DOCKET SECTION

BEFORE THE POSTAL RATE COMMISSION WASHINGTON, D.C. 20268-0001

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POSTAL RATE AND FEE CHANGES, 1997

POSTAL RATE COMPLESSION OFFICE OF THE SECRETARY Docket No. R97-1

RESPONSES OF UNITED STATES POSTAL SERVICE WITNESS SMITH TO INTERROGATORIES OF ADVERTISING MAIL MARKETING ASSOCIATION (AMMA/USPS-T45-1 AND 2)

The United States Postal Service hereby files the responses of witness Marc

Smith to the following interrogatories of Advertising Mail Marketing Association, filed

October 30, 1997: AMMA/USPS-T45-1 and 2.

Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr. Chief Counsel, Ratemaking

Michael T. Tidwell

475 L'Enfant Plaza West, S.W. Washington, D.C. 20260-1137 (202)268-2998/FAX: -5402 November 6, 1997

AMMA/USPS-T-45-1

The following questions refer to LR-H-128, page II-2 (Bates No.21).

a. Please confirm that the 80% DBCS share on line 14 of page II-2 is derived by the method shown in the table below:

Equipment	Number <u>1</u> '	Relative <u>1</u> '	Capacity	Share	(3) % Line 3 of Col (3)]
<u>Type</u>	of Units	<u>Productivity</u>	[Col (2) * Col (3)]	[<u>Line of Col.</u>	
(1)	(2)	(3)	(4)	(5)	
1.DBCS 2.CSBCS 3.Total	4,723 <u>3,726</u> xxx	$\begin{array}{ccc} 3 & 1 \\ \frac{1}{xxx} & 1 \end{array}$	4,169 <u>3,726</u> 7,895	79.18% <u>20.82%</u> 100.00%	

1' LR-H-128 Page II-2 Footnote 2.

- b. If you cannot confirm part a, please show the derivation of the 80% DBCS share.
- c. USPS Witness Daniel (USPS-T-29 Appendix I page 43 of 43 revised 10/01/97) presents the productivities shown in Column 2 of the following table:

Equipment	Productivity	Relative <u>1</u> '
Type_	(pieces/hour)	Productivity
(1)	(2)	(3)
I. DBCS	7,467	0.436
2. CSBCS	17,124	1

1' Relative to CSBCS (Column (2) %0 17,124).

Please explain why the relative productivity in the above table is 0.436 unit of DBCS to one unit of CSBCS and that Footnote 2 of page II-2 of LR-H-128 assumes a relative productivity of a DBCS is 3.0 to one unit of productivity of CSBCS.

- d. Please explain in words and diagrams the meaning of line 4 of page II-2 (% MPBCS/DBCS DESTINATING) and how it is computed. (Please define any acronyms used.)
- e. Please explain in words and diagrams the meaning of line 8 of page II-2 (% DPSGIVEN BCS 3D DESTINATION) and how it is computed. (Please define any acronyms used.)
- f. Please confirm that line 13 of page II-2 is derived by the multiplication of lines

- 4, 8 and I4 of page II-2.
- g. If you cannot confirm part f, please explain the derivation of line 13.
- h. Please explain the logic of the computation that produces line 13 (% NON-ELIGIBLE AUTO CAR.ROUTE DESTINATING) and explain the meaning of the result.
- i. Please provide the standard errors of the estimates shown under column headings STANDARD REG.NON-CRT, PR and STANDARD, REG CARRIER ROUTE.
- j. Please explain the difference between line 13 (% NON-ELIGIBLE AUTO CAR.ROUTE DESTINATING) and line 20 (% CURRENT NON-ELIGIBLE AUTO.CAR.ROUTE DEST.).

Response:

- a. Not confirmed.
- b. The calculation is correct as you've provided in subpart "a" with the exception that the title of the third column should be changed from "Relative Productivity" to "Relative Capacity." In the engineering studies of CSBCS requirements, it was estimated that three CSBCS would provide the same amount of DPS capacity as one DBCS. In another words, one DBCS will provide three times the daily amount of DPS letters as compared to a CSBCS. I am told this is based on the slightly higher throughput of the DBCS and that 3 passes are needed on a CSBCS versus one pass on a DBCS (the second pass) during the critical processing window. In addition, while the critical processing window for the CSBCS is estimated to be somewhat longer than for the DBCS, this was offset by the need to deploy a minimum of two CSBCS to a delivery unit, to assure reliability.
- c. As indicated above in subpart "b," relative labor productivities are not used in LR-H-128

Response to AMMA/USPS-T-45-1

RESPONSE OF POSTAL SERVICE WITNESS SMITH TO INTERROGATORIES OF AMMA

to determine the share of DPS associated with DBCS and CSBCS.

- d. % MPBCS/DBCS DESTINATING is the percentage of letters destinating (or addressed) to 3-digit ZIP Codes in the SCF service area of plants with at least one Mail Processing Barcode Sorter (MPBCS) or Delivery Barcode Sorter (DBCS) (for each respective category indicated in each column of page 21). As indicated at page 21 of LR-H-128, this is the ratio of "LC9" to "LC7." These variables are defined at page 5 of LR-H-128. LC7 is total destinating volumes (of letters and cards), excluding volumes destinating at the following 3-digit ZIPs which are APOs and FPOs: 90-98, 340, and 962-966, and excluding volumes destinating at the 5-digit ZIP Codes which receive only firm directs. (An APO is Army & Air Force post office located outside the continental United States. An FPO is a Fleet post office for Navy and Marine personnel.) LC9 is the volumes destinating at 3-digit ZIP Codes at MPBCS/DBCS sites, excluding the five digit ZIP Codes receiving only firm directs. LC9 is a subset of LC7.
- e. % DPS GIVEN BCS 3D DESTINATION is applicable to plants with one or more MPBCS or DBCS. For these plants, this is essentially the percentage of their destinating mail which goes to the 5-digit ZIP Codes that are targeted for DPS (those 5-digit ZIP codes with 10 or more carrier routes) in the test year (for each respective category indicated in each column of page 21). The formula for its calculation is LC13/(LC9-LC11) as provided in LR-H-128, page 21. Each of these variables is defined at pages 5-6 of LR-H-128. LC9 is discussed above in subpart "d." LC11 and LC13 are subsets of LC9. LC11 is the volumes destinating at 5-digit ZIP Codes which receive only P. O. Box mail,

for 3-digit ZIP Codes served by plants with MPBCS or DBCS. LC13 is the volumes destinating at ZIP Codes with 10 or more carrier routes, for 3-digit ZIP Codes served by plants with MPBCS or DBCS. LC11 is deducted from LC9 in the denominator since we are unable to say how much of the letter mail going to the 5 -digit ZIP Codes containing only post office boxes is DPS. Not deducting LC11 would implicitly take the percentage of DPS for this mail to be zero. An alternative approach was used in Docket No. MC95-1 as discussed at TR6/1903-1904, though this probably was an understatement of the amount of DPS since non-"City" 5-digit ZIP Codes dedicated to post office boxes receive DPS as well.

- f. Confirmed. This is indicated at page 21 or II-2 in line 13 of LR-H-128 and shown on sheet B of the spreadsheet COVRAG98.XLS.
- g. Not applicable.
- h. The meaning of % NON-ELIGIBLE AUTO CAR.ROUTE DESTINATING is the percentage of total destinating letter mail which destinates in 5-digit ZIP Codes that are targeted for DPS on DBCS in the test year (for each respective category indicated in each column of page 21). Letter mail is not eligible for the automation carrier route rate if it is going to a 5-digit ZIP Code (or zone) whose carriers receive DPS letters from DBCSs, thus this is the percentage of letters not eligible for the automation carrier route rate presort rate. The logic of calculating this using the product of Lines 4, 8 and 14 is as follows. The product of line 4 and line 8 of page 21 of LR-H-128 (which are described in subparts "d" and "e" above) provides the percentage of total destinating letter mail

which destinates in 5-digit ZIP Codes that are targeted for DPS in the test year year (for each respective category indicated in each column of page 21). Line 14, as discussed above in subparts a-c is the share of DPS to be done by DBCS in the test year. Multiplying Line 14 times the product of lines 4 and 8 provides the percentage of letter mail (for each respective category indicated in each column of page 21) which destinates in 5-digit ZIP Codes which are targeted for DPS via DBCS in the test year and therefore ineligible for the automation carrier route presort rate.

- i. The standard errors for the line 13 of page 21 of LR-H-128 are not available. I am told there is no straight forward formula that applies, consequently an analysis would need to be done to develop this.
- j. Line 13 (% NON-ELIGIBLE AUTO CAR.ROUTE DESTINATING) and line 20 (% CURRENT NON-ELIGIBLE AUTO.CAR.ROUTE DEST.) are both the percentage of letter mail which is non-eligible for automation carrier route presort rate. Line 13 is the test year forecast, while line 20 is the actual percentage non-eligible in early 1997 based on Address Management System data. As DPS on DBCS is extended to more 5digit ZIP Codes the line 20 percentage should rise to the line 13 percentage. The calculation of line 20 is the ratio of LC14 to LC7. LC7 is discussed above in subpart "d." LC14 is a subset of LC7. It is the ODIS volumes destinating in the list of 5-digit ZIP Codes which are were designated as non-eligible for automation carrier route presort rate by the Postal Service in early 1997. This list is contained in the diskette in LR-H-128, in the file "DNOACRZ.DAT." This is from the Postal Service's National Customer

Support Center, Address Management System, Vol. 2, February, 1997, file "ctystate.zip"

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of 12/1596, which is provided to mailers in making up their mailings.

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AMMAIUSPS-T45-2

Please provide the standard errors for each estimate shown on page II-1 (Bates No.20).

Response:

Pages 395 to 409 of LR-H-128 contain the volumes shown on page 20 (under the heading "Total Volume") and the relative margin of error for each volume estimate. I am told the standard error (SE)can be computed from the relative margin of error using the following formulas. First, note that the relative margin of error (RE) is:

1.96 *SE 100/Total Volume.

The formula for the SE is therefore:

RE*Total Volume/196.

DECLARATION

I, Marc A. Smith, hereby declare, under penalty of perjury, that the foregoing Docket No. R97-1 interrogatory responses are true to the best of my knowledge, information, and belief.

marc a Smith

Marc A. Smith

<u>11-6-97</u> Date

CERTIFICATE OF SERVICE

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

Michael T. Tidwell

475 L'Enfant Plaza West, S.W. Washington, D.C. 20260-1137 November 6, 1997

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