If different OCRs have different maximum read rates, please provide the maximum read rate for each and provide a description of each BCR (sic).

(c) Please describe the mail flow for a piece that is rejected from an FSM. In doing this, please describe the mail flow in terms of both mail sorting activities and allied activities.

(d) Please explain which of these activites must be performed for flats that are not rejected.

(e) – (f) NA

(g) What is the maximum throughput for an AFSM 100.

(h) What is the maximum throughput for an FSM 881 with automatic feeders?

(i) What is the maximum throughput for an FSM 1000 with automatic feeders?

Response:

(a) It is my understanding that a BCR on an MLOCR or BCS has actually been observed reading over 50,000 barcodes (not addresses) per hour. WABCR camera scan limitation is 180 inches per second. Given the minimum piece length (5½ inches) and minimum gap of 90mm (approximately 3½ inches) between letters, that is at most, 72,000 pieces scanned per hour. The limiting factor on the equipment is the physical limitation of transporting the pieces through the machine at that speed, not the ability of the Wide Area BCR to look in a limited area of the letter for a barcode that is "right-side up".

The BCR on a FSM has two other constraints, finding the barcode in an image that is larger than for letters through many more graphics, which requires additional computing time, and reading barcodes upside down and vertically. Therefore, a BCR on an FSM can read up to 35,000 barcoded images per hour. Again, the physical speed of transporting the flat through the FSM, that has more mass than a letter, and not the BCR is the primary constraint on throughput.

(b) It is my understanding that an OCR on an MLOCR or low cost OCR can scan letters (not addresses) at approximately 118 inches per second. Given the minimum piece length (5½ inches) and minimum gap of 90mm (approximately 3½ inches) between pieces, that is at most, 47,200 pieces scanned per hour. Any reduction in the gap causes physical jams. The gap also varies depending on the weight, length, and/or address look-up requirements of the piece. Again, transport of the mail is the limiting factor in equipment throughput. The OCR requires a look-up for results in the national database. If the physical throughput rises, the accept rate will decline since the amount of time provided to look up the result is diminished.

The OCR on the FSMs is similar the BCR above in that the physical speed of transporting flats is the limiting factor. Again, the OCR on the FSMs must look through a larger scan, through more graphics, which requires additional computing time, and decipher addresses upside down and vertically as well as right-side up. Therefore, each OCR on the FSM can scan up to 3 images per second or approximately 10,800 images per hour. The FSM 881 has two

BCR/OCRs (one for each feed end) and the AFSM has three per machine (one for each feeder). The FSM 1000 is expected to have one OCR per machine.

(c) and (d) The mailflows for flats on an FSM are shown in USPS-T25, page 24 and discussed to some extent in my testimony (T10), pages 12-14. Mailflows of rejects vary depending on which FSM they came from, what processing mode (e.g., BCR on the FSM 1000, BCR/OCR on the FSM 881, or keying), the sort plan, the operating windows, and the amount of FSMs by type at a facility. FSM 881 BCR and OCR rejects may be keyed on another FSM 881, flowed to the FSM 1000, or sent to manual. FSM 1000 BCR rejects may be keyed on the FSM 1000 or sent to manual. The AFSM 100 BCR/OCR rejects are keyed on-line and stay on the AFSM. For all FSMs, this does not include "physical" rejects due to jams etc. that may be re-fed into an FSM or sent to manual.

(e) and (f) answered by witness Yacobucci.

(g) It is my understanding that the maximum throughput of the AFSM 100 theoretically is approximately 21,600 pieces per hour given the three feed systems can feed approximately 7,200 pieces per hour each. However, the last feeder to supply mail has to "wait", to a limited extent, for an available slot given the previous two feeders have already filled the majority of slots. The pieces waiting for encoding results are also in the slots re-circulating through the machine until a result has been determined. Therefore, the actual throughput is closer to the 17,000 pieces per hour as stated in my testimony.

(h) Since the automatic feeders for the FSM 881 have not been fully evaluated, I do not know the maximum throughput. Please see response MPA/USPS-T10-4. It is my understanding that the existing theoretical, unsustainable, maximum throughput of pieces fed on the FSM 881 without the feeders is 20,600 per hour (LR-I-193, page 5).

(i) The automatic feeder for the FSM 1000 is currently planned for vendor testing. Therefore, we do not have a maximum throughput at this time. Please see MPA/USPS-T10-5. It is my understanding that the theoretical, unsustainable, maximum throughput of pieces fed without the feeder is 10,000 per hour (LR-I-193, page 5).

DECLARATION

I, Linda Kingsley, declare under penalty of perjury that the foregoing answers are true and correct to the best of my knowledge, information, and belief.

Linda A. Kingsley

Date: 3 - 23 - 2000

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.

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